

MIAMI UNIVERSITY
BOARD OF TRUSTEES
Minutes of the Board of Trustees Meeting
Oxford Campus, Marcum Conference Center, Rooms 180-186
Friday, December 14, 2018

The Secretary to the Board of Trustees confirms that as specified in the Regulations of the Board of Trustees of Miami University, and in compliance with Section 121.22 of the Ohio Revised Code, due notice was given prior to holding this meeting of the Board of Trustees.

The meeting was called to order at 9:00 a.m. in the Marcum Conference Center, on the Oxford Campus with the Board Chair, Mr. Mark Ridenour, presiding. The roll was called with a majority of Trustees present, constituting a quorum. In addition to the Board members; President Greg Crawford, Provost Phyllis Callahan, Senior Vice Presidents David Creamer, Tom Herbert, and Michael Kabbaz; and Vice Presidents Jayne Brownell, Ronald Scott, David Seidl and Michele Sparks were also present; as were; Robin Parker, General Counsel; and Ted Pickerill, Secretary to the Board of Trustees. Members of the faculty, staff, student body, and community were also in attendance.

Present: John W. Altman (National Trustee)	Zachary Haines
C. Michael Armstrong (National Trustee)	Terry Hershey (National Trustee)
Jagdish K. Bhati	Hallie Jankura (Student Trustee)
David H. Budig	John C. Pascoe
Megan Cremeans (Student Trustee)	Diane Perlmutter (National Trustee)
Robert E. Coletti (National Trustee)	Mark E. Ridenour
Sandra D. Collins	Rodrick Robinson
Thomas W. Gunlock	Robert W. Shroder

Absent: None

Comments from the Public

There were no requests to address the Board.

Public Study Session

Strategic Planning Update

Bob Applebaum, and Julia Guichard, co-chairs of the Strategic Planning Steering Committee updated the Board on strategic planning. They provided an overview of the process, timeline and actions to date. They explained that this is a time of change, not simply of adjustment, and that it will require different strategies and actions. To achieve this goal, there are six subcommittees supporting these efforts – Academics, Research, Diversity, National University, the Transformative Experience, and Finance – with each of the subcommittee co-chairs sitting on the Steering Committee.

Their presentation is included as Attachment A.

Public Business Session

Approval of Prior Meeting Minutes

Trustee Bhati moved, Trustee Pascoe seconded, and by voice vote, the minutes of the prior meeting of the Board of Trustees were unanimously approved, with all voting in favor and none opposed.

Consent Calendar

Resolutions on the Consent Calendar, included:

- Designation of Emerita/Emeritus
- Conferral of Degrees
- Change to the Board of Trustees Regulations, Emerita/Emeritus Trustees

Trustee Shroder moved, Trustee Budig seconded, and by voice vote, the resolutions on the Consent calendar were unanimously approved, with all voting in favor and none opposed.

All resolutions from the Consent Calendar are included as Attachment B

Comments by the Chair

Chair Mark Ridenour relayed the following information:

Good morning and welcome to this meeting of the Miami University Board of Trustees. I'd like to begin by welcoming David Seidl, our new Vice President for Information Technology, and Chief Information Officer, David joins us from Notre Dame University. Welcome David.

Since our last meeting many Miami alumni celebrated the 50th anniversary of our Luxembourg campus. Or, as it is officially known, the John E. Dolibois European Center (MUDEC), named to honor Miami Alumnus, University Vice President, and U.S. Ambassador to Luxembourg, John E. Dolibois, who was instrumental in the establishment of the campus. Nearly 1,000 alumni and guests visited Luxembourg to join in the many events, ceremonies, activities and overall celebration. It was an exceptional experience for all, and it was incredible to witness and be a part of the "Miami Takeover" of Luxembourg City.

The motto for the occasion, to recognize the importance and value of the campus, was "To advance global peace and understanding." This was a vision of the original campus founders, and their foresight has achieved this goal for the many Miamians who have studied there – thank you Ambassador Dolibois, and the many others who created this wonderful Center – well done. President Crawford will share some photos in his remarks.

Also, since our last meeting, Mark Sullivan led his final meeting as the Chair of the Foundation Board. At his final meeting, I presented him with a recognition certificate on behalf of the Board, to recognize his exceptional and dedicated service. The new Chair is Steve Anderson, and we all look forward to working with him and the entire Foundation Board, during

this important Miami campaign.

Later today, we will receive the report of the Nominating Committee, and I'd like to thank and recognize them now for their service; Chair Diane Perlmutter, Trustee Terry Hershey, and Trustee David Budig. Thank you for your time, effort, and ever unwavering support for Miami University.

I'd like to now turn the microphone over to Ted. You may not be aware, but Ted is the President of the Association of Naval ROTC Colleges and Universities and he has some updates from their recent annual meeting.

Ted Pickerill reported the following:

Thank you Chair Ridenour. Miami hosts two ROTC Units, the Air Force and Naval, which includes the Navy and the Marine Corps. The Air Force numbers 57 cadets and the Naval Unit 68 midshipmen and enlisted commissioning students. We also have 38 students pursuing commissioning in the Army and National Guard programs through Xavier University's "All for One Battalion," which hosts students from Miami, Xavier, Mount St. Joseph, Thomas Moore, and Northern Kentucky Universities.

As the Chair mentioned, the Naval program is unique in that there is an Association of Naval ROTC Colleges and Universities. The Association is not a Navy association, but one formed following World War II by the host Universities to encourage the exchange of information and opinion between member institutions and the United States Navy, with a goal of the greatest possible success in the operation of the NROTC program.

The annual meeting provides a forum for the host Universities to share best practices, become informed of Navy initiatives, such as a common orientation for Midshipmen, and for the Navy to be informed by the Universities in their decision making. A recent example of the benefits of such exchange is the Navy's new "precision loading" for scholarships. In seeking a way to both reduce scholarship costs and to increase the opportunities for currently enrolled non-scholarship students to receive a three or two-year scholarship, the Navy changed its scholarship award process.

Instead of building in attrition from the start; for example, if 1,000 officers are required in 4 years, then 1,250 four-year scholarships might be awarded, the Navy now precisely assigns the scholarships. If 1,000 officers are eventually required, then precisely 1,000 four-year scholarships are assigned. Then, at the end of the first year, any attrition is addressed through the award of three-year scholarships to students who entered the ROTC without an initial scholarship.

This approach reduces the Navy's scholarship costs, while providing opportunities for three and two-year scholarships to motivated students who are proven ROTC performers. This is an example of a "win-win" which can be achieved through the dialogue generated in working towards solutions that benefit the Universities, the Navy, and the students.

Thank you Chair Ridenour for this opportunity to share a bit of information about our ROTC programs.

Chair Ridenour then resumed his remarks:

Thank you, Ted. I would like to end my remarks with some personal reflections and three short stories.

Last week we paid our respects to President George H. W. Bush after a very full and rewarding life of service to his country, family, and his fellow man. Most of you know the connection to Miami with Barbara's parents graduating from Miami, but for me there is another connection with a fond memory. I bet very few of you can remember who your commencement speaker was those many years ago, but I sure can. None other than then Vice President George H. W. Bush was the speaker at the Spring Commencement right here in Oxford on that May Saturday in 1982 in Millett Hall. Rest in Peace Mr. President and Mrs. Bush.

On December 1, I received an email from an alumni Dad, I would like to share:

Mark,

We stayed up until 12:01am tonight (Friday) so we could log in and find out if our son was accepted into Miami. He was and we couldn't be more thrilled.

We wanted to thank you again for everything you have done and the impression you left with him.

Love and Honor.

Sincerely,

Proud parents of the Class of 2023!

Obviously, acceptances are starting to roll out and I share this with you to remind all of us that one of the duties as a Trustee is to recruit future Miamians. Sometimes my wife tells me that I am a bit obnoxious in my promotion of Miami, but anybody that knows me knows I do it with abandon and enjoy it. I hope you all do the same.

Lastly, on December the 1st, Karen and I headed up to Grand Rapids, Michigan for a pajama party, to celebrate the day that our friends, Bill and Karen L., first met at Miami at an Alpha Phi/Phi Psi "pajama party" 40 years ago that day. My Karen was at that very party! In a related twist, I actually caught Karen L.'s garter at their wedding 36 years ago and gave the garter back to Karen that night. Needless to say, they were both surprised I still had it. Great fun was had by all, with many Miamians in attendance. Yes, I now have Miami pajamas. But that is not the real story of this trip.

On our way back to Northwest Ohio the next day, we were nearly home, driving down US 23, South of Ann Arbor. We came around a slight corner and there were two cars pulled off the road in a precarious spot. As I whizzed by, I saw seven girls standing on the berm and noticed they all had Miami jackets on. I told Karen we have to go back.

As it turned out, they were part of our Club Skating Team that had just finished competing in Ann Arbor, and were headed back to Oxford. One of the cars was dead and they were waiting on AAA. They had done a pretty good job of figuring out what to do, but there was one small problem, all seven could not get into the one small car that was still running. They called their faculty advisor and were able to rent a car through the University to get back to Oxford. We waited for the wrecker, and then Karen and I took three of the young ladies to the Toledo airport, made sure they got their car, and sent them on their way. During the ride to the airport two of the girls put their parents on the phone with us and thanked us profusely.

Why do I tell you this story? During our conversations with those parents, whose girls were both freshman I might add, they went on and on about how impressed they have been with everyone, repeating everyone, they have met at Miami, and how lucky their girls were to be here. This is just more validation that what we are doing here does matter and has an impact on young people's lives in and out of the classroom. The entire university community should be commended for these positive experiences. Keep it up! Of course, I could not agree more and reiterated to those parents our Miami Family philosophy that, as you know, I talk about all the time. One of the parents posted the story on the Miami Parent's Facebook Page ending with... Love and Honor in action!

This is who we are, this is what we do!!!

Thank you everyone, that concludes my remarks.

Love and Honor

Reports, Ordinances and Resolutions

President's Report

President Crawford's presentation is included as Attachment C.

President Crawford updated the Board on the challenges facing higher education, and Miami strategic planning to meet the future. He also highlighted several significant events since the last meeting, including; welcoming the new VP for Information Technology, David Seidl; dedicating the Veterans Tribute; MUDEC's fiftieth anniversary; The Hamilton Campus's fiftieth Anniversary; and other significant Miami university events and achievements. Chief among these milestones was the announcement that Miami Alumnus and National Trustee, C. Michael Armstrong, was awarded the Ernest T. Stewart Award for alumni volunteer involvement from CASE.

The room responded with applause and a standing ovation at the news of Trustee Armstrong's award. Trustee Armstrong then addressed the group, telling of his love for Miami, and how medical issues in 2006 caused himself and his wife, Ann, to ask what is their purpose? They knew it was to give back, and they have been phenomenal supporters of Miami University and its students; providing scholarships, facilities, programs and faculty support. Trustee Armstrong then announced that their support for Miami University was not yet complete and he and Ann were donating an additional \$6 million in scholarships.

Chair Ridenour thanked Trustee Armstrong and praised his support for the University.

Report of the Chair of University Senate Executive Committee

A written reported was provided, and is included as Attachment D.

Report of the Student Body President

Meaghan Murtagh provided the following update:

This semester has been full of a variety of initiatives and campaigns presented by the Associated Student Government.

Student Body Vice President Vincent Smith and I have been working diligently to accomplish our goals since the last time I updated you all. The Mental Health Forum was a great success with the help of Miami University's mental health awareness organization, Active Minds. Our guest speaker Kevin Hines was engaging, relatable, and enthusiastic about the topic of mental health. We had over 400 students in the audience who were able to hear his message. To continue the conversation, I will be working with the Student Counseling Services Suicide Prevention Team to generate more ways to promote the well-being of students on campus.

In addition to mental health, Vincent and I have begun to focus on sexual assault awareness and prevention. We have formed a group consisting of 15 students from organizations including Men Against Rape and Sexual Assault, Feminist Work on Revolutionary Democracy, The Miami Body Project, and more. As a group, we have brainstormed different initiatives that we, as students, can take to promote sexual assault awareness and prevention. We are currently encouraging the position of a safety chair in every organization to educate members on resources Miami has to offer. In addition, we will be creating a campaign to raise awareness on the new Title IX laws and their potential effects on students.

Next semester, we will be working closely with our Secretary of Diversity and Inclusion to add depth behind the phrase "I am Miami". Multicultural organizations have expressed concerns regarding lack of respect and overarching community on campus. We are planning to survey students to find out what I am Miami means to them, and to create an initiative that will resonate with all individuals. As of now, we are still in the process of what we want this campaign to look like, but we believe it will be a great opportunity to remind students of the values Miami holds.

Overall, this semester has been very productive for the Associated Student Government. Please feel free to reach out to me with any questions. I appreciate your time and I hope you enjoy the holiday season.

Love & Honor

Academic and Student Affairs Committee

Report of the Committee Chair

Committee Chair Terry Hershey stated that it would be her final meeting as Chair of the Academic and Student Affairs Committee, and she expressed her gratitude for the opportunity, privilege and honor to serve as Chair. She then relayed the following information:

The Academic and Student Affairs Committee met yesterday in McGuffey Hall. During the meeting, one resolution was considered.

The Committee received written reports from the University Senate and from student leaders. The Committee heard from the Provost, the Senior Vice President for Enrollment Management and Student Success, and from the Vice President for Student Life. The Committee received presentations on several topics, and also reviewed written reports, which will be available in the meeting's minutes.

The Provost, Senior Vice President Kabbaz, and Vice President Brownell, led an integrated dialogue on Affordability, Accountability, Efficiency, and Accessibility. They informed the committee about areas, such as: enacting an inclusive learning and work environment; balancing tuition revenue with affordability; and enhancing efficiency while advancing Miami's mission.

Vice President Brownell then updated the committee on student life matters, including the final report on creating an impactful, positive, meaningful and safe fraternity experience.

Senior Vice President Kabbaz then provided an update on Enrollment Management and Student Success, followed by Assistant Vice President Susan Schaurer updating the Committee on Admissions. Ms. Schaurer reported on enrollment planning, competitors, Fall 2019 goals and enrollment efforts.

Next, Provost Callahan presented a proposed resolution to create a new degree – a Bachelor of Science in Games and Simulation. For which, the committee voted unanimously to recommend approval here today. She then presented an update on the Boldly Creative process, and highlighted the proposals being considered, which cluster into three areas – Analytics, Health, and Engineering. She then explained next steps and acknowledged the many people who had helped with the process.

The College of Education, Health and Society hosted the meeting, and the Committee received a college update from Dean Dantley, along with a presentation on Disability Studies, which included input from several students, informing the Committee on how the program has personally impacted them.

The meeting concluded with a tour of McGuffey Hall, including the Mindfulness Center and the Accessibility Classroom.

Resolutions

Bachelor of Science in Games and Simulation

Provost Callahan spoke in support of the resolution. Trustee Bhati then moved, Trustee Pascoe seconded, and by voice vote, the resolution was unanimously approved.

The resolution is included as Attachment E.

Finance and Audit Committee

Report of the Committee Chair

Mr. Chairman and Members of the Board of Trustees:

The Finance and Audit Committee met yesterday at the Marcum Conference Center. The Committee considered one ordinance and three resolutions at the meeting. All four items are recommended for approval later in today's meeting.

The Committee began the meeting with the annual report from the University's independent auditors, RSM. The report by RSM was brief and largely routine. A great deal of work goes into generating the annual financial statements and reports. I want to thank the University's controller, Gary Cornett, and his staff for their excellent work again this year.

The Committee considered one ordinance for the Professional MBA program at yesterday's meeting. The proposal to maintain the current tuition and fees for the program's new cohort was endorsed by the Committee. Tuition for this highly regarded program will remain unchanged for the third consecutive year.

The resolutions to adopt the annual efficiency report and minor changes to the practice standards policy were also considered at the meeting and were endorsed by the Committee. The efficiency report is submitted annually to the Ohio Department of Higher Education, and the change to the "practice standards" policy will align the policy with improved ethics reporting standards for this industry.

The majority of yesterday's meeting was devoted to the Committee's ongoing discussion of the long-term financial outlook for the University. This same discussion is taking place at governing board meetings throughout much of higher education today. Concerns about affordability, major demographic changes, declining state support, technological changes, shifting student interests, and reduced return on investment from a college education are not easily solved and suggest that higher education is headed for a long period of transformative change.

During periods of great change, there is increased opportunity and risk that the stature of an organization will either be enhanced or subjected to great decline depending on how it responds to these changes. Miami University faces such risk today and must recognize that it will ascend or decline in its stature depending on how well it adapts to these changes.

As the early stages of these changes began to influence Miami's net tuition revenue and its budget, the Committee has had many discussions about the near and long-term implications that accompany these shifts but may not have spent as much time discussing what is causing these changes and what needs to occur beyond simply balancing the university budget. The resolution on the strategic direction for the University attempts to address this and provide greater guidance to the university community on where the new strategic plan must take the University and the budgetary adjustments that will need to occur to maintain financial stability in the near term but more importantly, to enable investments in academic programs and other priorities for future success. The resolution was unanimously endorsed at the meeting.

Beyond my report on yesterday's meeting, Mr. Chairman and colleagues, allow me a few moments to make some brief, but final comments, as my last official act as Chair of the Audit and Finance Committee.

Just a couple of years ago in Columbus, at our annual retreat, our chairman and I had the dubious honor of revealing what became known as Dr. Creamer's ski slope. Although not well received as the closing comments to the retreat, it began a lengthy process of serious examination of our business model, and how to overcome a lot of "red ink" in the not too distant future.

Yesterday afternoon, the Audit and Finance Committee endorsed, as hopefully will our Board of Trustees later in this meeting, the most important resolution I have seen in my Miami years. It is a resolution that addresses some serious issues facing our society, especially higher education, which for us means Miami University.

Two mottos have emerged since the Columbus retreat. They embody two very important concepts that all of us embrace. I charge all current and future Trustees, especially committee chairs, to permanently enshrine both in our culture. They are:

Miami First, and Not on Our Watch

Our job as a committee was to do one thing, and one thing only; to assist Dr. Creamer and his able staff to define reality. I want to personally thank each member of our Audit and Finance Committee for their support in reaching this objective. However, the job moving forward is to craft a detailed list of objectives to fulfill our budget plan and the emerging new strategic plan. And, to have completion dates that must be scrupulously adhered to for each of these tasks.

In closing, let me remind all of us that the transformation of a venerable institution is very difficult. Yet, it has happened here with great success numerous times before, most recently with our Strategic Priorities Task Force.

In the historical timeline of Miami University, as noted on a plaque titled "Academic Freedom", in the Armstrong Student Center, you can find this quote: "Miami closed in 1873 due to a national financial panic, a shortage of male students as professions changed after the Civil War, and (listen especially!) devotion to a curriculum that rarely included preparation for careers other than the ministry, law and politics."

Miami First, and Not on Our Watch

Thank you colleagues! And especially, thank you Dr. David Creamer!

Mr. Chairman, that concludes the report of the Finance and Audit Committee.

Ordinances and Resolutions

The Finance and Audit Committee Ordinances and Resolutions are included as Attachment F.

Ordinance – PMBA Tuition

Senior Vice President Creamer spoke in support of the ordinance, explaining that it will maintain the current tuition level for the third consecutive year. Trustee Robinson then moved, Trustee Pascoe seconded, and by roll call vote, the resolution was unanimously approved, with nine voting in favor and none opposed.

Resolutions

Strategic Direction and Budget Plan

Senior Vice President Creamer spoke in support of the resolution. Trustee Haines then moved, Trustee Collins seconded, and by voice vote, the resolution was unanimously approved.

Resolution R2019-14 Strategic Direction and Budget Plan

WHEREAS, every college and university is facing profound change and, in order to flourish, must identify solutions to a plethora of issues and problems; and

WHEREAS, as Miami University's faculty and staff commence the preparation of a new strategic plan that will guide the University during the next decade, the Board of Trustees desires to provide guidance to the strategic planning steering committee to help ensure the resulting plan is consistent with the needs of Ohio and will sufficiently address the challenges the University is facing; and

WHEREAS, the Board of Trustees also seeks to ensure that the University remain in a strong financial position to be able to invest in the priorities identified in the new strategic plan; and

WHEREAS, affordability is the greatest challenge confronting public higher education today but other issues include: major demographic shifts as the population ages and migrates southward, westward and to urban centers; declining numbers of U.S. high school graduates especially in the Midwest and Northeast; significant uncertainty regarding future international enrollment; greater financial need by today's enrolling students with even more financial need likely for future students as we work to correct disparity in college participation rates; concerns about the value of a college education given its high cost versus slower salary and wage growth for graduates; increased emphasis on career opportunities by prospective students in evaluating

both the institution and selected majors; increased interest in new disciplines and careers while demand for some traditional degree programs decline; employer and political leaders' concerns about recent graduates' preparedness and the gap between today's economic needs and the graduates higher education is producing; the impact of rapid technological change on the creation of new areas of study and research, as well as on how students learn and how education could be delivered; increased competition from new education providers as well as from flagship universities needing to grow in response to mounting budget pressures; and increased expectations from state legislatures and governors even as state appropriations regularly decline and are unlikely to keep pace with inflation going forward; and

WHEREAS, Miami University through the successful implementation of the Strategic Priorities Task Force recommendations enhanced its quality and reputation during a decade when many universities experienced unending financial challenges, diminished student interest and questions about the value they offer; and

WHEREAS, in a period when higher education is facing unrelenting change, the accomplishments brought about by the Strategic Priorities Task Force aren't sufficient to sustain Miami into the future and Miami must learn to continuously adapt to the changing needs and demands of the 21st century;

NOW, THEREFORE BE IT RESOLVED, that, in order to address the profound and dynamic changes facing higher education, the Board of Trustees views it as imperative that the University, through the new strategic plan: become more affordable for future students through improved productivity throughout all operations of the University; identify scholarships as the highest priority for the new comprehensive campaign; adapt all levels of its academic programs and degrees faster in the future in response to emerging societal needs and diminished interest in some programs; ensure academic departments prioritize innovation in teaching and learning outcomes in the allocation of faculty time in order for Miami to continue to be recognized as one of the premier undergraduate universities in the nation and achieve breakthroughs in teaching that lead to improved learning outcomes for students and greater efficiency in the delivery of academic programs; and ensure greater integration occurs between the curricular, co-curricular and career experiences of students that lead to improved graduation rates, enhanced leadership development, and improved student success beyond graduation; and

BE IT FURTHER RESOLVED, that the Board of Trustees directs the President and the Senior Vice President for Finance and Business Services to develop a detailed five year plan to be presented at the February meeting of the Board of Trustees that fully addresses the anticipated budget challenges during the new decade, accomplishes the priorities identified by the Board of Trustees in this resolution, provides for sufficient investment in the priorities identified in the new strategic plan, and prioritizes for faculty and staff annual salary improvements; and

BE IT FURTHER RESOLVED, that the objectives and goals outlined in this resolution are only the beginning of a difficult journey for Miami University that will require constant adjustment in a rapidly changing world. However, by beginning the journey from the positive position created in the previous decade by the outstanding accomplishments of

the University's faculty and staff, there is reason for optimism that we will look back at the end of the next decade and find Miami University has both a stronger reputation and greater financial stability.

Efficiency Report

Senior Vice President Creamer spoke in support of the resolution. Trustee Collins then moved, Trustee Budig seconded, and by voice vote, the resolution was unanimously approved.

Revised Policy on Practice Standards

Senior Vice President Creamer spoke in support of the resolution. Trustee Collins then moved, Trustee Pascoe seconded, and by voice vote, the resolution was unanimously approved.

The Finance and Audit Committee Resolutions are included as Attachment F.

Student Trustee Reports

Student Trustee Jankura relayed the following information:

If the sleepy glaze over Megan's and my eyes this week hasn't been enough of a sign, I'll tell you now: it's finals week. Students at all of Miami's campuses have been flooding the libraries and academic buildings all week trying to find the perfect hidden study spot. This means it's also been a busy week for staff and student employees in every campus building, particularly our libraries. I find it important to remember at this time of year that many student employees don't have the luxury of calling off the entire finals week, because if they don't work, no other students get their study room keys or coffees. It's very admirable to see peers balancing 5 or 6 finals this week while working in dining services and in offices all around campus.

Additionally, we would all be mistaken to overlook the programs that have been set up to help us this week.

Last Monday from 10 pm to midnight, The Office of Student Activities and the University Libraries hosted their Late Night Study Breakfast in King Library. Breakfast foods in addition to Bagel & Deli, Oxford Doughnut Shoppe, Skippers, and Insomnia Cookies were available for students who needed a little respite from late night study sessions.

The library at the Hamilton campus was also stocked with snacks and coffee. Throughout three sessions of "Cram Jam," the Rentschler Library had peer tutors, group study sessions, and even therapy dogs to assist in the last minute cramming.

All throughout the semester, but particularly during finals week, the meaningful events that are planned with students in mind bring so much joy and remind students to stay balanced and well-fed as we try to ace our classes.

On Monday, November 12, The Office of Community Engagement and Service hosted its second annual Service Oriented Unity Projects Dinner, also called a SOUP Dinner. SOUP is a granting dinner for community change proposals put together by students and community

partners. Four service project proposals were presented at the event, and the audience voted on the top two projects they wanted to see in the Oxford community.

The winning proposal is a collaboration between the student organization Best Buddies, which allows college students to have a one-to-one friendship with an adult who has an intellectual or developmental disability, and Oxford Empty Bowls, an annual community luncheon that celebrates service and the arts.

A focus of the SOUP facilitators was to ensure that Miami students were serving as project leaders. The president of Best Buddies, was a co-contributor to the winning proposal. She was passionate about this project, in part, because it skillfully addressed various community needs. She said that “the intersection of food insecurity and the Intellectual and Developmental Disease community is huge. It is so important to educate and create awareness about hunger to Miami students, the oxford community, and adults with IDD.”

The funds from the grant supported the purchase of 100 bowls for the Oxford Empty Bowls event that Best Buddies members painted as a group outing. Additionally, funds will support ongoing awareness and education for the needs of adults with IDD, people with food insecurities, and those with both.

The second place project is called Check. Change. Control., a proposal written in collaboration with the student organization Men in Nursing and the American Heart Association. This project addresses the urgent need for impactful and accessible blood pressure programming in the Butler County community. The grant will establish a partnership between Miami University and the Butler County YMCA that will provide blood pressure monitoring and education on how to lead a healthy lifestyle. Along with serving a community need, Check. Change. Control. provides a service learning opportunity for nursing students.

The Office of Community Engagement and Service supports a SOUP Fellow, a student who runs the entire grant selection process and dinner. This year’s SOUP fellow was a senior Psychology and Neuroscience major with a Management and Leadership minor.

When students aren’t busy making Oxford a more inclusive, healthy community, we’re keeping involved with the many opportunities Miami offers...I strongly stand by the statement that a Miami student would have to try really hard to not be engaged on campus. There are constantly several different events happening at the same time that all sound like a blast.

To name a few, Goggin Ice Center recently hosted an ugly Christmas sweater skate, the Residence Hall Association held a carnival in Armstrong Student Center, Miami Activities and Programming held several comedy shows featuring Jay Pharoah and Cecily Strong, students tested their baking skills in The Great Miami Bake Off Competition, the Women’s Center provided students the opportunity to write letters of support for the transgender community to their senators and congressional representatives on Trans Day of Remembrance, and many, many more.

On November 6, the first Community Table dinner and conversation was kindly hosted by President and Dr. Crawford at Lewis Place. This Miami-spin on The Longest Table Community events provides a unique opportunity for students, faculty, and staff to engage with

one another in ways that foster connection and build community. Attendees were intentionally seated with folks they probably wouldn't know and were given various prompts to inspire honest conversation about identity and diversity. Each attendee was also asked to bring or wear an item that reflects their family, hometown, or culture, which served as a conversation starter and instantly broke down the barriers of surface-level small talk.

Thank you to Dr. Jayne Brownell for coming up with the idea for the dinner and for working endlessly to cultivate communities of students who are eager to get involved, learn from each other, and become courageous leaders.

Finally I'd like to thank Mike Armstrong for his continued support of student success. Miami students are so lucky to have you as a fellow Miamian and generous donor. I've recently been spending many long days in Armstrong Student Center and am constantly grateful that it's truly a space dedicated to students. Thank you for your generosity today - most students do not know of all the personal contributions that benefit their education and I feel lucky to be able to know you and your support. I hope that one day I'll be able to give back to my community as you have.

Thank you! That concludes my report.

Student Trustee Cremeans relayed the following information:

On Thursday, we had the opportunity to tour McGuffey Hall. As we saw the building where I spend so much of my time, I was motivated to consider the readings I have done over the semester. One important piece was written by American educational philosopher John Dewey. Dewey remarks on the uniquely American quality of pragmatism and the ability of the American student to problem solve and contribute to their communities as citizens. I think about his words often as a Miami student, where I have, like many others, felt compelled to find pragmatic solutions for community problems. I consider myself fortunate to see examples of this transformative scholarship every day.

One such scholar is a first year from Las Vegas, Nevada. She came to Miami as part of the first nursing cohort back in Oxford. She said that the beauty of Miami's campus brought her in, but that what is encouraging her to stay is the opportunities she knows a Miami education can afford. She loves the nursing cohort because of the small classes, which makes for more personal instruction. She hopes to one day make a difference as a nurse by helping those in need of care. She has had just one semester here, but is engaged and looking forward to seeking out and taking advantage of each new opportunity she comes across as a scholar.

Another is what most statistics would call a non-traditional student. She's an older undergraduate student native to the area and has spent her time on both the regional campuses and here in Oxford, all while working full time. I'd like to think she is a non-traditional undergrad because when she isn't working the night shift in a morgue, she has been conducting an in-depth anthropological study in a break-out area of music ethnoecology. Her research in the humanities is revolutionary and transforming the entirety of her field. In the spring, she will be presenting her research at a conference.

Another is a chemical engineering major with an eye turned towards biomedical

engineering. At Miami, he is making the most of interdisciplinary research between the physics and psychology departments. The psychology department conducts studies in which they stress subjects in various ways with a special helmet on to see if there is a hemodynamic change. Then the physics department is tasked with processing that data so that the psychology department can actually use the raw numbers they are given to draw conclusions. His job is to create maps of human head and brain, and modeling the data of blood flow over the model so you can actually see what's going on in the brain when the subjects are tested. He is studying his passions and is engaged in transformative research.

Another is a first-year Miami student, carrying with her three associates degrees from a community college career. She studies physics and is engaged in a research laboratory where she uses optical sensing to research pressure ulcers. She is interested in using science to uplift communities through nonprofit work. She loves her research and is excited for the future, but when I talk to her, what stands out the most is what she loves about Miami. I leave you today with her words: "To me, Love and Honor is the sense of community and togetherness that represents Miami. Every person comes from a different background and faces unique adversities, but we support and embrace these differences. This is crucial to me as a first generation American coming from a single-mother household where a sense of community and family is imperative to survival. I honestly wasn't expecting such support and compassion from my peers, staff, and professors, but nobody is left behind. Miami is a family."

Our Miami family faces mighty challenges in the coming days. But I have faith in the pragmatists that flood our beautiful campuses. I am in awe of my peers and can only hope to join them on the fight to create a better future.

Other Business

Resolution - Regulations of the Foundation Board

Senior Vice President Herbert spoke in support of the resolution. He stated that it represents a thorough governance review, and includes the term length of Foundation Board members moving from three to four years, and the creation of CFO Position with Foundation. Trustee Shroder then moved, Trustee Budig seconded, and by voice vote, with greater than the required two-thirds vote needed to amend Articles III or IV of the Foundation Code, the resolution was unanimously approved, with all voting in favor and none opposed.

The resolution is included as Attachment G.

Election of Officers for Calendar Year 2019

Chair Ridenour first addressed the group:

Before we turn to the Nominating Committee I want to say a few things about the last eight years on the Board of Trustees and the last two in particular. Back in 2011 David Budig and I were appointed to the Board of Trustees on the very same day. We did not know each other. Everyone from the current Board at the time, led by our friend Don Crain, to the PEC to the Dean's Council were diligent in reaching out to us. I want to thank a lot of people that were so helpful as I moved from Treasurer to Chair of the Finance and Audit Committee to Vice Chair

to Chair. As I look around this table and the audience, there is scarcely a person I see that I have not had some interaction with at one time or another. I wish I could thank everyone individually, but know that I am indebted to all of you for your friendship and input. I want to thank all of the Trustees collectively for giving me this opportunity. I consider you all friends and colleagues. You know that I love to talk about the Miami Family, and I want to especially thank all of you that reached out to me a few years ago as my wife Karen was going through her second bout of cancer. That is family.

Thank you individually to my Committee Chairs Trustee Dr. Altman and Trustee Hershey. Great job you two, you always listened to my off the wall ideas and made our committees interesting and productive. Dr. Parker, thank you for all the conversations and counsel. Dr. Creamer, we have worked closely together for six years now, and I can't thank you enough for your time, transparency, analysis and leadership. Trustee Perlmutter, thank you for reviewing countless communications, and every major speech I ever gave as Chair. You always made them better.

To the Dr.'s Crawford. It has been a pleasure to get to know you. Karen and I look forward to future interactions. Greg, we have talked a lot these past two years. All of our conversations were with one purpose in mind, Miami first. I will watch with keen interest as you put your mark on this university in the years to come.

There are two people that deserve extra special attention. The first is not here and that is my wife Karen. She is the one that has felt the impact of all my time working on Miami matters, attending numerous meetings and events in Oxford and beyond. She was always interested in what was going on, and gave occasional advice where she thought I needed it. She knows that I don't do anything half way, so thank god she is a graduate along with 15 members of my immediate family... she "gets" my passion for this place. The last person I want to thank is my friend Ted Pickerill. I could not have done this without you and your staff. I can't even begin to count the number of conversations we have had the last two years. My guess is well into the hundreds with some weeks talking nearly every day. Thank you Commander for all of those conversations, running down answers to my questions, giving advice when I asked for it, and specifically for all of the planning you did for me and this board.

In closing, this body has accomplished much, but we have much, much more to do. This may be my last meeting as Chair, but I still have one more year left in my term to keep the new slate of officers in line. Every old drum major likes to lead a parade, and I have thoroughly enjoyed the experience of representing Miami at the highest level. Sometimes it was not so fun to sit in this Chair, such as when writing the parents of students we lost, but this is what families do, support each other. I have enjoyed the inquisitive engagement, all the conversations and interactions with so many people across the University, presenting to cap-stone classes at FSB, and meeting so many talented students and interesting Miamians along the way. I have learned a lot! Servant leadership is indeed worth it.

I tried not to take myself too seriously and I think we had some fun along the way.

Miami First. Love and Honor to you all.

Report of the Nominating Committee

The nominating committee was comprised of Trustee David Budig, Trustee Terry Hershey and Trustee Diane Perlmutter (Chair).

Trustee Perlmutter reported that the Committee took their job very seriously, to ensure Miami's strong future. They praised the current group of officers, then proposed the following slate for calendar year 2019:

Chair, David Budig
Vice Chair, Tom Gunlock
Secretary, Sandra Collins
Treasurer, Rod Robinson

Trustee Bhati then moved that the slate be adopted, Trustee Haines seconded, and by unanimous voice vote the slate of officers for calendar year 2018 was approved.

Written Reports

Tom Herbert, Vice President for Advancement submitted a written report which is included as Attachment H.

Executive Session

Trustee Collins moved, Trustee Budig seconded, and by unanimous roll call vote, with nine voting in favor and none opposed, the Board convened to Executive Session to consult with counsel, review pending litigation, and for personnel matters, the appointment of a public official, as provided by the Open Meetings Act, Ohio Revised Code Section 121.22.

Other Business

The Board returned to public session.

Adjournment of Meeting

With no other business to come before the Board, Trustee Robinson moved, Trustee Pascoe seconded, and by unanimous voice vote, the Board adjourned at 12:30 p.m.



T. O. Pickerill II
Secretary to the Board of Trustees

STRATEGIC PLANNING UPDATE

BOARD OF TRUSTEES – DECEMBER 14, 2018



STRATEGIC PLANNING UPDATE



- Incremental changes to our strategy have been valuable – but not enough for the current world of higher education.
- Our new reality: Changing demographics, intense competition, reduced state support, and questions about our value.
- We undertake this strategic planning process from a position of strength, unlike the crisis management required in some institutions.
- Faculty and staff have seen plans come and go – “skeptics R us” – but it is a different time, requiring different strategies and actions!

WHY DO ORGANIZATIONS FAIL?



Organizations can fail because of bad products:

- White Star Lines (Titanic) – Sharper Image, when the Ionic Breeze Air Purifier added ozone to the home-air supply
- Or bad ideas – The Harley-Davidson perfume line, Cosmo Yogurt, Thirsty Dog's flavored bottled water for pets
- But organizations also fail with quality products, because the world changes and they do not (Kodak, Blockbuster, Blackberry).
- This year, we have seen a number of universities in Ohio face unprecedented financial challenges.



THE PARADOX OF CHANGE



*We need to spend resources to
prepare for the future, but we
also need to deal with today, so
we have a tomorrow.*

STRATEGIC PLANNING STEERING COMMITTEE



Co-chairs: Julia Guichard and Bob Applebaum

Six focus areas to be explored by subcommittees

- Academic Excellence: Terri Barr and Renee Baernstein
- Research: Vaishali Raval and Bill Even
- Diversity: Denise Taliaferro Baszile and Moira Casey
- Student Experience: Elise Radina and John Weigand
- Financial Sustainability: Stacey Lowery Bretz and David Ellis
- National University: Diane Delisio and Aaron Shrimplin
- Subcommittees include 62 faculty & staff, 10 students, and two community members.



FOCUS AREAS



- The **Academic Excellence Subcommittee** will examine gaps in our current offerings and recommend a process to evaluate and modify our curriculum, and in some cases reallocate resources in order to develop new programs in response to the dynamic environment of today.
- **The Excellence in Research and Scholarship Subcommittee** will examine how Miami can enhance its research and scholarship and increase external funding, while at the same time supporting its excellent academic efforts.



FOCUS AREAS



- **The Transformational Student Experience to Integrate Life and Learning Subcommittee** will examine the approaches used to integrate life and learning at Miami to ensure that we have the right model for integrating academics and life outside the classroom.
- The **Diversity & Inclusion Subcommittee** will develop recommendations about how to continue our improvements in attracting, retaining, and supporting a diversity of people at all levels of the Miami community – students, faculty, and staff.



FOCUS AREAS



- **The Financial Sustainability Subcommittee** will recommend the best financial model for Miami to ensure strength in support of our mission
- The **National University Subcommittee** will consider the important attributes of a national university, to assess where Miami stands relative to those markers, and to provide input to the other sub-committees about how Miami can achieve those standards

THREE PHASES OF WORK



- **Phase 1** – Full committee informational sessions with administrative staff and initial meeting of individual subcommittees
- **Phase 2** – Listening sessions with wider university community and subcommittee work
- **Phase 3** – Drafting of plan and receipt of feedback from university community prior to final submission to President Crawford



TAKING ACTION



Develop Strategic Plan Web-site to inform and receive input from University community.

The committee co-chairs will provide updates on the work of the steering and subcommittees to the Board of Trustees.

By **June 2019** – a focused set of high-level priorities designed to guide Miami for the next five years will be developed.

In 2019-2020, the university will develop implementation plans for the key initiatives.

We will continuously review the plan to assure that it remains dynamic and responsive.

STRATEGIC PLANNING UPDATE

QUESTIONS?





BOARD OF TRUSTEES
 ROUDEBUSH HALL ROOM 212
 OXFORD, OHIO 45056
 (513) 529-6225 MAIN
 (513) 529-3911 FAX
 WWW.MIAMIOH.EDU

December 14, 2018
 Consent Calendar

RESOLUTION R2019 - 10

BE IT RESOLVED: that the Board of Trustees hereby approves the following for the rank of Professor Emerita effective on the formal date of retirement:

Kimberly Medley
 Geography

Yihong Pan
 History

BE IT RESOLVED: that the Board of Trustees hereby approves the following for the rank of Professor Emeritus effective on the formal date of retirement:

Byron Finch
 Management

David Pennock
 Biology

BE IT FURTHER RESOLVED: that the Board of Trustees hereby approves the following for the rank of Administrator Emerita effective on the formal date of retirement:

Suzanne M. Clark
 Alumni Relations

Karen Clift
 University Libraries

Connie Davenport
 College of Creative Arts

Donna Rohlfer
 University Budget Office

Sherry L. Schilling
 Human Resources

*Approved by the Board of Trustees
 December 14, 2018*

T. O. Pickerill II
 Secretary to the Board of Trustees



BOARD OF TRUSTEES
ROUDEBUSH HALL ROOM 212
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December 14, 2018
Consent Calendar

RESOLUTION R2019-11

BE IT RESOLVED: that the Board of Trustees hereby approves the conferring of all appropriate degrees, honors, and distinctions, as recommended by the Faculty Assembly, for all Commencement exercises scheduled during the 2018-2019 academic year.

*Approved by the Board of Trustees
December 14, 20*

T. O. Pickerill II
Secretary to the Board of Trustees



BOARD OF TRUSTEES
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December 14, 2018
 Other Business

RESOLUTION R2018-12

Amendment to the Regulations of the Board of Trustees
 Creation and Award of Title: Trustee Emerita/Emeritus

WHEREAS, Miami University's Trustees selflessly serve Miami University; and

WHEREAS, This steadfast service requires a tremendous commitment of time, talent, effort, and focus; and

WHEREAS, Miami University is committed to honoring this dedicated service.

NOW, THEREFORE BE IT RESOLVED, that the Regulations of the Board of Trustees be amended to create and bestow the title "Trustee Emerita/Emeritus" as follows:

Article I, Section 4, Trustee Emerita/Emeritus

To recognize and honor the service of prior Trustees, the title of Trustee Emerita/Emeritus, National Trustee Emerita/Emeritus or Chair Emerita/Emeritus is conferred, as applicable, following approval by the Board of Trustees, upon departing Board of Trustee members. All departing Trustees who have served for at least three years are automatically nominated for consideration and approval by the Board of Trustees.

Those departing Trustees appointed by the Governor of the State of Ohio shall be titled Trustee Emerita/Emeritus, departing National Trustees shall be titled National Trustee Emerita/Emeritus and for those who have served as the Chair of the Board of Trustees, Chair Emerita/Emeritus.

BE IT FURTHER RESOLVED, that all prior Trustees who served for at least three years shall be retroactively bestowed with the appropriate Emerita/Emeritus title.

*Approved by the Board of Trustees
 December 14, 2018*

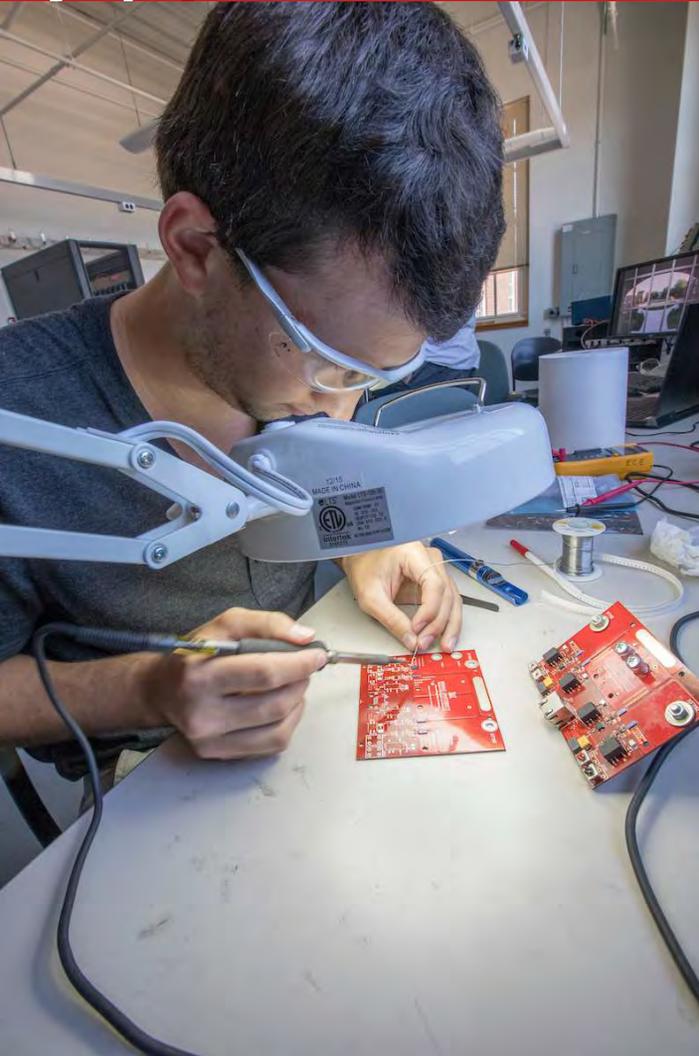
T. O. Pickerill II
 Secretary to the Board of Trustees

PRESIDENT'S UPDATE

DECEMBER 14, 2018



WHAT WILL WE COVER TODAY?



- Welcome to David Seidl
- Campus updates
- Positioning Miami University for the future
 - Disruptive trends
 - The stark reality
 - Investing in our future

HONOR FOR NATIONAL TRUSTEE MIKE ARMSTRONG



- Winner of the Ernest T. Stewart Award for alumni volunteer involvement from CASE
- Recognizes an individual for service to one's alma mater
- To be presented at CASE's annual Summit for Leaders in Advancement in July



VETERANS TRIBUTE DEDICATED ON VETERANS DAY



- Honors veterans past, present & future
- Located next to Student Veterans Center (Wells Hall)
- > 300 people attended ceremony



50TH ANNIVERSARY – MUDEC IN LUXEMBOURG



- > 700 Miamians
- > 10,000 students in Luxembourg
- Honorary degree to Prince Guillaume

50TH ANNIVERSARY – HAMILTON CAMPUS



- Community celebration in September
- One Miami connection
- Items in a time capsule:
 - A letter to the Class of 2043
 - A photo of President Shriver presenting the original time capsule
 - A Presidential Medallion



PRESIDENTIAL FELLOWS PROGRAM



- 15 full-ride scholarships for Class of 2023
- > 1,000 applications
- Attracting the nation's top students
- On the road – Columbus & Toledo



WIL HAYGOOD '76 & THE HARLEM RENAISSANCE



- Special alumni celebration Dec. 10
- Exhibit at Columbus Museum of Art
- Curated by Wil Haygood '76
- Rave reviews

NATIONALLY RANKED INSTITUTE FOR ENTREPRENEURSHIP



- 11th consecutive year ranked
- 7th among public universities; 14th overall
- Students in more than 110 majors enrolled
- 62% of faculty have started, bought or run a successful business

CINCINNATI
BUSINESS COURIER

Education

Greater Cincinnati university again ranks among best in U.S. for entrepreneurs



Princeton Review and Entrepreneur magazine ranked Miami University among the Top 25 Undergraduate Schools for Entrepreneurship Studies for the 11th straight year.

COURTESY OF MIAMI UNIVERSITY

CAREERS – PRESIDENTIAL SERIES



- Stackable credentials
- October – StartUp Cincy Day
- November – Design Thinking
- February 2019 – Technology, Innovation & Design
- March 2019 – Diversity & Inclusion

MIAMI IS A "BICYCLE-FRIENDLY UNIVERSITY"



- League of American Bicyclists
- Promoting safe & accessible bicycling
- Less congestion
- Healthier students, faculty, and staff
- Connections between campus and community

MAC COACHES OF THE YEAR



- Tom Chorny – men's cross country
- Inako Puzo – field hockey
- Carolyn Condit - volleyball



POSITIONING MIAMI UNIVERSITY FOR THE FUTURE



Miami will offer the best undergraduate education and top residential integrative experience, with select graduate programs, built on a solid, sustainable financial foundation.



POSITIONING MIAMI UNIVERSITY FOR THE FUTURE



Miami is strong

- Nationally recognized
- Excellent academic reputation
- Extraordinary faculty & staff
- Impressive physical infrastructure
- Distinctive mission & purpose

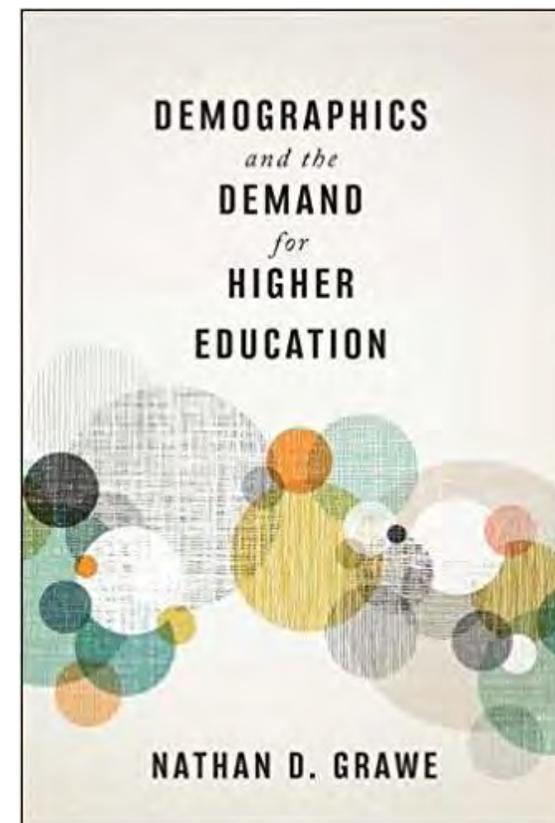
Great institutions are not immune to impending volatility, but great institutions plan & position themselves accordingly.



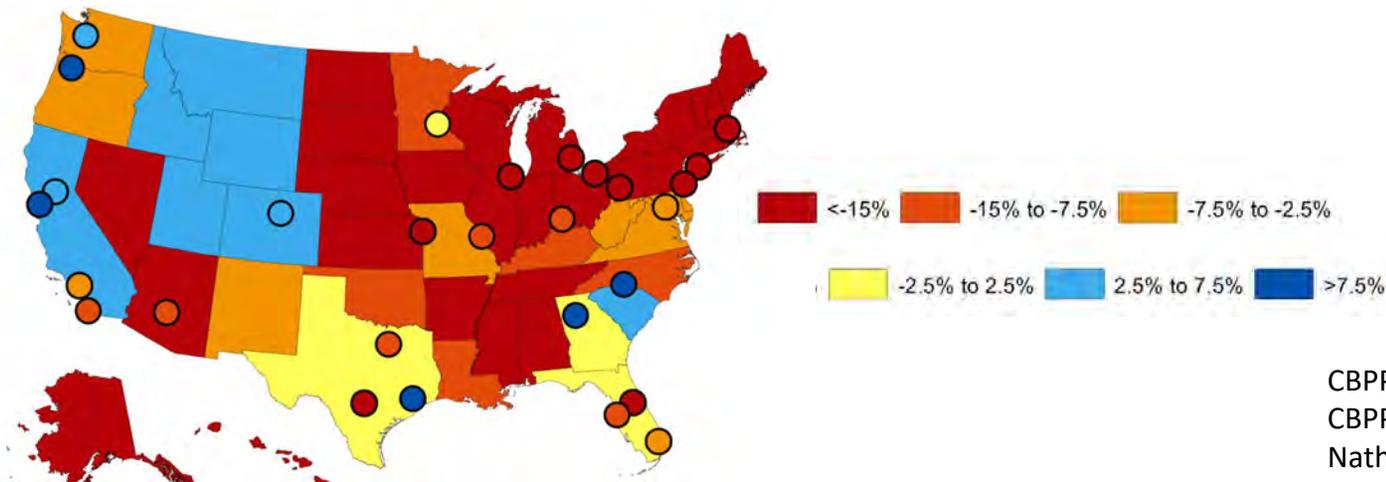
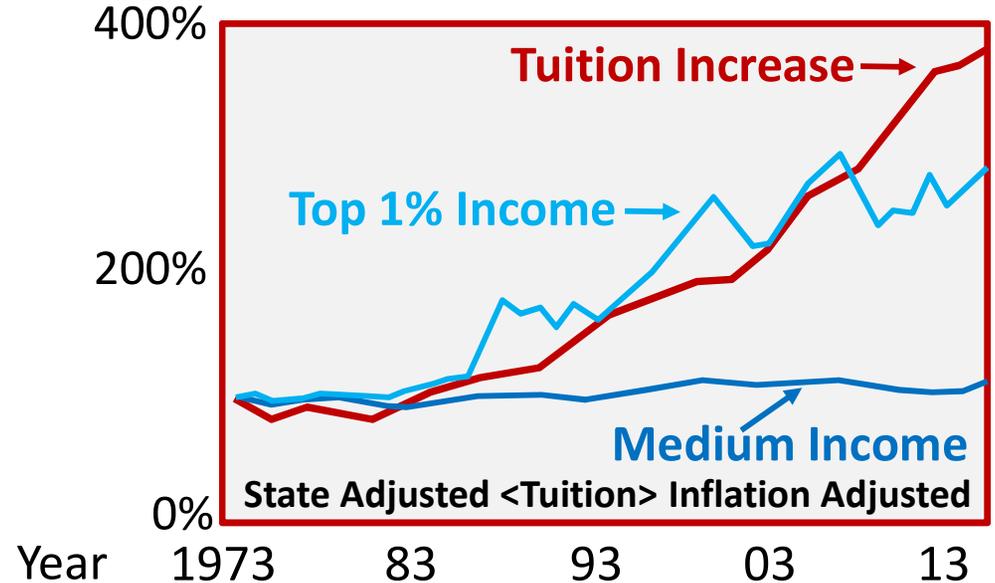
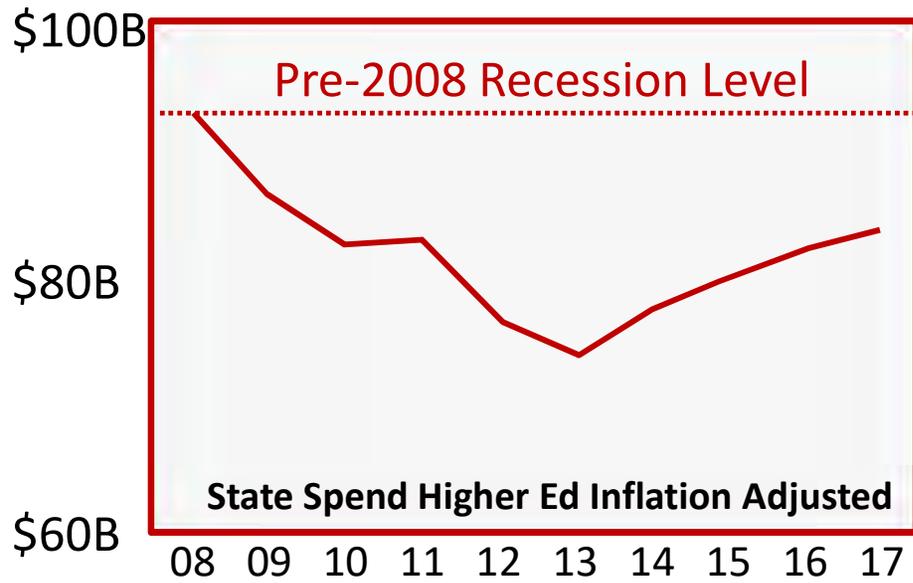
DISRUPTIVE TRENDS – THE NEW NORMAL



- Fewer high school graduates
- State support
- Greater need for student aid
- Hyper-competition for non-resident students
- Uncertainty in international markets
- Shifting student interests
- Perceptions of higher education
- Increased tuition discounting
- Fast-growing — post-graduate, masters/certs



DISRUPTIVE TRENDS – THE NEW NORMAL

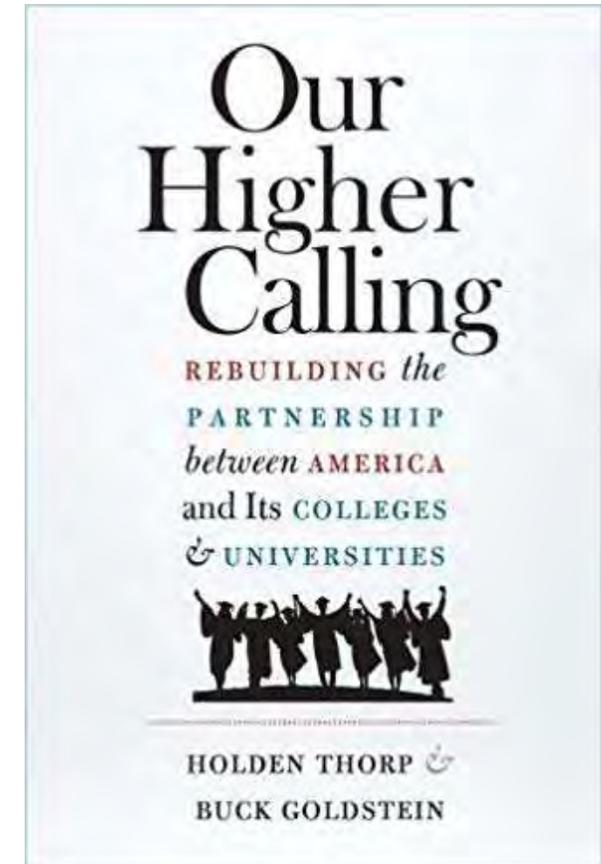


CBPP, College Board & Census Bureau
 CBPP Analysis of Grapevine & SHEE Assoc. '17
 Nathan Grawe on Demographics 2018

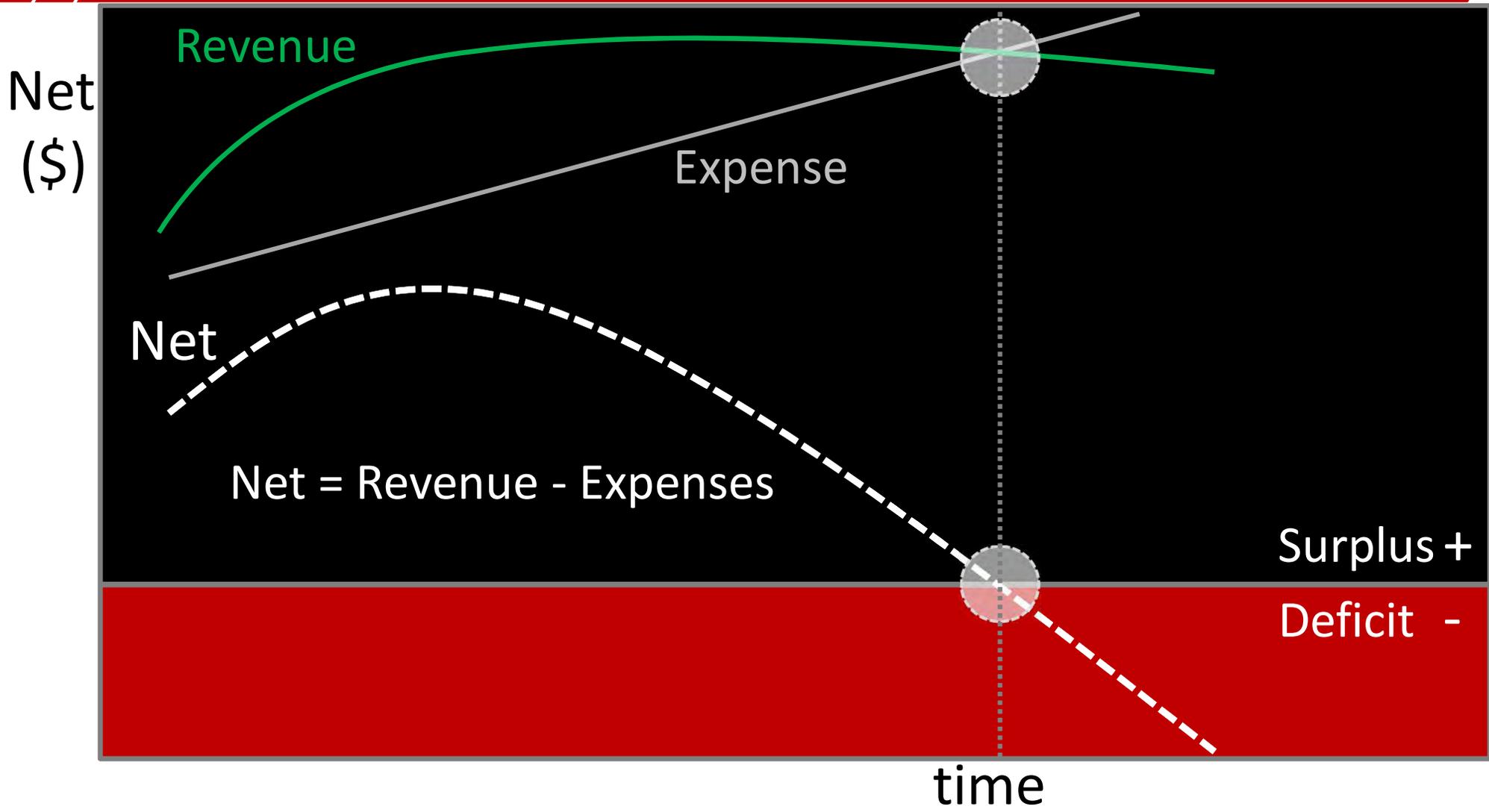
VOLATILITY IN HIGHER EDUCATION'S FUTURE



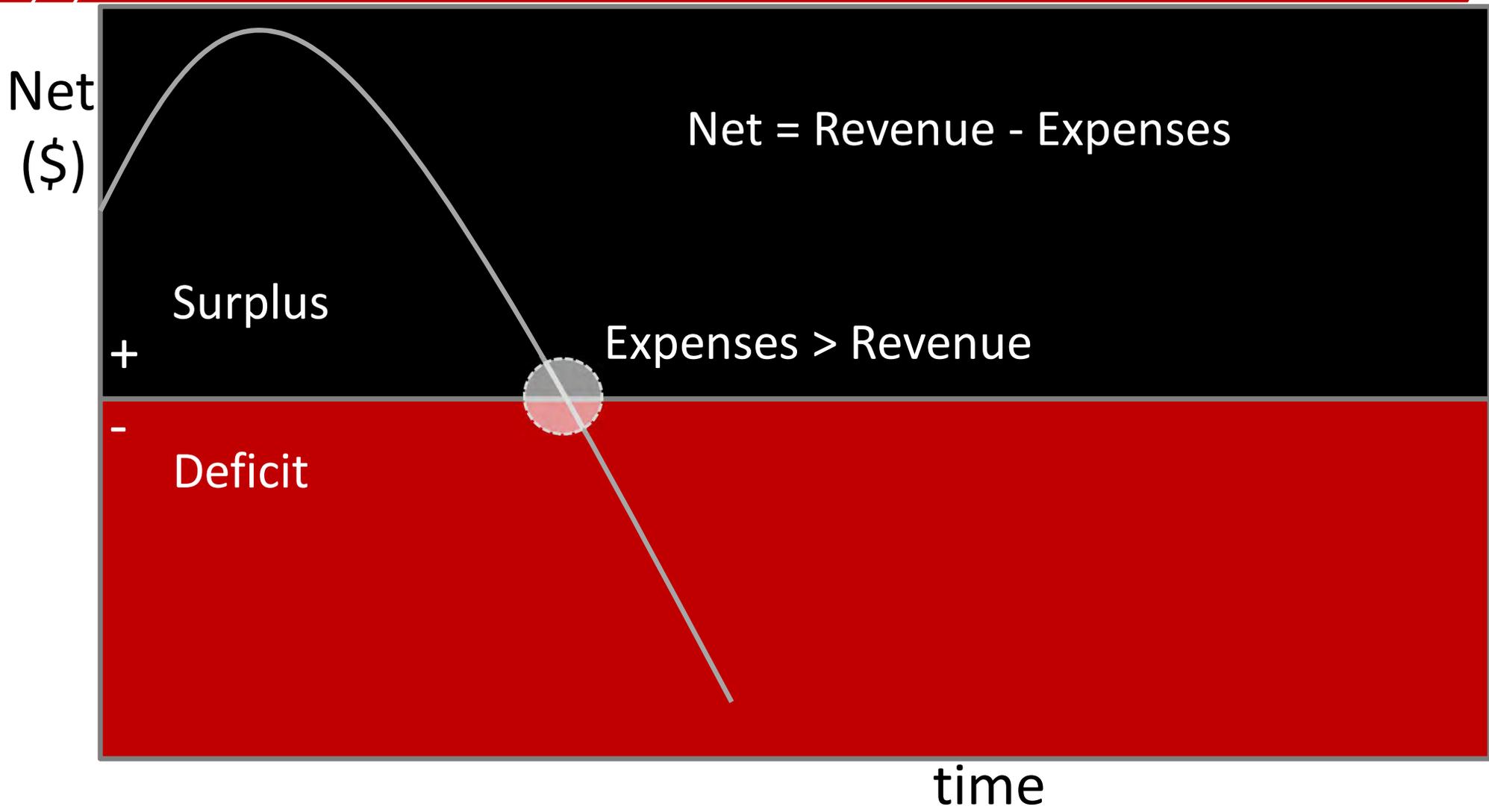
- Facing profound & radical change in higher education
↓
- Unprecedented times call for **proactive & urgent action**, short & long term
↓
- New strategic plan to drive transformational change, position Miami for future
↓
- **The time to act is now**



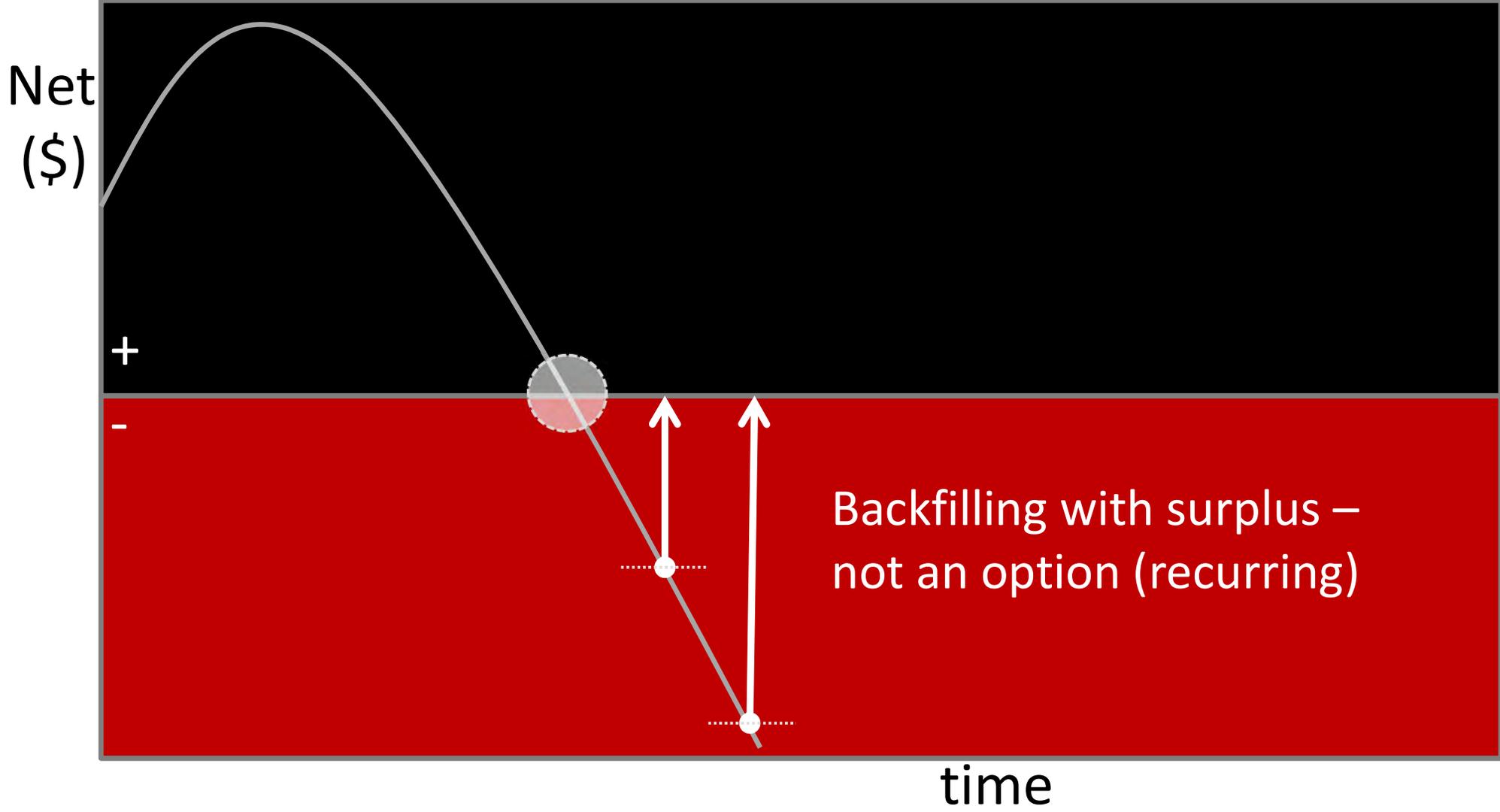
THE STARK REALITY IN HIGHER EDUCATION



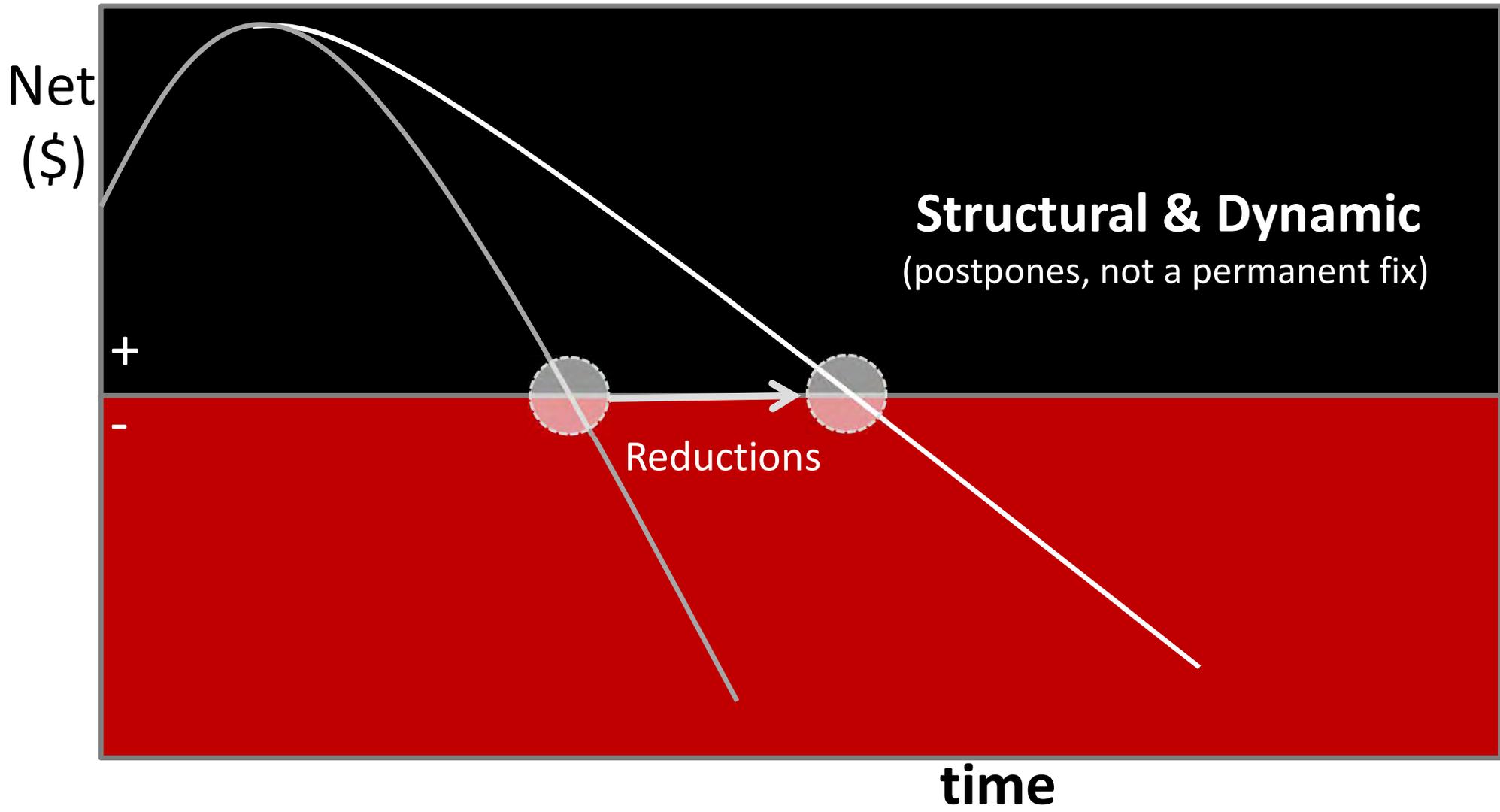
THE STARK REALITY IN HIGHER EDUCATION



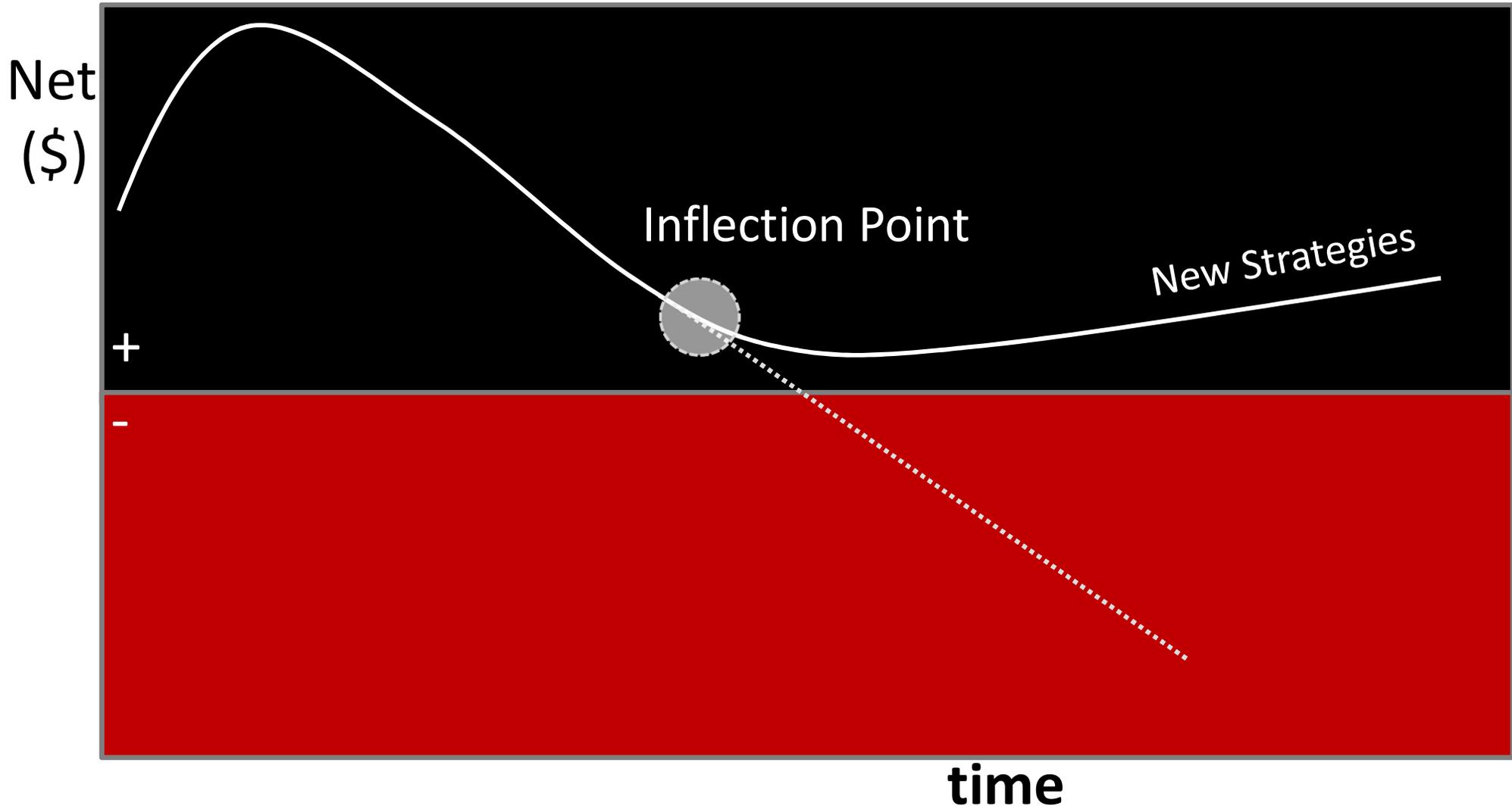
THE STARK REALITY IN HIGHER EDUCATION



THE STARK REALITY IN HIGHER EDUCATION



MUST CREATE POSITIVE GROWTH

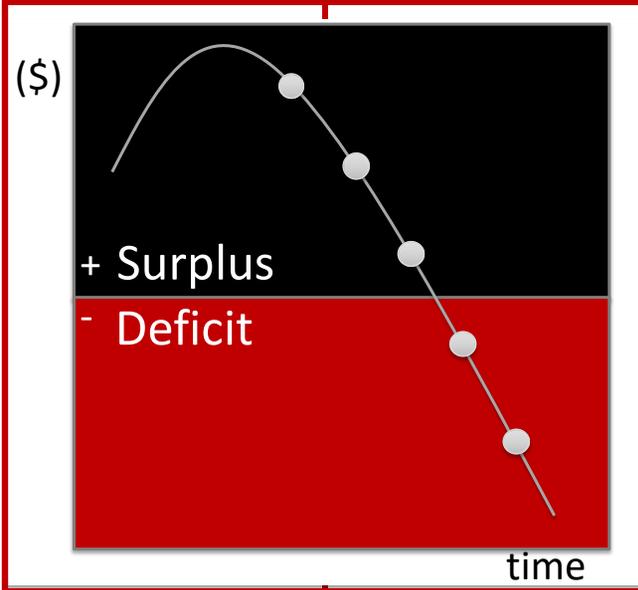


MIAMI'S CURRENT & FUTURE FISCAL SITUATION



Budget GAP

Revenue – Expense = Net



Expenses

- Employee Salaries
- Scholarship Aid
- Health Care Benefits

Revenue

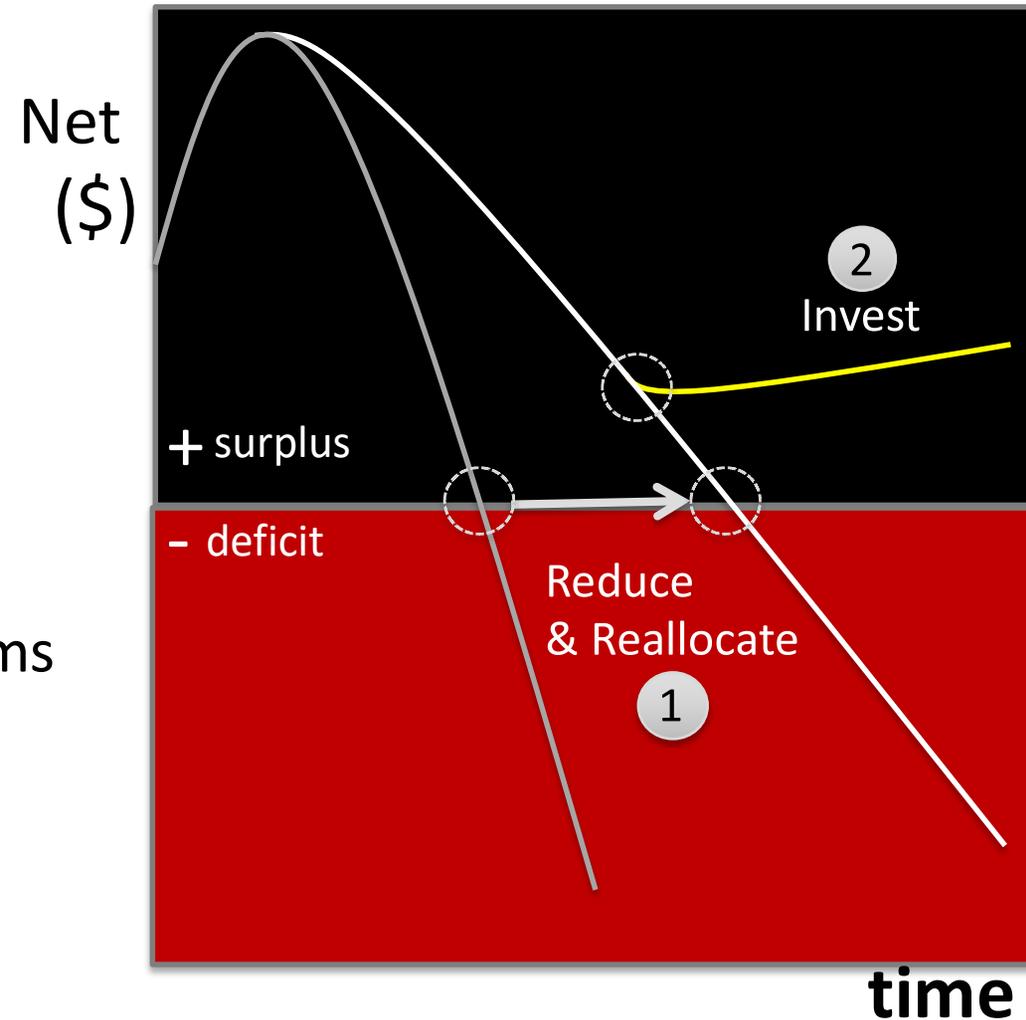
- Undergraduate Tuition
- Undergraduate Fees
- State Support (flat)

ACT NOW



We have ONE option

- Do nothing now – not viable
- Reduce & reallocate **1**
reinvest **2** strategically now
- New competitive academic programs
- Advance academic infrastructure
- Enhance strength areas



ADDRESS TRENDS, REDUCE & REALLOCATE



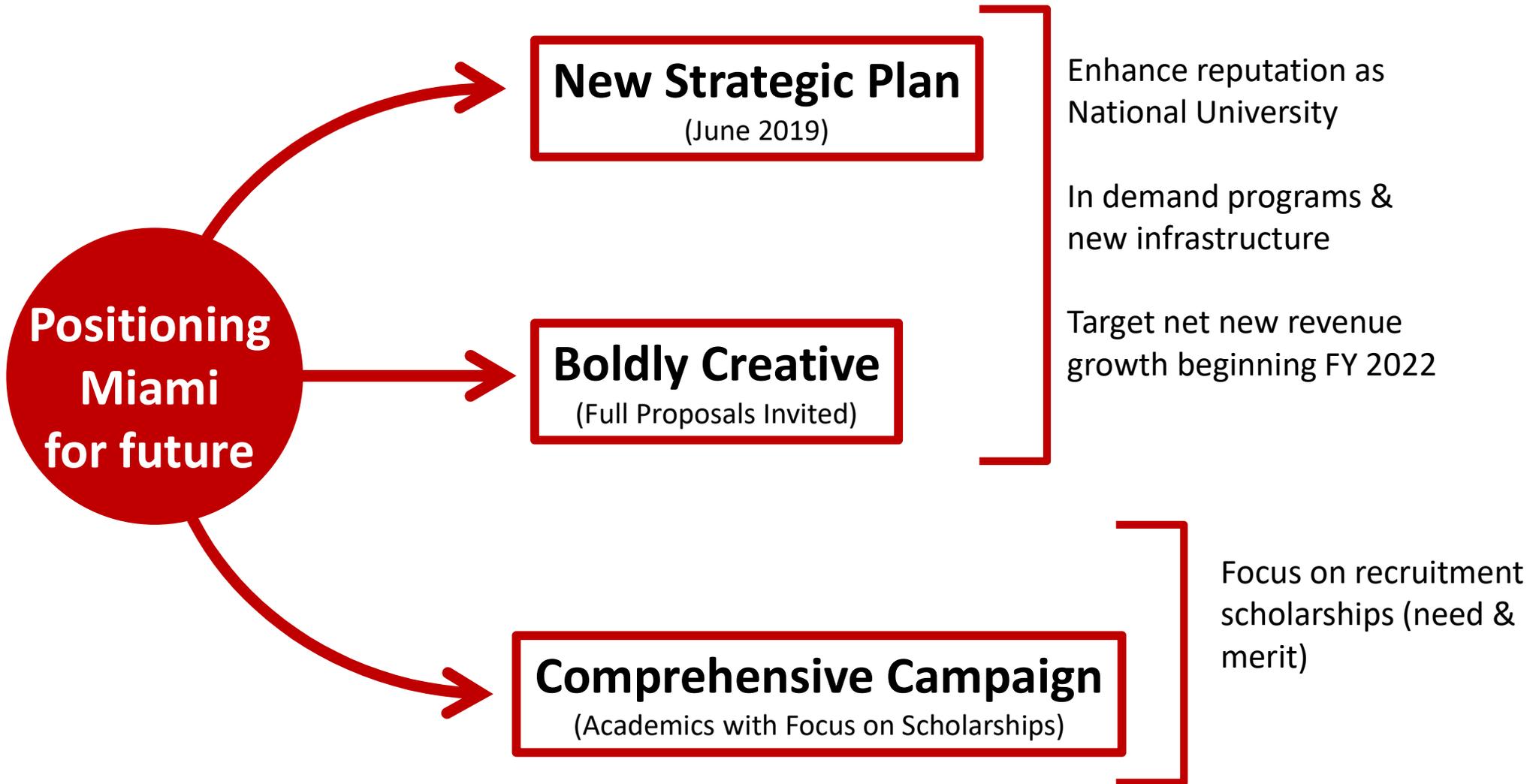
Address Structural Trends

- Curriculum reform through Governance
- Academic reallocations to create competitive, in-demand programs
- Reduce administrative & auxiliary spending

Reallocate to High Priority

- Retain and attract talented employees
- Competitive student aid
- Strategic initiatives
 - New & expanded academic programs
 - (co) Curricular & career experiences
 - New academic infrastructure

ALIGN OUR EFFORTS AND RESOURCES



INVESTING IN OUR FUTURE



Academic Focus Areas

- Health Care
- Innovation & Entrepreneurship
- Data & Analytics
- Faculty-generated programming

Campus Infrastructure

- Academic facilities & spaces

Enhancing National Reputation

- Increase non-resident & international interest
 - In-demand programs
 - Premier & signature programs
 - Academic facilities & infrastructure
- Target growing markets
 - Professional & post graduate experiences, 3+1 and 4+1 degrees

ADVANCING MIAMI STRATEGIC PLAN



- Complete plan by June 2019
- Begin implementation September 2019
- Chairs: Julia Guichard & Bob Applebaum

Strategic Planning Committee Structure

NEW DIRECTIONS (IN-DEMAND AREAS)



Recently Created

- Nursing expansion (Oxford)
- Gaming (Approve, to State)
- Data Science & Statistics

Boldly Creative Proposals

Team Collaboration

- Analytics (Liberal Arts, Sport, M.S.)
- Health (PA Feasibility, Nursing)
- Engineering (Automation, Innovation)

Individual

- eSports
- Cyber-Security
- Innovation Hub
- Online Micro-Credentials
- Distilling
- M.S. Business Management

THE “UNI” VERSITY



- Act **NOW** to prepare for a future that will transform higher education
- Position Miami University for a dynamic future through our **NEW** Strategic Plan
- Have a **sense of urgency** & financial resources to make investments in our academic programs & infrastructure that will ensure our future



THANK YOU!




EXECUTIVE COMMITTEE of UNIVERSITY SENATE

Terri Barr, Chair

Dana Cox, Chair-elect

 University Senate Website: www.miamioh.edu/senate/

December 13, 2018

To: Board of Trustees, Academic and Student Affairs Committee
 From: Terri Barr, Chair, Executive Committee of University Senate
 RE: University Senate Report to Board of Trustees – December 14, 2018 Meeting

Executive Committee of University Senate membership:

- Terri Barr, (Marketing), Chair
- Dana Cox, (Mathematics), Chair-Elect
- Don Ucci, (Electrical and Computer Engineering), at-large member
- Meaghan Murtagh (Student Body President), undergraduate
- Benedict Njoku, graduate student
- Phyllis Callahan, Provost, Chair of University Senate
- Jeffrey Wanko, (Associate Provost), Secretary of University Senate
- Becky Sander (Executive Assistant for Admin Services), Recording Secretary

The following summarizes items of University Senate Business conducted since the Executive Committee submitted a report to the Board of Trustees on September 13, 2018.

- New Business, Specials Reports and Updates delivered to University Senate:
 - **September 24, 2018**
 - Open Education Resources – Carla Myers, University Libraries; Jennifer Bazeley, University Libraries; and, Carolyn Haynes, Associate Provost
 - Academic Program Review Committee Update – Jim Oris, Chair
 - Attendance Policy – Brent Shock, VP Student Enrollment Services and Mandy Euen, Interim University Registrar
 - Ad-hoc Committee Charge (listed below)
 - **October 8, 2018**
 - HLC/ODHE Compliance Issues – Carolyn Haynes, Associate Provost
 - Survey Results Discussion – Terri Barr, Chair, Senate Executive Committee
 - **November 5, 2018**
 - Special Report: Budget Presentation - Phyllis Callahan, Provost and Dr. David Creamer, Senior VP for Finance and Business Services
 - **November 19, 2018**
 - Enrollment Management and Student Success Update – Michael Kabbaz, Sr. V.P. for EMSS
- Minors, revisions to existing degrees, name changes and University Policies received and approved on the University Senate consent calendars:
 - **September 24, 2018**
 - Revision of an Existing Certificate, EDP – Quantitative Data Analysis in Education and Social Sciences
 - Revision of an Existing Certificate, KNH – Sport Management Certificate
 - New Minor, PSS – Psychological Science

- Revision of an Existing Minor, ATH – Anthropology
- Revision of an Existing Minor, BIO – Plant Sciences
- Revision of an Existing Major, EDT – Literacy and Language, M.Ed.
- Revision of an Existing Major, ENT – Engineering Technology
- Revision of an Existing Major, GTY – Social Gerontology
- Revision of an Existing Major, MUS – Music, Master of Music
- Revision of an Existing Major, MUS – Music, Master of Music
- Revision of an Existing Major, MUS – Music Education, Master of Music
- Revision of an Existing Major, SPN – Spanish
- Revision of an Existing Major, STA – Data Science and Statistics
- Revision of an Existing Major, THE – Theatre and Practice, MA
- Elimination of an Existing Major, KNH – Athletic Training
- **October 8, 2018**
 - Revision of an Existing Major, GEO – Geography and Sustainable Development
 - Revision of an Existing Major, JRN – Journalism
 - Revision of an Existing Major, NSG – Nursing
- **October 22, 2018**
 - Class Attendance Policy Revision (MUPIM 10.1)
- **November 5, 2018**
 - Revision of an Existing Minor, STA – Actuarial Science
- **November 19, 2018**
 - Revision of Course Numbering System (Bulletin)
 - Revision of an Existing Minor, SGE – Criminology
 - New Co-Major, ART – Art Therapy
 - Revision of an Existing Major, BIO – Cell Molecular and Structural Biology , MS and Ph.D.
 - Revision of an Existing Major, CMA – Community Arts
 - Revision of an Existing Major, IES – Environmental Science

- Senate Resolutions

SR 19-01

August 27, 2018

BE IT HEREBY RESOLVED that University Senate endorse proposed revisions to the ByLaws of University Senate, 6.C.4.a regarding Committee composition and membership of the Council on Diversity and Inclusion Committee.

SR 19-01 passed by voice vote

- Ad-hoc Committee Charge

November 19, 2018

SR 18-12: April 30, 2018 Creation of Ad-Hoc Committee by Senate Executive Committee

BE IT HEREBY RESOLVED that an ad-hoc committee be appointed by Senate Executive Committee in consultation with Faculty Welfare Committee and Faculty Rights & Responsibilities Committee to consider Miami's needs, values and goals in relation to its faculty composition and to make recommendations about faculty composition that include due process and academic freedom protections appropriate to each category. SR 18-12 passed by voice vote.

Executive Committee charge to the Ad-Hoc Committee: As the resolution states, the outcome of the committee's charge is "make recommendations about faculty composition."

When making recommendations to address the resolution, we ask the committee to consider criteria that might be applied to determine appropriate faculty composition within departments. The committee should be mindful of the different missions of academic divisions, departments, and programs and should:

1. Consider curricular needs (with attention to enrollment, number of majors, minors, etc.), including:
 - a) The need to serve the Miami Plan, e.g. Foundation courses; MPF requirements
 - b) The need to offer upper-level courses to serve majors, offer thematic sequences, etc.
 - c) The need to offer graduate courses in some departments.
2. Consider how Miami might increase the ratio of tenure/tenure track faculty to non-tenure track faculty to align with the University's mission and commitment to Teacher/Scholar model. Consider criteria that might be applied to evaluate curricular offerings in ways that would affect faculty composition.
3. Consider other factors, e.g. professional degree granting programs, liberal arts programs, Oxford campus mission, Regional Campuses mission, issues of accreditation, and others.
4. Benchmark faculty composition, policies regarding academic freedom, and due process at peer and aspirational colleges and universities.
5. Recommend policies and procedures to ensure academic freedom and due process for non-tenure track faculty relative to Miami's needs, values, and goals.
6. Keep Senate Executive Committee updated on committee needs and progress. The Committee will report to Senate at the April 1, 2019 meeting.

NB: Office of Institutional Research will provide data the committee may require.

cc: Provost Phyllis Callahan, Chair, University Senate
Terri Barr, Chair, Executive Committee of University Senate
Jeffrey Wanko, Secretary, University Senate
Becky Sander, Recording Secretary, University Senate



BOARD OF TRUSTEES
ROUDEBUSH HALL ROOM 212
OXFORD, OHIO 45056
(513) 529-6225 MAIN
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WWW.MIAMIOH.EDU

December 14, 2014
Academic and Student Affairs

RESOLUTION R2019 - 13

WHEREAS, University Senate on December 3, 2018 passed SR 19-02, endorsing a degree, Bachelor of Science, with a major in Games and Simulation, College of Creative Arts.

NOW THEREFORE BE IT RESOLVED, that the Board of Trustees hereby approves the establishment of a Bachelor of Science, with a major in Games and Simulation, within the College of creative Arts.

*Approved by the Board of Trustees
December 14, 2018*

A handwritten signature in black ink, appearing to read 'T. O. Pickerill II', with a long horizontal flourish extending to the right.

T. O. Pickerill II
Secretary to the Board of Trustees



EXECUTIVE COMMITTEE of UNIVERSITY SENATE

Terri Barr, Chair

Dana Cox, Chair-elect

University Senate Website: miamioh.edu/academic-affairs/university-senate/

December 4, 2018

To: Gregory P. Crawford, President
 From: Jeffery Wanko, Secretary of the University Senate
 Re: Degree Program Approval
 SR 19-02, Games and Simulation – Bachelor of Science, with a major in Games and Simulation,
 College of Creative Arts;

The Miami University Policy and Information Manual, Section 11.1.E, Adding a New Degree, states that a proposal for any curriculum or program leading to a new undergraduate or graduate degree shall be submitted to the President, the Board of Trustees, and the Ohio Board of Regents/Ohio Regents' Advisory Committee on Graduate Study for approval following approval by the department or program, the academic division, the Council for Undergraduate Curriculum/Graduate Council, the Council of Academic Deans, and University Senate.

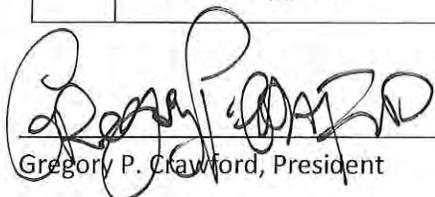
On December 3, 2018, University Senate adopted SR 19-02:
BE IT HEREBY RESOLVED that University Senate endorse the proposed degree, Bachelor of Science, with a major in Games and Simulation, College of Creative Arts;

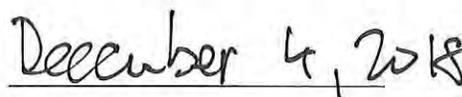
AND FURTHERMORE, that the endorsement by University Senate of the proposed degree will become effective immediately and will be forwarded to the Miami University Board of Trustees for consideration.

Approval of the President

I, Gregory P. Crawford, President of Miami University, approve/do not approve Bachelor of Science, with a major in Games and Simulation, College of Creative Arts.

✓	Approve Forward to the Board of Trustees for action (copy to Secretary of University Senate)
	Do Not Approve


 Gregory P. Crawford, President


 Date

cc: Terri Barr, Chair, Executive Committee of University Senate
 Phyllis Callahan, Provost, Chair University Senate
 Ted Pickerill, Secretary to the Board of Trustees and Executive Assistant to the President



Board of Regents

John R. Kasich, Governor
Jim Petro, Chancellor

University System of Ohio

REQUEST FOR APPROVAL

**SUBMITTED BY
MIAMI UNIVERSITY**

**ESTABLISHMENT OF A
[Bachelor of Science] DEGREE IN
[Games + Simulation]**

(March 2, 2018)



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REQUEST

Date of submission: [3/2/18]

Name of institution: Miami University

Degree/degree program title: [Bachelor of Science] degree in [Games + Simulation]

Primary institutional contact for the request

Name: Glenn Platt
Title: ArmstrongProf Network Tech&Mgt
Phone number: 513-529-2808
E-mail: plattgj@miamioh.edu

Department chair/program director

Name: Murali Paranandi
E-mail: paranam@miamioh.edu

Delivery sites: campus(es) Oxford

Date that the request was approved by the institution's governing board:

Approved by the Miami University Senate on [date], and the Board of Trustees on [date]

Proposed start date: [Fall] [2019]

Date Institution established: 1809

Institution's programs: associate, bachelor's, master's, educational specialist, doctoral degrees (total ____ degree majors as of ____)

Educator Preparation Programs:

Indicate the program request leads to educator preparation licenses or endorsements.

Licensure Yes No
Endorsement Yes No

SECTION 1: INTRODUCTION

1.1 Brief summary of the request

The Interactive Media Studies program at Miami University is proposing a Bachelor of Science in Games + Simulation. The IMS program represents a STE(A)M-focused liberal arts education for the 21st century, integrating technology and innovation with the traditional curriculum offerings of Miami University. The program includes disciplines and faculty from five of the university's academic divisions, distinguishing the BS in Games + Simulation as a unique, interdisciplinary major that embraces the widespread influence and critical impact that games have in contemporary industry and society.

IMS has been offering courses for twenty-two years and continues to be recognized for excellence in digital and interactive media. In the last two years, the program has seen exponential growth due to high demand for the newly established BA in IMS and significant interest in the degree's minor in Digital Games Studies. The BS in Games + Simulation builds

on the existing BA focus track in games. It then offers significantly deeper expertise in the design and development of games as they can be used for both entertainment and non-entertainment purposes. This BS provides significant and rigorous study in the production, art, and analysis of games. This degree reflects not only the thriving state of the game industry but also the growing demand for “games-thinking” in a broader spectrum of industries and organizations, including healthcare, education, marketing, and science.

The BS in Games + Simulation begins with a set of Foundation courses, providing a common grounding in game design as well as all three areas of focus within the curriculum: game art, game development, and game studies. The Foundation also includes an introductory course that helps frame the student's interest in games and helps them see the broader career options available to them, both inside and outside of the game industry.

After finishing the Foundation, the student moves to the Intermediate courses. These courses provide an introduction to industry-standard tools for 3D modeling, game programming/development, usability, and narrative.

The curriculum culminates in a three-semester sequence of courses, ending with a capstone course where students produce an industry-quality game.

Students will choose one of three areas of focus: Game Art, Game Development, or Game Studies. Each of these focus areas comes with a set of required courses in addition to those described above. The Game Art focus contains a series of courses that are in the process of being proposed as a minor in Art. The Game Development focus includes a minor in Computer Science. The Game Studies focus includes a minor in Interdisciplinary Studies. Note that we have written approval from ART, WST, and CSE for the inclusion of their courses & curricula.

SECTION 2: ACCREDITATION

2.1 Regional accreditation

Original date of accreditation:	1913
Date of last review:	2005
Date of next review:	2015

2.2 Results of the last accreditation review

Miami University is accredited by the [Higher Learning Commission](#) (HLC) of the North Central Association of Colleges and Schools. HLC accredits degree-granting post-secondary educational institutions in the North Central region of the United States. Miami's most recent accreditation review was in 2005 (see [2005_Review.pdf](#), 4.3MB), while the next reaccreditation review will occur in 2015.

2.3 Notification of appropriate agencies

Provide a statement indicating that the appropriate agencies (e.g., regional accreditors, specialized accreditors, state agencies, etc.) have been notified of the institution's request for authorization of the new program. **Provide documentation of the notification as an appendix item.**

SECTION 3: LEADERSHIP—INSTITUTION

3.1 Mission statement

Miami University, a student-centered public university founded in 1809, has built its success through an unwavering commitment to liberal arts undergraduate education and the active engagement of its students in both curricular and co-curricular life. It is deeply committed to student success, builds great student and alumni loyalty, and empowers its students, faculty, and staff to become engaged citizens who use their knowledge and skills with integrity and compassion to improve the future of our global society.

Miami provides the opportunities of a major university while offering the personalized attention found in the best small colleges. It values teaching and intense engagement of faculty with students through its teacher-scholar model, by inviting students into the excitement of research and discovery. Miami's faculty are nationally prominent scholars and artists who contribute to Miami, their own disciplines and to society by the creation of new knowledge and art. The University supports students in a highly involving residential experience on the Oxford campus and provides access to students, including those who are time and place bound, on its regional campuses. Miami provides a strong foundation in the traditional liberal arts for all students, and it offers nationally recognized majors in arts and sciences, business, education, engineering, and fine arts, as well as select graduate programs of excellence. As an inclusive community, Miami strives to cultivate an environment where diversity and difference are appreciated and respected.

Miami instills in its students intellectual depth and curiosity, the importance of personal values as a measure of character, and a commitment to life-long learning. Miami emphasizes critical thinking and independent thought, an appreciation of diverse views, and a sense of responsibility to our global future.

-- June 20, 2008

[\(http://MiamiOH.edu/about-miami/leadership/president/mission-goals/\)](http://MiamiOH.edu/about-miami/leadership/president/mission-goals/)

3.2 Organizational structure

Miami University is governed by a Board of Trustees which has 11 members appointed by the Governor with the consent of the Ohio Senate. The Board of Trustees delegates responsibility for administration of the university to the President. The President is advised by an Executive Committee that includes the Provost and Executive Vice President for Academic Affairs, Vice President for Finance and Business Services, Vice President for Student Affairs, Vice President for University Advancement, Vice President for Information Technology, General Counsel, Secretary to the Board of Trustees, Senior Director of University Communications, and Director of Intercollegiate Athletics.

The Division of Academic Affairs includes six academic divisions (College of Arts & Science, College of Creative Arts; College of Education, Health and Society; College of Engineering and Computing, Farmer School of Business; College of Professional Studies & Applied Sciences), the Graduate School, University Libraries, and the Miami University Dolibois European Center (MUDEC).

The administrative leadership of Miami University can be found at: <http://MiamiOH.edu/about-miami/leadership/admin-officers/index.html>.

SECTION 4: ACADEMIC LEADERSHIP—PROGRAM**4.1 Organizational structure**

Describe the organizational structure of the proposed program. In your response, indicate the unit that the program will be housed within and how that unit fits within the context of the overall institutional structure. Further, describe the reporting hierarchy of the administration, faculty, and staff for the proposed program.

This degree program will be housed within the College of Creative Arts, in the IMS program. All of the courses are offered on the Oxford campus. Faculty and staff in IMS report to the Director of IMS, who reports to the Dean of the College of Creative Arts.

Provide the title of the lead administrator for the proposed program and a brief description of the individual's duties and responsibilities. Include this individual's CV/resume as an appendix item.

The title of the lead administrator for this program is the Director of the Interactive Media Studies Program, a role presently held by Prof. Glenn Platt. The duties and responsibilities of this position are identical to a department chair and include academic and administrative leadership of department and programs (educational planning, scheduling, monitoring, and accreditation activities), faculty and staff performance evaluation, recruitment and retention of faculty and staff members, faculty and staff development, promotion and tenure guidance and evaluation, recruitment (including outreach) and retention of students, resource management, routine departmental administration (chair faculty meetings, implement curricular and program decisions made in faculty meetings, assignment of committees), program development and publicity, liaison with industry, academia, and alumni, and seeking advice and support from external constituencies.

[..\CV for new major\Glenn Platt CV.pdf](#)

Describe any councils, committees, or other organizations that support the development and maintenance of the proposed program. In your response, describe the individuals (by position) that comprise these entities, the terms of their appointment, and the frequency of their meetings.

The IMS Curriculum Committee:

This is a subgroup of faculty currently in the IMS program. Currently there are ten members of the committee; all are tenured, tenure-track, lecturer, or full-time visiting faculty. This committee meets approximately once a month during the academic year. The term of appointment is one year.

The IMS Assessment Committee:

This is a subgroup of faculty currently appointed in the IMS program. Currently there are three members of the committee, all of whom are tenured, tenure-track, and lecturer. This committee meets approximately once a month during the academic year. The term of appointment is one year.

The IMS Faculty:

This group is made up of all tenured, tenure-track, lecturer, visiting faculty, adjunct faculty, and affiliate faculty in the IMS program. The program typically meets as a committee of the whole once a month during the academic year. There are no terms of appointment as faculty members serve on this committee while they are members of the IMS program.

4.2 Program development

Describe how the proposed program aligns with the institution's mission.

Focusing on the Undergraduate Curriculum:

This degree is focused on the development of Miami's undergraduate curriculum and allows a move into 21st century-relevant STEM content, skills, and critical thinking.

The Engaged University:

All of the courses in this degree involve highly engaged, active learning. Many of them use the "inverted classroom" model, which means viewing/reading content outside of class and using class time for projects, experimentation, and engagement. Courses within the major work with industry partners on game and simulation production. For example, our games and simulation students recently built a virtual reality version of Cincinnati Children's Hospital to train staff on evacuation techniques. Corporate and non-profit partnerships are key aspects of the program.

Improving the Future of our Global Society:

This curriculum focuses on putting the student's learning into a global context, making them strong and committed citizens. From our semester-long internship program in San Francisco, working with startups that operate in global settings, to courses that examine race, gender, and sexuality in games, we strive to contextualize gameplay in a critical context that recognizes the global marketplace for games. Our usability and games course, for example, studies how interactions and cultural norms vary across global markets.

21st Century Liberal Education:

This degree focuses teaching and intense engagement of faculty with students through its teacher-scholar model by inviting students into the excitement and process of research and discovery. The breadth of the degree offerings and the faculty expertise offer a 21st-century liberal arts experience, building information and digital literacy as a foundation for the new liberal arts. As an inclusive community, IMS, like Miami, strives to cultivate an environment where diversity and difference are appreciated and encouraged. The unique niche of this program relative to programs elsewhere that simply teach game making is that games are a true liberal arts discipline for us. From writing to art, from philosophy to engineering, from business to psychology, we steep our students in critical foundations that not only let them be experts in game production, but also understand how games drive learning, health, commerce, and culture.

Knowledge Creation:

The IMS faculty are nationally engaged scholars and artists who contribute to Miami, their own disciplines, and society by creating new knowledge and art. Our game faculty are regular speakers at GDC, the highly competitive, premier game conference. They are sought after by news organizations and NSF teams. For example, one of our faculty, Prof. Bob De Schutter, is considered one of the top three scholars in the world who study games and aging populations. The IMS faculty instill in their students an intellectual depth and curiosity. This is exemplified in the one-on-one mentorship, the including of undergraduates in published research, and the various scholarly requirements for students in addition to production requirements.

Indicate whether the institution performed a needs assessment/market analysis to determine a need for the program. If so, briefly describe the results of those findings. If completed, submit the full analysis as an appendix item.

Computer games are a strong engine for economic growth. The game industry is a \$138 billion industry that is growing four times faster than the U.S. economy. The industry is expected to top \$180 billion by 2021 [1]. In the healthcare industry alone, gamification accounts for about \$4 billion of revenue and is expected to be \$40 billion by 2024 [2]. U.S. Video Game Industry Expands to 50 States, Supporting 220,000 Jobs, and \$30.4 Billion in Revenue. The U.S. video game industry employs more than 220,000 individuals according to the Entertainment Software Association (ESA) [3]. The average annual salary for a game designer is over \$81,000 [4] and for a game developer is over \$101,000 [5].

[1] <https://venturebeat.com/2018/04/30/newzoo-global-games-expected-to-hit-180-1-billion-in-revenues-2021/>

[2] <https://markets.businessinsider.com/news/stocks/healthcare-gamification-market-will-secure-12-cagr-to-exceed-40-billion-by-2024-1009803608>

[3] <http://www.theesa.com/article/u-s-video-game-industry-expands-50-states-supporting-220000-jobs-30-4-billion-revenue/>

[4] https://www.glassdoor.com/Salaries/game-designer-salary-SRCH_KO0,13.htm

[5] https://www.glassdoor.com/Salaries/game-developer-salary-SRCH_KO0,14.htm

Higher Education Game Program Summary

[These data below are based on the survey of game companies conducted by the Higher Education Video Game Association found at <https://hevg.org/reports/>]

Employment

Alumni of game-based programs fare well on the overall market. The percentage of alumni reporting gainful employment after a single year on the market was 93.1%, more than 8% higher than national employment rates for college graduates four years post-graduation. More than half of alumni surveyed work within the video game industry (55.8%).

Working in Industries Outside Games

Game-based programs prepare students for more than just the games industry, however. While 55.8% of respondents work within the video game industry, the other 44.2% contribute to other vital industries, including education (26.8%), software development (5.8%), and government/security/defense (2.2%). Thus, a solid education in game design prepares students for more than just the games industry itself.

Salaries

Alumni of game-based programs also earn higher salaries. Graduates who participated in this survey earn an estimated average salary of \$76,200 annually for full-time positions, or \$24,000 more than the U.S. national average for college graduates with full-time jobs. Findings show little difference between the average salary for those working within the video game industry and those working outside of it, although graduate degree holders do significantly out-earn alumni with only undergraduate degrees.

Job Satisfaction

Finally, game-based program alumni report overall high rates of workplace well-being on the Cantril scale, with 82.9% classified as "thriving" out in the workplace. Additional items measuring autonomy, connectedness, sense of purpose, and satisfaction in career path and current employment context confirm these findings. Alumni working full-time reported even greater satisfaction than those working only part-time, and alumni working within the video game industry reported greater well-being than those working in other industries.

Enrollment

The success of the video game industry begins with education. Enrollment of video game-

related programs continues to grow, demonstrating the interest and strength in this course of study at universities and colleges nationwide and internationally. Game-based programs in higher education account for a total of 7,675 undergraduate students in the United States and four other countries. Such programs are most commonly established within computer and information sciences (roughly 43,000 total undergraduate degrees per year in the States), engineering and engineering technologies (roughly 93,000 per year), and visual and performing arts (roughly 94,000).

If completed, upload the full analysis

Indicate whether the institution consulted with advisory groups, business and industry, or other experts in the development of the proposed program. If so, briefly describe the involvement of these groups in the development of the program.

The IMS faculty have received feedback on the game curriculum from executives from Twitch (the premier online gaming channel), Facebook Games, Ubisoft, EA, Blizzard, Telltale games, WB Games, Zenimax, Bungie, Amazon, nVidia, and others.

Indicate whether the proposed program was developed to align with the standards of a specialized or programmatic accreditation agency. If so, indicate whether the institution plans to pursue programmatic/specialized accreditation for the proposed program and provide a timeline for achieving such accreditation. If the program is already accredited, indicate the date that accreditation was achieved and provide information on the next required review.

There are no accrediting bodies for game programs, though the Director of the program's Armstrong Institute for Interactive Media Studies is the President Emeritus of the International Digital Media and Arts Association and has served on review committees for other programs. The game program and curriculum have also been discussed with HEVGA (Higher Education Video Game Alliance), where one of the IMS Faculty serves on the Diversity & Inclusion Committee.

4.3 Collaboration with other Ohio institutions

Indicate whether any institution within a 30-mile radius of your institution offers the proposed program. If so, list the institutions that offer the proposed program, and provide a rationale for offering an additional program at this site.

There are no institutions within 30 miles of Miami University that offer a bachelor's degree program in games. Once approved, this will be the only bachelor's program in games in SW Ohio.

Indicate whether the proposed program was developed in collaboration with another institution in Ohio. If so, briefly describe the involvement of each institution in the development of this request and the delivery of the program.

No, we did not develop this degree in collaboration with another institution.

SECTION 5: STUDENT SERVICES

5.1 Admissions policies and procedures

Describe the admissions requirements for the program. In your response, highlight any differences between the admission requirements for the program and for the institution as a whole.

All students must first be accepted to Miami University, then, if accepted, they must be separately be admitted to the major. This second step is to ensure we can appropriately staff the program to meet the demand. We will begin the program with the goal of having 100 students (in total) at any point in time. We hope to increase that number with future hiring, but are keenly aware of the importance in being able to staff for existing demand.

The process for both steps are outlined below.

Detailed information about admission to Miami University can be found on the website at: <http://miamioh.edu/admission/high-school/application/index.html>.

Once accepted into the university, there is an additional admission requirement:

[From the proposed BS Admission Website]

Students will submit a concept document for a game that they would like to make (or have made in the past). It is highly recommended you visualize your concept as much as possible (through flowcharts, concept art, etc.) and that you use this opportunity to highlight your strengths as a future professional in games. In the document, please address the following questions:

1. What is the premise of your game?
2. How does your game relate to other games that you have played?
3. What would the biggest technical challenges be to develop this game?
4. What parts of the game development process would you take on, and why?
5. Describe a player that this game is being designed for. What makes this experience valuable and engaging to them?
6. How would you make sure that your game delivers the experience described in the previous question?
7. How would you ensure that your audiences find your game?

For students who want to get on the art track, we request that in addition to the assignment above you submit 12 or more pieces that you made in the past. (Any pieces that are used as part as the assignment also count towards the 12 required pieces.) Students who are not on the art track are also given the option to submit up to 15 images but these are optional.

Describe the transfer credit policies for the proposed program, including the use of credit transfer review committees and the maximum number of hours that can be transferred into the program. In your response, specifically address the credit that may be transferred according to the Board of Regents' Transfer Assurance Guide (TAG) and Career Technical Credit Transfer (CT²) initiatives; and other types of transfer credit awarded toward major program requirements (e.g., AP, life experience, CLEP, portfolio, etc.).

The IMS program will follow all Miami University and State of Ohio policies regarding transfer credits. When TAG, CTAG, OTM, or MTAG approvals are sought, all proposals will be developed by the program's faculty and approved by the Director of Interactive Media Studies or the program's Chief Department Advisor. When transfer students enter into the program, their transfer credit will be ensured and appropriately evaluated by faculty experts in that area.

5.2 Student administrative services

Indicate whether the student administrative services (e.g., admissions, financial aid, registrar, etc.) currently available at the institution are adequate to support the program. If new or expanded services will be needed, describe the need and provide a timeline for acquiring/implementing such services.

No new administrative services will be needed, since the IMS program recently hired an additional administrative assistant in anticipation of this degree.

5.3 Student academic services

Indicate whether the student academic services (e.g., career services, counseling, tutoring, ADA, etc.) currently available at the institution are adequate to support the program. If new or expanded services will be needed, describe the need and provide a timeline for acquiring/implementing such services.

The program will work with the office of Career Exploration and Student Success to help students seeking employment, internships, or graduate programs. The College of Creative Arts has a designated staff member who specializes in career services for CCA graduates. Other services (e.g., counseling, ADA, etc.) provided by Miami University are sufficient for this program, and no changes are needed.

SECTION 6: CURRICULUM

6.1 Introduction

Provide a brief description of the proposed program as it would appear in the institution's catalog (*General Bulletin*). The description should be no more than 150 words.

The Bachelor of Science in Games + Simulation provides students with an interdisciplinary plan of study covering all aspects of creating and interpreting games. Games are the liberal arts of the 21st century: the fusion of coding and design, writing and mechanics, usability and creativity. With a focus on making and praxis, the BS in Games + Simulation prepares students for a career or graduate study in game design, development, 3D modeling, creative development, writing or designing, esports, and games in other industries, all while encouraging students to take creative risks, to build things, and to think critically about audiences, narratives, and aesthetics.

6.2 Program goals and learning objectives

IMS 213	3	ART 102	1.5
IMS 254	3	MPF III	Global Perspectives (3)
IMS 222		MPF IV	Natural Science (3)
Time period	Curriculum component	Time period	Curriculum component
Sophomore Year			
e.g., Year 2 Fall Semester	Courses/Activities (hrs.)	e.g., Year 2 Spring Semester	Courses/Activities (hrs.)
IMS 317	3	IMS 453	3
CSE 251	3	ART 218	3
ART 106	1.5	ART 231	3
MPF IV	Natural Science/Lab (4)	IMS 319	3
Time period	Curriculum component	Time period	Curriculum component
Junior Year			
e.g., Year 3 Fall Semester	Courses/Activities (hrs.)	e.g., Year 3 Spring Semester	Courses/Activities (hrs.)
IMS 314	3	IMS 487	3
ART 305	3	IMS 445	3
IMS 465	3	IMS 461	1
IMS 391	3	IMS 102	3
		MPF IIC	Social Science (3)
Time period	Curriculum component	Time period	Curriculum component
Senior Year			
e.g., Year 4 Fall Semester	Courses/Activities (hrs.)	e.g., Year 4 Spring Semester	Courses/Activities (hrs.)
IMS 488	3	IMS 489	6
IMS 454	3	Elective	3
Elective	3	Elective	3
Elective	3	Elective	2
Elective	2		

6.5 Alternative delivery options (please check all that apply):

- More than 50% of the program will be offered using a fully online delivery model
 More than 50% of the program will be offered using a hybrid/blended delivery model
 More than 50% of the program will be offered using a flexible or accelerated delivery model

For the purposes of this document, the following definitions are used:

- an **online course** is one in which most (80+%) of the content is delivered online, typically without face-to-face meetings;
- a **hybrid/blended course** is one that blends online and face-to-face delivery, with substantial content delivered online;

- a **flexible or accelerated program** includes courses that do not meet during the institution's regular academic semester (fall or spring) as well as courses that meet during the regular academic term but are offered in a substantially different manner than a fixed number of meeting times per week for all the weeks of the term.

6.6 Off-site program components (please check all that apply):

- Co-op/Internship/Externship
- Field Placement
- Student Teaching
- Clinical Practicum
- Other

If one or more of the items is checked, please provide a brief description of the off-site component(s).

SECTION 7: ASSESSMENT AND EVALUATION

7.1 Program assessment

Assessment efforts are directed by the Office of the Provost and the Center for the Enhancement of Learning, Teaching and University Assessment. Because of the accreditation standards of the Higher Learning Commission, each department and program at Miami University is required to implement a full cycle assessment program for each undergraduate major, general education, free-standing certificates, and all graduate programs.

Each major or degree program specifies at least three learning outcomes to assess. Each year, data is collected and analyzed related to the outcomes and used for program improvement. When beginning the process of assessment for the first time, departments and programs create an assessment plan for each degree program or major. Annually or biennially, the assessment data for the three or more learning outcomes are analyzed and discussed and plans for improving teaching and learning based upon those findings should be put in place. The summary of the data collected, the analysis and the steps for improvement are recorded in an assessment report which is submitted each year. Plans and reports are reviewed regularly by divisions.

Please see <http://www.units.MiamiOH.edu/celt/assessment/guidelines.php> for details about how your proposed assessment plan will be reviewed.

Is your program externally accredited? If yes, does the external body require the program to do **direct assessment of student work showing student achievement of your stated learning outcomes**? If so, please provide a copy of the assessment requirements/plan to the university assessment coordinator. If not, please answer all the following questions:

- List at least 3 specific student learning outcomes (SLOs) that the students are expected to achieve by the time they complete the program. If the program includes liberal education course(s), articulate any specific linkages between your stated SLOs and Miami Plan principles or competencies.

SLO 2 Students will be able to apply the fundamental principles of game design

SLO 5 Students will be able to critique and apply aesthetic principles to game art, design, and development

SLO 6 Students will demonstrate fluency in relevant tools and technologies for game development

- Identify courses (and examinations or assignments within them) or other culminating projects where these outcomes

IMS 453, IMS 487, IMS 489 are three classes taken in the junior and senior years which have games as their products (either collaborative, as in 487 and 489, or solo, as in IMS 453). These final products can be evaluated against our learning outcomes.

- Identify courses (and examinations or assignments within them) or other culminating projects where these outcomes are emphasized and can be measured, especially near the point of graduation. If relevant, specify any licensing or external exams you intend to use.
- Describe how you intend to evaluate the learning outcomes by means of the assignment(s)—e.g., rubric(s) or answer key(s) to exam.

Rubrics will be developed and normed (using samples of student work) for each outcome as part of an annual retreat (which has not been held before) with industry experts, faculty, and games specialists. At each annual retreat thereafter, we will devote time in the retreat to scoring student work from the three courses and, if needed, modifying rubrics and/or learning outcomes based on the scoring session. A report summarizing data will be generated and discussed at a subsequent faculty meeting where faculty will discuss strategies for improvement based on the data analysis. Industry leaders on the frontier of games will be invited to review sessions in capstone courses to provide input to students as they are presenting or developing their games. The feedback offered by external experts will also be incorporated into the report. Ultimately, the evaluation of the report and development of the rubrics will be the responsibility of the director of the game major, Prof. Bob De Schutter, but will be done consultatively with Prof. Artie Kuhn, the Chief Departmental Advisor and responsible for IMS assessment.

- Describe the sampling procedure. What percentage of your student body will comprise your sample? If the sample size is small, make the case that they adequately represent the whole.

All capstone projects will be scored with rubrics each year.

- Describe how you intend to collect student perceptions of their achievement of the program learning outcomes.

Additional questions reflecting these learning outcomes will be added to all game course evaluations. We will also be creating a student advisory board, made up of game students at all stages of matriculation, as well as an advisory board of game experts in the field who will review assessment reports and offer input.

- Describe your plans for regular (annual or biennial, depending on program size) collection and summary of data.

All data will be collected annually at a Fall retreat, every semester in evaluations, and

annually an ad hoc committee of industry experts.

- Describe your plans for a regular faculty meeting in which faculty discuss assessment data findings and make plans for improvement of teaching and learning based upon the data.

The preliminary report will be shared at the Fall retreat, as described above.

- Identify who will be responsible for creating and submitting an annual assessment report to the assessment coordinator at the end of each academic year.

Bob De Schutter, the senior faculty member of the games faculty, will chair a subcommittee that will complete and submit the report.

7.2 Other means of measuring student success

In addition to program assessment, describe the other ways that individual student success in the proposed program will be measured (e.g., exit interviews, job placement, alumni surveys). Describe the measurements to be used, frequency of data collection and how the results will be shared and used for program improvement.

While we believe the aforementioned assessment plan is diverse and sufficient, we will also be tracking game publication and employment, two commonly followed measures of outcomes,

The Miami University Retention Committee with the support of The Office of the Provost and the Office of Institutional Research (OIR) guides and implements the university's student success evaluation and assessment. Student success is measured through national surveys and projects (e.g., the National Survey of Student Engagement, CIRP Freshman survey, Collegiate Learning Assessment, College Senior Survey, Your First College Year, HERI Faculty Survey, Faculty Survey of Student Engagement, and the Voluntary System of Accountability) as well as in-house graduate survey and alumni survey.

The IMS assessment committee, under the direction of the IMS Director, will direct the assessment efforts.

SECTION 8: FACULTY

8.1 Faculty appointment policies

Describe the faculty designations available (e.g., professor, associate professor, adjunct, instructor, clinical, etc.) for the proposed program's faculty. In your response, define/describe the differences between the designations.

Faculty and Degrees (in order of seniority)

Professors:

Eric Bachman, PhD

Glenn Platt, PhD

Bruce Murray, PhD

Associate Professors:

Michael Bailey-Van Kuren, PhD
L. James Smart, PhD
Mike Zmuda, PhD

Assistant Professors:

Bob De Schutter, MA and PhD
Matt Board, MFA
Phill Alexander, PhD
Eric Hodgson, PhD

Full-time Instructor:

Jerry Belich, MFA (expected 2018)

Part-time Instructors:

(There are many of these hired with varying backgrounds and the roster changes every semester. This list below is just a snapshot of a moment in staffing.)

Henry Bawden, MFA (in 2018)
JS Bragg, MA
Tim DeMarks, BS
Chris Dewitt, MS
Eric England, MFA
Richard Sykes, MS

Describe the credentialing requirements for faculty who will be teaching in the program (e.g., degree requirements, special certifications or licenses, experience, etc.).

We will follow the University's guidelines for faculty qualifications. We typically appoint instructors who have a terminal degree in the field; however, we have also developed and had approved criteria for faculty using tested experience qualifications combined with non-terminal degrees.

We are looking for a diversified staff in line with the requests of the games industry. As the game industry relies more on demonstrable experience than academic degrees, we expect a number of our faculty to hold significant industry experience rather than a terminal academic degree. This is similar to other nationally and internationally ranked programs, who have been hiring industry experts to take on important leadership positions. While a terminal academic degree will still be the primary credential of our faculty, other criteria such as having published three or more commercial games or being employed full time in the games industry for over five years will be considered as similar experience.

For undergraduate courses in coding, game development, 3D modeling/animation, User Experience (UX), design/technology: PhD preferred. Master's degree in a tech-related field with 5 years of highly applied or technical experience in the field of course being taught; and teaching excellence determined by the director which may include one or more of: syllabi review, prior course evals, teaching portfolio, teaching demo/guest lecture.

For graduate courses in coding, game development, 3D modeling/animation, User Experience (UX), design/technology: Ph.D. or Master of Fine Arts preferred. Master of Business Administration, M.S. in Computer Science/Software Engineering and 5 years of

highly applied or technical experience in the field of course being taught; and teaching excellence determined by the director which may include one or more of: syllabi review, prior course evals, teaching portfolio, teaching demo/guest lecture.

Describe the institution's load/overload policy for faculty teaching in the proposed program.

Indicate whether the institution will need to identify additional faculty to begin the proposed program. If additional faculty members are needed, describe the appointment process and provide a timeline for hiring such individuals.

There are no additional faculty needed to offer this program nor would workload implications change given the enrollment constraint identified earlier in this document. See "Games Staffing Plan.pdf" in the section below for detail regarding the staffing plan.

[MUPIM 6.5 Overload Teaching](#)

8.2 Program faculty

Provide the number of existing faculty members available to teach in the proposed program.

Full-time: 11

Less than full-time: 6

Provide an estimate of the number of faculty members to be added during the first two years of program operation.

Full-time: 1

Less than full-time: 0

8.3 Expectations for professional development/scholarship

Describe the institution's general expectations for professional development/scholarship activities by the proposed program's faculty. In your response, describe any differences in the expectations for tenure-track vs. non tenure-track faculty and for full-time vs. part-time faculty. Indicate the financial support provided for such activities. **Include a faculty handbook outlining the expectations and documenting support as an appendix item.**

All IMS faculty are expected to demonstrate high-quality teaching through multiple measures of teaching (course evaluations, peer evaluations, classroom observations, Small Group Instructional Diagnosis) and academic advising.

IMS has a professional component and a commitment to high-quality, multi-disciplinary research. IMS scholarship consists of research in the candidate's disciplinary field of expertise where that advances knowledge or leads to new knowledge in Interactive Media. The program embraces academic, applied, and professional research of a traditional scholarly nature and recognizes creative/scholastic works appearing in professional and public media forums if these works are exceptional, demonstrating high standards in the practice of the discipline and having significant impact on a relevant field of Interactive Media; for creative achievement and professional productivity, emphasis is placed on works

that reach a substantial or significant audience and/or receive appropriate professional notice in highly regarded publications or other prestigious media forms.

Each faculty member has an MOU that clearly outlines the expectations of scholarship for promotion and tenure. This is developed in consultation with the candidate, P&T committee drawn across the university appropriate to assess candidates work, IMS Director, and the Dean of CCA within the first year of tenure-track appointment. [Examples of MOU for promotion to Associate Professor with tenure and for an associate professor for promotion to Full Professor are attached.]

While nearly all AIMS faculty are all active in scholarship and creative activity and such activity is encouraged for both tenure, and non-tenure track faculty, those faculty designated as non-tenure track and/or part-time are not expected to maintain a scholarly record as described above.

Funds from both Miami University budget as well as the Armstrong Gift are designated to support professional development activity as well as scholarly activity at the program level. Each individual college/school also has funds allocated for this use, as does the university as a whole. Preference for these funds is generally given to tenure-track faculty, but IMS has historically been able to provide equal funding for tenure-track as with non-tenure track faculty.

Miami University does not have a printed faculty handbook, so there is no attachment. The faculty handbook can be found here: http://blogs.miamioh.edu/miamipolicies/?page_id=514 as an online document.

Upload a faculty handbook outlining the expectations and documenting support
[example P&T Assistant to Associate MOU.pdf](#)
[example P&T Associate to Full MOU.pdf](#)

8.4 Faculty matrix

Complete a faculty matrix for the proposed program. A faculty member must be identified for each course that is a required component of the curriculum. If a faculty member has not yet been identified for a course, indicate that as an “open position” and describe the necessary qualifications in the matrix (as shown in the example below). **A copy of each faculty member’s CV must be included as an appendix item.**

[Combined Game Faculty CVs.pdf](#)
[Games staffing plan v3.pdf](#)

SECTION 9: LIBRARY RESOURCES

Librarian representative to do: http://www.lib.MiamiOH.edu/subject_librarians/

9.1 Library resources

Describe the involvement of a professional librarian in the planning for the program (e.g., determining adequacy of current resources, working with faculty to determine

the need for additional resources, setting the budget for additional library resources/services needed for the program).

Librarian consulted: Nathaniel Floyd and John Millard

Describe the library resources in place to support the proposed program (e.g., print, digital, collections, consortia, memberships, etc.).

The library presently hosts a game collection and consoles to support the game program. The library houses one of the primary classrooms/labs in the game curriculum as well as the esports arena. The library also offers game software in its own labs. While IMS pays and maintains the software and hardware (including upgrades) in the classroom/lab in King Library and the esports arena, the library, if it is going to include game software in its labs, will be responsible for the purchase and upgrade of the software/hardware as they are with software that supports any other major using those labs.

Describe any additional library resources that will be needed to support the request and provide a timeline for acquiring/implementing such services. Where possible, provide a list of the specific resources that the institution intends to acquire, the collaborative arrangements it intends to pursue, and monetary amounts the institution will dedicate to the library budget to support and maintain the proposed program.

While additional resources would help the library maintain its present critical support for this program, such as increased support for console gaming and the creation of a dedicated gameplay lab in King Library, these are not required for the major to be offered. That said, such resources would allow IMS to offer more flexible and rich academic experiences.

SECTION 10: BUDGET, RESOURCES, AND FACILITIES

10.1 Resources and facilities

List the facilities/equipment currently available for the program. Where possible, provide a list of the specific resources that the institution intends to acquire, the collaborative arrangements it intends to pursue, and monetary amounts the institution will dedicate to the library budget to support and maintain the proposed program.

There are five game labs on campus: 27 King, 200 Hiestand, Esports Arena, the RAD Lab (a 3D Modelling classroom/lab), and our VR Lab (with CAVE and VR hardware.) These labs all have state-of-the-art computer hardware and software for the design and development of games. These are supported by the Armstrong Institute for Interactive Media Studies as well as the College of Creative Arts.

10.2 Budget/financial planning:

Complete the table on the following page to describe the financial plan/budget for the first three years of program operation.

[Fiscal Impact.pdf](#)

Fiscal Impact Statement for New Degree Programs

	Year 1	Year 2	Year 3	Year 4
I. Projected Enrollment				
Headcount full time				
Headcount part time				
Full-time equivalent (FTE) enrollment				
II. Projected Program Income				
Tuition (paid by student or sponsor)				
Expected state subsidy				
Externally funded stipends, as applicable				
Other income (if applicable, describe in narrative section below)				
Total Projected Program Income				
III. Program Expenses				
New Personnel				
<ul style="list-style-type: none"> • Instruction (technical, professional and general education) <ul style="list-style-type: none"> Full _____ Part Time _____ • Non-instruction (indicate roles in narrative section below) <ul style="list-style-type: none"> Full _____ Part time _____ 				
New facilities/building/space renovation (if applicable, describe in narrative section below)				
Scholarship/stipend support (if applicable, describe in narrative section below)				
Additional library resources (if applicable, describe in narrative section below)				
Additional technology or equipment needs (if applicable, describe in narrative section below)				
Other expenses (if applicable, describe in narrative section below)				
Total Projected Expense				

Budget Narrative:

Use narrative to provide additional information as needed based on responses above.

APPENDICES

Please note that the institution is required, at a minimum, to submit the following the items as part of the review:

Results of recent accreditation reviews	Course syllabi
Organizational Chart	Faculty CVs
Faculty/student handbooks (or link)	Current catalog (or link)

Appendix Description

A
B
C
D
E
F
G

Miami University is committed to continual support of the delivery of the [DEGREE] in [MAJOR]. If Miami University decides in the future to close the program, the university will provide the necessary resources and means for matriculated students in the program to complete their degree.

Miami University verifies that the information in the application is truthful and accurate.

Respectfully,

Phyllis Callahan
Provost and Senior Vice President for Academic Affairs
Miami University

Department Chair/Program Director Approval and Forwarding:

Name: Glenn Platt
529-2808

Email: plattgj@miamioh.edu

Phone: 513-

Date:

Department Chair/Program Director approval indicates that the program and its student learning outcomes will be assessed in accordance with the department's/program's overall assessment plan.

Divisional Dean approval indicates that the new program fits into the mission of the division, and that any overlap between the courses and other extant courses in the divisional curriculum has been identified and any related concerns resolved. By approving, the Dean (A) takes oversight

responsibility for ensuring that the new program meets divisional standards for rigor, (B) indicates a recognition and acceptance of the staffing model and implications, and (C) forwarding of other related resource issues, when approved. When approved by the Dean, following the divisional curriculum approval, forward for Registrar action within the curriculum approval process.

Please submit completed approved forms (in Microsoft Word) via e-mail to: courseapproval@MiamiOH.edu

NOTE: New Degrees: This form requires approval by the department/program, division, CUC or Graduate Council, COAD, a vote by University Senate plus ten (10) class days for review, the President, the Miami University Board of Trustees and the Ohio Board of Regents (see MUPIM, Section 11). Upon submission of this form, the Office of the University Registrar will verify the information and forward this request to the appropriate contact.

NOTE: New Majors: This form requires approval by the department/program, division, CUC or Graduate Council, COAD and a vote by University Senate plus ten (10) class days for review (see MUPIM, Section 11). Upon submission of this form, the Office of the University Registrar will verify the information and forward this request to the appropriate contact.

Memorandum of Understanding regarding Phil Alexander's Promotion and Tenure Committee

January 8, 2018

Given the cross-divisional nature of Dr. Phil Alexander's work in Game Studies, it is necessary to appoint a committee that represents diverse academic fields consisting of faculty members who share similar teaching and research agendas to conduct annual and promotion/tenure evaluations and will function in the role of a typical departmental committee.

This committee will consist of the following tenured faculty members recommended by the Director of IMS.

1. Dr. Glenn Platt
2. Dr. Jim Porter
3. Dr. Jim Coyle
4. Dr. Bruce Murray*

*Dr Bob DeShutter will be added to the committee, once tenured and promoted, likely from Fall 2019).

The chair of the committee will be elected by a vote of the committee members. Procedures will follow MUPIM P & T guidelines.

The P & T Committee will forward its evaluation of Dr. Alexander to the Director of IMS. The Director of IMS will write separate evaluation letter and then will forward all documents to the Dean of CCA. In the third, fourth, and fifth years the letters from the P & T committee, IMS Director and the Dean go forward to the provost. In the 6th year, the candidate's documentation will then be forwarded and reviewed by the CCA divisional P & T committee. The divisional committee will make its recommendation to the Dean of CCA who will forward her/his recommendation to the University P & T Committee. At the time of consideration for tenure and promotion, the timeline for identification of reviewers and submission of materials will follow the established university guidelines. The process for identifying potential external reviewers will follow the University P & T guidelines and will involve the Dean, Director of IMS and Dr. Alexander. Please consult Tenure-Track Faculty Promotion Guidelines & Materials on Provost's website for a specifics. (<https://miamioh.edu/academic-affairs/admin-affairs/promotion-tenure/tenure-track/index.html>)

Overall criteria for promotion and tenure will be consistent with the expectations are defined in MUPIM .

1. To be promoted to Associate Professor a candidate needs to demonstrate high-quality teaching and academic advising;
2. research, scholarly and/or creative achievement of high quality and its prospective continuation;
3. productive professional service; and
4. professional collegiality within the department, division, campuses, and University community.

(MUPIM 7.4.D)

Research, Scholarship, and Creative Activity Expectations

Throughout the probationary period, Dr. Alexander's Promotion and Tenure committee will provide guidance to Dr. Alexander regarding scholarship expectations. Such guidance is provided via the annual review process and will include both summative and formative commentary. Dr. Alexander should develop and articulate a strategy for professional success. The guidelines below are given in such a way as to allow for necessary flexibility. Dr. Alexander should recognize that IMS expect a pattern of professional activity that is characterized by a sense of growth and continuous productivity. Advancement in both the prestige of professional context and in the engagement of multiple indicators of professional activity is expected.

- **Research:** Candidates are expected to provide evidence of productivity in several, but not all, areas such as: authored and edited books, articles in refereed journals, presentations at conferences, and competitive grants. Candidates must document the quality of scholarly activity by providing acceptance rates, circulations, journal rankings, conference attendance, publication impact, etc. where appropriate and when available.
- **Creative Activity:** Candidates are expected to remain creatively active throughout the probationary period. Creative activity can include exhibitions, publication of creative work online or in print, awards, and prizes, etc. Candidates must document the quality of creative activity by providing acceptance rates, venue stature, adjudicator expertise, impact, etc. where appropriate and when available.
- **At the time of application for promotion and tenure, Dr. Alexander will be expected to provide evidence of a cumulative record of high-quality scholarship, per University criteria for promotion and tenure. It is understood that Dr. Alexander may produce scholarship of an interdisciplinary nature, that he may produce co-authored works, and that high-quality interdisciplinary scholarship will be valued with the same regard as high-quality scholarship in a single discipline.**
- **Dr. Alexander is encouraged to seek external funding that will support his work. Proposals seeking external support may be part of the professional portfolio and are highly valued (especially proposals that go through a competitive peer-reviewed process, as these are strong indicators of the quality of a candidate's research).**
- **Dr. Alexander may be involved in both conventional research and/or creative activity. Judgment as to "high quality" research and its "prospective continuation" is made by the Promotion and Tenure Committee; the IMS Director, the CCA Dean, the UPT, Provost, and President. The ultimate judgment as to the quality, quantity, and prospective continuation of work produced by the candidate is strongly informed by external evaluators. Such evaluators should be well-respected and established researchers who are able to take an objective and comprehensive view of the candidate's work and its relation to the broader body of research within which it is placed.**

Review of this MOU

This Memorandum of Understanding may be reviewed and changed with the agreement of Dr. Alexander, the Director of IMS, and the Dean of CCA. It is recommended that the MOU be reviewed during Dr. Alexander's 3rd and 6th years so that it may be recalibrated (if needed) to be in tune with the ways that his interdisciplinary position has developed.

We agree to the P&T plan for Dr. Alexander as proposed above.

Signed by



Phil Alexander
Assistant Professor



Murali Paranandi
Interim Director, IMS



Elizabeth Mullenix
Dean, College of Creative Arts



FARMER SCHOOL OF BUSINESS
Office of the Dean

3075 Farmer School of Business
Oxford, OH 45056-3628
(513) 529-3631 office
(513) 529-6992 fax
MiamiOH.edu

MOU - C. MICHAEL ARMSTRONG BUSINESS CHAIR

Memorandum of Understanding

Young Hwa Lee

Joint appointment in the Farmer School of Business
and Armstrong Institute for Interactive Media Studies

February 18, 2013

1. Partnership

To the extent permitted by policies of the University, the appointment of Dr. Young Hwa Lee to the C. Michael Armstrong Chair (Armstrong Chair) is a joint venture of the Farmer School of Business (FSB), FSB Department of Information Systems and Analytics (ISA) and Armstrong Institute for Interactive Media Studies (AIMS), who will approach decision-making on that basis, with full consultation among Dr. Skip Benamati, the Chair of ISA, and Dr. Glenn Platt, Director of AIMS. Unless stipulated otherwise in the following paragraphs of this memorandum, the final decisions will be made by the FSB Dean in consultation with the Provost.

2. Nature of Joint Appointment

Dr. Young Hwa Lee is a tenured associate professor in FSB Department of Information Systems and Analytics with a joint appointment in AIMS. Dr. Young Hwa Lee will have a summer research stipend funded through the Armstrong Business Chair endowment in the amount of \$20,000 per year in addition to a professional spending allowance of \$10,000 per year. All policies for assistantships and leave awards will be consistent with those for all FSB faculty. Responsibility for funding course releases, if applicable, will be shared equally between FSB and AIMS.

3. Research Expectations

Dr. Young Hwa Lee is expected to produce innovative scholarship that simultaneously reflects and advances the vision, mission and national/international reputation of both the FSB and AIMS. The research expectations are consistent with those of Chaired Professors in the FSB and the ISA Department.

4. Teaching Assignment and Expectations

Dr. Young Hwa Lee's usual teaching load will be governed by university guidelines for workload policy and correspondence workload policies in FSB. In 2013-14, the Armstrong Chair will teach a 2-2 load (12 credit hours) including two ISA courses and two AIMS courses which include interactive digital media in business contexts. The ISA chair and AIMS director will arrange that Dr. Lee has only two course preparations for his first two years as Armstrong Chair. Ideally, Dr. Young Hwa Lee will develop cross listed AIMS/Business courses. Course loads are determined annually, however, the expectation is that the Armstrong Chair will teach at least one ISA and one AIMS course each year. The FSB dean will have final say in Dr. Young Hwa Lee's teaching load in consultation with the ISA Chair the AIMS Director.

It's expected that Dr. Young Hwa Lee will demonstrate a commitment to teaching excellence during his tenure as Armstrong Chair.

5. Advising Expectations

Dr. Young Hwa Lee's advising duties will include advising FSB or AIMS students as needed. The FSB Dean will have final say in his advising responsibilities in consultation with the ISA Chair and AIMS Director.

6. Service Expectations

Dr. Young Hwa Lee is expected to perform service to the institution, academy, and profession which could include development of curricula, internship programs, and business applications using digital media. Dr. Young Hwa Lee is also expected to participate in committees or initiatives in AIMS and FSB that are pertinent to his teaching, research and service load and regularly attend faculty meetings in FSB and AIMS. However, given the nature of his joint appointment, it is understood that it will not be possible for him to attend every single faculty meeting, as there may be time conflicts. The Armstrong Business Chair is primarily focused at the divisional level. Dr. Young Hwa Lee does not have service or committee responsibilities in the ISA Department and is expected to not participate in departmental level decisions while in the AIMS Chair position. The FSB Dean will have final say in his service responsibilities in consultation with the AIMS Director.

7. Annual Evaluations

The evaluation of Dr. Young Hwa Lee's progress toward full professor will follow the policies and procedures of the university and the FSB. The departmental level review will be coordinated with the ISA Department and AIMS. The ISA Department will take the lead on processing the review. An ad hoc committee will be constituted to perform any annual reviews and reviews for promotion to full professor. Committee membership will come from both ISA and AIMS, and will be formed by the ISA Chair in consultation with the AIMS Director. The committee letters will be forwarded to the Chair of ISA and the AIMS Director. Every effort will be made to ensure the Chair of ISA and the AIMS Director agree and write a joint letter to be forwarded to the FSB Dean. In the event that they cannot agree, then the Chair of ISA and the AIMS Director will each submit a recommendation to the FSB Dean and the FSB promotion process will carry

forward from there. The AIMS Director will also write an annual review letter to provide input to the Chair of ISA and the Dean of the FSB for salary raise recommendations.

8. Review of the Endowed Chair Appointment

Dr. Young Hwa Lee will undergo a fifth year review during the 2017-18 academic year as per Miami University and FSB governance (See section 6.3). The initial review for reappointment of the professorship will be conducted by the FSB divisional Promotion and Tenure Committee with recommendation to the FSB Dean. The Director of AIMS or the chair of ISA may also write a recommendation letter to the FSB Dean. The FSB Dean will then make his recommendation to the Provost. In addition to the fifth year review to determine reappointment, a third year review may be conducted to provide an indication of progress toward reappointment at either Dr. Young Hwa Lee's request or at the request of the FSB Dean (See section 6.3.7).

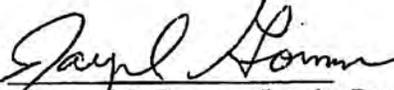
9. Review of this MOU

The MOU may be reviewed and recalibrated during the first two years (if needed) to be in tune with the ways that the interdisciplinary position has developed within FSB and AIMS. The review will include Dr. Young Hwa Lee, the Director of AIMS, the ISA Chair, the FSB Dean and the Provost.



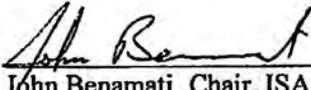
 Young Hwa Lee

3/13/13
 date



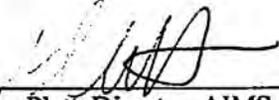
 Raymond F. Gorman, Interim Dean, FSB

2/18/13
 date



 John Benamati, Chair, ISA

2/12/13
 date



 Glenn Platt, Director, AIMS

3/1/13
 date

Bob De Schutter, Ph.D., M.A.

Curriculum Vitae January, 2018

EDUCATION

Ph.D. K.U.Leuven, Leuven, Belgium	Social Sciences	2011
M.A. St. Lucas University College of Art and Design, Antwerp, Belgium	Visual Arts	2003
B.A. St. Lucas University College of Art and Design, Antwerp, Belgium	Visual Arts	2001

EMPLOYMENT

Current Position

C. Michael Armstrong Assistant Professor of Applied Game Design 2013-present

Faculty Affiliations

Director and Founder, CEHS/AIMS Engaging Technology Lab 2015-present
 Research Fellow, Scripps Gerontology Center 2014-present

Previous Employment and Academic Rank

Assistant, researcher, lecturer and designer, K.U.Leuven Campus Group T (Belgium) 2007-2012
 Visiting Professor, University of Science and Technology of Beijing (China) March 2007, March 2008
 Lecturer, "Horito" Education Center for Adults (Belgium) 2005-2006
 Self-employed web developer (Belgium) 2000-2005

PUBLICATIONS

Books and Chapters

De Schutter, B. (Accepted). Games en Verouderen [Games and Ageing]. In Bourgonjon, J., Ribbens, W., De Grove, F. (Eds.), *TBA*. Academia Press, Ghent, Belgium.
 De Schutter, B., Roberts, A. R., & Franks, K. (2016). Miami Six-O: Lessons Learned From an Intergenerational Game Design Workshop. In S. Sayago, H. Ouellet (Eds.), *Game-Based Learning Across The Lifespan* (pp. 13-27). Springer: Switzerland.
 De Schutter, B., Brown, J. A., & Nap, H.-H. (2015). Digital Games in the Lives of Older Adults. In D. Prendergast & C. Garattini (Eds.), *Aging and the Digital Life Course* (pp. 236–256). New York: Berghahn Books.

Research Reports (non-refereed)

Vanden Abeele, V., De Schutter, B., Annema, J., Husson, J., Desmet, S., & Geerts, D. (2009). Van co-design tot playtest: een leidraad voor een player-centered design process [From co-design to playtesting: a practical guide for a player-centered design process] (p. 39). Retrieved from <http://etreasure.groopt.be>.
 De Schutter, B., & Vanden Abeele, V. (2008). Digitale Spellen als Bron van Leren [Digital games as a source of learning] (p. 95). Louvain, Belgium: Group T Engineering School. Retrieved from <http://etreasure.groopt.be>.

Peer-Reviewed Journal Articles

Full Papers

Manera, V., Ben-Sadoun, G., Aalbers, T., Agopyan, H., Askenazy, F., Benoit, M., Bensamoun, D., Bourgeois, J., Bredin, J., Bremond, F., Crispim-Junior, C., Renaud, D., De Schutter, B., Ettore, E., Fairchild, J., Foulon, P., Gazzaley, A., Gros, A., Hun, S., Knoefel, F., Olde Rikkert, M., Phan Tran, M. K., Politis, A., Rigaud, A. S., Sacco, G., Serret, S., Thümmler, S., Welter, M. L., Robert P. (2017). Recommendations for the use of Serious Games in neurodegenerative disorders. *Frontiers in Psychology*, 8, 1-10.
 De Schutter, B. (2017). Gerontoludic Design: An Integrated Framework for the Design of Digital Games for Older Adults (p. 20). *International Journal of Gaming and Computer-Mediated Simulations*.
 Brown, J. A., De Schutter, B. (2016). Game Design for Older Adults: Lessons From A Life Course Perspective. *International Journal of Gaming and Computer-Mediated Simulations*, 8(1), 1-12.
 De Schutter, B., Brown, J. A. (2015). Digital Games as a Source of Enjoyment in Later Life. *Games and Culture: A Journal of Interactive Media*. doi: 10.1177/1555412015594273
 Nap, H. H., Diaz-Orueta, U., González, M. F., Lozar-Manfreda, K., Facal, D., Dolničar, V., Oyarzun, D., Ranga, M-M., De Schutter, B. (2015). Older people's perceptions and experiences of a digital learning game. *Gerontechnology*, 13(3), 323 - 331.
 De Schutter, B., Vanden Abeele, V. (2015). Towards a Gerontoludic Manifesto. *Anthropology & Aging: Journal of the Association of Anthropology & Gerontology*, 36(2), 112-120.
 De Schutter, B., Brown, J. A., Vanden Abeele, V. (2014). The domestication of digital games in the lives of older adults. *New Media & Society*, 17(7), 1-17.

- De Schutter, B., Malliet, S. (2014). The Older Player of Digital Games: A Classification Based on Perceived Need Satisfaction. *Communications: The European Journal of Communication Research*, 39(1), 66-88.
- Zaman, B., De Cock, R., Vanden Abeele V., De Schutter, B. (2014). Motivation profiles of online poker players and the role of interface preferences. *Computers in Human Behavior*, 39, 154-164.
- De Schutter, B. (2010). Never Too Old to Play: The Appeal of Digital Games to an Older Audience. *Games and Culture: A Journal of Interactive Media*, 6(2), 155-170.
- Vanden Abeele, V., & De Schutter, B. (2010). Designing intergenerational play via enactive interaction, competition and acceleration. *Personal and Ubiquitous Computing*, 14(5), 425-433.

Extended Abstracts and other Journal Contributions

- De Schutter, B., Eynon Black, D. (2016). Learning Games for Older Adults: The Case of Minecraft. *Gerontechnology*, 15.
- De Schutter, B., Roberts A.R. (2016). A Workshop on Intergenerational Game Concept Design and Prototyping. *Gerontechnology*, 15.
- De Schutter, B., Vanden Abeele, V. (2015). Reply to Responses. *Anthropology & Aging: Journal of the Association of Anthropology & Gerontology*, 36(2), 125-126.
- De Schutter, B., Gerling, K., Brown, J., McLaughlin, A. C., Mosberg Iversen, S., Allaire, J., Rice, M., Nap, H.-H. (2015). Gerontoludic for fun! *Gerontechnology*, 13(4), 442.
- De Schutter, B., Nap H-H, Brown J.A., Roberts A.R. (2014). The Promise of Gerontoludic Design. *Gerontechnology*, 13(2), 277.
- De Schutter, B. & Vanden Abeele, V. (2014). Blast From The Past: Applying the P-III Framework to Facilitate Intergenerational Play between Grandparents and Grandchildren. *Gerontechnology*, 13(2), 163.
- De Schutter, B. (2012). A qualitative inquiry into the meaning of digital games for an older audience in Flanders. *Gerontechnology*, 11(2), 420.
- Brown, J. A., Davis, T., Singh, J., Dunn, D., & De Schutter, B. (2012). Is Wii for Me? *Gerontechnology*, 11(2), 399.

Contributions to Academic Conferences

Full Papers

- De Schutter, B. (2015). Gerontoludic Design and Intergenerational Play [Conception G erontoludique et Jue Interg en rationnel]. In *Intergenerational Learning, Life Narratives and Games* (pp. 86–89). Qu ebec, Canada: Centre de recherche et d'intervention sur la r eussite scolaire (CRIRES) / Center of Research and Intervention for Student and School Success (CRI_SAS).
- Vanden Abeele, V., Tierens, P., De Schutter, B., De-Wit, L., & Geurts, L. (2015). Game-based Experiments on Human Visual Attention (p. 9). Presented at the Foundations of Digital Games, Pacific Grove, CA.
- De Schutter, B., Eynon Black, D., & Nap, H.-H. (2015). Teaching Older Adults to Play Minecraft (p. 4). Presented at the Foundations of Digital Games, Pacific Grove, CA.
- De Schutter, B., & Papa, S. (2015). Return of Gradequest - Evaluating the Third Iteration of a Gameful Course (p. 4). Presented at the Foundations of Digital Games, Pacific Grove, CA.
- Aubrecht, M., De Schutter, B., Clarke, D., Wheatley, A. (2015). How to support non-game designers becoming game-design instructors: Developing a course to support teachers in game-based learning and game design & developing a community of practice (p. 7). Presented at the Games+Learning+Society conference, Madison, WI.
- De Schutter, B. (2014). "The Gradequest Tale of Scrotie McBoogerballs" - Evaluating the Second Iteration of a Gameful Undergraduate Course (p. 28). Presented at the Meaningful Play, East Lansing, Michigan.
- De Schutter, B. (2014). "Gradequest Strikes Back" - The development of the second iteration of a gameful undergraduate course (p. 9). Presented at the Games+Learning+Society 10, Madison, WI: ETC Press.
- De Schutter, B., & Vanden Abeele, V. (2014). Gradequest - Evaluating the impact of using game design techniques in an undergraduate course (p. 9). Presented at the Foundations of Digital Games 2014, Fort Lauderdale, FL.
- Vanden Abeele, V., De Schutter, B., Geurts, L., Desmet, S., Wauters, J., Husson, J., Van Audenaeren, L., et al. (2012). P-III: A player-centered, iterative, interdisciplinary and integrated framework for serious game design and development. *Communications in Computer and Information Science*, 1(280), 82–86.
- Vanden Abeele, V., De Schutter, B., Geurts, G., Desmet, S., Wauters, J., Husson, J., Van Broeckhoven, F. (2011). P-III: A framework for serious game development (p. 2). Presented at the Serious Games: The Challenge, K.U.Leuven, Ghent, Belgium.
- Malliet, S., & De Schutter, B. (2011). Virtual Cultivation and the Role of Perceived Realism (p. 8). Presented at the The 2011 Annual Meeting of the American Educational Research Association (AERA), New Orleans, Louisiana.
- De Schutter, B., & Vanden Abeele, V. (2010). Designing meaningful play within the psycho-social context of older adults. In *Proceedings of the 3rd International Conference on Fun and Games* (pp. 84–93). New York, NY, USA: ACM.
- De Schutter, B., & Malliet, S. (2009). A new or just an older breed of gamer? (p. 5) Presented at the The Annual Conference of the International Communication Association, Chicago, USA.
- Vanden Abeele, V., Gajadhar, B., & De Schutter, B. (2009). Gaming Naturally is more Fun Together: the Influence of Controller Type on Player Experience (p. 8). In *Advances in Computing Entertainment/Digital Interactive Media Entertainment and Arts (ACE 2014)*. Athens, Greece, October 29-31 2009.
- Vanden Abeele, V., & De Schutter, B. (2008). Designing Intergenerational Play through Physical Action (p. 15). Presented at the International Conference on Fun and Games, Eindhoven, Netherlands.
- De Schutter, B., & Vanden Abeele, V. (2008). Meaningful Play in Elderly Life. Presented at the Annual Meeting of the International Communication Association, Quebec, Montreal, Canada.

Refereed Abstracts

- De Schutter, B., Eynon Black, D. (2016). Learning Games for Older Adults: The Case of Minecraft. Presented at the 10th World Conference of Gerontechnology, Nice, France
- De Schutter, B., Roberts A.R. (2016). A Workshop on Intergenerational Game Concept Design and Prototyping. Presented at the 10th World Conference of Gerontechnology, Nice, France

- De Schutter, B., Romero, M. (2016) Breaking the Age Barrier through Participatory Intergenerational Game Design. Presented at Different Games, New York, USA
- Roberts A. R., De Schutter, B., Franks, K. (2015) Miami Six-O: An Experiment in Intergenerational Game Design. Presented at the first conference of the National Association on Ageing, Miami University, USA.
- De Schutter, B. (2015) Gradequest: A Gameful Undergraduate Course - Director's Commentary, Presented at the Playful Learning summit, Ohio University, Athens, OH
- Eynon Black, D., De Schutter, B. (2015) Minecraft in Later Life: Challenges and Opportunities. Presented at the first conference of the National Association on Ageing, Miami University, USA.
- De Schutter, B., Nap H-H, Brown J.A., Roberts A.R. (2014). The Promise of Gerontoludic Design. Presented at the 9th World Conference of Gerontechnology, Taipei, Taiwan.
- De Schutter, B. & Vanden Abeele, V. (2014). Blast From The Past: Applying the P-III Framework to Facilitate Intergenerational Play between Grandparents and Grandchildren. Presented at the 9th World Conference of Gerontechnology, Taipei, Taiwan.
- De Schutter, B. (2012). A qualitative inquiry into the meaning of digital games for an older audience in Flanders. Presented at the 8th World Conference of Gerontechnology, Eindhoven, The Netherlands.
- Brown, J. A., Davis, T., Singh, J., Dunn, D., & De Schutter, B. (2012). Is Wii for Me? Presented at the 8th World Conference of Gerontechnology, Eindhoven, The Netherlands.
- Aerts, K., De Schutter, B., Dierckx, J., & Wauters, J. (2011). GameHUB: Developing Serious Games in Flanders. Presented at the Think Design Play: 5th Conference of the Digital Games Research Association (DiGRA), Hilversum, The Netherlands.
- Vanden Abeele, V., De Schutter, B., Husson, J., Vos, G., & Annema, J. (2008). e-Treasure: Fostering intergenerational play by means of a digital game. Presented at the Meaningful Play 2008, Michigan State University, East Lansing, Michigan, USA.

Invited Presentations

- De Schutter, B. (2016) Games and Aging: An Anthology. Presented at the University of California, San Francisco, CA
- De Schutter, B. (2016) Lights, Camera, Interaction, Presented at the Discovery Café, Miami University, Oxford, OH
- De Schutter, B. (2015) Designing Games for an Ageing Player. Presented at CHI Play, London, UK.
- De Schutter, B. (2015) Gaming Grandparents and the Gospel of Matthew (updated version), Presented as a Brown Bag Talk at the North Carolina State University, Raleigh, NC.
- De Schutter, B. (2015) Gaming Grandparents and the Gospel of Matthew (updated version), Presented as part of a two session workshop during the Experience Design program of Miami University, Miami University, Oxford, OH
- De Schutter, B. (2015) Gaming Grandparents and the Gospel of Matthew (updated version), Presented as a guest lecture at the University of North Dakota, Grand Forks, ND
- De Schutter, B. (2015) Gaming Grandparents and the Gospel of Matthew, Presented as a Brown Bag Talk at the Scripps Gerontology Center, Miami University, Oxford, OH.
- De Schutter, B., Gerling, K. (2014) Gerontoludic Design: Developing a Framework to Design Playful Experiences for Older Adults. Presented at CHI Play, Toronto, Canada.
- De Schutter, B. (2014) Game Design Theory, Presented at the Penny Lecture Series, Miami University, Oxford, Ohio.
- De Schutter, B. (2014) Super Brown Bag Talker II. Presented as a Brown Bag Talk at the University of Madison-Wisconsin, Madison, WI
- De Schutter, B. (2014) The Ethics of Digital Games (updated version). Presented as a guest lecture at the University of North Dakota, Grand Forks, ND
- De Schutter, B. (2013) The Ethics of Digital Games, Presented at the GeoGebra Conference, Miami University, Oxford, OH.
- De Schutter, B. (2012). The Role of Digital Games in the Lives of Older Learners. Presented at the Game-based Learning for Older Adults symposium, K.U.Leuven, Leuven, Belgium
- De Schutter, B. (2012). The brutal truth about digital games and older adults. Guest lecture at Northeastern University, Boston, MA, USA.
- De Schutter, B. (2012). The Meaning of Digital Games to an Older Audience. Guest lecture at the University of Baltimore, Baltimore, MD, USA.
- De Schutter, B. (2012). Balancing in-game economies. Guest lecture at the University of Baltimore, Baltimore, MD, USA.
- De Schutter, B. (2011). The Seriousness of Non-Serious Games. Presented at the Barcamp of SIGCHI.be, Group T Engineering School, Leuven, Belgium.
- De Schutter, B. (2011). Designed - Or How to Become a Successful Graphic Designer in 120 Minutes. Guest Lecture at the KU Leuven, Leuven, Belgium.
- De Schutter, B. (2010). Blast From The Past: A Serious Game about Intergenerational knowledge Transfer. Guest Lecture at the Provinciale Hogeschool Limburg (PHL), Hasselt, Belgium.
- De Schutter, B. (2009). An introduction to the Flemish DiGRA chapter. Presented at the 3rd Meeting of the Flemish Chapter of the Digital Game Research Association, Antwerp University.
- Vanden Abeele, V., De Schutter B. (2009). e-Media - Developing people by creating joyful experiences through intuitive and motivating interactions with intelligent systems. Presented at Open Spaces, IBBT, Gent, Belgium
- De Schutter, B. (2009) The Design and Development of Blast From The Past. Guest lecture at the Catholic University-College of Limburg, Genk, Belgium.
- De Schutter, B. (2008). Designing Digital Games for An Older Audience. Guest Lecture at the Technical University of Eindhoven, Eindhoven, The Netherlands.
- De Schutter B. & Husson, J. (2008). e-Treasure: an Example of User-Centered Game Design and Development. Presented at the FARO conference on games and heritage, Brussels, Belgium.
- De Schutter B. (2008). Emergence - teaching game design to secondary school students by means of a digital game. Presented at the Wetenschapsweek, Group T Engineering School, Leuven, Belgium.

Other Contributions to Conferences

- De Schutter, B., Brown J. A., Nap, H.-H., Wennekes, S. (2016) Gerontoludic: Digital Game Engagement for Older Populations [themed Session] (p. 1). Presented at the 10th World Conference of Gerontechnology, Nice, France.

- De Schutter, B., Brown, J. A., Dormann, C. & Gerling, K. (2016). Designing Games for Older Adults: Beyond Accessibility and Health Benefits [themed Session]. 1st Joint International Conference of DiGRA and FDG, Dundee, Scotland.
- Husani, N., Capaccio, A., Capaccio, D., McKenzie, L., De Schutter, B. (2016) Da Vinci Coders [game demonstration]. Presented at Games+Learning+Society 12, Madiscon, Wisconsin.
- Papa, S., Mullins, H., Mullenix, T., De Schutter, B. (2015) Denounce! A Soviet Simulation Game [game demonstration]. Presented at the Playful Learning summit, Ohio University, Athens, OH.
- Gerling, K., De Schutter, B., Brown, J. A., Allaire, J. (2015). Ageing Playfully: Advancing Research on Games for Older Adults Beyond Accessibility and Health Benefits [workshop]. CHI Play, London, UK.
- De Schutter, B., Brown J. A., Roberts A. R., Gerling, K., Eynon Black, D. (2015) Ageing and Digital Games [themed session] (p. 2). Presented at the first conference of the National Association on Ageing, Miami University, USA.
- De Schutter, B., Gandy, M., Mosberg Iversen, S., Nap, H-H., Hunicke, R. (2015) Digital Games in Later Life: Challenges and Opportunities [panel session] (p. 5), Presented at the Foundations of Digital Games, Pacific Grove, CA.
- Quinten, N., Bourgonjon, J., De Schutter, B. (2015) DiGRA Flanders [panel session]. In Apperly, T., Brown, A. & Quinten, N. (Orgs.) Meeting of local DiGRA Chapters, DiGRA 2015, Lüneburg, Germany
- Armstrong, A. E., Tzoc, E., De Schutter, B. (2014) Games and Social Justice: A Freedom Summer Location-Based Game [game demonstration]. Presented at “50 Years after Freedom Summer: Understanding the Past, Building the Future”, Miami University, Oxford, OH.
- Vanden Abeele V., Geurts, L., Husson, J., Van den Audenaeren, L., Desmet, S., Verstraete, M., De Schutter, B. (2014) Kung-Fu Kitchen: A Physical Therapy Game to Remedy the Negative Consequences of Spasticity [game demonstration] (p. 2). Presented at Games+Learning+Society 10 Educational Arcade, Madison, Wisconsin, USA.
- De Schutter, B. (2014) Designing for Older Adults: Differences between Players and Non-Players (p. 2) [workshop]. in Khaled, R., Vanden Abeele, V., Van Mechelen, M. & Vasalou, A. (Orgs.) *Participatory Design for Serious Game Design: Truth and Lies*. CHI Play, Toronto, Canada.
- De Schutter, B. (2014) EDP/IMS225 Games & Learning [workshop]. in Consalvo, M., Paul C. A., Waern, A. Alitzer, R. (Orgs.) *Teaching Game Studies: Course Post-Mortems & Advanced Syllabus Design*, Foundations of Digital Games 2014, Florida, USA.
- De Schutter, B., Gerling, K., Mosberg Iversen, S., Heeter C., Nap, H-H. (2014) Digital Games in Later Life: Challenges and Opportunities [panel] (p. 5). Presented at Meaningful Play, East-Lansing, MI
- Papa, S., & De Schutter, B. (2014). Instructing Fear: Behaviorism in Limbo [poster]. Presented at Games+Learning+Society 10, Madison, Wisconsin.
- De Schutter, B., Vanden Abeele, V., Vos, G., Annema, J.-H., Van Gils, M., Derboven, J., Poels, Y., Nap, H.-H., IJsselsteijn, W., de Kort, Y., Dogruel, L., Joeckel, S., & Woldberg, Y. (2008) Suitable For All Ages: Game Design for the 60+ Demographic [themed session]. Presented at Meaningful Play 2008, East-Lansing, Michigan, USA
- De Schutter, B. (2007). Games en ouderen: Theoretisch kader en methodologische knelpunten [Games and the Elderly: Theoretical Framework and Methodological Issues] [poster]. Presented at the Etnaal van de Communicatiewetenschap, Universiteit Antwerpen.

Contributions to Industry Meetings

Invited Presentations

- De Schutter, B. (2017) Beyond Ageism: Accessibility for an Older Audience. Presented at GAConf, San Francisco, CA.
- De Schutter, B. (2017) Designing Better Games for an Older Audience. Presented at PLAYER, The Cinematheque, Copenhagen, Denmark.
- Alexander, P., De Schutter, B. (2015) Quick Paper Prototyping: From Vision to Visualized. Presented at the Ohio Game Developers Expo, Columbus, OH.
- De Schutter, B. (2014) Designing Better Games for an Ageing Society. Presented at the Ohio Game Developers Expo, Columbus, OH.
- Van Eck, R., De Schutter, B., Adcock, A., Malliet, S. (2013). Designing Games for Realism: What's Real Enough? Presented at South by Southwest 2013 (SXSW), Austin, Texas, USA.
- De Schutter, B. (2009). Serious Gaming: The Potential Benefits of Digital Games. Presentation at the symposium on Games and Libraries, Culture Department of the Province of Vlaams-Brabant, Leuven, Belgium.
- De Schutter, B. & Vanden Abeele, V. (2008) Games Plus: The Positive Side of Digital Games. Presentation at the UBIsoft press conference, Universiteit Antwerpen, Belgium.
- Vanden Abeele, V. & De Schutter, B. (2008). Games Plus: The Positive Side of Digital Games (updated version). Presentation at OSBJ non-profit association, Gent, Belgium.
- De Schutter, B. (2007). The History of Digital Games (Updated Version). Presentation for the 'Apestaartjaren' symposium, Gent, Belgium.
- De Schutter, B. (2007). The History of Digital Games. Presented at the U PLAY 2 symposium, Group T Engineering School, Leuven, Belgium.

Accepted after Submission

- De Schutter, B. (2017) Beyond Ageism: Exploring VR Games for an Older Audience. Accepted for the main conference of the Game Developers Conference, San Francisco, CA.
- De Schutter, B. (2016) Beyond Ageism: Designing Meaningful Games for an Older Audience. Presented at the main conference of the Game Developers Conference (Design track, Advocacy track), San Francisco, CA
- De Schutter, B. (2016) GDC Flash Forward: Beyond Ageism. Featured on the GDC Flash Forward YouTube channel, San Francisco, CA
- De Schutter, B. (2015) How Games Are Changing The Way We Age. Presented at TEDxMiamiUniversity, Miami University, Oxford, OH

Purchased Booth

- De Schutter, B. (2016) Brukel (Pre-Alpha Build v0.01). Presented at the expo floor of the GDEX, Columbus, Ohio

CREATIVE WORK

- | | | | |
|--------|--------------------------------|-------------------------|--------------|
| Brukel | Digital Game (Unreal Engine 4) | Assigned Research Leave | 2015-present |
|--------|--------------------------------|-------------------------|--------------|

Brukel uses the recorded audio narrative of a reminiscing elderly female survivor in order to sensitize its players about the impact of war on the lives of innocent bystanders.

Role(s): Proposal writer, Project Manager, Game Designer, Programmer, 2D Art

Super PR Manager	Online Game (HTML5) <i>A game about the subjectivity of mass media.</i> Role(s): Game Design, 2D Art, Programming	2015-present
Broken	Digital Game (Game Maker Studio) <i>An indie game that incorporates glitches and impossible-play as its features to explore the "gamification" discourse.</i> Role(s): Programmer, Game Designer, 2D Art	2014-present
Code Breaker	Digital Game (Unity3D) <i>A game to help children with cognitive impairment improve their communication skills.</i> Role(s): Co-PI	2014-present
#StoryTags	Card Game <i>A card game about improvising and sharing stories.</i> Role(s): Game Design Consultancy, Faculty Advisor	2016
Da Vinci Coders	Board Game <i>A board game that teaches basic programming skills.</i> Role(s): Game Design Consultancy, Faculty Advisor	2015-2016
Freedom Summer	Mobile Game (ARIS) Funded by the National Endowment for the Humanities <i>Developing a location-based mobile game to teach US history and civic justice.</i> Role(s): Co-PI	2014
Far-Plane	Online Game (HTML5) Funded by the Center for Creative Leadership <i>Developing a narrative-driven serious game to teach the boundary spanning model.</i> Role(s): Game Designer	2014
Gradequest	Online Game (HTML5) <i>An online jQuery Mobile based web application to introduce game design techniques to classroom education.</i> Role(s): Project Manager, Course Designer, Programmer, 2D Art	2013-2015
GameHUB	Digital Game (Unity3D) <i>Developing a knowledge center and various educational games for the Flanders region of Belgium.</i> Role(s): Case Manager, Game Designer, 2D Artist, Development Tools Scripter, Social Scientist	2010-2012
Sidewalk Jungle	Online Game (Web) Funded by the Flemish Cabinet of Equal Rights <i>A game about city planning for the visually impaired and wheelchair users.</i> Role(s): Case Manager, Game Designer, 2D Artist, Development Tools Scripter, Social Scientist	2009-2010
Kung-Fu Kitchen	Digital Game (Unity3D) Funded by the IWT-TeTra (Theraplay) <i>User-centered design and development of a game to help children to rehabilitate from brain palsy and multiple sclerosis.</i> Role(s): Case Manager, Game Designer, 2D Artist, Development Tools Scripter, Social Scientist	2008
Key Competences	Online Game (Web) Funded by Opikanoba <i>Using digital games to teach the unemployed a range of key competences that should help them to find a job.</i> Role(s): Game Designer, 2D Artist, Didactic Advisor, Social Scientist	2008
Blast From The Past	Digital Game (Virtools) Funded by IWT-TeTra (e-Treasure) <i>A game that facilitates intergenerational knowledge transfer between grandparents and grandchildren.</i> Role(s): Game Designer, 2D Artist, Social Scientist	2008
Emergence	Digital Game (Virtools) Funded by Canon Cultuurcel <i>A game that teaches basic game design theory and psychology to high school students.</i> Role(s): Game Designer, 2D Artist, Social Scientist	2008

AWARDED FUNDING

External

Advancing Educational Technology	Amount: \$718,147	Role(s): PI	Butler County Straight A	2014
Freedom Summer	Amount: \$59,994	Role(s): Co-PI	NEH	2014
GameHub	Amount: \$1,741,537	Role(s): PI	European Regional Development Fund	2010

Theraplay	Amount: \$595,100	Role(s): Co-PI	IWT-TeTra	2008
Sidewalk Jungle	Amount: \$47,284	Role(s): PI	Flemish Government	2008
Key Competences	Amount: \$3,000	Role(s): PI	Opikanoba	2008
e-Treasure	Amount: \$498,670	Role(s): PI	IWT-TeTra	2007
Emergence	Amount: \$40,000	Role(s): Co-PI	Canon Cultuurcel	2007

Internal

Tech Fee for MU Rad Lab	Amount: \$132,611	Role(s): Co-PI	Miami University	2017
CTE Teaching Grant	Amount: \$3,000	Role(s): TM	Miami University	2017
Brukel	Amount: \$5,000	Role(s): PI	Miami University	2016
Tech Fee for Eye Tracking Analysis	Amount: \$53,100	Role(s): TM	Miami University	2016
Mentoring Grant	Amount: \$450	Role(s): n/a	Miami University	2016
Student Honors Grant	Amount: \$800	Role(s): n/a	Miami University	2015
Mentoring Grant	Amount: \$500	Role(s): n/a	Miami University	2015
Instructional Space Enhancement Grant	Amount: \$81,384	Role(s): PI	Miami University	2014
Summer Scholars	Amount: \$3,600	Role(s): n/a	Miami University	2014
Mentoring Grant	Amount: \$500	Role(s): n/a	Miami University	2014

*(PI – Principal Investigator, TM – Team Member)***HONORS AND AWARDS**

2014-present	Research Fellowship at the Scripps Gerontology Center
2016	Honorary Membership of the Flemish DiGRA chapter
2015	2 Best Paper Nominations at Foundations of Digital Games
2014	Exemplary Paper Award at Foundations of Digital Games
2013-2014	Special Merit Award of the College of Education, Health & Society
2014	Research Level A Status at Miami University
2003	Selected to participate in the AD LIB International typographic workshop
2002	AD!DICT Design Award

AFFILIATIONS AND POSITIONS

International Game Choice Awards Network	Member	2016-current
EHS/AIMS Engaging Technology Lab	Director	2015-current
Higher Education Video Game Alliance	Member	2014-current
Gerontoludic Society	Founder and President	2014-current
Scripps Gerontology Center	Research Fellow	2014-current
International Society for Gerontechnology	Board Member	2014-current
International Game Developers Association	Lifetime Member	2014-current
International Society for Gerontechnology	Member	2012-current
Digital Games Research Association	Member	2008-current
SIGCHI	Member	2014-2016
American Educational Research Association	Member	2011-2014
International Communication Association	Member	2008-2014
KU Leuven	Affiliated Researcher	2009-2013
Digital Game Research Association – Flanders	Founder and Chair	2008-2013

TEACHING EXPERIENCE

Critical Game Development (IMS566)	3 credit hours	Post-Graduate	Miami University
Inside the GDC (IMS285)	2 credit hours	Undergraduate	Miami University
Game Design (IMS445)	3 credit hours	Undergraduate	Miami University
Critical Game Development (IMS466)	3 credit hours	Undergraduate	Miami University
Design of Play (IMS212)	3 credit hours	Undergraduate	Miami University
Games and Learning (EDP/IMS225)	3 credit hours	Undergraduate	Miami University
Game Design + Game Maker Studio	2 weeks	High School	Miami University
Intergenerational Game Design	1 credit hour	Post-Retirement	Institute for Learning in Retirement
Game Design	3 credit hours	Post-Graduate	Group T Engineering School
Concept Definition	3 credit hours	Post-Graduate	Group T Engineering School
Game Development Project	3 credit hours	Post-Graduate	Group T Engineering School
Adobe Flash Game Design	3 credit hours	Post-Graduate	Group T Engineering School
Media Impact	3 credit hours	Post-Graduate	Group T Engineering School
Engineering for the Real World	3 credit hours	Undergraduate	Group T Engineering School
Thesis Supervision	n/a	Graduate & Post-Graduate	Group T Engineering School
Flash Game Design Workshop	1 credit hour	Graduate & Post-Graduate	USTB (Beijing, China)
Desktop Publishing	n/a	Professional Certificate	Horito

Adobe Photoshop	n/a	Professional Certificate	Horito
Microsoft Excel	n/a	Professional Certificate	Horito
Internet	n/a	Professional Certificate	Horito
Computers & Microsoft Office	n/a	Professional Certificate	Horito

PRESS APPEARANCES

Gamestar (Germany)	Ältere Spieler – Rise of the Silver Gamer	July 2017
GameOverMan (Australia)	Interview – Brukel	March 24 2017
Famitsu	高齢者も VR には興味津々!	March 5 2017
Gamasutra	Game accessibility quotes of 2016	December 30 2016
Flega	Flemish professor working on fascinating WW2 game	December 15 2016
Level Up	¿Serás un abuelo gamer?	July 28 2016
Polygon	Games for Grandparents	July 21 2016
WVXU	A New Study Reports On Possible Benefits of Video Game Playing	June 23 2016
Miami University	Miami team to compete in finals of AARP's Social Connection GameJam contest	June 9 2016
Gamesindustry.biz	The 50-plus gamer crowd has passed 40m in the US	June 2 2016
Sudouest	Santé : les jeux vidéo pour passer une bonne retraite	May 21 2016
Huffington Post (Canada)	Comment les jeux vidéo peuvent changer votre retraite	May 20 2016
The Conversation	Comment les jeux vidéo peuvent changer votre retraite	May 18 2016
WOSU	Tech Tuesday: Video Games for Retirees.	May 17 2016
Verge of Discovery	Video Games and the Nature of Aging and Play with Dr. Bob De Schutter	May 17 2016
Huffington Post (France)	Comment les jeux vidéo peuvent changer votre retraite	May 15 2016
Dayton Daily News	Miami University students help develop gaming ideas for AARP crowd	May 5 2016
Newsweek	Playing video games will keep you younger	April 26 2016
CBS	CBS Radio News San Francisco	April 23 2016
Kotaku (Australia)	How playing video games can change your retirement	April 21 2016
Houston Chronicle	The graying of gamers	April 14 2016
Mashable	Playing more video games when you retire? Here's why that's a good idea.	April 14 2016
Rawstory	How video games could change retirement for this generation – and the ones to come	April 14 2016
The Conversation	How playing video games can change your retirement	April 14 2016
Ciaran Laval	Virtual Reality And Virtual Worlds Should Pay Attention To Older Participants	April 13 2016
Animation Magazine	GDC 2016: The Growing Games Market for Seniors	April 11 2016
AARP	Technology and Games for Age 50+	April 1 2016
Kotaku	This Week In The Business: The Game Industry Needs To Get Laid	March 19 2016
Famitsu	高齢者だって楽しくゲームを遊びたい!	March 19 2016
FM4	Warum gibts es kaum Gamer über 50?	March 18 2016
Miami University	AARP teams up with students designing games for 50 plus.	March 17 2016
Golem	Beschäftigt euch mit ernsten Themen für ältere Spieler!	March 14 2016
Concordia University	Never too old to become a video game maker	February 2 2016
Miami University	A Giant in a World of Miniatures	December 12 2015
KQED Mindshift	Can Games and Badges Motivate College Students to Learn?	April 20 2016
Miami Student	Interactive app brings Freedom Summer to life	September 26 2015
EdGamer	The gameful classroom with Bob De Schutter	January 3 2015
Oxford Press	Freedom Summer app being developed by Miami U. team	July 18 2014
Miami University	Interactive app and Web-based game will share the story of Freedom Summer	May 22 2014
Miami University	Zombies take over Miami University	April 3 2014
Minicore Studios Blog	SXSWi Day Three – Realism in video games	March 10 2013
Flanders Today	Fun and Games – The Game Fund plays to the needs of the Flanders game industry	November 14 2012
SHIFTMag	Designing video games for seniors	September 30 2011
Gazet Van Antwerpen	Vijtigplussers dol op gamen	June 24 2011
De Campuskrant	Waarom geen 'Witse'-game voor ouderen?	June 22 2011
De Standaard	Een game als bindmiddel	December 12 2008
iMag	Gaming is meer dan kinderspel	December 2008
Interconnect	Vlaanderen moet investeren in de game-industrie	November 2008
De Standaard	Waar zitten de gamende oma's?	July 4 2008
EOS	Bob De Schutter onderzoekt waarom senioren gamen	January 2008
Het Nieuwsblad	Nieuw computerspel geeft je hersenen een verjongingskuur	June 8 2006

PHILLIP MICHAEL ALEXANDER

Assistant Professor of Games

IMS @ Miami University

209F Laws Hall, Oxford, OH 45056

513.593.5116 | phill.alexander@miamioh.edu | phillalexander.com

EDUCATION—

PhD: Rhetoric & Writing, Michigan State University, East Lansing, MI (2012)

- Concentration: Digital Rhetoric and Professional Writing & Cultural Rhetorics
- Dissertation: Individual Copycats: Memetics, Identity and Collaboration in the World of Warcraft
- Dr Dànielle Nicole DeVoss, chair

MA: Composition and Rhetoric, Miami University, Oxford, OH (2007)

BA: English/ AA: Political Science, Indiana University (East Campus),
Richmond, IN (2003)

APPOINTMENTS—

Assistant Professor, Interactive Media Studies, Miami University, 2017-Present.

Heanon Wilkins Faculty Fellow / Visiting Assistant Professor, Armstrong Institute for Interactive Media Studies, Miami University, 2014-2017.

Co-Director, Miami University Varsity Esports Program, 2015-Present.

Heanon Wilkins Faculty Fellow, Department of English and Armstrong Institute for Interactive Media Studies, Miami University, 2014-2015.

Visiting Assistant Professor, Department of English, Miami University, 2012-2014.

Graduate Teaching Assistant, Michigan State University, 2008---2011.

Graduate Teaching Assistant, Miami University, 2005---2007.

Adjunct Faculty in English, Indiana University East, 2001---2006.

AWARDS—

- **Howe Writing Fellow**, Miami University, 2017.
- **Heanon Wilkins Faculty Fellow**, Miami University, 2014.
- **AT& T Faculty Award** for Exemplary Use of Technology in Teaching and Learning, Michigan State University, 2011.
- **University Fellow** (full tuition first and last year of Ph.D program), Michigan State University, 2007.
- **Kairos Teaching Assistant/Adjunct Faculty Award for Service** in Computers and Writing, 2007.
- **Humanities and Fine Arts Adjunct Instructor of the Year**, Indiana University East, 2005.

PUBLICATIONS—

Alexander, Phill. (2017). Knowing how to play: Gamer knowledges and knowledge acquisition. *Computers and Composition* (forthcoming in June of 2017).

Alexander, Phill. (accepted). The myth of the digital Native. In Cheryl Ball and Drew Lowe (Eds). *Bad ideas about writing*. Contracted to West Virginia University Digital press and Inside Hire Ed.com.

Alexander, Phill. (2016). The composing practices and rhetorical acumen of MMORPG players: What *City of Heroes* means for writing instruction. In Douglas Eyman (Ed.), *Play/Write: Digital rhetoric, writing, games*. New York: Parlor Press.

Alexander, Phill. (accepted) , "If you stare long enough into the simulation it stares back at you: A collage essay." In Marilee Brooks, Julie Lindquist and Sue Webb (Eds). *Echoes of home: Bringing home to work*.

Adsanatham, Chanon; [Alexander, Phill](#); Carsey, Kerrie; Dubisar, Abby; Fedeczko, Wioleta; Landrum, Denise; Lewiecki-Wilson, Polak, Michele. (2013). Going multimodal: Programmatic, curricular, and classroom change. In Tracey Bowen and Carl Whitehaus (Eds.) *Multimodal literacies and emerging genres in student compositions* (pp. 282-312). Pittsburgh: U of Pittsburgh Press.

[Alexander, Phill](#); Chabot, Karissa; Cox, Matt; DeVoss, Dànielle; Gerber, Barbara; Perryman---Clark, Staci; ... Wendt, Mary. (2012). Teaching with technology: Remediating the teaching philosophy statement. *Computers and Composition* 29, 2-38.

Alexander, Phill. (2009). He's the kind of girl who wants matching daggers. In Luke Cuddy and John Nordinger (Eds). *World of Warcraft and philosophy* (pp. 153-163). New York: Open Court.

Alexander, Phill. (2009). Review of Digitizing Race by Lisa Nakamura. *Kairos* 14(1). Available online <http://www.technorhetoric.net/14.1/reviews/alexander/index.html>

Knight, Aimee; Alexander, Phill; DeVoss, Danielle; Loncharich, Les & Rife, Martine. (2009). About face: Mapping our institutional presence. *Computers and Composition* 26, 190-202.

WORKS IN PROGRESS—

Alexander, Phill. (under contract, in revision). *Identity, Collaboration and Digital Work in the World of Warcraft*. Book contracted to Parlor Press.

Alexander, Phill. (in revision). Not sure if brilliant or merely pedestrian: Toward a theory of the meme. Submitted to *Kairos*.

Alexander, Phill. (proposal under editorial review). *The chromatics of dragons: Race and video games*. Book proposed to MIT Press.

Alexander, Phill. (in progress). I was born into this world, just like you: A gamer and storyteller's rhetoric.

CONFERENCE PRESENTATIONS—

Alexander, Phill (2016, April). Workshop: Telling Stories, Writing Cultures: Using Indigenous Rhetorics in the Writing Classroom. Workshop at Conference on College Composition and Communication, Houston, TX.

Alexander, Phill (2015, December). Workshop: Storytelling as play: Harnessing the power of gaming for survivance. Returning the Gift; The Wordcraft Circle Conference (accepted but could not attend—sent materials and video electronically).

Alexander, Phill and DeShutter, Bob. (2015, November). Quick paper prototyping: From vision to visualized. Presented at Ohio Game Developer's Expo, Columbus, OH.

Alexander, Phill. (2015, April). Some things will NEVER change: the Washington Redskins and the problems of race rhetoric. Paper presented at College Conference on Composition and Communication, Tampa, FL.

Alexander, Phill. (2015, April). Workshop session: Bringing Cherokee thinking into the digital writing classroom. Offered at College Conference on Composition and Communication, Tampa, FL.

Alexander, Phill. (2014, March). Ten things games can teach us about teaching writing. Paper presented at College Conference on Composition and Communication, Indianapolis, IN.

Alexander, Phill. (2013, June). We are but meme machines: Memetics, gaming and learning. Paper presented at the Computers & Writing Conference, Frostburg, MD.

Alexander, Phill & Platt, Julie. (2011, May). Workshop: Using WordPress as a CMS. Presented at the Computers & Writing Conference, Ann Arbor, MI.

Alexander, Phill. (2011, May). Red, dead? Red Dead Redemption and American Indian depictions in video games. Paper presented at the Computers & Writing Conference, Ann Arbor, MI.

Alexander, Phill. (2011, April). The ghost in the Machinima is you: Games as film as resistance. Paper presented at the Conference on College Composition and Communication, Louisville, KY.

Alexander, Phill. (2010, May). Gaming, identity, and narration: The gaming narrative. Paper presented at the Computers & Writing Conference, West Lafayette, IN.

Alexander, Phill. (2010, May). The Problem of the Popular Indian: World of Warcraft and race. Paper presented at the Computers & Writing Conference, West Lafayette, IN.

Alexander, Phill. (2009, October). I'm that type of girl: World of Warcraft, gender identity, and identity tourism. Paper presented at the Feminisms and Rhetorics conference, East Lansing, MI.

Alexander, Phill. (2009, March). Running with the bulls: Race and the Tauren in World of Warcraft. Paper presented at the Convention on College Composition and Communication, San Francisco, CA.

Alexander, Phill. (2008, October). Anji Bee: Digitally alive. Video presented at the Thomas R. Watson Conference, Louisville, KY.

Alexander, Phill. (2008, October). Your world (of Warcraft) could use an ad-just-ment. Paper presented at the Thomas R. Watson Conference, Louisville, KY.

Alexander, Phill; Cox, Matt; DeVoss, Danielle; Platt, Julie & Sackey, Donnie. (2008, October). Remixing the teaching philosophy. Panel discussion at the Thomas R. Watson Conference, Louisville, KY.

Alexander, Phill; Cox, Matt; DeVoss, Danielle; Platt, Julie & Sackey, Donnie. (2008, May). Remixing the teaching philosophy. Panel discussion at the Computers & Writing

Conference, Athens, GA.

Alexander, Phill. (2008, May). Using gaming identities in the computer classroom. Paper presented at the Computers & Writing Conference, Athens, GA.

Alexander, Phill; DeVoss, Danielle; Knight, Aimee; Loncharich, Les & Rife, Martine. (2008, May). About face: Mapping our institutional presence. Paper presented at the Computers & Writing Conference, Athens, GA.

Alexander, Phill. (2008, March). Gaming genres in City of Heroes. Paper presented at the Convention on College Composition and Communication, New Orleans, LA.

Alexander, Phill. (2007, October). On my way: The ethics of MMORPG research. Paper presented at the Association of Internet Researchers Conference, Vancouver, BC, Canada.

Alexander, Phill. (2007, May). Composing a virtual identity: City of Heroes and writing a toon to life. Paper presented at the Computers & Writing Conference, Detroit, MI.

Alexander, Phill. (2007, March). City of Heroes, affinity groups and gamer identity. Paper presented at the Convention on College Composition and Communication, New York, NY.

Alexander, Phill. (2006, October). The next generation gap: Exploring the impact of video games on literacy and composition. Paper presented at the Thomas R. Watson Conference, Louisville, KY.

Alexander, Phill; Helton, Edwina. (2002). Undergraduates as teachers: The IU East professional experience in writing program. Paper presented at the Convention on College Composition and Communication, Chicago, IL.

TEACHING—

Miami University, Armstrong Interactive Media Studies, 2016-present

Courses taught:

ENG/IMS 224: Digital Rhetoric and Writing (taught face-to-face, online, and hybrid, including summer and winter sessions)

IMS 390i: Digital Identity (Created course, offered each winter term)

IMS 390e: The Comprehensive Study of Esports (designed in collaboration with student Stelanie Tsirlis)

ENG/IMS 411/511: Visual Rhetoric and Design for Print and the Web (taught face-to-face, online and hybrid)

IMS 445/545: Game Design

IMS 211: The Analysis of Play (taught face-to-face, online and hybrid, including summer sessions)

ENG/IMS 317: Writing for Games (Created course)

*I average of 5-7 independent study students per term, including honors projects, senior projects, summer research and internships. This is likely to only increase a interest in games and simulations increases.

Miami University, English/IMS 2012-2016

Courses taught:

ENG 111: Composition and Rhetoric

ENG/IMS 224: Digital Rhetoric and Writing (taught face-to-face, online, and hybrid, including summer sessions)

ENG 310: Special Topics, The Rhetoric of Digital Identity (Created course, offered each winter term).

ENG 313: Technical Writing (taught face-to-face and online, including summer sessions)

ENG/IMS 411/511: Visual Rhetoric and Design for Print and the Web (taught face-to-face, online and hybrid)

IMS 445/545: Game

IMS 211: The Analysis of Play (taught face-to-face, online and hybrid, including summer sessions)

ENG/IMS 317: Writing for Games (Created course)

Michigan State University: 2008-2011

Courses taught:

WRA 110: Writing, Science and Technology (taught face-to-face and online, one of Michigan State's themed first-year writing courses)

WRA 150: Writing, The Evolution of American Thought (taught face-to-face and online, one of Michigan State's themed first-year writing courses)

WRA 210: Introduction to Web Authoring (taught face-to-face and hybrid, award winning course design revision)

Miami University: 2005-2007**Courses taught:****ENG 111:** Composition and Rhetoric**ENG 112:** Composition and Literature**Indiana University East: 2001-2006****Courses taught:****English W130:** Principles of Composition (this course is the first in a three course cycle of first--year composition, offered to those slightly behind expectations upon admission)**English W131:** Elementary Composition I (taught face-to-face and online, second course in first--- year composition cycle, offered to those who entered as typical traditional students)**English W132:** Elementary Composition II (taught face-to-face and online, third course in first---year composition cycle, required of all students regardless of AP or test---out credit)**English W231:** Professional Writing Skills (taught face-to-face and online)**SERVICE—**

- Co-Director and founding member of Miami University Varsity Esports Program 2015-present.
- Miami University faculty liaison to TESSA (Blizzard Esports league), 2016-present.
- Miami University faculty liaison to REKT U Esports, 2016-present.
- Miami University faculty liaison collaborating on course development with Twitch.TV, 2016-present.
- Miami University delegate to NAC Esports, 2015-present.
- Miami University delegate to HEVGA (Higher Education and Video Games Association) 2016-present.
- Member, team coordinator and presenter: Miami University Year of Creativity and Innovation Faculty Learning Group, 2015-2016.
- Independent study director, AIMS: Miami University, 2014-present.
- Intern manager, AIMS: Miami University, 2016-present.
- Senior project director, AIMS: Miami University: 2015-present.
- Mentor for Teaching Assistant in AIMS: Miami University, 2015-present.
- Chair, AIMS faculty hiring committee, 2015.
- Organizer and Coordinator: Miami University's presence at Lexplay expo, 2016-present.
- Assistant Editor: Kairos. 2014-2016.

- Founder: CCCC Special Interest Group: Race and Technology, 2015.
- Founding co-facilitator: Computers and Writing Social Justice caucus, 2015.
- Organizer and coordinator: AIMS presence at Ohio Digital Gaming Expo, 2014---present.
- Facilitator/Campus Contact/Organizer/Coordinator: Miami University Global Game Jam, 2014---present.
- Assistant coordinator, CCCC Digital Pedagogy Posters, 2015-2016.
- Independent Study/Project advisor in English, winter and summer 2014, summer 2015.
- Internship Advisor in English: Miami University, summer 2014, summer 2015.
- Faculty Advisor: Miami University Forensics Society, 2014---present.
- Faculty Advisor: Miami University Professional Writing Club, 2013-2016.
- Mentor for Teaching Assistant in English: Miami University, 2013.
- Member: Miami University Writing and Rhetoric committee, 2012-2016.
- Member: AIMS Games committee, 2013-present.
- Consultant: Miami Digital Writing Collaborative, 2012---2013.
- Elected Member: Miami University English Department Advisory Committee, 2012---2014.
- Proposal Reviewer: Computers & Writing Conference, 2011, 2013.
- Article Reviewer: Computers and Composition, 2014---present.
- Article Reviewer: Open Words, 2014---present.
- Consultant: Writing in Digital Environments lab, Michigan State University, 2007-2010.
- Organizational assistant: Feminisms and Rhetorics Conference, 2009.
- Assistant Coordinator: Miami University portfolio review program, 2007.
- Organizer and presenter: Digital Writing Collaborative Brownbag Series, 2007.
- Representative (elected): Miami University Graduate Assistants and Adjuncts Association executive committee, 2007.

MEMBERSHIPS —

- Association of Internet Researchers
- Committee on Computers and Composition in the Conference on College Composition and Communication
- Computers & Writing Race Caucus
- Computers & Writing Social Justice Caucus
- Conference on College Composition and Communication

- Conference on College Composition and Communication Race and Technology SIG
- Conference on College Composition and Communication Indigenous Rhetorics Caucus
- Higher Education and Video Games Association
- North American College Esports Association
- Modern Language Association
- National Council for Teachers of English
- Ohio Game Developers Conference
- TESPA
- Wordcraft Circle

REFERENCES AVAILABLE BY REQUEST

6420 Fairfield Drive
Oxford, OH 45056

JERRY BELICH
jerrytron.com

(612) 306 - 8258
jerry@jerrytron.com

TEACHING EXPERIENCE

Miami University

Armstrong Professor in College of Creative Arts

Bringing industry experience directly to game design students through technical and creative education methods and assisting in the creation of a game design degree. Using alternative controllers and involving industry game development teams to help develop students creative process while exposing them to real world experience.

*Oxford, OH
2016 - Present*

Eastern Kentucky University

Vernon Wilson Endowed Chair in Game Design

Served as a continual resource for students and faculty through guest lectures, workshops, and provided colloquium in various topics such as game design, alternative controls, crowdfunding, and pitching. Developed and led STEM outreach workshops, and was a keynote speaker at 2016 Vector Conference hosted by ECU.

*Richmond, KY
Spring 2016*

O'Reilly Media

Series Designer & Presenter

Created a 6+ hour course from scratch titled *Prototyping for Play*. Used 7 original hardware / software projects to teach participants about creative toy and game design, as well as tackle the challenges of interface and presentation.

*Sebastopol, CA
Summer 2015*

Loft Literary Center

Teaching Artist

Provided young writers a chance to develop their creative writing and game design skills through interactive fiction. Each student built a Choosatron kit to test and play their work, learning about electronics and the maker movement.

*Minneapolis, MN
Summer 2013*

A full list of speaking engagements and workshops can be found at jerrytron.com/speaking

SELECT PROJECTS

A.F.T.E.R.G.L.O.W. - A Soviet radar simulation game and briefcase installation using recovered hardware.

The Choosatron - An award-winning, successfully kickstarted interactive storytelling platform and arcade game.

Cylindr - Cylindr is a game of light played around a cylindrical field of play of 600 multi-color LEDs.

Ghost Dentist VR - A body-horror game testing the joy and terror of immersive virtual play as your own dentist.

MysteryPhone - A real-time, location-based interactive fiction mystery game for the Northern Spark festival.

Please Stand By - A 1951 Capehart TV turned into a tactile game piece about US history, communication, and politics.

Utopia Room - A technically advanced escape-the-room experience in a utopian future where happiness is mandated.

Full project list available at jerrytron.com/projects

EMPLOYMENT EXPERIENCE

Miami University

Armstrong Professor in College of Creative Arts

Bringing industry experience to game design education; using technical and creation education methods for developing well rounded skills; assisting in creation of a game design degree; physical, electronic, and digital design for honing students' creative process; exposing students to real world experience by involving game industry professionals

*Oxford, OH
2016 - Present*

Independent & Freelance

Game and Narrative Designer / Developer

Freelance game design, coding, installations; acting as a community leader and researcher for [Particle](#); narrative work for published games; developed [talked and workshops](#) about game design and creative work given all over the world

*Minneapolis, MN
2012 - Present*

Clockwork Active Media*Senior Mobile Developer**Minneapolis, MN**2010 - 2014*

Led mobile development; released many native and cross-platform mobile projects; designed and implemented hardware installations (e.g., [Bluetooth LE & Flip-Dots](#)); was a key member of a small dev team that wrote software to manage a large-scale installation at the [Cosmopolitan Casino](#) in Las Vegas; worked closely with clients; ran client demos

SKILLS

Languages and Libraries: C, C++, C#, Swift, Objective-C, Java, Python, Haxe

Tools: Unity3D, Unreal, Xcode, Visual Studio .Net, Git, Subversion, Eclipse, Arduino, Chat Mapper, Google Docs Suite

EDUCATION

Miami University, Master of Fine Arts, Experience Design, Expected graduation 2019

Oxford, OH

Bethel University, Bachelor of Arts, Computer Science, 2003

St Paul, MN

Los Angeles Film Studies Center, 2002

Los Angeles, CA

Matthew James Board

4135 St Martins PL, Cincinnati, OH 45211

Home Phone: 413.386.4698

Email: boardmj@miamioh.edu

Websites: www.mattboard.com; www.sleekTiki.com; Artstation

Education

Gnomon Master Classes, 2009 | Gnomon School of Visual Effects, Games + Animation, Los Angeles, California

M.F.A. 2006 University of Cincinnati, College of Design, Art, Architecture and Planning

B.F.A. 2003 Northern Kentucky University

1998 Art Academy of Cincinnati

A.A. 1997 Washington State Community College

Professional Experience

2015-Present, Assistant Professor of Art and Interactive Media Studies, Miami University, Oxford Campus

2010-2015, Assistant Professor of Game Design, Columbia College Chicago, Chicago, Illinois, Tenure Awarded

2010-Present, Founder, SleekTiki Interactive,

2009-2010 Freelance Digital Sculptor, Pawtucket, Rhode Island, Hasbro, INC. (Telecommute)

2008-2010 Full-Time Assistant Professor of Computer Graphics/Digital Art, Springfield College, Springfield, Massachusetts

2006-2008, Full-Time Tenure Track Instructor, Casper College, Casper, Wyoming

Awards/Grants

- Information Technology Award, "Rad Lab", Miami University, Oxford, Ohio, 2017, 132,000.00
- CCA Scholarship and Teaching Grant, Miami University, Oxford, Ohio 2016, Completed, 1736.00
- Innovation Grant, Casper College, 2007
- Excellence in Graduate Assistant Teaching, University of Cincinnati, 2006

Selected Exhibits

- 2016** *GDEX, Game Developer Expo, Center for Science and Industry, Columbus, Ohio*
I presented my game project, *Kamodo Steve: Janitor on Fire* as an independent exhibitor under my Limited Liability Company, Sleek Tiki Interactive, Juror: Cody Starcher. (Peer Reviewed)
- 2015** *Games for National Impact Demos, Games + Higher Education + National Impact Summit, Higher Education Video Game Alliance, Woodrow Wilson Center, Washington D.C.*
I presented my game project, *Kamodo Steve: Janitor on Fire*, at the Games + Higher Education + National Impact Summit, organized by the Higher Education Video Game Alliance (HEVGA) at the the Woodrow Wilson Center in Washington DC. I presented it as part of the *Games with National Impact Demos* component of the conference. The demos were juried by Constance Steinkueler, Associate Professor at the University of Wisconsin, Madison; President of HEVGA; and former Senior Policy Analyst in the White House Office of Science and Technology Policy (OSTP) where she advised on national initiatives related to games. (Peer Reviewed)
- 2012** *Pixologic Turn Table Gallery, www.pixologic.com*
- 2010** *Drawing the Line, University of Cincinnati, Clermont Campus, Batavia, OH Faculty Group Show, Columbia College Chicago, IAM Project Room, Chicago, IL*
- 2009** *Action Hero Exhibit, Gnomon School of VFX, Los Angeles, CA Turntable Gallery, Invited to exhibit digital sculpts on Zbrush.com turntable gallery*

Publications/Conferences

- Mid America College Art Association, *Everyone is a Developer*, Session Chair. 2016. (Peer Reviewed)
- Mid America College Art Association, *Game Art and Methodologies for Critique*, Session Chair, Theresa Devine, *The Art and Aesthetics Behind Kamodo Steve* by Matthew Board, 2016. (Peer Reviewed)
- <http://chi-scroller.com/2013/12/02/kickstarter-watch-kamodo-steve/> *Kickstarter Watch: Kamodo Steve*, Author: Chris Hodges. 2013
- 2007
The Chicago Journal mentioned *Maybelline Mario* in an Exhibit review of *Gameplay: Video Games In Contemporary Art Practice*.

Residencies/Workshops

- A Day of Unity Workshop, Microsoft Chicago, Chicago, IL, 2014
- Technical Art Boot Camp, Game Developers Conference, San Francisco, CA, 2012,
- 2014
Autodesk Certified Instructor (ACI) workshop, Montreal, Quebec, Canada 2009

Technical Skills and Proficiencies

Software and Technology

Adobe Creative Suite, (Photoshop, Illustrator, Indesign, Flash, Dreamweaver and Premiere); Final Cut Studio Suite (Final Cut, DVD Studio Pro, Motion, Livetype, Soundtrack Pro and Compressor); Autodesk Maya, 3D Studio Max; Pixologic Zbrush; 3D Coat; Allegorithmic Substance Painter and Designer; Unreal Engine 4; Unity3D

Curriculum Vitae
ERIC R. BACHMANN

Department of Computer Science
Benton 205B
Miami University
Oxford, OH 45056

Cell: (513) 255-0086
Office: (513) 529-0786
Eric.Bachmann@miamiOh.edu

EDUCATION

Ph.D. Computer Science, Naval Postgraduate School, December 2000
M. S. Computer Science, Naval Postgraduate School, September 1995
B. A. Mathematics and Computer Science, University of Cincinnati, June 1983

EXPERIENCE

2014 –Present

Miami University, Oxford, OH
Professor

2001 – 2014

Miami University, Oxford, OH
Associate Professor

1997 – 2016

Naval Postgraduate School, Monterey, CA
Lecturer of Computer Science / Research Assistant Professor

1985 – 1997

United States Navy

Rank: Lieutenant Commander, USNR - **Unrestricted Naval Aviator**: (earned wings August 1986) Aircraft flown: SH-60B, CH-53E, and SH-3G. Designated Aircraft Commander, Mission Commander and Functional Check Pilot.

Naval Officer: (commissioned July 1985) Major billets: Quality Assurance Officer, Line Division Officer, Assistant Administration Officer and Public Affairs Officer. Managed \$500,000 budgets and supervised up to 25 personnel. Responsible for the quality of maintenance on ten SH-60B aircraft.

1984 – 1985

RCA Missile Test Project, Patrick AFB, FL

Designed, maintained and tested real-time Fortran and Assembler software to control missile tracking radars on the Atlantic Missile Test Range.

PUBLICATIONS

Journal Publications:

E Hodgson, E. R. Bachmann, D. Vincent, M. Zmuda, D. Waller, and J. Calusdian, "WeaVR: A Self-Contained and Wearable Immersive Virtual Environment Simulation System," *Journal of Behavioral Research Methods, Instruments, and Computers*, April. 2014.

E. Hodgson, E. R. Bachmann, and T. Thrash, "Performance of Redirected Walking Algorithms in a Constrained Virtual World," in press *IEEE Transactions on Computer Visualization and Computer Graphics*, Vol. 20, No. 4, 2014.

M. A. Zmuda, J. L. Wonser, E. R. Bachmann, and E. Hodgson, "Optimizing Constrained-Environment Redirected Walking Instructions Using Search Techniques," in press *IEEE Transactions on Computer Visualization and Computer Graphics*, Vol. 17, No. 11, 2013.

E. Hodgson and E. R. Bachmann, "Comparing Four Approaches to Generalized Redirected Walking: Simulation and Live User Data," *IEEE Transactions on Computer Visualization and Computer Graphics*, Vol. 19, No. 4, 2013.

X. Yun, J. Calusdian, and E. R. Bachmann, and R. McGhee, "Estimation of Human Foot Motion During Normal Walking Using Inertial and Magnetic Sensor Measurements," *IEEE Transactions on Instrumentation and Measurement*, Vol. 61, No. 3, 2012, pp. 1-14.

Hodgson, E., Bachmann, E., & Waller. D, "Steering Immersed Users of Virtual Environments: Assessing the Potential for Spatial Interference," *ACM Transactions on Applied Perception*, Vol. 8 Issue 4, November 2011.

X. Yun, E. R. Bachmann, and R. B. McGhee, "A Simplified Quaternion-based Algorithm for Orientation Estimation from Earth Gravity and Magnetic Field Measurements," *IEEE Transactions on Instrumentation and Measurement*, Vol. 57, No.: 3, 2008.

D. Waller, E. R. Bachmann, E Hodgson, and A. C. Beall, "The HIVE: A Huge Immersive Virtual Environment for research in spatial cognition," *Journal of Behavioral Research Methods, Instruments, and Computers*. Vol. 39, No. 4, November 2007, pp. 835-843.

E. R. Bachmann, X. Yun, A. Brumfield, "An Investigation of the Effects of Magnetic Variations on Inertial/Magnetic Orientation Sensors," *IEEE Robotics and Automation Magazine*, Vol. 14, No. 3, September 2007, pp. 76-87.

X. Yun, and E. R. Bachmann, "Design, Implementation, and Experimental Results of a Quaternion-Based Kalman Filter for Human Body Motion Tracking," *IEEE Transactions on Robotics*, Vol. 22, Issue 6, December 2006.

E. R. Bachmann, and X. Yun, "A Single Parameter Tunable Quaternion Based Attitude Estimation Filter," *Journal Navigation*, Vol. 53, Issue 2, Fall 2006.

D. Waller and E. R. Bachmann, "The Borderline of Science: On the Value of Factor Analysis for Understanding Presence," *Presence: Teleoperators and Virtual Environments*, Vol. 15, Issue 2, April 2006.

X. Yun, E. R. Bachmann, S. Arslan, K. Akyol, and R. B. McGhee, "An Inertial Navigation System for Small Autonomous Underwater Vehicles," *Advanced Robotics, VSP and Robotics Society of Japan*, Vol. 15, No. 5, 2001, pp. 521-532.

X. Yun, E. R. Bachmann, R. B. McGhee, R. H. Whalen, R. L. Roberts, R. G. Knapp, A. J. Healey, and M. J. Zyda, "Testing and Evaluation of an Integrated GPS/INS System for Small AUV Navigation," *IEEE Journal of Oceanic Engineering*, Vol. 24, No. 3, July 1999, pp. 396-404.

Conference Proceedings:

E. R. Bachmann, M. A. Zmuda, J. Calusdian, X. Yun, E. Hodgson, and D. Waller, "Going Anywhere Anywhere: Creating a Low Cost Portable Immersive VE System," *17th International Conference on Computer Games (CGAMES)*, Louisville, KY, 2012.

E. R. Bachmann, J. Calusdian, Eric Hodgson, and X. Yun,, "In-Situ Heading Drift Correction for Human Position Tracking Using Foot-Mounted Inertial/Magnetic Sensors," *Proceedings of the IEEE International Conference on Robotics and Automation, ICRA 2012*, St. Paul, Minnesota, USA, May 2012.

X. Yun, J. Calusdian, and E. R. Bachmann, "Adaptive-Gain Complementary Filter of Inertial and Magnetic Data for Orientation Estimation," *Proceedings of the IEEE International Conference on Robotics and Automation, ICRA 2011*, Shanghai, China, May 2011.

X. Yun, E. R. Bachmann, H. Moore, and J. Calusdian, "Self-contained Position Tracking of Human Movement Using Small Inertial/Magnetic Sensor Modules," accepted for publication in the *Proceedings of the IEEE International Conference on Robotics and Automation, ICRA 2007*, Rome, Italy, April 2007.

B. J. Snow, P. Maynard-Zhang, and E. R. Bachmann, "A WiFi Based Personal Place Awareness System using Bayesian Learning," *Proceedings of the Midwest Artificial Intelligence and Cognitive Science Conference (MAICS-05)*, Dayton, Ohio, April 2005.

X. Yun, C. Aparicio, E. R. Bachmann, R. B. McGhee, "Implementation and Experimental Results of a Quaternion-Based Kalman Filter for Human Body Motion Tracking," *Proceedings of the IEEE International Conference on Robotics and Automation, ICRA 2005*, Barcelona, Spain, April 2005.

X. Yun, E. R. Bachmann, A. Kavousanos-Kavousanakis, F. Yildiz, McGhee, R. B., "Design and Implementation of the MARG Human Body Motion Tracking System," *Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 04)*, Sendai, Japan, September - October 2004.

E. R. Bachmann, X. Yun, and C. W. Peterson, "An Investigation of the Effects of Magnetic Variations on Inertial/Magnetic Orientation Sensors," *Proceedings of the IEEE International Conference on Robotics and Automation, ICRA 2004*, New Orleans, Louisiana, April - May 2004.

X. Yun, M. Lizarraga, E. R. Bachmann, and R. B. McGhee, "An Improved Quaternion-Based Kalman Filter for Real-Time Tracking of Rigid Body Orientation," *Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 03)*, Las Vegas, Nevada, October 2003.

E. R. Bachmann, X. Yun, and R. B. McGhee, "Sourceless Tracking of Human Posture Using Small Inertial/Magnetic Sensors," *Proceedings of the IEEE International Symposium on Computational Intelligence in Robotics & Automation (CIRA 03)*, Kobe, Japan, July 2003.

E. R. Bachmann, , X. Yun, D. McKinney, R. B. McGhee and M. J. Zyda, "Design and Implementation of MARG Sensors for 3-DOF Orientation Measurement of Rigid Bodies," *Proceedings of the IEEE International Conference on Robotics and Automation, ICRA 2003*, Taipei, Taiwan, September 2003.

E. R. Bachmann, R. B. McGhee, X. Yun and M. J. Zyda, "Inertial and Magnetic Posture Tracking for Inserting Humans into Networked Virtual Environments," *ACM Symposium on Virtual Reality Software and Technology, VRST 01*, Banff, Alberta, Canada, November 2001, pp. 9 – 16.

J. L. Marins, X. Yun, E. R. Bachmann, R. B. McGhee, and M. J. Zyda, "An Extended Kalman Filter for Quaternion-Based Orientation Estimation Using MARG Sensors," *Proceedings of the 2001 IEEE/RSJ International Conference on Intelligent Robots and Systems(IROS 01)*, Maui, Hawaii, USA, Oct. 29 - Nov. 03, 2001, pp.2003-2011.

X. Yun, E. R. Bachmann, and S. Arslan, "An Inertial Navigation System for Small Autonomous Underwater Vehicles," *Proceedings of 2000 IEEE International Conference on Robotics and Automation (ICRA 00)*, Vol. 24, April 2000, San Francisco, CA, pp. 1781 -1786.

E. R. Bachmann, I. Duman, U. Usta, R. B. McGhee, X. Yun, and M. J. Zyda, "Orientation tracking for Humans and Robots Using Inertial Sensors," *Proceeding of the IEEE International Symposium on Computational Intelligence in Robotics & Automation (CIRA 99)*, Monterey, CA, November 8-9 1999, pp.187-194.

X. Yun, G. C. Hernandez, E. R. Bachmann, R. B. McGhee, and A. J. Healey, "An Integrated GPS/INS Navigation System for Small AUVs Using an Asynchronous Kalman Filter," *Proceedings of the 1998 Workshop on Autonomous Underwater Vehicles*, August 20-21, 1998, Cambridge, MA, pp. 43-49.

X. Yun, E. R. Bachmann, R. B. McGhee, R. H. Whalen, R. L. Roberts, R. G. Knapp, A. J. Healey, and M. J. Zyda, "Testing and Evaluation of an Integrated GPS/INS System for Small AUV Navigation (SANS)," *Proceedings of the 10th International Symposium on Unmanned Untethered Submersible Technology (UUST)*, Durham, NH, September 1997, pp. 101-108.

E. R. Bachmann, R. B. McGhee, R. H. Whalen, R. Steven, R. G. Walker, J. R. Clynch, A. J. Healey, and X. Yun, "Evaluation of an Integrated GPS/INS System for Shallow-Water AUV Navigation (SANS)," *Proceedings of the 1996 IEEE Symposium on Autonomous Underwater Vehicle Technology, (AUV '96)*, Monterey, CA, June 3-6, 1996, pp. 268-275.

R. B. McGhee, J. R. Clynch, A. J. Healey, S. H. Kwak, D. P. Brutzman, X. Yun, N. A. Norton, R. H. Whalen, E. R. Bachmann, D. L. Gay, and W. R. Schubert, "An Experimental Study of an Integrated GPS/INS System for Shallow-Water AUV Navigation (SANS)," *Proceedings of the 9th International Symposium on Unmanned Untethered Submersible Technology (UUST)*, Durham, NH, September 25-27, 1995, pp.153 - 167.

Referred Poster Papers:

E. R. Bachmann, J. Holm, M. A. Zmuda, and E. Hodgson Multi-User, "Collision Prediction and Prevention in a Simultaneous Two-User Immersive Virtual Environment," *IEEE Virtual Reality 2013*, Orlando, FL. March, 2013.

M. A. Zmuda, E. R. Bachmann, E. Hodgson, and J. Wonser, "Improved Resetting in Virtual Environments," *IEEE Virtual Reality 2013*, Orlando, FL. March, 2013.

E. Hodgson, E. R. Bachmann, D. Waller, A. Bair, and A. Oberlin, "Virtual Reality in the Wild: A Self-Contained and Wearable Simulation System," poster *IEEE Virtual Reality*, 2012, March, 2012.

Invited Papers:

M. J. Zyda, D. P. Brutzman, R. Darken, R. B. McGhee, J. Falby, E. R. Bachmann, K Watsen, B. Kavanaugh, and R. Storms, "NPSNET-Large-Scalve Virtual Environment Technology Testbed," *Proceedings of the International Conference on Artificial Reality and Tele-Existence*, Tokyo, Japan, December 1997, pp 18-26.

Grants

"Realistic Simulation of Slope and Vertical Navigation in Low Cost, Portable, Wearable Immersive Environment Systems for Education and Training," NSF, Cyber-Human Systems (CHS) Program, Three Year Grant, \$364,116, FY 2014 - 2017, Principal Investigators Eric Bachmann and Eric Hodgson.

"HCC: Medium: Collaborative Research: Low Cost, Portable, Multi-user, Immersive Virtual Environment Systems for Education and Training in Worlds of Unlimited Size," National Science Foundation' NSF, IIS- Human-Centered Computing, Four Year Grant 1.2 million (\$659,999, Miami University; \$540,000, Naval Postgraduate School), FY 2010, Principle Investigators Eric Bachmann and Xiaoping Yun.

"Enabling Large-Scale Multi-User Immersive Virtual Reality Simulations," Army Research Office (ARO) Defense University Research Instrumentation Program (DURIP) Equipment Grant, \$150,000, FY 2010, Principle Investigators Eric Bachmann and David Waller.

"Enabling Large-Scale Multi-User Immersive Virtual Reality Simulations," National Science Foundation' NSF, CCF- Computing Infrastructure, \$312,672, FY 2010, Principle Investigators Eric Bachmann and David Waller.

"Initial Development of Miami's Interdisciplinary Center for Virtual Environment Research and Scholarship," Armstrong Interactive Media Studies (AIMs), One-year grant for \$50,000, Principle Investigators: Eric Bachmann & David Waller.

"Portable Virtual Environment for Training in Transit," Navy Modeling and Simulation Office, One-year grant for \$70,000, FY 2009, Principal Investigators: Eric Bachmann, & Xiaoping Yun.

"Realistic Simulation of Environments of Unlimited Size in Immersive Virtual Environments," Army Research Office (ARO), Three-year grant for \$300,000, August 1, 2008 - January 31, 2011, Principal Investigators: Eric Bachmann and David Waller.

"Sourceless Position Tracking Using Small Inertial/Magnetic Sensors," Navy Modeling and Simulation Office, One-year grant for \$90,000, FY 2007, Principle Investigators: Eric Bachmann, & Xiaoping Yun.

"Very Large Immersive Virtual Environment for Multiple Users Based on Wireless Full Body Posture and Position Tracking," Defense University Research Instrumentation Program (DURIP) Equipment Grant, \$196,056, May 05 – April 06, Principal Investigator: Eric Bachmann, Co-Investigator: David Waller.

"Implementation of a Very Large Immersive Virtual Environment (VLIVE)," Shoup Award, \$8,136, Summer 05 - Spring 06, Principal Investigator: Eric Bachmann, Co-Investigator: David Waller (Miami University Dept. of Psychology).

"Inertial Motion Tracking for Inserting Humans into a Networked Synthetic Environment," Army Research Office (ARO), Two-year grant for \$49,528, September 1, 2004 - August 31, 2005, Principle Investigator: Eric Bachmann.

"The Role of a Simulated Body in Increasing Presence and Task Performance within Virtual Environments," One-year grant for \$10,186, P&G Fellows in Interactive Media, Spring 04 – Fall 04, Principle Investigator: Eric Bachmann. Co-Investigators: Dr. Yvonne Lippa & Dr. David Waller.

"Immersive Technologies," Navy Modeling and Simulation Office, One-year grant for \$55,000, FY 2004, Principle Investigators: Eric Bachmann & Xiaoping Yun.

“Hybrid Inertial Motion Tracking for Inserting Humans into Networked Synthetic Environments,” Navy Modeling and Simulation Office, One-year grant for \$60,000, FY 2003, Principle Investigators: Eric Bachmann & Xiaoping Yun.

“Inertial Motion Tracking for Inserting Humans into a Networked Synthetic Environment,” Army Research Office (ARO), Three-year grant for \$358,996, September 1, 2002 - August 31, 2005, Principle Investigators: Eric Bachmann, Xiaoping Yun, & Michael Zyda.

“Hybrid Inertial Motion Tracking for Inserting Humans into Networked Synthetic Environments,” Navy Modeling and Simulation Office, One-year grant for \$72,250, FY 2001, Principle Investigators: Eric Bachmann & Xiaoping Yun.

“Inertial and Magnetic Posture Tracking for Inserting Humans into Networked Virtual Environments (Student Support),” One-year grant for \$9,695, P&G Fellows in Interactive Media, Fall – 01 – Spring 02, Principle Investigator: Eric Bachmann.

“Hybrid Inertial Motion Tracking for Inserting Humans into Networked Synthetic Environments,” Navy Modeling and Simulation Office, One-year grant for \$70,000, FY 2000, Principle Investigators: Eric Bachmann & Xiaoping Yun.

“Inertial Motion Tracking for Inserting Humans into a Networked Synthetic Environment,” Army Research Office (ARO), Two-year grant for \$141,885, January 1, 1998 - December 31, 1999, Principle Investigators: Michael Zyda & Robert McGhee.

“Inertial Motion Tracking for Inserting Humans into a Networked Synthetic Environment,” Army Research Office (ARO), Two-year grant for \$176,496, January 1, 2000 - December 31, 2001, Principle Investigators: Michael Zyda & Xiaoping Yun.

Patents

United States Patent: *Method for the Determination of Three-dimension Body Attitude Using the Adaptive-Gain complementary Filter*, Patent Pending January 2012.

United States Patent: *Method and Apparatus for Motion Tracking of an Articulated Rigid Body*, Patent No.: US 7,089,148 B1, Date of Patent: August 8, 2006.

United States Patent: *Method and Apparatus for Motion Tracking of an Articulated Rigid Body*, Patent No.: US 6,820,025 B2 Date of Patent: Nov 16, 2004 (Licensed PNI 2011).

Additional Activities

Butler County Advocate for Sexual Assault Victims, 2010 - 2012

Butler County Community Crisis Center Suicide Prevention Hotline, 2010 – 2012

Yoga Instructor, Miami Recreational Sports Center, 2008 -2009

Auction volunteer, Three Valley Conservation Trust, Fall 2005 and 2006

WMUB Pledge Drive Volunteer, Spring 2002

Citizens for Talawanda Schools Committee, Fall 2002

Curriculum Vitae Michael A. Zmuda

EDUCATION

- Ph.D. Computer Science. Wright State University, 1992.
- M.S. Computer Science. Wright State University, 1989.
- B.S. Computer Science and Mathematics. Eastern Michigan University, 1987.

PROFESSIONAL EXPERIENCE

Associate Professor, Miami University, 2003–present.

Assistant Professor, Miami University, 1997–2003.

- Taught courses in artificial intelligence, parallel programming, computer graphics, game programming, programming language theory, object oriented programming, formal languages, and networking.
- Designed and developed robot localization algorithm using accelerometers and RF sensor networks.
- Co-recipient of multi-year \$500K contract from the U.S. Air Force for applying evolutionary-learning techniques to the problem of pattern recognition. Miami's portion is \$170K.
- Coached ACM programming team. Our team's performance since 1999 has been 1st or 2nd in non-Ph.D. granting universities.
- Organized outreach programs involving high school programming contests and game programming expos. High schools from Indiana, Michigan, and Ohio participated.

Visiting Professor, Miami University, 1997–1998.

- Taught courses in object oriented programming, windows programming, networking, and computer architecture.

Principle Engineer, UMI, Dayton, OH, 1996–1997.

- Designed and developed grammars for translating third-party documents into a proprietary format. The grammars were developed for proprietary compiler tools.
- Developed a macro library and coding standards that allowed translations to be developed quickly and accurately.
- Identified key enhancements to UMI's proprietary compiler tools.

Software Project Manager, Spectra Research, Centerville, OH, 1995–1996.

- Developed software for performing syntax analysis and data dependency analysis in FORTRAN programs. These tools were used to automatically translate console-based programs into equivalent GUI-based programs.
- Implemented specialized graphical interfaces for modeling and simulation environments.

Research Scientist, Wright-Patterson Air Force Base, Wright Laboratory, 1992–1995.

- Designed and implemented a technique for determining the attitude of satellites using celestial images (i.e., a star map). The algorithm is extremely accurate and performs real-time matching.
- Designed and implemented algorithms for the soft morphological operators that are up to 30 times faster than conventional soft morphological algorithms.
- Used machine-learning techniques such as genetic algorithms, neural networks, and stochastic search to synthesize, select, and optimize morphological pattern recognition systems.

- Managed one of seven contracts in the MSTAR automatic target recognition program. MSTAR was the largest software development effort in DOD at that time.
- Served as system administrator for a small network of Unix workstations.

Adjunct Professor, Air Force Institute of Technology, 1994-1996.

- Taught graduate students operating systems and C/C++.

Adjunct Professor, Wright State University, 1992-1994.

- Taught undergraduate courses in formal languages and computer programming.

Research/Teaching Assistant, Wright State University, 1988-1992.

- Developed a machine learning system for synthesizing morphological image processing programs.
- Taught laboratory sections in digital circuit design and introductory computer science.

PRIMARY COURSES

Artificial Intelligence
 Computer Graphics
 Data Structures
 Game Programming
 Object Oriented Programming
 Comparative Programming Languages
 Simulation
 Automata, Formal Languages, and Computability
 Introduction to Computer Programming
 High Performance Computing

AWARDS AND RECOGNITION

Arthur Olsen Generational Teaching Excellence Award Winner, 2015.

Miami University, CELTUA Teaching Excellence Award, 2011.

ACM Student Chapter Professor of the year, Miami University, 2008.

School of Engineering and Applied Science Research Award, Miami University, 2004.

Miami University Associated Student Government Honored Professor, 2003.

Miami University Alumni Association Effective Educator Award Nominee, 2003.

Miami University Associated Student Government Honored Professor, 2002.

"Hybrid Evolutionary Learning for Pattern Recognition Contract (HELPR) to Three Dimensional Target Classification." Co-recipient of 2-year \$205,987 award from US Air Force, 2002-2005.

"Applying Evolutionary Computation to the Design of Pattern Recognition Systems," co-recipient of 4-year \$300K award from the U.S. Air Force. Miami's share is \$130K, 1999-2002.

Midwestern Artificial Intelligence and Cognitive Science Conference, "The Application of Evolutionary Computation to Pattern Recognition." invited presentation, 2001.

Outstanding Technical Achievement, Wright Laboratory, Avionics Directorate, 1994.

Outstanding Ph.D. Student in Computer Science, Wright State University, 1990-1991.

Air Force Office of Scientific Research Summer Research Fellowship, 1988.

PROFESSIONAL SERVICE

Program committee Congress on Evolutionary Computation, 2001.
 Program committee Midwest Artificial Intelligence and Cognitive Sciences Conference, 2001.
 Reviewer for IEEE Transactions on Education
 Reviewer for IEEE Transactions on Evolutionary Computation.
 Reviewer for International Journal of Smart Engineering System Design.
 Reviewer for IEEE Transactions on Systems, Man, and Cybernetics.
 Reviewer for Pattern Recognition Letters.
 Reviewer for IEEE Expert.
 Program Committee for 1995 Conference on Evolutionary Computation.
 Session Chairman for Evolutionary Programming Conference, 1994.

JOURNAL PUBLICATIONS

Eric Hodgson, Eric Bachmann, David Vincent, Michael Zmuda, David Waller, James Calusdian, "WeaVR: A Self-Contained and Wearable Immersive Virtual Environment Simulation System", *Behavior Research Methods*, to appear in 2014.

Michael Zmuda, Joshua Wonser, Eric Bachmann, and Eric Hodgson. Optimizing Constrained-Environment Redirected Walking Instructions Using Search Techniques. *IEEE Transactions on Vision and Computer Graphics*, 19(11), pp. 1872-1884, 2013.

Zmuda, M. and M. Hatch. "Scheduling Topics for Improving Student Comprehension of Recursion," *Computers in Education* (48), pp. 318-328, 2007.

Zmuda, M., M. Rizki, and L. Tamburino. "Mutating Real-Valued Vectors Using Angular Displacement" *International Journal on Artificial Intelligence Tools*, pp 509-526, 2003.

Zmuda, M., M. Rizki, and L. Tamburino. "An Evolutionary Learning for Synthesizing Multi-Class Pattern Recognition Systems," *Applied Soft Computing* 2(4), pp. 269-282, 2003.

M. Rizki, Zmuda, M., and L. Tamburino. "Evolving Pattern Recognition Systems," *IEEE Transactions on Evolutionary Computation*, pp. 594-609, Dec. 2002.

Zmuda, M. "A stochastic algorithm for approximating the soft morphological operators". *Optical Engineering*, pp. 2746-2752, Dec., 2001.

Zmuda, M. and L. Tamburino, "Efficient Algorithms for Soft Morphological Operators," *IEEE Transactions on Pattern Analysis and Machine Intelligence*, pp. 1142-1147, Nov., 1996.

Zmuda, M., L. Tamburino, and M. Rizki, "An Evolutionary Learning System for Synthesizing Complex Morphological Filters," *IEEE Transactions on Systems, Man, and Cybernetics*, pp. 645-653, Aug., 1996.

Tamburino, L., M. Rizki, and M. Zmuda, "Generating Pattern Recognition Systems Using Evolutionary Learning," *IEEE Expert*, pp. 63-68, Aug., 1995.

CONFERENCE PUBLICATIONS

Michael Zmuda, Eric Bachmann, Eric Hodgson, Joshua Wonser. "Improved Resetting in Virtual Environments." 2013 IEEE Virtual Reality Conference, pp. 91-92, 2013.

Eric Bachmann, Jeanette Holm, Michael Zmuda, Eric Hodgson. "Collision Prediction and Prevention in a Simultaneous Two-User Immersive Virtual Environment." 2013 IEEE Virtual Reality Conference. pp.89-90, 2013.

Bachmann, E., J. Calusdian, E. Hodgson, X. Yun, and M. Zmuda. "Going Anywhere Anywhere – Creating a Low Cost Portable Immersive VE System," Proceedings of the 17th International Computer Games Conference: AI, Interactive Media, Virtual Worlds, and Serious Games, 2012.

- Claude C. Grigsby, Michael A. Zmuda, Derek W. Boone, Tyler C. Highlander, Ryan M. Kramer, and Mateen M. Rizki. Differential profiling of volatile organic compound biomarker signatures utilizing a logical statistical filter-set and novel hybrid evolutionary classifiers. SPIE Conference on Evolutionary and Bio-Inspired Computation: Theory and Applications , 2012.
- Zmuda, M., A. Elesev, and Y. T. Morton. "Robot Localization Using RF and Inertial Sensors," Proceedings National Aerospace and Electronics Conference, 2008.
- Zmuda, M. and Y. T. Morton. "Calibrating Non-GPS Navigation Sensors for Use in Robot Localization," National Meeting of Institute of Navigation, Feb., 2007.
- Zmuda, M., M. Rizki, and L. Tamburino. "Target Classification Using Morphological Features," SPIE Conference for Synthetic Aperture Radar Imagery XI, pp. 321-331, 2004.
- Zmuda, M., M. Rizki, and L. Tamburino. "Optimizing Linear Discriminants Using Evolutionary Learning," Proceedings of the Artificial Neural Networks in Engineering Conference. ASME Press, pp. 261-266, 2002.
- Zmuda, M. "Recovering Tabular Information from ASCII Documents Using Evolutionary Programming," Proceedings of the Artificial Neural Networks in Engineering Conference. ASME Press, pp 189-195, 2001.
- Tamburino, L., M. Rizki, and M. Zmuda, "HELPR Evolved Pattern Recognition Systems," World Multiconference on Systemics, Cybernetics, and Informatics Vol XIII, pp. 212-217, 2001.
- Wheeler, M. and M. Zmuda. "Processing Color and Complex Images Using Mathematical Morphology," Proceedings National Aerospace and Electronics Conference, pp. 618-624, 2000.
- Zmuda, M., L. Tamburino, and M. Rizki. "Automated Synthesis of Pattern Recognition Systems," Proceedings of the Artificial Neural Networks in Engineering Conference. ASME Press, pp 381-386, 1999.
- Rizki, M., L. Tamburino, and M. Zmuda, "Evolution of Morphological Recognition Systems," Proceedings of the Fourth Annual Conference on Evolutionary Programming, 1995.
- Rizki, M., L. Tamburino, and M. Zmuda, "E-MORPH: A Two-Phased Learning System for Evolving Morphological Classification Systems," Proceedings of the Third Annual Conference on Evolutionary Programming, pp. 60-67, 1994.
- Zmuda, M., M. Rizki, and L. Tamburino, "Generating Feature Detectors with Discovery Algorithms," Proceedings National Aerospace and Electronics Conference, pp. 825-830, 1993.
- Rizki, M., L. Tamburino, and M. Zmuda, "Multi-Resolution Feature Extraction from Gabor Filtered Images," Proceedings National Aerospace and Electronics Conference, pp. 819-824, 1993.
- Rizki, M., L. Tamburino, and M. Zmuda, "Evolving Multi-Resolution Feature Detectors," Proceedings of the Second Annual Conference on Evolutionary Programming, pp. 108-118, 1993.
- Tamburino, L., M. Zmuda, and M. Rizki, "Applying Evolutionary Search to Pattern Recognition Problems," Proceedings of the Second Annual Conference on Evolutionary Programming, pp. 183-191, 1993.
- Rizki, M., L. Tamburino, and M. Zmuda, "Multi-Resolution Correlators for Target Recognition," Proceedings of the 1992 Canadian Conference on Electrical and Computer Engineering, pp. TA3.18.1-TA3.18.4, 1992.

- Zmuda, M., L. Tamburino, and M. Rizki, "Automatic Generation of Morphological Sequences," SPIE Image Algebra and Morphological Image Processing III, pp. 106-118, 1992.
- Zmuda, M., M. Rizki, and L. Tamburino, "The Computational Complexity of Synthesizing Target Recognition Programs," SPIE Signal Processing, Sensor Fusion, and Target Recognition, PP. 225-231, 1992.
- Tamburino, L., M. Rizki, and M. Zmuda, "Feature Extraction Using Morphological Analysis of Multi-Resolution Grey-Scale Images," SPIE Signal Processing, Sensor Fusion, and Target Recognition, pp. 385-397, 1992.
- Rizki, M., L. Tamburino, and M. Zmuda, "Biological Evolution as a Paradigm for Performance-Driven Search," Lecture Notes in Computer Science, Springer-Verlag, pp. 385-391, 1991.
- Zmuda, M., M. Rizki, and L. Tamburino, "Approaches to Synthesizing Image Processing Software," Proceedings National Aerospace and Electronics Conference, pp. 1054-1059, 1991
- Zmuda, M., L. Tamburino, and M. Rizki, "Efficient Software Techniques for Morphological Image Processing with Desktop Computers," SPIE Data Structures and Target Classification, pp. 183-189, 1991.
- Rizki, M., L. Tamburino, and M. Zmuda, "Applications of Learning Strategies to Pattern Recognition," SPIE Proceedings on Applications of Artificial Neural Networks, pp. 384-391, 1991.
- Rizki, M., L. Tamburino, and M. Zmuda, "Adaptive Search for Morphological Feature Detectors," SPIE Image Algebra and Morphological Image Processing I, pp. 150-159, 1990.
- Rizki, M., L. Tamburino, and M. Zmuda, "A Study of Morphological Feature Detector Complexity and Character Recognition Rates," Proceedings National Aerospace and Electronics Conference, pp. 1132-1138, 1990.
- Tamburino, L., M. Rizki, and M. Zmuda, "Computational Resource Management in Supervised Learning Systems," Proceedings National Aerospace and Electronics Conference, pp. 1074-1079, 1989.

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SUMMARY

- Since summer 2012 I have been Professor of Music at Miami University (Ohio). From fall 2012 through spring 2017 I was Chair of the Department of Music.
- From 2003 until 2012 I was Dean and Artistic Administrator of the Brevard Music Center, a major summer institute and festival in western North Carolina. From 2004 until 2012 I taught as an adjunct faculty member at Brevard College.
- From 1998 until 2003 I was Director of the School of Music at the University of Alabama.
- From 1981 until 2003 I was a member of the faculty at the University of Alabama School of Music. My teaching focus was piano. I worked in various administrative roles (e.g., Assistant Director of the School, Director of Graduate Studies) before being appointed Interim Director position in 1998 and Director in 1999.
- I hold a BFA in Music degree from Carnegie Mellon University (1977) and MM (1980) and DMA (1984) degrees in Piano from the Yale School of Music.
- Throughout my professional life I have been an active pianist. I am a Steinway Artist and have given hundreds of concerts (solo recitals, chamber music, concertos) throughout the United States, in Europe, and in South America.

EMPLOYMENT

Professor of Music, Miami University of Ohio (2012-present)

Chair, Department of Music, Miami University of Ohio (2012-2017)

My teaching has included applied music (piano), piano literature, and chamber music. In fall 2017 I accepted an invitation to teach in Miami University's Interactive Media Studies program. In fall 2018 I will teach a course in games music and will commence a research agenda to explore uses of technology to improve audience experience in live performing arts events.

I was Chair of a department with 230 majors enrolled in B.M. (performance, education, composition), B.A., and M.M. degrees. Thirty full-time faculty members and seventeen adjuncts work in the Department, which resides in a School of Creative Arts with Departments of Art, Architecture, and Theatre, and the program in Interactive Media Studies. The school is accredited by the National Association of Schools of Music (NASM).

My responsibilities as Chair included management of personnel, staffing, facilities, and budgets. I had contact with donors and prospective donors. I was the institutional representative to NASM and was expected to maintain compliance in all matters pertaining to accreditation. I held ultimate responsibility for the schedule of public events and the for the schedule of classes. The most recent annual budget as reported to the Higher Education Arts Data Survey was \$5.8M.

My successful initiatives at Miami included

- Adding a new degree program in music composition.
- Adding guitar to the list of instruments in which a student can major.
- Improving the visibility and availability of music on campus and in the community. This included creating a series of professional chamber music concerts in conjunction with the Oxford Community Arts Center, and expanding substantially the list of venues in which formal concerts are offered.
- Improving the concert experience on campus. This included introducing some physical improvements to the recital hall; appointing qualified managers for all public events; improving communication with audience; and adding rigor to the use of the clock, so that events commenced on time, carried reasonable intermissions, and ran for reasonable lengths of time.

Dean and Artistic Administrator, Brevard Music Center, Brevard, NC (2003-2012)

I was the chief academic officer of this summer institute and festival, a 501(c)(3) corporation whose mission is to "teach gifted young musicians to prepare and perform great musical works at a high artistic level." I was also the Artistic Administrator (a position since renamed Director of Artistic Planning). I reported to the CEO of the institution, and I worked closely shared several responsibilities with an Artistic Director (David Efron, 2003-2007, Keith Lockhart 2007-2012). My position was year-round, and my annual duties included:

- building, revising, and assessing the curriculum
- setting long-range artistic and educational goals
- setting the season calendar of >80 public events, all to be presented within seven weeks
- determining/approving repertoire and programs
- hiring: an artist faculty of 70; production managers and staff; a student life staff of five deans and 36 resident advisors
- engaging season guest artists and conductors
- fielding student applications, determining admission status, enrolling 420 students, ages 14 through 29

These activities were accomplished through a Department of Instruction and Performance, consisting of me and two year-round, full-time professional staff members who reported to me. The Artistic Director retained final authority on artist faculty hiring and programming but had no budgetary authority or accountability. I held final authority on the other listed items. The institution earned more than \$1M in student tuition and fees each year. About \$600k in ticket revenue was earned from public performances. The total budget of the institution during my final year was about \$3.7M.

At Brevard the number of raw student applications in 2005 was 1463. The number in 2012 was about 2700. Enrollment was capped long at 390 F.T.E., a function of the limitations of the facilities.

Important artists who performed at Brevard during my tenure included Yo-Yo Ma, Joshua Bell, Emanuel Ax, Andre Watts, Gil Shaham, Frederica von Stade, Peter Serkin, Barry Douglas, and Leila Josefowicz; guest conductors included JoAnn Falletta, Matthias Bamert, and Grant Llewellyn. I proposed that Ms. Falletta, only the second woman to conduct an orchestra at Brevard, be engaged on a long-term basis as Brevard's first "Principal Guest Conductor."

I worked regularly with development officers and had persistent contact with members of the Board of Trustees. During my tenure Brevard Music Center installed facilities for recording and broadcast, which led to its first radio presence in more than fifty years. A regular series was developed in collaboration with WDAV in Charlotte, and WCQS in Asheville, and Brevard recordings have since appear regularly on the program *Performance Today* from American Public Media.

Adjunct Faculty Member, Brevard College (2004-2012)

I taught studio piano and, in some semesters, keyboard skills classes. My studio enrollment ranged from two to eight each semester.

**Director, School of Music, The University of Alabama, Tuscaloosa, AL (1999-2003);
Interim Director (1998-99)**

I was head of a comprehensive music unit in the flagship institution of the Alabama state university system. Degree programs included music performance, composition, history, theory, music education, and music therapy, manifest through degrees including B.A., B.M., B.S., M.M., M.S. (music education), D.M.A. (performance and composition), and Ed.D. (music education).

At the time of my departure in 2003, there were more than 300 music majors. With any academic year about one-fifth of the University's undergraduate population enrolled in a music course. More than 350 public performances were presented each year. Budgets for salaries, facilities, and equipment in my unit totaled \$4.5M. The School of Music's most significant outreach efforts included a Community Music School in which more than 600 students enrolled each year.

During my years at the University of Alabama institutional advancement was strongly centralized and vertical. Nevertheless, I worked closely with development offices and participated in many fundraising efforts, including acquisition of a \$1M gift to endow the University's symphony orchestra. I re-instituted the University Opera Theatre after an eleven-year dormancy; managed a significant recital/chamber series; brokered partnerships with the Alabama Symphony and other arts organizations; and chaired the Realizing the Dream Coordinating Committee, a broadly representative body that planned and presented events throughout the community to celebrate the legacy of Dr. Martin Luther King, Jr.

Faculty Member, The University of Alabama (1981-2003)

I taught studio piano, piano literature, chamber music, and harpsichord at undergraduate and graduate levels. Many of my students proceeded to elite graduate programs and/or have garnered employment as college teachers.

I served as Assistant Director of the School of Music (1984-93) and Director of Graduate Studies in Music (1993-96).

My committee service was regular and extensive; it included various IT committees,

leadership review committees, and search committees. For a dozen years I was the arts representative on the Graduate Scholarship Committee, the University screening committee for Rhodes, Fulbright, Truman, and Marshall Scholarships.

SUMMARY OF TECHNOLOGY EXPERIENCE AND INNOVATION

- Independent programmer and consultant, 1988-2006. Worked in various languages including x86 assembler, C, Java, JavaScript, and SQL. c. 1990 developed add-on software for Artisoft Lantastic networking system that was widely distributed.
- First webmaster at the University of Alabama and, likely, in the state of Alabama (1993). Built and managed a permanent web server that went online 10/93 when there were fewer than 300 such servers in the world. 1998-2005 created the official online versions of the University catalog.
- Manning Publications: webmaster, et al (1996-2006). Manning has been a prominent publisher of books for programmers and other technology professionals. I created and managed the Manning web presence; produced e-book versions of each title (before the term “e-book” was common); edited and packaged deliverables (code, etc.) associated with each title for CD-ROM (until 2000) or download; developed a proprietary e-commerce system at a time before turnkey systems were available; and served as a technical resource for both authors and readers. Finished writing the title Java Applets and Channels without Programming after other authors proved unable, and received an author credit.
- Brevard Music Center (2003-2012). Managed the web presence for five years, until a full-time programmer was hired; created a system to accept online student applications and auditions (likely the earliest implementation of an online audition process in the United States); developed infrastructure to allow live streaming and live broadcasting of performing arts events from a rural location; created and managed an Internet radio presence that ran 24/7 for several years; produced and hosted more than 40 episodes of a podcast series (2008-09); produced various audio and video programs for various audiences, including a group of retrospective programs, broadcast nationally on NPR stations, that featured live “recovered” recordings from the 1940s and 1950s.

OVERVIEW OF PERFORMING ACTIVITY

- Chamber music and collaborative appearances with many important performing artists, including Frederica von Stade, William Preucil, Ricardo Morales, Roberto Diaz, Gail Williams, Michael Collins, Andres Cardenes, Ransom Wilson, Elmar Oliveira, Michael Thompson, Marianne Gedigian, Andres Diaz, Robert MacDuffie, Ransom Wilson, Carol Wincenc, Øystein Baadsvik, and the Audubon Quartet. Cycle of complete Beethoven piano/violin sonatas with William Preucil in 2010; complete Brahms violin sonatas with William Preucil in 2011.
- One hundred forty performances with the Cadek Trio, 1983-2006.
- More than eighty public performances at the Brevard Music Center.
- Appearances as piano soloist with the Pittsburgh Symphony, the Alabama Symphony Orchestra (18 performances, 13 different works), the Tuscaloosa Symphony (five times), the Central Ohio Symphony Orchestra, the Tupelo Symphony Orchestra, the Hendersonville Symphony Orchestra, four different orchestras at the Brevard Music Center, and several college and university orchestras. Conductors have included Matthias Bamert, Keith Lockhart, Shinik Hahm, Paul Polivnick, David Efron, Louis Lane, Anshel Brusilow, David Stewart Wiley; repertoire has included forty different works for piano and orchestra.
- Many solo performances at American colleges and universities, including Emory University, Rockefeller University, the University of Pittsburgh, the University of Georgia, Converse College, the University of Alabama in Huntsville, Huntingdon College, the University of Alabama in Birmingham, and the University of Montevallo.
- Many live performances on public radio stations including WGBH Boston, WQED Pittsburgh, WDAV Davidson, North Carolina, and WCQS, Asheville, North Carolina.
- 2017 summer: "Mostly Beethoven" series of seven weekly recitals (four solo, three chamber) that included performances of fourteen Beethoven piano sonatas.
- 2015 summer: series of six weekly recitals covering the complete piano sonatas of Mozart, Oxford, OH.
- 2012: Artist faculty, Prague International Piano Festival: two lecture-recitals.
- 2012: Nine performances for Charlotte Chamber Music, Charlotte, NC.
- 1997: Recital and masterclasses at the Academia Gheorge Dima in Cluj, Romania, 1997. Masterclass at the Franz Liszt Academy, Budapest.

- 1990-1992: Solo and chamber music performances at regional and national conferences of The Society of Composers, Incorporated, and regional conferences of the College Music Society. Six performances for the SCI National Conference (March 1992), including premieres of two concertos for piano and orchestra: John White's "Mirrors" and Charles Argersinger's Concerto No. 1.
- 1991: Recital and master classes at the Eighth International Piano Festival, Universidad Industrial de Santander, Bucaramanga, Colombia; performance of Bach's Goldberg Variations broadcast live on Colombian national television.
- 1995-2001: Principal keyboard for the Tuscaloosa Symphony Orchestra.

RECORDINGS AS PERFORMER

- *Solo Piano Music of Frederic Goossen*, Vols. 1 and 2; Opus One Recordings numbers 159 and 163.
- *The Passion Of Bliss, Bowen And Bridge* with Doris Lederer, viola; Centaur Records number 2692.
- *Music by York Bowen* with Doris Lederer, viola; Centaur Records, number 2786.
- Chopin: Nocturne Op. 62, No. 1, for Radio Chopin (radiochopin.org), Episode 5.

OTHER RECORDINGS, PUBLICATIONS, AND ACTIVITIES

- More than 100 published book reviews for CHOICE, journal of the Association of College & Research Libraries Association.
- Program annotator for more than 200 public events (Alabama, Brevard, Miami); dozens of pre-concert lectures (Brevard, Miami); liner notes for commercial compact discs (Centaur)
- Producer/host for more than 40 podcasts at the Brevard Music Center.
- Producer of two compact discs for the Brevard Music Center that were made available for retail sale.
- Book: *Java Applets and Channels Without Programming*, Greenwich, CT: Manning Publications, 1997, with Ronny Richardson, Michael Shoffner, Marq Singer, and Jack Gambol.
- Article, "Franz Liszt," *The St. James Guide to Biography*, Chicago: St. James Press, 1991.

- Article, "Piano Literacy," Piano Quarterly, Summer 1989.

EDUCATION

- DMA in Piano (1984), Yale University School of Music.
- MM (1980), MMA (1981) in Piano, Yale University School of Music. Piano study with Ward Davenny and Claude Frank; harpsichord with Richard Rephann; theory with Allen Forte and Jacob Druckman.
- BFA in Music with Honors (1977), Carnegie Mellon University. Piano study with Nelson Whitaker.

Additionally,

- from 1988 until 1990 I undertook occasional private piano study with Leonard Shure;
- in 1980 I enrolled at the Yale Summer School of Music and Art in Norfolk; and
- in 1976 I enrolled at the Aspen Music Festival and School, where I studied piano with Aube Tzerko.

OTHER CONTACT INFORMATION

The contact information at the head of this document includes my home address, cell number, and personal email address. My school contact information:

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Curriculum Vita



L. James Smart Jr. (Jay)

Psychology Department	4407 Whitmore Lane
Miami University, OH	Fairfield, OH 45014
Oxford, OH 45056	513-330-6573 (h)
Phone: 513-529-1656	513-240-4587 (c)
Email: SmartLJ@miamioh.edu	
Internet: blogs.miamioh.edu/spocc	

Education

Ph.D.: Experimental Psychology, University of Cincinnati, June 2000.

Title: A comparative analysis of visually induced motion sickness.

Chair: Thomas A. Stoffregen

M.S.: Experimental Psychology, Northeast Louisiana University, May 1995.

Title: The effect of reporting instrument on judgments of caught weight.

Chair: Steven B. Flynn

B.S.: Psychology, Trinity College, May 1992. Minor: Cognitive Science.

Professional Positions

Assoc. Professor of psychology, Miami University (July 2013 – present)

Director: Smart Postural Control & Coordination Laboratory.

Chief Departmental Advisor (Psychology)

Steering Committee Member: Psychology

Member: Miami University Institutional Review Board for Human Subjects (chair Jul 2013- Jul 2016)

-Member Psychology Department subcommittee (chair Jun 2009 – Jun 2013)

Summer Orientation Faculty advisor (College of Arts & Science)

Steering Committee Member: Miami Design Collaborative

AIMS Interdivisional Curriculum Committee Member

Member: Miami University Graduate Council

Member: Miami University Center for Assistive Technology (MUCAT)

Member: NSF College of Reviewers (Perception, Action, & Cognition program)

Adjunct Professor of psychology, Clemson University (June 2017 – present)

Asst. Professor of psychology, Miami University (Aug., 1998 – June 2013; tenured 2004)

Instructor, University of Cincinnati (Summer, 1996; 1998)

Teaching Philosophy

I believe that teaching is composed of four functions: providing information, knowledge, and guidance about the topic being taught, honing students' ability to evaluate this knowledge and seek further knowledge, illuminating the relevance of the course material for everyday life, and encouraging students to seek opportunities for further work in the field through research and mentoring. With these functions in mind, my approach to the classroom setting has been to set the course content in the context of questions to be answered or problems to be solved by the class with my help. My goal is to empower students by not just giving them the "answer" but helping to develop the skills that would allow them to find or generate "answers" on their own.

Courses taught: Perception, Cognition, Motor Control, Research Methods and Design, Human Factors, Psychology of Virtual Environments & Gaming, Psychology of Design, Creativity, Innovation, & Design Thinking

Research Summary

The concept of perception-action coupling is at the heart of much of the research inspired by James Gibson's Ecological approach to psychology. Inherent in this idea is that the information obtained by the perceptual systems can be used to guide subsequent actions, particularly in a manner that allows for the completion or reaching of some future state or goal. What happens when the perceptual information obtained does not support action or actions that the organism is familiar with? *My research involves examining the consequences of disrupting the perception-action cycle on participants' ability to successfully regulate their behavior. In particular, I am interested in how functional relationships between perception and action are regained (adaptation) and the cost of not being able to do so (motion sickness). My research bridges interests in motor control, perception, and Human Factors.*

Dissertations Chaired: Smith, D. L. (2004), Oates, S. P. (2005), Otten, E. W. (2008), Strang, A. J. (2010), Littman, E. M. (2011), Cook, H. E. (2015), Gong, M. (current), Hassebrock, J. (current)

Professional Service

Ad hoc reviewer for: JEP:HPP; JEP:LMC, Motor Control, Ecological Psychology, Ergonomics, Cognition, Displays, International Journal of Applied Aviation Studies (IJAAS), Journal of Motor Behavior, Frontiers in Movement Science and Sport Psychology (review editor), Frontiers in Robotics and AI, Frontiers in Human Neuroscience, PLoS ONE, Human Movement Science, Attention, Perception, & Psychophysics, Behavioral Research Methods, Experimental Brain Research, Perception, Frontiers in Psychology: Perception Science, Experimental Psychology, Frontiers in Robotics and AI, Frontiers in Psychology: Cognitive Science

6th Midwestern Cognitive Science Conference Co-organizer (2017)

Nineteenth International Conference on Perception and Action Scientific Committee member (2017)

Cognitive engineering for spatial information processes (CESIP) 2015 program committee member

NSF panelist 2010; 2012; 2014; 2016

Textbook reviewer (research methods): John Wiley & Sons; Sage; Nestor

Publications

Kinsella, A., Beadle, S., Wilson, M., **Smart, L.**, & Muth, E. (2017) Measuring User Experience with Postural Sway and Performance in a Head Mounted Display. *Proceedings of the Human Factors and Ergonomics Society 61st Annual Meeting 2062-2066.*

Wolf, R. C., Thurmer, H. P., Berg, W. P., Cook IV, H. E., & **Smart, L. J.** (2017). A Pilot Feasibility Study of the Effect of the Alexander Technique on Muscle Activation, Movement Kinematics and Performance Quality in Collegiate Violinists and Violists. *Medical Problems of Performing Artists* 32 (2), 78 -84.

Hassebrock, J. A., Cook, H. E., & **Smart, L. J.** (2015). Coordinative dynamics: The role of task difficulty during interpersonal coordination. In J. A. Weast-Knapp, M. Malone, & D. H. Abney (Eds.) *Studies in Perception & Action XIII* (57- 60), New York: Psychology Press.

Mark, L. S., Ye, L., & **Smart, L. J.** (2015). Perceiving the Nesting of Affordances for Complex Goal-Directed Actions. In Robert Hoffman, Peter Hancock, Mark Scerbo, Raja Parasuraman, and James Szalma (eds.), *Cambridge Handbook of Applied Perception Research (vol. 1)*. New York, NY: Cambridge University Press

- Smart, L. J.**, Otten, E. W., Strang, A. J., Littman, E. M., & Cook, H. E. (2014). Influence of complexity and coupling of optic flow on visually induced motion sickness. *Ecological Psychology* 26 (4), 301-324.
- Charles, E. P., & **Smart, L. J.** (eds). (2011). *Studies in Perception and Action XVI*. New York: Psychology Press.
- Strang, A. J., Haworth, J., Hieronymus, M., Walsh, M., & **Smart, L.J.** (2011). Structural Changes in Postural Sway Lend Insight into Effects of Balance Training, Vision, and Support Surface on Postural Control in a Healthy Population. *European Journal of Applied Physiology*, 111, 1485-1495. DOI 10.1007/s00421-010-1770-6
- Littman, E. M., Otten, E. W., & **Smart, L. J.** (2010). Consequence of self versus externally generated visual motion on postural regulation. *Ecological Psychology*, 22(2), 150 – 167.
- Littman, E. M., Otten, E. W., & **Smart, L. J.** (2009). Consequence of internally versus externally generated visual motion on postural regulation in a virtual environment. In J. Wagman & C. Pagano (Eds.), *Studies in perception and action X (145-148)*. Philadelphia, PA: Taylor & Francis Group, LLC.
- Otten, E. W., & **Smart, L. J.** (2009). The effect of open vs. closed-loop optic flow on visually induced motion sickness. In J. Wagman & C. Pagano (Eds.), *Studies in perception and action X (149-152)*. Philadelphia, PA: Taylor & Francis Group, LLC.
- Smart, L.J.**, Otten, E.W., & Stoffregen, T.A. (2007). It's turtles all the way down: A comparative analysis of visually induced motion sickness. *Proceedings of the 51st Annual Meeting of the Human Factors and Ergonomics Society* 1631-1634.
- Smart, L.J.**, Mobley, B.S., Otten, E.W., Smith, D.L., & Amin, M.R. (2004). Not just standing there: The use of postural coordination to aid visual tasks. *Human Movement Science*, 22(6), 769-780.
- Stoffregen, T. A., Bardy, B. G., **Smart, L. J.**, & Pagulayan, R. J. (2003). On the nature and evaluation of fidelity in virtual environments. In L. J. Hettinger & M. W. Haas (Eds.), *Virtual & Adaptive Environments: Applications, Implications, and Human Performance Issues*, 111 - 128.
- Smart, L. J.**, Stoffregen, T. A., & Bardy, B. G. (2002). Visually induced motion sickness predicted by postural instability. *Human Factors*, 44(3), 451-465.
- Smart, L. J.**, & Smith, D. L. (2001). Postural Dynamics: Clinical and Empirical Implications. *Journal of Manipulative and Physiological Therapeutics*, 24 (5), 340-349.
- Stoffregen, T. A., Hettinger, L. R., Haas, M. W., Roe, M., & **Smart, L. J.** (2000). Postural instability and motion sickness in a fixed-base flight simulator. *Human Factors*, 42 (3), 458-469.
- Smart, L. J.**, Hettinger, L. J., & Stoffregen, T. A. (1999). A comparison of two forms of visually induced motion sickness. In R. S. Jensen, & J. D. Callister (eds.) *Proceedings of the 10th International Symposium on Aviation Psychology (2)*, 889-895.
- Stoffregen, T. A., **Smart, L. J.**, Bardy, B. G., & Pagulayan, R. J. (1999). Postural stabilization of looking. *Journal of Experimental Psychology: Human Perception & Performance*, 25 (6), 1641-1658.
- Smart, L. J.**, Pagulayan, R. J., & Stoffregen, T. A. (1998). Self-induced motion sickness in unperturbed stance. *Brain Research Bulletin*, 47(5), 449-457.

Stoffregen, T. A. & **Smart, L. J.** (1998). Postural instability precedes motion sickness. *Brain Research Bulletin*, 47(5), 437-448.

Smart, L. J., & Pagulayan, R. J. (1997). Motion sickness without imposed motion. In M.A. Schmuckler & J. M. Kennedy (Eds.), *Studies in perception and action IV* (pp. 257-260). Hillsdale, NJ: Lawrence Erlbaum Associates.

Stoffregen, T. A., & **Smart, L. J.** (1997). Postural stabilization of visual fixation. In M.A. Schmuckler & J. M. Kennedy (Eds.), *Studies in perception and action IV* (pp. 347-350). Hillsdale, NJ: Lawrence Erlbaum Associates.

Technical Reports

Stoffregen, T. A. & **Smart, L. J.** (1996). Postural instability as an etiological factor in visually-induced motion sickness. Final Report: Naval Air Warfare Center contract #N61339-94-M-1285.

Abstracts

Stoffregen, T. A., Hettinger, L. J., Haas, M. W., Roe, M., & **Smart, L. J.** (1998). Postural instability and motion sickness in a fixed-base flight simulator. Abstract in the Proceedings of the Human Factors and Ergonomics Society 42nd annual meeting.

Works in Progress

Cook IV, H. E., Hassebrock, J. A., & **Smart, L. J.** (abstract accepted). Other People's Posture: Visually induced motion sickness from naturally generated optic flow. *Frontiers in Psychology*

Smart, L. J., Johnson, B. L., Littman, E. M., Hassebrock, J. A., & Vitatoe, K. N. (under revision). Control and sex influences on seated postural regulation during a virtual task.

Smart, L. J., Thomas, R. D., Cook IV, H. E., & Hassebrock, J. A. (in prep). Perceptual identification of postural characteristics.

Funding

Internal

Student Technology Fee award (Miami University)

Submitted: December '13

Title: "Upgrading behavioral data capture technologies for use in Perception, Action, & Cognition teaching and research"

Investigator: **Smart, L. J.**

Amount of Award: \$32,495

Howe Writing Center (Miami University) grant

Submitted: April '11

Title: "Revision of statistics/research methods sequence"

Investigators: Uhler, B., Hall, C., Johnson, J., Abraham, M., Evans, C., & **Smart, L.J.**

Amount of Award: \$5000.00

CELTUA (Miami University) instructional grant

Submitted: March '11

Title: "Revision of statistics/research methods sequence"

Investigators: Uhler, B., Hall, C., Johnson, J., Abraham, M., Evans, C., & **Smart, L.J.**

Amount of Award: \$3000.00

CELTUA (Miami University) teaching grant

Submitted: May '07

Title: "Enhancing the Undergraduate Research Experience"

Investigators: **Smart LJ** & Strang, AJ

Amount of Award: \$600.00

Proctor & Gamble Interactive Media Initiative (internally administrated)

Submitted: January '01

Title: Interactivity in Virtual Environments as a Tool for Displaying Information about Complex Systems.

Investigators: Dainoff MJ, Davis NC, Mark LS, **Smart LJ**, and Thomas RD

Amount of Award: \$11,300

External

NSF (PAC program) – collaborative with Clemson University

Submitted January '17

Title: The Impact of Varying Latency on Perception and Performance

Amount Requested: \$837,737; Status: Not funded

NSF (PAC program) – collaborative with Clemson University

Submitted August '14

Title: The Impact of Varying Visual Latency on Motor Performance and Motion Sickness

Amount Requested: \$854,402; Status: Not funded

NASA (Research and Technology Development to Support Crew Health and Performance in Space Exploration Missions) – collaborative with Clemson University

Submitted: December '12

Title: Portable Sensorimotor Adaptation System (pSAS)

Amount Requested: \$1,111,333; Status: Not funded

NSF (PAC program)

Submitted: January '08

Title: Understanding the Mechanisms Involved in the Prospective Control of Posture.

Amount Requested: \$356,000; Status: Not funded

NSF (PAC program)

Submitted: July '05

Title: Understanding the mechanisms Involved in the Prospective Control of Posture.

Amount Requested: \$227,000; Status: Not funded

Air Force Research Laboratories

Submitted: January '02

Title: Effect of Cognitive Work Analysis (CWA) on the development of a portal for information foraging.

Investigators: **Smart LJ**, Mark LS, and Dainoff MJ

Amount of Award: \$19,880

NIH (AREA program)

Submitted: January '01

Title: Age-related changes in postural coordination.

Amount requested: \$100,000; Status: Not funded

Awards & Certifications

2016 Jahnke-White Faculty Service Award (Department of Psychology)
Miami Center for Teaching Excellence Commendation for student impact (2010 - 2018)
Level A – advisor status (2017)

Paper Presentations

Smart, L. J., Drew, A. P., Hadidon, T., & Bachman, E. (Jan. 2018). Swaying the Audience: Real-time Postural Prediction of Motion Sickness. Invited Paper given at the 1st Annual Research Symposium, Miami University Center for Assistive Technology Oxford, OH.

Kinsella, A., Beadle, S., Wilson, M., **Smart, L.**, & Muth, E. (Oct. 2017) Measuring User Experience with Postural Sway and Performance in a Head Mounted Display. Paper presented at the Human Factors and Ergonomics Society 61st Annual Meeting Austin, TX.

Smart, L. J., & Thomas, R. D. (July, 2017). Perception of non-linear characteristics of posture. Paper presented at the 6th Midwestern Cognitive Science Meeting, Oxford, OH.

Drew, A. P., Hadidon, T., Bachmann, E. & **Smart, L. J.** (June, 2016). Real time prediction of VIMS using postural motion. Paper presented at the 2016 American meeting of the International Society for Ecological Psychology, Clemson, SC.

Smart, L. J. (Mar, 2016). Swaying the audience: Postural precursors of motion sickness. Paper given to the Clemson University Chapter of HFES, Clemson, SC.

Burlew, K., Burlew, R., Johnson, L. N., Mitchell, M. J., & **Smart, L. J.** (Feb, 2016). Standing on the Shoulders of Our Predecessors: African Americans in Psychology. Panel Discussion, University of Cincinnati, Cincinnati, OH.

Smart, L. J. (Sep, 2015). Data Blitz: SPoCC. Talk given at the Department of Psychology, Miami University, Oxford OH.

Cook, H. E., Hasebrock, J. A., & **Smart, L. J.** (June, 2014). People Perceiving Fractals. Paper given at the 2014 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.

Smart, L. J., Cook, H. E., & Littman, E. M. (June, 2014). “WM”: Studies in Behavioral Adaptation to Perception-Action Distortions. Symposium paper given at the 2014 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.

Smart, L. J. (Apr., 2012). Old Wine in a Virtual Bottle: Consequences of Altering Perception-Action Relationships. Invited paper presented at Trinity College, Hartford, CT.

Choi, S., Jacobs, S., Fendley, M., Moroney, W., & **Smart, L. J.** (Nov., 2011). Educating Future Practitioners. Panel Discussion, 7th Annual World Usability Day, Dayton OH.

Smart, L. J. (April, 2011). Encouraging some cycles while breaking others: The very personal value of undergraduate research. Keynote address given at the Mid-America Undergraduate Psychology Conference, Earlham College, Richmond, IN.

Smart, L. J. (Jan., 2011). Breaking the cycle: Consequences of altering perception-action relationships. Invited paper presented at University of Cincinnati, Cincinnati, OH.

Smart, L. J. (Oct., 2010). You be the judge: Perceptual quantification of postural motion. Invited paper presented at Illinois State University, Normal, IL.

Smart, L. J. (Jan, 2008). Sick of standing there or sick from standing there: What posture has told me about us. Invited paper presented at Miami University, Oxford, OH.

Smart, L.J., Otten, E.W., & Stoffregen, T.A. (Oct., 2007). It's turtles all the way down: A comparative analysis of visually induced motion sickness. Paper presented at the 51st Annual Meeting of the Human Factors and Ergonomics Society, Baltimore, MD.

Smart, L.J. (Nov, 2006). Things Learned from Watching People Stand Around or How Action can Inform Psychology. Invited paper presented at Earlham College, Richmond IN.

Smart, L.J. (October, 2003). Lessons from posture: Basic and applied studies. Invited paper presented at Willmington College, Willmington, OH.

Smart, L. J., & Riley, M. A. (May, 2002). Virtual Study of Perception and Action: An Introduction. Paper presented at the 2002 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.

Richardson, A.R., Dainoff, M. J., Mark, L. S., & **Smart, L. J.** (October, 2002). Toward interactivity in virtual environments as a tool for representing complex data sets. Paper presented at the Human Factors and Ergonomics Society 46th Annual Meeting, Baltimore, Maryland.

Smart, L. J., & Smith, D. L. (June, 2001). Crossing Borders: Implications for Postural Stability and Coordination. Paper presented at the 11th International Conference on Perception and Action, Storrs, CT.

Smart, L. J., Hettinger, L.J., & Stoffregen, T. A. (May, 1999). A comparison of two forms of visually-induced motion sickness. Paper presented at the 10th International Symposium on Aviation Psychology, Columbus, OH.

Smart, L. J. (May, 1998). A comparative analysis of visually induced motion sickness. Paper presented at 1998 North American Meeting of the International Society for Ecological Psychology, Hartford, CT.

Stoffregen, T. A. & **Smart, L. J.** (July, 1997b). Postural stabilization of vision. Paper presented at the Ninth International Conference on Perception and Action, Toronto, Canada.

Smart, L. J., Pagulayan, R. J., & Stoffregen, T. A. (June, 1997). Self-induced motion sickness in unperturbed stance. Paper presented at the Faculty of Sport Sciences, University of the Mediterranean, Marseilles, France.

Smart, L. J. & Stoffregen T. A. (May, 1997). Postural instability and motion sickness in unperturbed stance. Paper presented at the International Workshop on Motion Sickness, Marbella, Spain

Stoffregen, T. A. & **Smart, L. J.** (May, 1997). Postural instability precedes motion sickness. Paper presented at the International Workshop on Motion Sickness, Marbella, Spain.

Stoffregen, T. A. & **Smart, L. J.** (March, 1996). Motion sickness induced through postural stabilization of vision. Paper presented at the 1996 North American Meeting of the International Society for Ecological Psychology, Hartford, CT.

Flynn, S. B., Stoffregen, T. A., & **Smart, L. J.** (July, 1995). Issues in the visual perception of caught weight. Paper presented at the 8th International Conference on Perception and Action, Marseilles, France.

Flynn, S. B., Williamson, J. D., Simpson, R., **Smart, L. J.**, & Boggs, P. (April, 1995). Relative-mass perception: Gender and geography effects. Paper presented at the 41st Annual Convention of the Southwestern Psychological Association, San Antonio, TX.

Smart, L. J., & Flynn, S. B. (April, 1995). The effect of reporting instrument on judgments of caught weight. Paper presented at the 41st Annual Convention of the Southwestern Psychological Association, San Antonio, TX.

Evans-Lewis, V., **Smart, L. J.**, & Ricks, S. P. (December, 1994). Urban Black males' perceptions of self and expectations for future life. Paper presented at the 1994 Meeting of the National Social Science Association, New Orleans, LA.

Poster Presentations

Gong, M., Smith, N., & **Smart, L. J.** (June 2017). The anger superiority effect revisited: A visual crowding task. Poster presented at the 6th Midwestern Cognitive Science Meeting, Oxford, OH.

Teaford, M., Buddie, A., Fitzpatrick, J., Frankel, J., Laane, S., Drew, A., Gong, M., Hassebrock, J., & **Smart, L. J.** (June 2017). Preliminary evaluation of a modified pressure cuff ischemia protocol. Poster presented at the 6th Midwestern Cognitive Science Meeting, Oxford, OH.

Gong, M. & **Smart, L. J.** (Aug 2016). Is there an anger superiority effect in crowding? Poster presented at the 124th annual meeting of the American Psychological Association, Denver, CO

Hassebrock, J. A., Cook, H. E., & **Smart, L. J.** (June, 2016). Other people's posture: Visually induced motion sickness from naturally generated optic flow. Poster presented at the 2016 American meeting of the International Society of Ecological Psychology, Clemson, SC

Smart, L. J., Cook, H. E., & Hassebrock, J. A (June, 2016). Getting there from somewhere else: Discovering affordances for tele-operated devices. Poster presented at the 2016 American meeting of the International Society of Ecological Psychology, Clemson, SC

Hassebrock, J. A., Cook, H. E., & **Smart, L. J.** (July, 2015). Coordinative dynamics: The role of task difficulty during interpersonal coordination. Poster presented at the International Conference of Perception and Action XVIII, Minneapolis, MN.

Hassebrock, J. A., Nagy, J., Stone, J., Tolson, B., Cook, H. E., & **Smart, L. J.** (June, 2014). Joint action synergies during a cooperative puzzle task. Poster presented at the 2014 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.

Stone, J., Walter, H., Payne, R., Tolson, B., Gorley, D., Hassebrock, J. A., Cook, H.E., & **Smart, L. J.** (June, 2014). Task specific behavioral adaptation in a virtual environment. Poster presented at the 2014 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.

Thurmer, H., Wolf, R., Berg, W., Cook, H. E., & **Smart, L. J.** (June, 2014). The effectiveness of the Alexander technique in reducing static upper body muscle tension in collegiate violin and viola performers. Poster presented at the 2014 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.

Walter, H., Payne, R., Tolson, B., Fotta, L., Hassebrock, J. A., Cook, H. E., & **Smart, L. J.** (June, 2014). Sin and punishment: Behavior adaptation in a virtual environment. Poster presented at the 2014 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.

- Cook, H. E., & **Smart, L. J.** (Nov., 2012). The Effect of Enactive-Interface Constraints on User Behavior in Virtual Environments. Poster presented at the 8th Annual World Usability Day meeting, Dayton, OH.
- Smart, L. J.**, Cook, H. E., Kinsella, A. J., Sullivan, L. E., Amin, L. R., Rosario, S., & Braun, J. L. (Nov., 2011). Give me the wheel: Role of control and gender on postural regulation. Poster presented at the 7th Annual World Usability Day meeting, Dayton, OH.
- Smart, L. J.**, Otten, E. W., Cook, H. E., Kinsella, A. J., Sullivan, L. E., Amin, L. R., Rosario, S., & Braun, J. L. (Nov., 2011). The sickness profile: Characterizing postural instability. Poster presented at the 7th Annual World Usability Day meeting, Dayton, OH.
- Smart, L. J.**, & Littman, E. M. (July, 2011). Consequences of altering perception-action relationships. Poster presented at Progress in Motor Control VIII, Cincinnati, OH.
- Smart, L. J.**, Otten, E. W., Strang, A. J., & Littman, E. M. (July, 2011). Changes in perception-action coupling influence postural sway and motion sickness. Poster presented at Progress in Motor Control VIII, Cincinnati, OH.
- Strang, A. J., **Smart, L. J.**, Harper, E., & Walsh, M. (July, 2011). Postural control developed to facilitate target shooting for stance on a dynamic surface. Poster presented at Progress in Motor Control VIII, Cincinnati, OH.
- Strang, A. J., Thoreson, J. A., **Smart, L. J.**, Littman, E. M., & Thomas, R. D. (July, 2011). Freezing degrees of freedom when faced with cognitive and target constraints in a continuous aiming task. Poster presented at Progress in Motor Control VIII, Cincinnati, OH.
- Amin, L., Andersen, A., Kinsella, A., Lukas, S., Martin, A., McCrossen, A., Palcan, M., Rosario, S., Rozenich, G., Littman, E., & **Smart, L. J.** (Nov., 2010). Adapting to dual perception-action distortions in virtual environments. Poster presented at the 6th Annual World Usability Day meeting, Dayton, OH.
- Amin, L., Andersen, A., Kinsella, A., Lukas, S., Martin, A., McCrossen, A., Palcan, M., Rosario, S., Rozenich, G., Littman, E., & **Smart, L. J.** (Nov., 2010). Consequence of internally versus externally generated visual motion on postural regulation in a virtual environment. Poster presented at the 6th Annual World Usability Day meeting, Dayton, OH.
- Strang, A.J., & **Smart, L.J.** (July, 2010). Temporal dynamics during initial acquisition of three-ball juggling. Poster presented at the 2010 International Society for Biomechanics in Sports Annual Conference, Marquette, MI.
- Littman, E. M., & **Smart, L. J.** (Nov., 2009). Adapting to perception-action distortions in virtual environments. Poster presented at the 5th Annual World Usability Day meeting, Dayton, OH.
- Littman, E. M., Otten, E. W., & **Smart, L. J.** (July, 2009). Consequence of internally versus externally generated visual motion on postural regulation in a virtual environment. Poster presented at the 15th International Conference on Perception and Action, Minneapolis, MN.
- Otten, E. W., & **Smart, L. J.** (July, 2009). The effect of open vs. closed-loop optic flow on visually induced motion sickness. Poster presented at the 15th International Conference on Perception and Action, Minneapolis, MN.
- Walsh, M., Strang, A.J., Haworth, J., Hieronymus, M., & **Smart, L.J.** (June, 2009). Balance training alters postural dynamics uniquely for stance on compliant vs. non-compliant surfaces. Poster presented at the 14th annual congress of the European College of Sport Science, Oslo, Norway.

- Smart, L.J.**, Jackson, L., Adams, N., Daffin, J., Malone A., et al. (Nov., 2008). Evaluating virtual experiences. Poster presented at the 4th Annual World Usability Day meeting, Dayton, OH.
- Strang, A. J., Littman, E. M., & **Smart, L. J.** (Nov., 2008). Visuo-Postural Coupling in a 3-D virtual moving room. Poster presented at the 4th Annual World Usability Day meeting, Dayton, OH.
- Thoreson, J. A., Strang, A. J., Skaff, B., Chambers, J., & **Smart, L. J.** (Nov., 2008). The effect of a cognitive load and physical constraints on a continuous laser pointing task. Poster presented at the 4th Annual World Usability Day meeting, Dayton, OH.
- Strang, A.J., Haworth, J.L, Hieronymus, M., Walsh, M., & **Smart L.J.** (Mar., 2008) Exploring the use of recurrence quantification analysis for identifying dynamic patterns in postural coordination: The effects of vision and support surface. Annual Symposium on Computational Research, Miami University, Oxford, OH.
- Thoreson, J. A., Vitatoe, K. N., Otten, E. W., & **Smart, L. J.** (Nov., 2007). Effect of Visual Proprioceptive Stress on Postural Control. Poster presented at the 3rd Annual World Usability Day meeting, Dayton, OH.
- Harmon, P., Coughlin, K.A., Capistrano, M., Littman, E.M., Otten, E.W., & **Smart, L.J.** (May, 2007). You're making this difficult: The effect of control and constraint on postural sway. Poster presented the 2007 Tri-State Chapter of the Human Factors and Ergonomics Society Student Poster Session, Cincinnati, OH.
- LaPlante, E.A., Luli, M.L., Matthews, D., Otten, E.W., & **Smart, L.J.** (May, 2007). Effect of simple, complex, and coupled visual motion on coordination. Poster presented the 2007 Tri-State Chapter of the Human Factors and Ergonomics Society Student Poster Session, Cincinnati, OH.
- Shinkle, J.A., Vitatoe, K., Taute, E., Burgard, R., Strang, A., & **Smart, L.J.** (May, 2007). The Effect of Visual Focus in a Virtual Environment on Postural Coordination. Poster presented the 2007 Tri-State Chapter of the Human Factors and Ergonomics Society Student Poster Session, Cincinnati, OH.
- Thoreson, J.A., Otten, E.W., & **Smart, L.J.** (May, 2007). Effect of a counting task on postural control. Poster presented the 2007 Tri-State Chapter of the Human Factors and Ergonomics Society Student Poster Session, Cincinnati, OH.
- Coughlin, K., LaPlante, E., Harmon, P., Luli, M., Littman, E., & **Smart, L. J.** (Nov., 2006). Stop this Crazy Thing: The Role of Control in Visually Induced Motion Sickness. Poster presented at the 2006 Sigma Xi national meeting and student research conference, Detroit, MI
- Coughlin, K., LaPlante, E., Harmon, P., Luli, M., Littman, E., & **Smart, L. J.** (Nov., 2006). Stop this Crazy Thing: The Role of Control in Visually Induced Motion Sickness. Poster presented at the 2nd Annual World Usability Day meeting, Dayton, OH.
- Vitatoe, K., Shinkle, J, Capistrano, M., Taute, E., Burgard, R., & **Smart, L. J.** (Nov., 2006). Why the Driver is Never Sick: The Role of Control & Gender in Visually Induced Motion Sickness. Poster presented at the 2nd Annual World Usability Day meeting, Dayton, OH.
- Vitatoe, K., Shinkle, J, Capistrano, M., Taute, E., Burgard, R., & **Smart, L. J.** (Nov., 2006). Why the Driver is Never Sick: The Role of Control & Gender in Visually Induced Motion Sickness. Poster presented at the 2006 Sigma Xi national meeting and student research conference, Detroit, MI

- Otten, E., Leitner, R., Littman, E., Harmon, P., LaPlante, E., & **Smart, L. J.** (June, 2006). Effect of Intrinsic versus Externally Generated Motion on Visually Induced Motion Sickness. Poster presented at the 2006 North American meeting of the International Society for Ecological Psychology, June 22-24, 2004. Cincinnati, OH.
- Smart, L. J.**, & Otten, E. W. (June, 2006). It's Turtles All the Way Down: A Comparative Analysis of Visually-Induced-Motion-Sickness. Poster presented at the 2006 North American meeting of the International Society for Ecological Psychology, Cincinnati, OH.
- Thoreson, J. A., Cole, R., Lennon, C., Shinkle, J. A., Capistrano, M., Coughlin, K. A., Otten, E. W., & **Smart, L. J.** (June, 2006). Effect of Task Constraints on Long Term Coordination. Poster presented at the 2006 North American meeting of the International Society for Ecological Psychology, Cincinnati, OH.
- Otten, E. W., & **Smart, L. J.** (May, 2006) Examination of Postural Adaptation Resulting from Visually-Induced-Motion-Sickness (VIMS). Poster presented at the 18th Annual Convention of the Association for Psychological Science, New York, NY.
- Cole, R., Lennon, C., Shinkle, J., Capistrano, M., Coughlin, K., Thoreson, J., Otten, E., & **Smart, L. J.** (April, 2006). Effect of Task Constraints on Long Term Coordination. Poster presented at a meeting of the Tri-state Chapter of the Human Factors and Ergonomics Society, Oxford, OH
- Leitner, R., Littman, E., Harmon, P., LaPlante, E., Otten, E., & **Smart, L. J.** (April, 2006). Effect of Intrinsic versus Externally Generated Motion on Visually Induced Motion Sickness. Poster presented at the a meeting of the Tri-state Chapter of the Human Factors and Ergonomics Society, Oxford, OH
- Otten, E. W. & **Smart, L. J.** (Nov 2005). Examination of postural adaptation resulting from Visually-Induced-Motion-Sickness. Poster Presented at the 1st Annual World Usability Day meeting, Dayton, OH.
- Otten, E. W., **Smart, L. J.**, et al (June 2004). Effect of predictability of stimulus on visually-induced-motion-sickness. Poster presented and the 2004 North American Meeting of the International Society for Ecological Psychology, Storrs, CT.
- Smith, D.L., **Smart L.J.**, & Otten, E.W. (June 2004). Postural coordination dynamics during voluntary suprapostural activity. Poster presented at the XVth Congress of the International Society of Electrophysiology & Kinesiology, Boston University, Boston, MA.
- Amin, M. R., & **Smart, L. J.** (April, 2004). The effect of field-of-vision on coordination in virtual environments. Poster presented at the 50th Annual Convention of the Southwestern Psychological Association, San Antonio, TX.
- Amin, M., Bidwell, B., Johnson, B., McLaughlin, M., Pecorak, K., Riggs, M., Otten, E., Smith, D., & **Smart, L. J.** (July, 2003). The effect of field-of-vision on coordination in a virtual environment. Poster presented at the 12th International Conference on Perception and Action. Surfers Paradise, Gold Coast, Australia.
- Otten, E., **Smart, L. J.**, Amin, M., Bidwell, B., Johnson, B., McLaughlin, M., Pecorak, K., & Smith, D. (July, 2003). Effect of predictability of stimulus on visually-induced-motion-sickness. Poster presented at the 12th International Conference on Perception and Action. Surfers Paradise, Gold Coast, Australia.
- Smith, D., **Smart, L. J.**, Otten, E., Pecorak, K., Amin, M., & Bidwell, B. (July, 2003) Investigating behavioral modes of postural control and coordination. Poster presented at the 12th International Conference on Perception and Action. Surfers Paradise, Gold Coast, Australia.

- Stoffregen T. A., **Smart, L. J.**, & Bardy, B. G. (November, 2002). Visually-induced motion sickness predicted by postural instability. Poster presented at a meeting of the Society for Neuroscience, Orlando, FL.
- Mobley, B. S., **Smart, L. J.**, Amin, M., Graban, L., Otten, E., Hinton, K., & Smith, D. (May, 2002). Task Specific Postural Adaptation. Poster presented at the 2002 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.
- Smith, D., L., Otten, E. W., Hinton, K., **Smart, L. J.**, Mobley, B., Amin, M., Graban, L., Crompton, K., & Manuel, J. (May, 2002). Surface and Visual Constraints on Postural Motion. Poster presented at the 2002 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.
- Mark, L. S., Humphrey, A., Siefried, M., & **Smart, L. J.** (May, 2002). Coordinating Movements Used in Reaching. Poster presented at the 2002 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.
- Humphrey, A., Mark, L. S., & **Smart, L. J.** (May, 2002). Adapting to Changes in Reaching Capabilities. Poster presented at the 2002 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.
- Richardson, A., Mark, L. S., Dainoff, M. J., **Smart, L. J.**, & Otten, E. W. (May, 2002). Perceiving Size in Virtual Displays. Poster presented at the 2002 North American Meeting of the International Society for Ecological Psychology, Oxford, OH.
- Smith D. L., Otten, E. W., & **Smart, L. J.** (May, 2002). Postural Control Changes with Support Surface but not Vision. Poster presented at the International Conference on Brain and Behavior, Delray Beach, FL.
- Mark, L. S., Humphrey, A., Siefried, M., & **Smart, L. J.** (May, 2002). Coordination of Component Movements in Seated Reaching. Poster presented at the International Conference on Brain and Behavior, Delray Beach, FL.
- Smart, L. J.**, & Smith, D. L. (June, 2000). Clinical utility of postural dynamics. Poster presented at the 2000 North American Meeting of the International Society for Ecological Psychology, Clemson, SC.
- Stoffregen, T. A., Hettinger, L. J., Haas, M. W., Roe, M., & **Smart, L. J.** (Oct., 1998). Visually induced motion sickness in a virtual environment. Poster presented at the 42nd annual meeting of the Human Factors and Ergonomics Society, Chicago, IL.
- Smart, L. J.** & Pagulayan, R. J. (July, 1997). Motion sickness without imposed motion. Poster presented at the 9th International Conference on Perception and Action, Toronto, Canada.
- Stoffregen, T. A. & **Smart, L. J.** (July, 1997a). Postural stabilization of visual fixation. Poster presented at the 9th International Conference on Perception and Action, Toronto, Canada.
- Smart, L. J.** & Stoffregen T. A. (Nov., 1996). Postural stabilization of vision. Poster presented at the 37th Annual Meeting of the Psychonomic Society, Chicago, IL.
- Smart, L. J.** & Flynn, S. B. (May, 1996). Effect of reporting instrument on judgments of caught weight. Poster presented at Psychology Beyond the Threshold: A Festschrift for William N. Dember, Cincinnati, OH.
- Stoffregen, T. A. & **Smart, L. J.** (May, 1996). Postural sway and viewing distance. Poster presented at Psychology Beyond the Threshold: A Festschrift for William N. Dember, Cincinnati, OH.

Stoffregen, T. A. & **Smart, L. J.** (March, 1996). Postural sway and viewing distance. Poster presented at the 1996 North American Meeting of the International Society for Ecological Psychology, Hartford, CT.

Smart, L. J. & Flynn, S. B. (March, 1996). Effect of reporting instrument on judgments of caught weight. Poster presented at the 1996 North American Meeting of the International Society for Ecological Psychology, Hartford, CT.

Flynn, S. B., **Smart, L. J.**, & Hagerman, R. A. (April, 1995). Velocity effects on relative-mass perception. Poster presented at the 41st Annual Convention of the Southwestern Psychological Association, San Antonio, TX.

Anderson, T. S., & **Smart, L. J.** (May, 1992). Not quite the spitting image: Adaptation to left-right reversal of the visual field. Poster presented at the 5th Annual Trinity College Undergraduate Science Symposium, Hartford, CT.

Organizations

Association for Psychological Science (APS)

Association of Black Psychologists (ABPsi Cincinnati Chapter)

Faculty advisor ABPsi Student Circle (Miami University Chapter)

Council on Undergraduate Research (CUR)

Human Factors & Ergonomics Society (HFES)

- President Tri-State Chapter (2003); Executive board member (2004-5)
- Host 2010 Annual Tri-State Chapter Student Meeting

International Society for Ecological Psychology (ISEP)

- Organizer/Host 2002 North American Meeting (May 23-25, 2002)
- Organizer/Host 2014 North American Meeting (June 5 -7, 2014)
- Diversity committee member

International Society for Motor Control

Public Responsibility In Medicine & Research (PRIM&R)

Sigma Xi

- Miami University chapter secretary 2001-2003
- Miami University chapter president-elect 2003-2006
- Miami University chapter president 2006 - 2009



Eric Hodgson :: Curriculum Vitae

Interactive Media Studies :: Psychology
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<http://www.users.miamiOH.edu/hodgsoep>

Research Interests

Interactive Media: virtual reality, 2D and 3D visualization, computer simulation, 3D modeling and animation, real-time rendering, game engines

Cognitive Psychology: human spatial ability; spatial cognition; spatial perception; spatial memory; navigation; wayfinding; landmark use; and reference frames;

Multidisciplinary: applied virtual reality simulation and training, including medical training; 3D visualization; motion tracking, motion capture and animation; immersive user interfaces; human-computer-interaction; human factors issues in virtual reality; haptic sensory feedback; networked virtual environments

Collaborators: I maintain active collaborations with faculty from all five of Miami's Academic divisions (College of Arts and Science; Farmer School of Business; School of Education, Health, and Society; School of Engineering and Applied Science; and the School of Creative Arts). I also maintain external collaborations with national and international academic colleagues, as well as some regional and national industry partners.

Teaching Interests

Interactive Media Studies: Virtual reality, 3D modeling & animation, motion capture, human-computer interaction, artistic & non-photorealistic rendering, augmented reality, data visualization

Cognitive Psychology: Spatial cognition, cognition, memory, perception, statistics, research methods, virtual reality as a research tool, computer programming for psychologists, human factors

Courses Taught:

Number	Title	Description
IMS 461/561 <i>(formerly IMS 390-V)</i>	Advanced 3D Visualization and Simulation	A discussion and production class on real-time 3D simulation and visualization, virtual reality, and motion tracking. Currently using Unity 3D, previously used EON Studio and Panda3D.
IMS 390-S	Character Design and Animation	A production-focused course on 3D modeling, texturing, rigging, and animating characters.
IMS 390-S <i>(soon to be IMS 391)</i>	Character Animation	A production-focused course on 3D animating characters, including motion-capture animation and game-engine animation controllers.
IMS 319	Foundations in 3D Design & Animation	A production-focused, introductory course in 3D modeling and animation using Maya.
IMS 261	Information and Data Visualization	Intro to static and interactive 2D data visualization of large data sets.
IMS 452	Senior Thesis Course	Group of senior students complete individual thesis projects, but use each other and instructor for feedback and guidance.
PSY 293-L	Psychological Statistics Lab	A hands-on lab using SPSS to analyze and graph data sets.
PSY 294-L	Research Methods Lab	A lab course on research ethics and formal scientific writing in APA style.

Professional Experience**Current**

2018 - Present: Assistant Professor in Interactive Media Studies at Miami University
 2013 – Present: Affiliate faculty in the department of Psychology at Miami University
 2010 Jan – Present: Director, Smale Interactive Visualization Center

Previous

2011 – 2018: Visiting Assistant Professor in Interactive Media Studies at Miami University
 2011 – 2013: Senior Postdoctoral Fellow at Miami University, coordinating interdisciplinary research efforts and managing the HIVE (Huge Immersive Virtual Environment)
 2008 May – 2011: Postdoctoral Fellow at Miami University, coordinating interdisciplinary research efforts and managing the HIVE (Huge Immersive Virtual Environment)
 2003 – 2008: Various graduate assistantships investigating spatial cognition in the Spacelab and HIVE (Huge Immersive Virtual Environment) at Miami University
 2008: Webmaster and member of organizing committee for the Hoosier Mental Life conference
 2006 Fall: Instructor for Research Methods laboratory course
 2005 Summer: Assistantship to help install and establish the HIVE (Huge Immersive Virtual Environment) laboratory at Miami University
 2005: Webmaster and member of organizing committee for the Hoosier Mental Life conference
 2004 Fall: Teaching assistant in Statistics; Instructor in Statistics laboratory course

Education

- 2008 – 2013: Postdoctoral Fellowship / Senior Postdoctoral Fellowship at Miami University, Oxford, OH.
- 2008 - PhD in Cognitive Psychology from Miami University, Oxford, OH. Advisor: Prof. David Waller.
- 2005 - MA in Psychology from Miami University, Oxford, OH
- 2003 - BA in Psychology (Summa Cum Laude; Minor in Art with an emphasis in Graphic Design) from Malone College, Canton, OH

Academic Honors & Awards

- 2016: Best in Show Award for Serious Games and Virtual Environments (Academic Faculty & Staff category) at the *ISSH 2016* conference, put on by the *Society for Simulation in Healthcare* - for an immersive Decontamination Training Simulation
- 2015: Clifford T. Morgan Best Article Award in *Behavior Research Methods* - for Hodgson, et al.'s "WeaVR: a self-contained and wearable immersive virtual environment simulation system."
- 2013: Nominated for Best Paper Award at *IEEE VR* conference - for Hodgson & Bachmann's Comparing four approaches to generalized redirected walking: Simulation and live user data.
- 2007-2008: Dissertation Scholar for the Department of Psychology, Miami University, Oxford, OH
- 2007: Recipient of Graduate School Dissertation Research Support Grant
- 2007: Patrick J. Capretta Memorial Scholarship for Research Excellence, Psychology Department, Miami University, Oxford, OH
- 2006: Graduate Student Achievement Award from Miami University
- 2005: Letter of Commendation from the Psychology Department, Miami University, Oxford, OH
- 2004: Letter of Commendation from the Psychology Department, Miami University, Oxford, OH
- 2003: Outstanding Senior Award in Psychology; Malone College, Canton, OH
- 1999-2003: Dean's List; Malone College, Canton, OH
- 1999: Valedictorian, Salem High School, Salem, OH

Publications

In progress:

- Smith, S.J., Farra, S., Ulrich, D.L., Hodgson, E., Nicely, S. & Mickle, A. (submitted). Effectiveness of Different Levels of Immersion for Game-Based Training in Nursing Education. *Nursing Education Perspectives*.
- *Nilsson, N.C., Peck, T., Bruder, G., Hodgson, E., Serafin, S., Rosenberg, E.S., Whitton, M., & Steinicke, F. (submitted). 15 Years of Research on Redirected Walking in Immersive Virtual Environments. *IEEE Computer Graphics & Applications*. [***Collaborative lit review / field overview done with an invited collection of international experts in Redirected Walking.**]
- Gneuhs, M., Hodgson, E., Farra, S., Miller, E., et al. (in preparation). Cost analysis of hospital emergency exercises and VR training.
- Hodgson, E. (in preparation). Spatial perception in virtual environments. In N. Lee [ed] *Encyclopedia of Computer Graphics and Games*.

Published:

- Farra, S., Miller, E.T., Hodgson, E., Cosgrove, E., Brady, W., Gneuhs, M., & Baute, B. (2016). Storyboard development for virtual reality simulation. *Clinical Simulation in Nursing, 12*, 392-399.
- Smith, S.J., Farra, S., Ulrich, D.L., Hodgson, E., Nicely, S., & Matchmam, W. (2016). Learning and retention using virtual reality in a decontamination simulation. *Nursing Education Perspectives, 37*, 210-305.
- Olzak, L., Hodgson, E., & Billock, V. (2015). Combining body ownership illusions and time delay adaptation in virtual reality environments. *Perception, 44*, 305-305.
- Fara, S.L., Smith, S., Gillespie, G.L., Nicely, S., Ulrich, D.L., & Hodgson, E. (2015). Decontamination Training: With and Without Virtual Reality Simulation. *Advanced Emergency Nursing Journal, 37*, 125-133.
- *Hodgson, E., Bachmann, E.R., Vincent, D., Zmuda, M., Waller, D., & Calusdian, J. (2015). WeaVR: a self-contained and wearable immersive virtual environment simulation system. *Behavior Research Methods, 47*, 296-307. [***Won Clifford T. Morgan Best Article of 2015 Award for Behavior Research Methods.**]
- Ulrich, D., Farra, S., Smith, S., & Hodgson, E., The Student Experience Using Virtual Reality Simulation to Teach Decontamination. *Clinical Simulation in Nursing, 10*, 546-553.
- Farra, S., Nicely, S., & Hodgson, E. (2014). Creation of a Virtual Triage Exercise: An Interprofessional Communication Strategy. *Computers Informatics Nursing, 32*, 492-496.
- Hodgson, E., Bachmann, E., & Thrash, T. (2014). Performance of Redirected Walking Algorithms in a Constrained Virtual World. *IEEE: Transactions on Visualization and Computer Graphics, 20*, 579-587.
- Zmuda, M., Wonser, J., Bachman, E.R., & Hodgson, E. (2013). Optimizing constrained-environment redirected walking instructions using search techniques. *IEEE: Transactions on Visualization and Computer Graphics, 19*, 1872-1884.
- Farra.S., Miller E. L., Hodgson, E. (2013). Virtual reality disaster training: Translation to practice. *Nurse Education in Practice.*
- *Hodgson, E., & Bachmann, E.(2013). Comparing four approaches to generalized redirected walking: Simulation and live user data. *IEEE: Transactions on Visualization and Computer Graphics, 19*, 634-643. [***Nominated for Best Paper Award at IEEE VR 2013 conference.**]
- Waller, D., & Hodgson, E.(2013). Sensory Contributions to Spatial Knowledge of Real and Virtual Environments. In F. Steinicke, Y. Visell, J. Campos, & A. Lecuyer [eds] *Human Walking in Virtual Environments: Perception, Technology, and Applications*. Springer.
- Brunye, T. T., Gagnon, S. A., Waller, D., Hodgson, E., Tower-Richardi, S., & Taylor, H. A. (2012). Up north and down south: Implicit associations between topography and cardinal direction. *Quarterly Journal of Experimental Psychology, 65*, 1880-1894.
- Bachmann, E., Calusdian, J., Hodgson, E., Yun, X., Zmuda, M., & Waller, D. (2012). Going anywhere anywhere – Creating a low cost portable immersive VE system. *Proceedings of CGames 2012 USA*, Louisville, KY, USA.
- Chaturvedi, M., Gannod, G., Mandell, L., Armstrong, H., & Hodgson, E. (2012). Myopia: A visualization tool in support of close reading. *Proceedings of Digital Humanities 2012*. Hamburg, Germany. 148 – 150.
- Bachmann, E., Calusdian, J., Hodgson, E., & Yun, X. (2012). In situ heading drift correction for human position tracking using foot-mounted inertial/magnetic sensors. *Proceedings of the IEEE International Conference on Robotics and Automation*. Saint Paul, MN. USA.

- Hodgson, E., Bachmann, E., & Waller, D. (2011). Redirected walking to explore virtual environments: Assessing the potential for spatial interference. *ACM: Transactions on Applied Perception*, 8, Article 22. n.p.
- Friedman, A., Waller, D., Greenauer, N., & Hodgson, E. (2011). View combination: A generalization mechanism for visual recognition of objects, scenes, and two-dimensional visual arrays. *Cognition*, 119, 229-241.
- Waller, D., Friedman, A., Hodgson, E. & Greenauer, N. (2009). Learning scenes from multiple views: Novel views can be recognized more efficiently than learned views. *Memory & Cognition*, 37, 90-99.
- Hodgson, E. (2008). *The interaction of transient and enduring spatial representations: Using visual cues to maintain perceptual engagement*. Unpublished doctoral dissertation, Miami University, Oxford, OH, USA.
- Waller, D., Bachmann, E., Hodgson, E., & Beall, A. C. (2007). The HIVE: A huge immersive virtual environment for research in spatial cognition. *Behavior Research Methods*, 39, 835-843.
- Hodgson, E., & Waller, D. (2006). Lack of set size effects in spatial updating: Evidence for offline updating. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 32, 854-866.
- Waller, D., & Hodgson, E. (2006). Transient and enduring spatial representations under disorientation and self-rotation. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 32, 867-882.
- Hodgson, E. (2005). *Spatial updating and set size: evidence for long-term memory reconstruction*. Unpublished master's thesis, Miami University, Oxford, OH, USA.

Invited Talks & Presentations

- June 23, 2016. Live panel discussion of Video Games and Learning on NPR's Cincinnati Edition on WVXU in Cincinnati.
- April, 2015. Presentation and hands-on-demos about emerging Virtual Reality technology to youth at Oxford's Lane Public Library as part of a Science series.
- April, 2014. Presentation and panel discussion on the 3D and simulation technology in higher education, for the Columbus, OH chapter of SMPS.
- Hodgson, E. (2012, March). Navigating the Field of Virtual Research in Academia. Paper presented at the 2012 EON Experience Fest. Irvine, CA, USA.
- Hodgson, E., Bachmann, E., Waller, D., Bair, A., & Oberlin, A. (2012, March). Virtual reality in the wild: A self-contained, portable VR System. Poster presented at IEEE Virtual Reality 2012. Irvine, CA, USA.
- *Hodgson, E., & IMS 390.v Class (2010, October). 3D Virtual Reality Mandala. Computer Simulation presented to His Holiness, the 14th Dali Lama of Tibet. Oxford, OH, USA.
[*Simulation presented live to HHDL on stage at Miami University]
- Hodgson, E., Waller, D., & Bachmann, E. (2010, April). Redirected walking in virtual spaces. Paper presented to the Tri-State Chapter of the Human Factors and Ergonomics Society. Oxford, OH, USA.
- Hodgson, E., Waller, D., & Bachmann, E. (2009, November). Redirected walking during unconstrained navigation. Paper presented at the annual meeting of the Society for Computers in Psychology. Boston, MA, USA.

- Hodgson, E.a, Waller, D., Greenauer, N., & Mello, C. (2008, November). Remaining oriented with abstract or intermittent visual information. Poster session presented at the annual meeting of the Psychonomic Society, Chicago, IL, USA.
- Hodgson, E. & Waller, D. (2007, November). Capacity limits of spatial updating: Online and offline updating. Poster session presented at the annual meeting of the Psychonomic Society, Long Beach, CA, USA.
- Hodgson, E. & Waller, D. (2006). Set size effects in spatial updating: Online and offline updating. Paper presented at the annual meeting of Hoosier Mental Life, Bloomington, IN, USA.
- Waller, D. & Hodgson, E. (2005). Human spatial representation: Egocentric Updating and Cognitive Maps. Paper presented at the annual meeting of the Psychonomic Society, Toronto, Ontario, Canada.
- 2004 – 2008: Five talks and poster presentations at Psychology department cognitive lecture series, Miami University, Oxford, OH
- 2005, Nov.: Guest speaker for the Department of Psychology's Alumni Chapel at Malone College, Canton, OH
- Hodgson, E. & Waller, D. (2004, November). Capacity limits in spatial updating. Poster session presented at the annual meeting of the Psychonomic Society, Minneapolis, MN, USA.
- 2002, Dec.: "Memory and Learning." Guest speaker for 7th and 8th grade language arts classes at United Junior High School, Salem, OH.

Grant & Other Funding Activities

Type of Funding Source



Year	Requested	Funding Agency	Title	Role	Status
2015	\$2k	University of Sydney	Body Ownership Illusions and Time Delay Adaptation in Virtual Reality Environments	Sr. Personnel	Funded
2014	\$364,116	National Science Foundation	Realistic Simulation of Slope and Vertical Navigation in Low Cost, Portable, Wearable Immersive Virtual Environment Systems for Education and Training.	Co-P.I.	Funded

2014	\$59,994	National Endowment for the Humanities	Orientation for the Mississippi Summer Project: An Interactive Quest for Social Justice	Consultant	Funded
2013	\$20k	Dunnhumby USA	IMS Capstone Project *Virtual Shopping Tool (Industry Partnership)	Sr. Personnel	Funded
2013	\$750,000	Agency for Healthcare Research and Quality (via NIH)	Effects of Virtual Reality Simulation on Worker Emergency Evacuation of Neonates (with University of Cincinnati and UC Children's Hospital)	P.I. on Sub-Award	Funded (Miami's Portion: \$147,799)
2013	\$465,536	DoD: Army Research Office	Realistic Simulation of Slope and Vertical Navigation in Low Cost, Portable, Wearable Immersive Virtual Environment Systems for Education and Training.	Co-P.I.	Withdrawn (funded by NSF instead)
2013	\$52,083 /yr (renewable)	PNI Sensor Corp.	Portable Position Tracking (Industry Partnership)	P.I.	Funded
2013	\$11,250	Miami University Student Technology Fee Program	Learning Game Programming and Development Using the Unity Game Engine	Co-P.I.	Funded
2012	*\$250k	National Institute of Health	*Nursing Sim to Train Evacuating Sr. Citizens During Emergencies (In conjunction with University of Cincinnati and UC Children's Hospital)	Co-P.I.	Declined (Miami's Portion: \$103,110)
2012	\$4000	CogniSens, Inc.	Software Development	P.I.	Funded \$750; project ended early for commercial reasons
2012	\$5,000	Miami University Shoupp Award	Realtime 3D visualization of architectural designs	Co-P.I.	Declined
2011	\$51,473	Miami University Student Technology Fee Program	Holographic 3D Display to Showcase Miami Student Work	P.I.	Funded
2011	~\$800,000	DARPA	Mentor Grant Program, in conjunction with Ast2, Inc. (P.I.) and other entities	Sub-contractor	Funded (Miami's portion: \$80,000)
2010	\$6,405	Miami University Student Technology Fee Program	Portable 3D Projection System for Academic Use	P.I.	Funded
2009	\$5,830	Armstrong Interactive Media Studies at Miami University	Haptic Displays for Spatial Information: Wearable Devices for Research and Application	Co-P.I.	Funded \$2,500
2009	\$18,250	Armstrong Interactive Media Studies at Miami University	Information and Data Visualization: Low-Cost Virtual Reality Systems for Research and Education	Co-P.I.	Withdrawn
2009	\$241,450	DoD: Army Research Office	Enabling Large-Scale Multi-User Immersive Virtual Reality Simulations*	First Author (ineligible to be a P.I.)	Funded \$150,000

			(*supplemented an NSF grant with additional equipment)		
2009	\$1.2 million	National Science Foundation	HCC: Medium: Collaborative Research: Low Cost, Portable, Multi-user, Immersive Virtual Environment Systems for Education and Training in Worlds of Unlimited Size	Contributing Author (ineligible to be a P.I.)	Funded
2009	\$312,672	National Science Foundation	II-EN: Enabling Large-Scale Multi-User Immersive Virtual Reality Simulations	First Author (ineligible to be a P.I.)	Funded
2008	\$399,214	DoD: Army Research Office	Realistic Simulation of Environments of Unlimited Size in Immersive Virtual Environments	Contributing Author (Graduate Student)	Funded
2008	\$50,000	Miami University & Ohio Board of Regents	Initial Development of Miami's Interdisciplinary Center for Virtual Environment Research and Scholarship	Contributing Author (Graduate Student)	Funded
2007	\$500	Miami University: Dissertation Research Support	Request for Dissertation Funding	P.I.	Funded

Industry Collaborations

- 2017: Advised Malone University (Canton, OH) psychology department on acquisition and setup of a \$13,000 VR lab.
- 2013: Partnered with Dunnhumby USA (Cincinnati, OH) and AIMS Captstone course to prototype a virtual shopping experience.
- 2013: Partnered with PNI Sensor Corporation (Santa Rosa, CA) in testing inertial-magnetic motion tracking sensors, and in developing new software and applications for their sensors.
- 2012: Assisted CogniSens (Montreal, Canada) in adding motion tracking capabilities to their simulation software, which is designed to train visual-perceptual abilities and spatial awareness in target populations (e.g, elite athletes, elderly drivers).
- 2012: Developed Shoupp Award proposal with architecture firm K4 (Cincinnati, OH) to pursue real-time, interactive 3D renderings of architectural designs. Funding for project was ultimately declined.
- 2011: Initiated a virtual-reality consumer research program in conjunction with Proctor & Gamble (Cincinnati, OH). Conducted behavioral research in full-scale virtual grocery store.
- 2010: Developed a DARPA Mentor Grant application (approved for funding; see above) to develop distributed engineering, prototyping, manufacturing, and visualization tools in conjunction with Ast2, Inc. (Youngstown, OH).
- 2010: Preliminary talks to conduct visualization and usability research initiated with Boeing, Inc. (Seattle, WA). Project funding source cut while proposal was under development.
- 2010 – present: Partnered with EON Reality, Inc. (Irvine, CA)

Professional Service

- 2017: Served on the International Program Committee for the EuroVR conference.
- 2015 – present: Served as summer IMS advisor for incoming freshman during Summer Orientation.

- 2015: Served on the Program Committee for COSIT (Conference on Spatial Information Theory)
- 2014 – 2016: Served on the International Program Committee for IEEE VR conference.
- 2010 – present: Led tours of virtual reality centers and facilities for community groups, school field trips, prospective students, industry reps, local / state / federal politicians, alumni, and Miami course field trips from various departments and programs.

Community Service

- 2009 – 2016: Volunteer in organizing and conducting a 5k road race (Rambler 5K) to raise funds for a the Cross Country team of Ross Local High School (Ross, OH)
- 2003 – 2011: Volunteer work for the Angel Tree organization (provides Christmas presents to children of incarcerated parents), Butler County, OH
- 2003 – 2005: Judge for fall and spring science fairs at Ross Local High School, Ross, OH
- 2001 – 2003: Governing board of the Psychology Club, at Malone College, Canton, OH
- 2002: Volunteer work for Habitat for Humanity (construction), Canton, OH

Affiliations & Professional Development

- 2009 – 2010: Society for Computers in Psychology
- 2008 – 2014: Psychonomic Society
- 2006 – 2008: American Psychological Association
- 2004 – 2008: Association for Psychological Science (formerly American Psychological Society)

Popular and Industry Press

- 2016, Apr 22 – May 4: The NBC news affiliate in Cincinnati did a piece on our Cincinnati Children's Hospital virtual reality training simulation. It was syndicated and aired in other locations including CA and FL.
- 2016 May 25: Our coverage on NBC was subsequently highlighted in an article by the [Health Facilities Management](#) e-Magazine.
- 2016 Feb 15: NPR's Cincinnati Edition featured our Cincinnati Children's virtual reality evacuation simulation for their [Focus on Technology](#) segment.
- 2015, Aug 21: Quoted in *Wired.com* article about Redirected Walking.
<http://www.wired.com/2015/08/cant-walk-straight-lineand-thats-great-vr/>
- 2015, Jul 16: Article by *Cincinnati Business Courier* on a 360° video I produced with a student for the Cincinnati Chamber of Commerce (REDI Cincinnati) to promote the region as part of the MLB All-Star Weekend activities.
http://www.bizjournals.com/cincinnati/blog/2015/07/heres-how-a-miami-university-students-virtual.html?ana=e_du_pub&s=article_du&ed=2015-07-16&u=mS2EqO+keYfL4KtRFqQxPEDLznJ&t=1437074649
- 2015, Jun 13: One of my students featured in a NASA press release about his work as their intern, doing 3D development.
<https://ocio.grc.nasa.gov/gvis/2015/06/two-college-interns-join-the-gvis-team-to-work-on-space-communications-outreach-game/>
- 2015, Mar 26: Quoted in OSVR press release about the partnership between Universities and OSVR (an Open Source Virtual Reality consortium). <http://www.osvr.org/blog/?p=52>
- 2014, Jul 21: Article by ConnectED (by Ohio Dept. of Higher Ed) featuring the IMS program and my visualization center.
https://www.ohiohighered.org/connect-ed/miami_university_aims_higher

- 2014, May 13: 40-minute interview with Kent Bye on the *Voices of VR Podcast, Episode 2*.
<http://voicesofvr.com/episode-2-eric-hodgson-on-spatial-perception-redirected-walking-the-split-between-old-vr-vs-new-vr/>
- 2014, Mar 13: Multiple live appearances on Cincinnati Fox 19's Morning News show in segments about 3D printing, scanning, and visualization, shot on site in the Smale Interactive Visualization Center. Cut and replayed clips on the evening news.
<http://www.fox19.com/story/24962811/miami-university-using-3-d-printing-technology>
- 2014, Mar 3: My visualization center was mentioned in an article by the Government Technology blog about Virtual Reality at University campuses.
<http://www.govtech.com/education/Virtual-Reality-Comes-to-a-University-Campus-Near-You.html>
- 2014, Mar 1-3: Coverage of the regional Virtual Reality Meet-up hosted in the Smale Interactive Visualization Center by Cox Media group, including TV news segments and print articles.
<http://www.journal-news.com/news/news/miami-university-showcases-virtual-reality-systems/nd4PW/> ...the event was also mentioned in industry blog GovTech.com
<http://www.govtech.com/education/Virtual-Reality-Comes-to-a-University-Campus-Near-You.html>
- 2014, Feb 5: Mentioned on the *Rev VR Podcast Episode 44 on the Road To Virtual Reality Blog* (between 43 - 48 min mark), in reference to organizing and hosting a regional Virtual Reality Meet-Up.
<http://www.roadtovr.com/rev-vr-podcast-episode-44-razer-hydra-boston-vr-meetup-does-not-hosting-vr-gathering/>
- 2013-2014, Dec 30 – Jan 5: *Virtual Reality transforms real-life shopping in stores*, By Heather Sommerville. Quotes on Virtual Shopping from Bo Brinkman, one of my collaborators for AIMS Capstone virtual shopping project involving my IMS 319 courses – Originally published in the San Jose Mercury News on Dec 30, 2013, and reprinted in multiple other outlets.
http://www.mercurynews.com/business/ci_24820288/virtual-reality-transforms-real-life-shopping-stores
- 2013, July 20: *Interview on Redirected Walking with Professor Eric Hodgson*, By Yuvall Boger (CEO of Sensics). Interview and Coverage of my Redirected Walking research on the *VR Guy* blog. <http://vrguy.blogspot.com/2013/07/interview-on-redirected-walking-with.html>
- 2013, July 12: *Redirected walking can save you from running into your sofa*, By Yuvall Boger (CEO of Sensics). Coverage of my Redirected Walking research and Outdoor Portable Virtual Reality systems on the *VR Guy* blog.
<http://vrguy.blogspot.com/2013/07/redirected-walking-can-save-you-from.html>
- 2010, October: *Dalai Lama visits Miami University*, various articles by Cincinnati Enquirer, Dayton Daily News, Columbus Dispatch, WLWT (NBC), Associated Press, and others. My IMS 390v (3D Visualization) class was involved in one of several interactive media projects done for His Holiness the 14th Dalai Lama of Tibet, and the Tibetan Government in Exile. My class helped put together an interactive 3D-projected virtual reality mandala, which the Dalai Lama explored live onstage.
http://www.huffingtonpost.com/2010/10/21/chinese-student-in-ohio-c_n_771958.html;
<http://www.eonreality.com/press-releases/his-holiness-the-dalai-lama-dons-3d-glasses-to-experience-a-virtual-mandala-created-in-eon-realitys-software/>
- 2009: Quoted in an NPR story relating to video game violence.

References available upon request

Glenn J. Platt .**C. Michael Armstrong Professor****Director, Interactive Media Studies Program, and Professor, Department of Marketing**

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3718 Oxford Middletown Road

Somerville, OH 45064

(513) 523 0960

EDUCATION

- Ph.D. Carnegie Mellon University, 1993
Graduate School of Industrial Administration
Concentration: Economics and Political Economy
- M.S. Carnegie Mellon University, 1990
Graduate School of Industrial Administration
Majors: Economics and Political Economy
- B.A. University of Florida, 1988
Major: Economics (Departmental Honors)

PROFESSIONAL EXPERIENCE

- 2008 to present C. Michael Armstrong Chair in Interactive Media at Miami University
- 2001 to present Director, Interactive Media Studies, Miami University
- 2005 to present Professor, Department of Marketing, Richard T. Farmer School of Business, Miami University
- 2003 to 2005 Associate Professor, Department of Marketing, Richard T. Farmer School of Business, Miami University
- 1999 to 2003 Associate Professor, Department of Economics, Richard T. Farmer School of Business, Miami University
- 1993 to 1999 Assistant Professor, Department of Economics, Richard T. Farmer School of Business, Miami University

SELECTED ACCOMPLISHMENTS AS INTERACTIVE MEDIA STUDIES (IMS) DIRECTOR

When I began my role as Director of IMS there was only one IMS course. While he held his ascent, I learned that a new model for higher education was needed – a horizontal model that broke down traditional silos and leveraged business, technology, design, and communication. As higher education entered an era of significant change and I was committed to providing the vision and direction to create an experientially based, interdisciplinary program that prepared students for the new innovation economy. Since becoming Director of the program, I have:

- Created over 40 new courses, a thematic sequence, two minors (one in Game Studies), a major, a graduate certificate, and a joint MFA with Graphic Design, overall, serving 800-1,000 students annually.
- Worked with the Development Office in raising approximately \$16 million in gifts for the IMS program, including funding for five new chairs/professorships and a leading edge visualization lab.
- Lobbied for the creation of four new tenure track faculty positions in IMS and a host of other affiliate positions with various academic divisions.
- Worked directly with the Deans of Arts and Science, Business, Creative Arts, Engineering, and Libraries, while reporting directly to the Provost's office and council of academic deans.
- Created a university based client consulting agency, bringing in \$300,000 in corporate gifts, creating IP for the university, and providing consulting experience for students. Created business solutions for P&G, Cardinal Healthcare, Cintas, Convergys, HP, Bank of America, Hulu, Lenscrafters, Pringles, Coca Cola, Home Depot, dunnhumby, and others. Same group worked with the Dalai Lama and the Tibetan Government in Exile & Google on a recent project.
- Created and led the *AIMS San Francisco Digital Innovation Center*: semester long immersive experience in the San Francisco Bay Area. Students intern with startups throughout Silicon Valley and learn from innovation experts from established companies (e.g., Google, Twitter, LinkedIn, eBay, etc.), Co-founders and angel investors, and early stage startups of all sizes. Expanding program with additional Centers in Cincinnati, Chicago, Austin, and NYC, in partnership with 500K grant from state of Ohio.
- Created IMS advisory board of industry experts with whom I meet twice a year to gather feedback. This is an "active" board with significant action items and expectations of engagement with the University.
- Created international experiential learning opportunity for IMS students in China, England, and Ireland.
- Created a required internship program in IMS.
- In collaboration with co-authors, coined the term "Inverted Classroom" in a seminal 2000 paper that is the foundation for Khan Academy and other new models of teaching and learning.
- Been twice chosen to present at SXSW Interactive. Once in a top 30 presentation about the Technology and the Future of Higher Education. This talk has also been presented to a number of University Presidents and Boards.
- Developed, hosted, and led an annual international conference on interactive media.
- Helped create new university centers in User Experience and Design, Design Thinking, Visualization, Game Design and Development, and Social Media/Digital Marketing.
- Directed the International Digital Media and Arts Association as President, 2007-2008.
- Developed the relationships with Deans across the University, resulting in leading edge IMS "owned" labs and classrooms in the College of Arts and Science, School of Business, School of Fine Arts, and School of Engineering and Applied Science.
- Led in the creation of and funding for a rapid prototyping lab, an immersive 3D CAVE, Oculus Rift development site, a visualization wall, a game lab, a usability lab with eye tracking equipment, and other "bleeding edge" technologies that are all available to undergraduate students and integrated into the IMS curriculum.
- Met regularly with visiting industry experts and spoke with a variety of advisory boards and external stakeholders. I have been an active participant in the University Capital Campaign.
- Created a new program of Professional Development Workshops as an alternative revenue opportunity for the IMS program.
- Asked to be part of rapid response team put together by CDC and Johns Hopkins to spend two weeks in isolation, developing online training for staff at hospitals to prevent the spread of Ebola.
- Present regularly at alumni and fundraising events and work frequently with university govt. relations.

HONORS AND AWARDS

- 2012 – Outstanding Faculty Award (Elective Course) MBA Program
- 2012 – A.K. Morris Alumni Award
- 2009 – Dave Robert Service Award
- 2004 – Associated Student Government (ASG) Teacher of the Year
- 2003 – Nominated for Alumni Effective Educator Award
- 2003 – ASG Honored Professor
- 2002 – ASG Honored Professor
- 2001 – ASG Honored Professor
- 2001 – Recognized by AREA 351 – the teaching technology center – in their faculty spotlight
- 2000 – ASG Honored Professor (nominated by two students)
- 1999 – Received the Cincinnati Greater Consortium of Colleges and Universities' Celebration of Teaching Award
- 1998 – Received Miami University E. Phillips Knox Teaching Award, the highest teaching award offered at Miami University
- 1997 – Received the School of Business Teaching Effectiveness Award.
- 1996 – Nominated for the School of Business Teaching Effectiveness Award.
- 1994 1995 – Chosen to participate in the Committee for the Enhancement of Learning and Teaching's Alumni Teaching Scholars Program
- 1991 – Bradley Fellowship, Carnegie Mellon University
- 1988 1990 – Olin Fellowship, Carnegie Mellon University

DOCTORAL THESIS

Title: Location and Stratification: Essays on Urban and Public Economics

Thesis advisors: Professors Dennis Epple (Chair), Howard Rosenthal, and Steven Spear

RESEARCH INTERESTS

Social Media Marketing, Technology and Higher Education, Information Visualization, Design Thinking.

PUBLICATIONS

Platt, G. & Faimon, P, "Brand as API", *The Journal of Digital Media Arts & Practice*, fall 2014, 10 1

Coyle, J., Smith, T., Platt, G., "'I'm here to help": How companies' microblog responses to consumer problems influence brand perceptions", 2012, *Journal of Research in Interactive Marketing*, vol. 5, no. 3, p.27 41

Coyle, J., Smith, T., Lightfoot, L., Neace, W, and Platt, G., "'Click Here to Share With a Friend': A Uses and Gratifications Approach to Word of Mouth Marketing Effectiveness," 2011, *International Journal of Electronic Marketing and Retailing*, Vol.4, No.4, pp.225 247

Magolda, P., & Platt, G. "Untangling Web 2.0's Influences on Student Learning," *About Campus: Enriching the Student Learning Experience*, v14 n3 p10 --16 Jul --Aug 2009.

Magolda, P., & Platt, G. "Unconventional Technologies Build Community," *Leadership Exchange*, 5, 10 1. 2008.

Forgette, R., & Platt, G. "Redistricting Principles, Processes, and Incumbency Protection," *Political Geography*, November 2005, Vol. 24, p. 934 951.

Forgette, R., & Platt, G. "The Disappearing Middle: An Incumbency --Based Explanation of a More Partisan Congress and a Less Partisan Electorate," *American Review of Politics*, fall 2002, vol. 3, pp. 225 --243.

Erekson, H, DeShano, K, Platt G, and Ziegert A., "Fungibility of Lottery Revenues in Support of Public Education" *Journal of Education Finance*, ol.28 o.2, all 002

Principles of Microeconomics – A Complete On-Line Course. Prentice Hall Publishing: New York, NY/Active Learning Technologies: West Park, NY, 2000. [On-Line Course for WebCT]

Lage, M., Platt, G., & Treglia, M., "Inverting the Classroom: A Gateway to Inclusive Learning Environments," *Journal of Economic Education*, inter 000, ol.31, o.1.

Lage, M. & Platt, G. "The Internet and the Inverted Classroom," *Journal of Economic Education*, inter 000, ol.31, No.1

"Cincinnati in 1840: The Social and Functional Organization of Urban Community During the Pre-Civil War Period by Walter Stix Glazer" Book Review, *Journal of Economic History*, une 000, ol.60, o.2.

Black, G. & Platt, G. *Prentice-Hall Learning Initiative Partnership*, Prentice-Hall Publishing: NY, NY/Active Learning Technologies: West Park, NY, 2000.

Principles of Microeconomics – A Complete On-Line Course. Prentice-Hall Publishing: New York, NY/Active Learning Technologies: West Park, NY, 2000.

Gifford, J. & Platt, G. "Using an Electronic Scavenger Hunt to Kick Off Your Semester." *The Marketing Educator*, 1999.

Forgette, R., & Platt, G. "Voting for the Person and Not the Party: Party Defection, Issue-Voting, and Process Sophistication," *Social Science Quarterly* August 1999.

Erekson, H, Platt G, and Ziegert A., "Factors Influencing the Adoption of State Lotteries," *Applied Economics*, June 1999.

Epple, D. & Platt, G. "Equilibrium and Local Redistribution in an Urban Economy when Households Differ in both Preferences and Incomes," *Journal of Urban Economics*, January 1998.

Platt, G., Poole, K., and Rosenthal, H., "The Directional and Euclidean Theories of Voting Behavior: A Legislative Comparison," *Legislative Studies Quarterly*, November 1992.

SELECTED GRANTS

- 2014 – Member of team led by Johns Hopkins receiving CDC grant to develop online Ebola training for Hospitals.
- 2014 – Member of Co-lead team \$500K grant from State of Ohio to develop apprenticeship program with Ohio startups.
- 2012 – Member of Co-lead team on multi-million dollar DARPA Grant for developing new models of distributed manufacturing.
- 2010 – Member of team on multi million dollar NSF Grant for developing interactive kiosks at zoos.

SELECTED PROFESSIONAL PRESENTATIONS

- 2015 – Presented at Brookings on panel about Big Data and Design thinking as part of U.S. State Department Quadrennial.
- 2015 2014 – Presented at TEDxOxford
- 2014 – Coordinated & Moderated at "Omnichannel Marketing Conference" (OH)
- 2013 – Presented Keynote at American Education Publishers Conference (DC)
- 2013 – Co Led workshop at Armstrong University (GA) on Design Thinking
- 2013 – Presented "The (near) Future of Marketing: Trends to Watch" to Global Marketing Summit at Victoria's Secret.
- 2013 – Coordinated & Moderated at "Omnichannel Marketing Conference" (OH)

- 2013 – Presented “Brand as API” at International Digital Media and Arts Association Conference, Orange County, CA
- 2013 – Presented “MBA for MFAs & MFA for MBAs” at *Creative Coast* conference, Savannah GA
- 2012 – Presented “Brand as API” at SXSW Interactive
- 2012 – Presenter/Leader for Kauffman Foundation Startup Weekend, Oxford, OH
- 2011 – P&G Consumer Solutions Global Meeting, “Brand as API – The Future of Marketing”
- 2011 – P&G Digital Marketing Summit “What is Gamification and Why Does It Matter?”
- 2011 – International Digital Media & Arts Association Conference, Co presenter, “Universities in the ‘Free Era,’” Savannah, GA.
- 2011 – Digital UnConference, Cincinnati – *Industry/Academic Partnerships: New Models*
- 2011– ESSEC Business School, Paris, France – Led graduate student workshop on Social Media Marketing
- 2011 – Health Data Initiative Forum at National Institutes of Health, Washington, DC
- 2011 – Sat on Advisory Board for New Media Institute, University of Georgia
- 2010 – Apple Challenge Based Learning Team – our team represented one of four universities chosen to pilot Apple’s Challenge --Based Learning Project
- 2010 – Presented “Universities in the ‘Free Era’” to Boards of Trustees and Executive Boards at Colgate, Duke, Miami University, Ball State, and Rutgers.
- 2010 – SXSW Interactive, “Universities in the ‘Free Era’”, Austin, TX
- 2010 – Mobile Learning Summit, Oxford, OH
- 2010 – NSF CPATH Conference on the future of Computer Science education, Oxford, OH.
- 2010 – Social Media for Non --Profits, Borneo, Malaysia
- 2010 – Conference on Design Principles and Practice, Chicago, IL
- 2009 – American Marketing Association, “Marketing in Virtual Environments,” Cincinnati, OH.
- 2009 – Delaware Design Institute Retreat, Panelist and Presenter, University of Delaware, Newark, DE.
- 2009 – International Conference on Design Principles & Practices, Co Presenter, “Transformation through Collaboration” Berlin, Germany.
- 2008 – International Digital Media Arts Association Conference, Co presenter, “Diving Deep,” Savannah, GA.
- 2007 – International Digital Media Arts Association Conference, Co presenter, “Transforming the Traditional University,” Philadelphia, PA.

TEACHING INTERESTS

Digital Branding, Social Media Marketing, Client Practicum

COURSES TAUGHT

Developed Executive Education curriculum in Digital Marketing delivered at Miami’s Cincinnati Campus.

- IMS 19: Digital Branding
- IMS 18: Social Media Marketing and Online Community Management
- MKT 632: Digital Marketing (Executive MBA)
- IMS 40: Interactive Media Studies Practicum
- IMS 52: Senior Thesis
- IMS 340, IMS 390C, IMS 440: Digital Innovation Center (San Francisco, Cincinnati, Chicago)
- IMS 10: Digital Development Methods
- MKT 291: Principles of Marketing
- MKT/ARC: 380 Sustainable Building and the New School of Business
- ECO 399: Business in Russia
- ECO 320: Sustainability, Trade, and Latin America
- ECO 399: Business in Australasia
- ECO 435: Urban & Regional Economics
- ECO 333: Public Economics
- ECO 201: Principles of Microeconomics
- ECO 202: Principles of Macroeconomics

Developed and taught Miami University courses in China, Australia, Russia, Costa Rica, Australia, New Zealand, Hong Kong, England, and Ireland.

SELECTED TEACHING SERVICE

- Directed over 30 graduate and undergraduate independent studies
- Supervised or was a member of 17 masters' theses committees
- Member of five doctorate committees
- Supervised two undergraduate honors theses
- University Honors Student Mentor

RECENT PROFESSIONAL SERVICE

- 2015 – Program Review for new Digital Media program at University of Mississippi
- 2012 2015 – Mentor for The Brandery (Top 20 Startup Accelerator)
- 2010 – Reviewer, Journal of Excellence in College Teaching
- 2010 – New Media Consortium Accreditation Summit
- 2010 – Program Reviewer for Digital/Game Program, Savannah College of Art and Design, Savannah, GA
- 2008 2014 – Ball State Center for Media Design Advisory Board
- 2007 2008 – President, International Digital Media and Arts Association
- 2004 2007 – Board member and Conference Chair (2005), International Digital Media and Arts Association
- 2010 2012 – New Media Consortium C --Lab Member

RECENT UNIVERSITY SERVICE

- 2015 – Co Chair of “Year of Creativity and Innovation” (Presidential initiative)
- 2013 2015 – Member of Interdisciplinary Advisory Committee
- 2015 – Present to University Leadership Development Program
- 2005 2015 – Present to Alumni Teaching Scholars (University Learning Community) about Technology
- 2013 – Search Committee for VP of IT
- 2013 – Hosted Jayne McGonigal, Convocation Speaker
- 2012 – Presented to CPAC Summer Conference
- 2012 – Member of Miami 2020 Strategic Planning Team
- 2012 – Member of Liberal Education Redesign Committee
- 2003 2010 – Member of University Senate
- 2009 2012 – Member of IT Strategic Advisory Committee (Provost --led committee with all the Deans)
- 2001 2015 – Presented “The Meaning of a Liberal Education” at first year orientation
- 2009 2015 – Presented at “Reunion College” and “Winter College” on various topics, most recently on Social Media and Business.
- 2003 2010 – Member of Liberal Education Council (managing the Liberal Education requirements for the University)
- 2002 2004 – Provost’s Student Academic Achievement Award Committee
- 2001 2004 – President’s Academic Enrichment Award (PAEA) Committee
- 2005 2015 – Member of Chair’s Council for Dean of Arts and Science and Dean of Fine Arts
- 2002 2015 – Co --Led University Learning Technology Summer Institute (week long professional development workshop)

RECENT DIVISIONAL AND DEPARTMENTAL SERVICE

- 2004 --2012 – Member of School of Business Technology Committee
- 1993 --2012 – Chair or Member of Over Thirty Search Committees
- 2000 --2011 – Co --Chair of AIMS Curriculum Committee
- 1999 --2012 – Chair or Member of Promotion and Tenure Committee
- 2005 --2012 – Member of Full Professor Committee
- 2009 --2012 – Member of Miami Design Collaborative
- 2010 --2012 – Member of Interdisciplinary Technology and Design Competition Committee

Additionally, I annually serve on 30 50 committees (e.g., search, strategic planning, and others) and present to external constituencies (e.g., alumni, groups, Parents’ Council, selected donors, and others) and Development officers.

The staffing plan included in this proposal validates that there are no new faculty needed, either full or part-time, to offer this degree. We have met with the Director of Planning & Analysis for the College of Creative Arts, who confirmed the net zero fiscal impact of this program. This is largely because this major was a track in another major previously.



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APPROPRIATION ORDINANCE O2019-01

Appropriation Ordinance for the Professional MBA Program

WHEREAS, the Board of Trustees of Miami University in December 2014 adopted a series of price increases for the Professional MBA (PMBA) offered by the Farmer School of Business; and

WHEREAS, the per credit hour price was increased from \$825 to \$950 effective for the fall 2015 and spring 2016 student cohorts and to \$1,050 for the fall 2016 and spring 2017 cohorts; and

WHEREAS, the adopted ordinance authorized an additional increase from \$1,050 to \$1,150 effective for the fall 2017 cohort; and

WHEREAS, after evaluating the competitive position of the Miami PMBA program in the greater Cincinnati market, the Farmer School of Business recommended that the increase from \$1,050 to \$1,150 be delayed; and

WHEREAS, despite the Farmer School of Business Top 25 ranking and stable price in the prior year, market conditions and declining MBA admission applications do not support another price increase.

NOW, THEREFORE, BE IT ORDAINED: that the Board of Trustees of Miami University approves a tuition rate of \$1,050 per credit hour for the Miami PMBA for the fall 2019 cohort.

*Approved by the Board of Trustees
December 14, 2018*

T. O. Pickerill II
Secretary to the Board of Trustees



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Finance and Audit
December 14, 2018

Resolution R2019-14
Strategic Direction and Budget Plan

WHEREAS, every college and university is facing profound change and, in order to flourish, must identify solutions to a plethora of issues and problems; and

WHEREAS, as Miami University's faculty and staff commence the preparation of a new strategic plan that will guide the University during the next decade, the Board of Trustees desires to provide guidance to the strategic planning steering committee to help ensure the resulting plan is consistent with the needs of Ohio and will sufficiently address the challenges the University is facing; and

WHEREAS, the Board of Trustees also seeks to ensure that the University remain in a strong financial position to be able to invest in the priorities identified in the new strategic plan; and

WHEREAS, affordability is the greatest challenge confronting public higher education today but other issues include: major demographic shifts as the population ages and migrates southward, westward and to urban centers; declining numbers of U.S. high school graduates especially in the Midwest and Northeast; significant uncertainty regarding future international enrollment; greater financial need by today's enrolling students with even more financial need likely for future students as we work to correct disparity in college participation rates; concerns about the value of a college education given its high cost versus slower salary and wage growth for graduates; increased emphasis on career opportunities by prospective students in evaluating both the institution and selected majors; increased interest in new disciplines and careers while demand for some traditional degree programs decline; employer and political leaders' concerns about recent graduates' preparedness and the gap between today's economic needs and the graduates higher education is producing; the impact of rapid technological change on the creation of new areas of study and research, as well as on how students learn and how education could be delivered; increased competition from new education providers as well as from flagship universities needing to grow in response to mounting budget pressures; and increased expectations from state legislatures and governors even as state appropriations regularly decline and are unlikely to keep pace with inflation going forward; and

WHEREAS, Miami University through the successful implementation of the Strategic Priorities Task Force recommendations enhanced its quality and reputation during a decade when many universities experienced unending financial challenges, diminished student interest and questions about the value they offer; and

WHEREAS, in a period when higher education is facing unrelenting change, the accomplishments brought about by the Strategic Priorities Task Force aren't sufficient to sustain Miami into the future and Miami must learn to continuously adapt to the changing needs and demands of the 21st century;

NOW, THEREFORE BE IT RESOLVED, that, in order to address the profound and dynamic changes facing higher education, the Board of Trustees views it as imperative that the University, through the new strategic plan: become more affordable for future students through improved productivity throughout all operations of the University; identify scholarships as the highest priority for the new comprehensive campaign; adapt all levels of its academic programs and degrees faster in the future in response to emerging societal needs and diminished interest in some programs; ensure academic departments prioritize innovation in teaching and learning outcomes in the allocation of faculty time in order for Miami to continue to be recognized as one of the premier undergraduate universities in the nation and achieve breakthroughs in teaching that lead to improved learning outcomes for students and greater efficiency in the delivery of academic programs; and ensure greater integration occurs between the curricular, co-curricular and career experiences of students that lead to improved graduation rates, enhanced leadership development, and improved student success beyond graduation; and

BE IT FURTHER RESOLVED, that the Board of Trustees directs the President and the Senior Vice President for Finance and Business Services to develop a detailed five year plan to be presented at the February meeting of the Board of Trustees that fully addresses the anticipated budget challenges during the new decade, accomplishes the priorities identified by the Board of Trustees in this resolution, provides for sufficient investment in the priorities identified in the new strategic plan, and prioritizes for faculty and staff annual salary improvements; and

BE IT FURTHER RESOLVED, that the objectives and goals outlined in this resolution are only the beginning of a difficult journey for Miami University that will require constant adjustment in a rapidly changing world. However, by beginning the journey from the positive position created in the previous decade by the outstanding accomplishments of the University's faculty and staff, there is reason for optimism that we will look back at the end of the next decade and find Miami University has both a stronger reputation and greater financial stability.

*Approved by the Board of Trustees
December 14, 2018*



T. O. Pickerill II
Secretary to the Board of Trustees



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RESOLUTION R2018-15

WHEREAS, Ohio Governor, John R. Kasich, on February 10, 2015, issued Executive Order 2015-01K establishing the Ohio Task Force on Affordability and Efficiency in Higher Education (Ohio Task Force) to review and recommend ways in which state-sponsored institutions can be more efficient, offering an education of equal or higher quality while decreasing their costs; and

WHEREAS, Am. Sub. HB 49 and Section 3333.95 of the Ohio Revised Code requires all boards of trustees of Ohio's state institutions of higher education to complete an efficiency review based on the report and recommendations of the Ohio Task Force and to make a report to the Chancellor of Higher Education the institution's progress toward the implementation of the recommendations and cost saving measures; and

WHEREAS, the report of the task force included two master recommendations requiring: the savings and new dollars from the efficiency review be employed to reduce the cost of college for students or provide tangible benefits for the quality of students' education and a five year goal to be established for savings and new resources to be achieved by fiscal year 2021; and

WHEREAS, Miami University recognizes with the adoption of this resolution an increase in student scholarships of \$14.0 million in FY18 towards its five year goal for increasing student scholarships \$30 million by fiscal year 2021 and continues to progress with its efficiency actions consistent with objectives originally submitted to comply with the Ohio Task Force report; and

WHEREAS, the institution's progress on its efficiency goals were presented to Miami's Fiscal Priorities committee; and

WHEREAS, Miami envisions this action not only being important for the five year period required by the report but is developing a process for performing program reviews for non-academic programs to better ensure that the Ohio Task Force goals to improve quality and efficiency be continued beyond 2021;

NOW, THEREFORE, BE IT RESOLVED: that the Board of Trustees of Miami University accepts the FY 2018 efficiency report and update on progress towards the University's five year goal to increase student scholarships by at least \$30 million; and

BE IT FURTHER RESOLVED: that the Board of Trustees directs the Senior Vice President for Finance and Business Services to submit the accompanying report and the related recommendations to the Chancellor of Higher Education by the legislated deadline.

*Approved by the Board of Trustees
 December 14, 2018*

T. O. Pickerill II
 Secretary to the Board of Trustees

10/16/2018

Google Apps @ Miami University Mail - RE: Miami University 2018 Efficiency Report



Ellis, David <ellisda2@miamioh.edu>

RE: Miami University 2018 Efficiency Report

1 message

SMolski@highered.ohio.gov <SMolski@highered.ohio.gov>

Fri, Oct 12, 2018 at 2:46 PM

To: "Ellis, David" <ellisda2@miamioh.edu>

Cc: "creamerd@miamioh.edu" <creamerd@miamioh.edu>

Hi David and Dr. Creamer-

I wanted to say how much I enjoyed reading Miami's report. Incredible use of data and very descriptive. What I love most about your report is that it's truly evident how diligently Miami is working to establish a culture of continuous improvement. A couple of highlights: I appreciated how at the end of each response, you provide a summarizing sentence on cost savings/avoidance. And I always enjoy reading about your Lean journey! Furthermore, I'm intrigued by your response to the Operations Review section in which you discuss the Administrative Program Review. As you dive into that more, I will be interested in learning what and how performance metrics are defined and utilized. David Cummins and I have been talking about metrics and your work will be interesting to study.

Thank you for all you are doing to ensure Ohio students have access to an affordable yet valuable education.

Have a great weekend,

Sara

Sara Molski, MPA

Project Manager, Fiscal and Legal Affairs

Ohio Department of Higher Education

614.728.8335

smolski@highered.ohio.gov

www.ohiohighered.org

From: Ellis, David <ellisda2@miamioh.edu>

Sent: Wednesday, September 26, 2018 11:32 AM

To: Molski, Sara <SMolski@highered.ohio.gov>

Subject: Miami University 2018 Efficiency Report

<https://mail.google.com/mail/u/0?ik=e59c5ab7fa&view=pt&search=all&permthid=thread-a%3Ar8183302158811314116%7Cmsg-f%3A1614146434153...> 1/2

10/16/2018

Google Apps @ Miami University Mail - RE: Miami University 2018 Efficiency Report

Sara,

Please find attached Miami University's efficiency report and associated table for master recommendation 2 for FY18. Our Board meets December 13 and 14 and we will review the report and seek adoption of the resolution at those meetings. Please let me know if you have any question about our submission.

David

--

David A. Ellis, Ph.D.

Associate Vice President for Budgeting and Analysis

218 Roudebush Hall

[501 E. High St.](#)

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Department of
Higher Education

John R. Kasich, Governor
John Carey, Chancellor



Affordability & Efficiency

FY18 Efficiency Reporting Template

Introduction:

Ohio Revised Code section 3333.95 requires the Chancellor to maintain an Efficiency Advisory Committee, composed of members from each of Ohio's public colleges and universities. The purpose of this committee is to generate institutional efficiency reports for campuses, identify shared services opportunities, streamline administrative operations, and share best practices in efficiencies among institutions. Each report must be based on the recommendations of the Ohio Task Force on Affordability and Efficiency in Higher Education, as established by the Governor's executive order, and shall benchmark and document institutional progress toward implementing the recommendations of the Task Force as compared to the institution's prior fiscal year efficiency report. Additionally, House Bill 49, section 381.550 requires that the board of trustees of each public institution of higher education approve the institution's efficiency report submitted to the Chancellor. Given the due date of this report, you may submit your Board approval at a later date.

There are several additional reporting requirements this year. The FY18 reporting template now includes a section on efficiencies gained as a result of the Regional Compacts that are required under ORC Section 3345.59. In addition, Ohio Revised Code Section 3333.951(C) requires Ohio's public colleges and universities to report their efforts toward reducing textbook costs for students, and Ohio Revised Code Section 3333.951(D) requires Ohio's public colleges and universities to conduct a study to determine the current cost of textbooks for students enrolled in the institution.

As in previous years, the Efficiency Reporting Template is structured into sections:

- **Section I: Efficiencies** – The first section captures practices likely to yield significant savings that can then be passed on to students. This includes Procurement, Administrative/Operational, Energy, and Regional Compacts.
- **Section II: Academic Practices** – This section covers areas such as textbooks, time-to-degree incentives, and academic course and program reviews. While improvements to academic processes and policies may not convey immediate cost savings to the college/university, there will likely be cost savings and/or tangible benefits that improve the quality of education for students.
- **Section III: Policy Reforms** – This section captures additional policy reforms recommended by the Task Force.
- **Section IV: Students Must Benefit** – Section IV corresponds to Master Recommendation 1. This section asks you to provide cost savings and/or resource generation in actual dollars for each of the recommendations. Furthermore, colleges and universities must advise if the savings have been redeployed as a cost savings to students or if they offered a benefit to the quality of education for students.

- **Section V: Five-year goals** – Finally, Section V corresponds to Master Recommendation 2. This section is designed to allow each college/university to benchmark its respective five-year goals to its actual institutional cost savings or avoidance. Furthermore, in the spirit of continuous improvement, this section allows you to revise and/or update your five-year goals as needed.

Identifying Efficiencies Gained and Results from Implementing Recommendations

Many of Ohio's colleges and universities have implemented a majority of the Task Force recommendations to date. Furthermore, several of the recommendations were never intended to be exercises conducted annually; however, portions may be implemented over several years or revisited as needed. **The purpose of this reporting template is twofold – 1) to capture the implementation status of these recommendations, and 2) to capture efficiencies gained due to the implementation of these recommendations.** Efficiencies gained illustrate the results or benefits of implementing the recommendations. Therefore, even if you have previously implemented a recommendation but have not done so in FY18, please include in your response how the implementation has continued to impact your operations to date.

Examples of efficiencies include:

- Direct cost savings to students
- Direct cost savings to the college/university
- Cost avoidance to the college/university
- Tangible benefits to students (i.e. increased advising, student services, academic achievements)
- Revenue generated for the college/university
- Course and program completion rates
- Graduation rates
- Number of steps reduced in a process and/or handoffs
- Fraction of graduates with experiential learning as part of their degree program
- Opportunities and training for faculty
- Improved value and quality for students

These are examples only. Feel free to provide results you deem appropriate and tailor efficiencies to address each recommendation.

ODHE recognizes one size does not fit all, and each of the colleges/universities have responded and will respond differently to the recommendations. Therefore, the questions are intended to capture all potential statuses of implementation. When responding to the recommendations, first identify your respective college/university's implementation status, and then you need only to respond to the corresponding question(s) that address your implementation status. Finally, please note that this is only a template. Feel free to respond to the Task Force recommendations in any additional ways you believe necessary.

Please contact Sara Molski at 614-728-8335 with any questions. Please submit your reporting template by email to smolski@highered.ohio.gov by **Friday, September 28, 2018.**

Miami University

Section I: Efficiency Practices

Procurement

Recommendation 3A | Campus contracts: Each college/university must require that its employees use existing contracts for purchasing goods and services, starting with the areas with the largest opportunities for savings.

Note: *Once fully implemented, this exercise is not necessary to conduct annually.*

Please identify your institution's implementation status.

No change from prior year's report

Please briefly explain your implementation status.

Miami University, as recommended in the Task Force report, has amended its procurement policy to require that all university departments prioritize goods and services available through contracts negotiated by the Inter-University Council - Procurement Group (IUC-PG).

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

Miami University's procurement strategies have resulted in \$1.1 million in saving to date.

If you have not implemented this recommendation to date, please explain.

Recommendation 3B | Collaborative contracts: Ohio's colleges and universities must pursue new and/or strengthened joint purchasing agreements in the following categories:

- Copier/printer services
- Computer hardware
- Travel services
- Outbound shipping
- Scientific supplies and equipment
- Office supplies and equipment

Contract Type	Did the college/university participate in joint contracts in FY18? [yes, no, worked toward]	Monetary Impact
Copier/printer services	Yes	The University began use of the contract on 7/1/16 with the replacement of student walk-up printing services. On-going use of the contract includes replacement of departmental copy/print as needed, securing \$40,988 reduction in maintenance charges.
Computer hardware	Yes	Miami updated our institution-wide technology procurement procedures to ensure that all technology purchases leverage the new electronic product catalogues. These catalogues have direct links between products and the existing state contract database, thereby ensuring that purchasers have access to the best in-state pricing available. Equipment within the scope of this new procedure includes computers and computer peripherals (e.g. keyboards, mice, docking stations, speakers, cables, etc.), printers, monitors, projection equipment, and accessories. 90% of Miami's spend was in compliance with the contract in FY18.
Travel services	Yes	The University has negotiated discounted air rates with Delta Airlines, saving 3% over standard rates, and partnered with Options Travel for offering assistance and discounted prices to travelers. The partnership resulted in \$31,464 in savings in FY18
Outbound shipping	Yes	No Change
Scientific supplies & equipment	In process	The agreements are anticipated to be in place in FY19.
Office supplies & equipment	Yes	Miami is participating with the IUC-PG to review a new master core list of standard products.

Other	Yes	<p>In FY17, Miami, along with 4 other IUC schools (WSU, UT, KSU, YSU), established a Strategic IT Purchasing Consortium. The consortium’s mission is to aggregate purchasing power for in-common vendors to improve pricing on products, services, maintenance, subscription fees, and other associated technology expenses. The initial target for the consortium was Ellucian, as all 5 schools are Banner ERP schools, but the group has since expanded its scope of engagement to include Oracle, AWS, and others.</p>
IUC Insurance Consortium	Yes	<p>The IUC Insurance Consortium (IUC-IC) is a collaboration of 13 public universities in Ohio. The IUC-IC collectively pools a core group of casualty and property risks, retaining a portion of the risks in a formalized self-insurance pool and then purchasing insurance to cover large incidents. The IUC-IC was formed as a joint purchasing group for property coverages in 1994, and expanded to casualty coverages in 1998. The program eventually grew to provide the self-insurance layers described below, and matured into the current pooling arrangements and governance structure in 2006. Due to their collaboration, the IUC-IC has been able to reduce costs by purchasing group insurance and services, pooling losses, expanding coverage and sharing limits in the excess layers. Miami University realized savings of \$896,977 from participation in the Consortium in FY18.</p>

Temporary

Assets and Operations

Recommendation 4 | Assets and operations

4A Asset review: Each college/university must conduct an assessment of its noncore assets to determine their market value if sold, leased, or otherwise repurposed. Where opportunities exist, colleges and universities must consider coordinating these efforts with other colleges and universities to reap larger benefits of scale. Please complete the section that aligns with the implementation status of your college/university.

Note: Once all assets are fully reviewed, this exercise is not necessary to conduct annually.

Please identify your institution's implementation status.

Progress made on implementing recommendation in FY18

Please briefly explain your implementation status.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

Miami University previously completed the assessment of non-core assets. The Miami University has commenced the process for liquidating certain real estate but these transactions are still in process. The sale of these properties is likely to take 1 to 2 years to finalize.

Airport - The University evaluated the total cost of ownership associated with a university-owned aircraft used for executive travel. Cost of ownership included routine aircraft maintenance, required FAA-mandated upgrades and certifications, flight crew salaries, training and stipends, aircraft fuel, and insurance. In FY17, these expenses totaled over \$125,000. After reviewing the flight hours of the aircraft, the University determined that annual savings were substantial enough to sell the aircraft and deliver required flight services through commercial carriers or private pay-per-use vendors. For FY18, \$35,000 was budgeted for executive travel resulting in an annual savings of \$90,000. In FY18, the University sold the aircraft for a \$670,000. Selling the aircraft avoided FAA-mandated avionics upgrades and landing gear certifications of more than \$340,000. FAA regulations limit development and use of the land surrounding the airport. The University has leased a portion of the property for agricultural cash crops resulting in over \$52,000 in annual revenue.

Through FY18 Miami has generated \$1.9 million in revenue from noncore assets.

If the college/university has not implemented this exercise to date, please explain.

4B Operations review: Each college/university must conduct an assessment of non-academic operations that might be run more efficiently by a regional cooperative, private operator, or other entity. These opportunities must then be evaluated to determine whether collaboration across colleges and universities would increase efficiencies, improve service, or otherwise add value. Please complete the section that aligns with the implementation status of your college/university.

Note: Once all operations are fully reviewed, this exercise is not necessary to conduct annually.

Please identify your institution's implementation status.

Progress made on implementing recommendation in FY18

Please briefly explain your implementation status.

The University completed an assessment of non-academic operations to determine if they can be operated more efficiently by a regional cooperative, private operator, or other entity. A summary of the results from these reviews follows:

Dining - Improving the performance of the University's dining and residence hall operations was identified as a university priority in 2008. In an effort to achieve further improvement in the dining program, an RFP for management services was issued in late 2014 but the selected vendor was unsuccessful in assuming these responsibilities and is no longer under contract. An updated assessment of the dining operation was completed in 2014 and serves as the blueprint for making further and ongoing improvements in the dining.

Housing - As noted above, the need for improvement in the residence hall facilities and operations was identified in 2008 as an institutional priority. In 2011, the University issued an RFP for a potential P3 housing partnership before undertaking the construction of new residential housing for freshman and sophomore students. The proposal-evaluation committee determined that a P3 partner would not offer a viable alternative to university-constructed housing for freshmen and sophomores. While Miami continues to own and operate housing for freshmen and sophomore students on the Oxford campus, it has generally relinquished upper class and graduate student housing to operators in the Oxford area and thereby avoided the need for a formal P3 agreement that would shift financial risk to the University.

Student Health Center and Student Health Insurance - In 2013, Miami University contracted the management of its student health center with a local hospital provider, resulting in annual savings of about \$450,000. The University also annually evaluates its student health insurance policy and continues to find that its hard waiver policy leads to annual savings for those students needing to purchase health insurance. The annual evaluation also verified that more affordable student health insurance opportunities are not available through the Federal Exchange.

Child Care - Child care is already contracted with private operators.

IT Help Desk - Miami University outsourced our help desk to Blackboard resulting in savings of \$420,000

Janitorial Services, Landscaping and Facility Maintenance - An assessment of the facility operations was performed by an independent operator earlier this year. The independent operator reviewed staffing levels, operating costs, and level of services provided on Miami's campus compared to national averages and best-in-class. Specifically, the report compared data on full time equivalent per gross square foot (FTE/GSF), cost per square foot (\$/GSF), and APPA standards for quality of service. Their report suggests that

unless significant improvements and efficiencies can be achieved for the custodial operations within the next 12 months, such services should be contracted with a private operator. The annual savings opportunity is projected to be about \$1.6 million. Similar opportunities were not found to exist for facilities maintenance or the grounds operations. Additional update is provided under FY 2017.

Real Estate Management - Because Miami's real estate holdings are largely rural, it is not financially practical to place them under the oversight of a real estate management company.

Print Center - The print center, due to a need to repurpose this space for expanded lab space in Hughes Hall, is being closed. Services will be provided through print shops in the Oxford or nearby communities. The annual operating savings is estimated to be \$200,000.

Miami University administrators, with guidance from the University Senate's Fiscal Priorities Committee, has developed an Administrative Program Review process to better enable an ongoing assessment of operations. Each administrative area will be reviewed on a rotating cycle every 5 years. The reviews will have performance metrics common across each administrative area as well as performance metrics unique the functional area under review. Review teams are to be comprised representatives from the division under review, external reviewer from peer institutions, and representatives from the President's Executive Council and Senate Executive Committee.

Additionally, Miami University has joined a consortium of universities from across the country in a project that will provide administrative bench marks across a variety of administrative functions. The information obtained from the consortium will be incorporated into the Administrative Program Review process.

The goal of the administrative review process is to create another mechanism of continuous improvement to ensure the efficient use of resources, and quality outcomes for constituencies serviced across the university in future years.

In addition to the Administrative Program Review, the initiatives described below were initiated or completed in FY 2017.

Help Desk - The work effort from last year focused on building Miami's self-service capabilities through the implementation of a knowledgebase. That work was successfully completed in December with the launch of the university's first Digital Knowledge Center (DKC). With DKC, instead of calling an IT Help Desk Analyst, students, faculty, and staff are able to seek answers to their questions in a self-service fashion by searching knowledge articles stored in highly searchable databases. By the conclusion of FY17, Miami had already experienced a 16% reduction in Help Desk cost-per-contact, driven by an 80% year-over-year increase in self-service usage.

Also over the last year, Cuyahoga Community College launched an RFP to rebid their outsourced Tier 1 Help Desk Services. As a part of that bid process, which was awarded to Blackboard Inc, Tri-C ensured that the negotiated agreement could be leveraged by other Ohio institutions. Kent State University successfully leveraged that agreement last spring; Miami University followed suit over the summer. As a result, Miami will be transitioning Tier 1 Help Desk Services to Blackboard in the Fall of 2017. When combined with the continued benefits generated by the DKC work effort (see above), Miami is anticipating this outsourcing step will result in an additional 32% drop in the cost of providing Tier 1 Help Desk Services.

Student Package Center – From FY10 to FY16, package volume at Miami has increased 114%, averaging 16% growth per year. The growth has been more exponential than linear. A 20% year over year package growth is anticipated in the forward fiscal years. To keep up with this growth, Miami was reaching capacity at its existing 5500 sq ft mail and package center and considering the need to increase staff. Rather than expand the existing facility and hire additional staff, Miami implemented smart locker technology. Coupled with improved processes, Miami will now be able to operate in 3300 sq ft of space for the next 5 years, even with 20% year over year package growth. At the same time, the full-time mail and package center manager position was eliminated through attrition due to increased automation. In total, nearly \$400,000 was saved in forfeited space and reduced staff salary and benefits.

Janitorial Services, Landscaping and Facility Maintenance – Since the last report, an internal consolidation of custodial services has been implemented to achieve savings and consistency of service. Action is being taken to align our staffing (FTE/GSF) and operating expenses (\$/GSF) with best in class. Miami is on-track to achieve a first-year goal of an 8% reduction in FTE while providing the same or higher level of service. This trend is expected to continue with an additional 3% reduction in FY19. Several actions have been taken to reduce operating expenses, but most notable is the outsourcing of our central storeroom operations. In 2017, after a competitive bidding process, Miami contracted with Wolseley/Ferguson to provide procurement and logistical services associated with janitorial, landscaping, and maintenance supplies. This contract includes a fixed fee as well as performance bonuses. Expected outcomes over the 5-year life of the contract: 21% reduction in price paid for goods at the start of year 1 versus end of year 5. More specifically, a 10% reduction in the cost of goods in year 1 versus year 0; an additional 5% in year 2; 3% year 3; 2% year 4; 1% year 5. The 5-year estimated savings for this contract exceeds \$1.8M. In addition, employees designated as job planners spend an average of 25% of their time procuring parts and materials. With this agreement, Wolseley/Ferguson will provide a dedicated buyer onsite as well as leverage their supply chain. As a result, Miami expects to realize this 25% productivity gain. For FY 2017, the savings resulting from the reforms were \$173,000. Also, the Wolseley/Ferguson fees are paid through vacant position elimination.

These operational improvements have facilitated several projects related to our vehicle fleet and fuel consumption. In the past three years 23 vehicles have been permanently removed from the fleet. As more employees move to second shift, vehicle demand is better managed through pooling. As a result, underutilized vehicles are eliminated from service. These moves have reduced our future replacement vehicle costs by over \$450,000; reduced our parking, insurance and maintenance costs by over \$44,000 annually. In addition, all such projects impacting our fleet have resulted in a 17% reduction in fuel consumption from FY16 to 17, translating to over 10,000 fewer gallons of fuel consumed. This trend is expected to continue with an additional 8 vehicle reduction in the next fiscal year.

Non-academic Greenhouse – Physical Facilities operational review identified an opportunity in our non-academic greenhouse Operations. Miami University traditionally operated two non-academic greenhouses to grow annual flowers for campus. These greenhouses had tens of thousands of dollars of deferred maintenance, with one greenhouse reaching end of life. In 2016, these greenhouses were permanently closed, with annuals grown and shipped to campus by a third party provider. Excluding greenhouse replacement and deferred maintenance as well as labor costs, Miami was able to procure annuals at 15% below previous cost of just utilities and supplies. 2/3 of an FTE was reallocated to other needed grounds tasks.

Restructuring of Meal Plans – Student meal plans were updated in FY17 to offer a combination of buffet meals plus declining balance dollars, which provides the best value for our students. Prior meal plans included an administrative fee, \$1,625 per semester. This fee was restructured to a residential fee, \$400 per semester for students in Miami housing, to help support the residential experience and programming.

Dining Operations – An Aramark assessment of Dining and CSC Operations resulted in implementation of single-source distribution through our Group Purchasing Organization (GPO). The University uses U.S. Foods, a broadline distributor as a primary vendor. US Foods provides the University a discount of 2.1% on approximately \$1.1 million in purchases, which results in roughly \$24,000 in annual discount. The recommendation was also made to reduce the amount of inventory stored at the CSC from an average of \$1 million to \$285,000. This resulted in reduced holding costs and freed up cash previously tied up in inventory. Furthermore, the suggestion was that if Miami increased spend through US Foods to \$6M, we could potentially negotiate an increase in rebate up to 4% of spend, or \$240,000.

Through our GPO, Vizient/National IPA, which USF is the distributor; our discount off each invoice has increased to 2.25%. In addition, we are now taking full advantage of the "Standardization" program, which for the period from 7/1/16- 5/31/17 returned a total of 2.11% of our spend.

Through review of the operations at the Demske Culinary Support Center, we were able to transfer 7 FTEs into the dining operations after the close of Vegetable Processing and consolidate the Bakery Operations into 1 shift, which eliminated the need for two additional managers, resulting in a savings of \$95,000

To alleviate storage restraints in a number of locations, we now warehouse the top-10 frozen items. We have been able to eliminate the majority of additional vendors used in the past, and bring most food in through our Group Purchasing Organization. This process change has provided a reduction in inventory cost, as well as labor savings from reducing multiple touch points.

Print Services – Miami University reviewed the print services offered to students, faculty and retail to provide more efficient and cost effective solutions. Previously, the University provided custom-creation print on demand for students and faculty. The print jobs were classified as "big" or "small" print and depending on type were either printed in-house or outsourced using other print shops around the area. The distribution of transactions were mainly individual students/retail (68%), faculty and staff (28%) and student

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

Dining Operations - A third-party sushi supplier was introduced to campus, who at no financial risk to the University produces a high quality product, offering our students a reasonably priced grab-and-go healthy option. Miami receives 25% of all sales of sushi, which for FY18 equated to \$136,447.

An Aramark assessment of Dining and CSC Operations resulted in implementation of single-source distribution through our Group Purchasing Organization (GPO). The University is a member of National IPA/Novation, which falls under the umbrella of parent company Vizient. U.S Foods, a broadline distributor is our primary vendor of products through the Vizient program. In FY'18, our

spend with US Foods was \$6,010,163 and our rebate monies totaled \$239,764 [this is solely rebates, does not account for deviated pricing from the GPO] or 4% of our food spend.

Food costs savings resulting from restructuring of the student meal plan were \$1,120,487 in FY18.

Janitorial Services, Landscaping and Facility Maintenance – Since the last report, custodial headcount has been reduced by 16 FTEs, while the amount of square footage cleaned and quality of service scores reflecting cleanliness standards have improved. Overall, this headcount reduction translates into an 8% productivity improvement across the custodial workforce, and a labor cost savings of over \$584,000.

Custodial product fulfillment and delivery have been outsourced to vendor. This has resulted in a 7% reduction in the cost of product; elimination of a delivery van from the vehicle fleet; an additional 1,200 hours of available custodial labor (or a 3% productivity improvement); abandonment of 2,000 square feet of storeroom space for future office space.

Internal consolidation of custodial staff continued during this reporting period. Six additional facilities who were previously scheduling and managing their custodians separately are now consolidated to achieve savings and consistency of service. While this change occurred in the fourth quarter of FY18, it is anticipated savings in excess of \$250,000 will be realized in the next fiscal year. Productivity improvement goals include increasing assigned cleanable square footage for these employees from 16,755 cleanable square feet (CSF) to over 23,000 CSF.

Residential CSF increased on the Oxford Campus from 1,779,844 to 1,859,624 CSF as new additional residence halls came on-line at the end of FY18. There will be no increase in FTE positions to accomplish the cleaning and maintenance of this additional space. Quality audit scores reflecting cleanliness standards for the Oxford Campus improved to 18%. The quality audits are performed using a widely accepted industry standard for higher education facilities.

Building maintenance has continued to consolidate operations by abandoning satellite storage, shop and staging locations in favor of a centralized model. In FY18, 4016 square feet was vacated and consolidated centrally into just 639 square feet of space, for a reduction of 3377 square feet. While helping to boost productivity, this also reduces unnecessary trips around campus. Efforts to minimize drive time and reduce the size of our vehicle fleet have resulted in an additional 11% reduction in fuel consumption in FY18, equating to over 5500 gallons of fuel. This is in addition to the 17% reduction previously reported. Eleven vehicles were removed from the fleet in FY18, for an overall savings exceeding \$325,000. This is in addition to the 23-vehicle reduction previously reported.

Through FY18 changes in Miami's operations have resulted in \$5.6 million in savings.

If the college/university has not implemented this exercise to date, please explain.

4C Affinity partnerships and sponsorships: Colleges and universities must, on determining assets and operations that are to be retained, evaluate opportunities for affinity relationships and sponsorships that can support students, faculty, and staff. Colleges and universities can use these types of partnerships to generate new resources by identifying “win-win” opportunities with private entities that are interested in connecting with students, faculty, staff, alumni, or other members of their communities. Please complete the section that aligns with the implementation status of your college/university.

Did the college/university initiate any new partnerships or sponsorships in FY18? If yes, please complete the below table for those new relationships.

Partnerships/Sponsorships	Description	Revenue Generated
Crown Castle	Mobile communications partnership	\$3,930

If the college/university saw efficiencies gained in FY18 in already existing relationships, please identify, specifically including revenue generated. *Include in the table above or add a similar table.*

Partnerships/Sponsorships	Description	Revenue Generated
Strategic IT Purchasing Consortium	<p>Part of the Strategic IT Purchasing Consortium’s value proposition, as described in Recommendation 3B, is the opportunity it provides Miami to cultivate deeper, more meaningful partnerships with key strategic technology suppliers.</p> <p>We have identified 5 vendors that we believe fall into this category – AWS, CBTS, Ellucian, IBM, and Oracle.</p> <p>In FY18, the consortium actively pursued partnership opportunities with these vendors by identifying “win-win” opportunities through connections with Miami students, faculty, staff, alumni, and/or other members of the community.</p>	\$98,641
Public Radio Station	Leased the broadcast rights to Cincinnati Public Radio in 2010, saving \$600,000 in annual operating costs.	\$600,000
On Campus Banking	Total value of the 2012 contract to the University is \$1.2 million over seven years. The new arrangement also made deposits of funds collected by university departments easier and	\$132,000

	faster with fewer administrative resources required to accomplish these deposits.	
Health Services	The 2015 sponsorship agreement provides \$10 million to the University over 12 years along with improved sports medicine services for Miami's intercollegiate athletes and students participating in intramural and club sports.	\$833,333
Sponsorship Agreement for Intercollegiate Athletics	Miami utilizes IMG to negotiate affinity partnerships for Intercollegiate Athletics which provides an annual value for the University's athletic programs of \$700,000.	\$1,227,500
Student Health Center	Tri-Health was selected in 2015 to operate the student health center and to provide urgent care services to Miami employees and dependents. The savings at the Student Health Center total \$450,000 per year and the health care savings.	\$450,000
If the college/university has not implemented this exercise to date, please explain.		

Temp

Administrative Practices

Recommendation 5 | Administrative cost reforms

5A Cost diagnostic: Each college/university must produce a diagnostic to identify its cost drivers, along with priority areas that offer the best opportunities for efficiencies. This diagnostic must identify, over at least a 10-year period:

- Key drivers of costs and revenue by administrative function and academic program;
- Distribution of employee costs — both among types of compensation and among units;
- Revenue sources connected to cost increases — whether students are paying for these through tuition and fees, or whether they are externally funded;
- Span of control for managers across the college/university — how many employees managers typically oversee, by the manager's function; and
- Priority steps that would reduce overhead while maintaining quality — which recommendations would have the most benefit?

Note: Once a full cost diagnostic has been performed, this exercise is not necessary to conduct annually.

Did the college/university perform this exercise in FY18? If yes, please provide an overview of the process used and the key outcomes.

Please provide details on the result(s) of the assessment. What are the cost drivers, based on the categories above? Please discuss the college/university's priority areas that offer the best opportunities for the recommendation.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

A 10-year cost diagnostic was completed for Miami University as recommended in the Governor's Task Force report. This review included an analysis of spending by functional category and by object of expense. The diagnostic confirmed that the many efforts by Miami University over the past eight years have been effective in slowing the annual rate of growth in spending. Spending per student, net of student financial aid, actually declined from its peak in 2008, and the increase in actual spending over the entire ten-year period rose at a rate slower than the annual growth in the consumer price index.

While the cost trends observed over the last decade are generally quite favorable, this review did identify a small number of areas where costs have grown faster than the overall trend at Miami. Most of these areas align with the strategic priorities of the University during this period. It also is possible that opportunities for increased productivity or improved efficiency may exist in areas that grew slower than the average rate of growth. For all administrative functions and cost centers, a deeper analysis could potentially identify opportunities for improvement. For this reason, the University intends to implement a program review process for assessing nonacademic functions and programs on a regular cycle. Through these reviews, the effectiveness and sufficiency of these activities can be properly assessed and improved.

If the college/university has not performed this exercise to date, please explain why.

5B Productivity measure: While the measure should be consistent, each college/university should have latitude to develop its own standards for the proper level of productivity in its units. This will allow, for instance, for appropriate differences between productivity in high-volume environments vs. high-touch environments.

What steps has the institution taken to improve productivity in FY18? Please discuss any updates to the utilization of process/continuous improvement methodologies such as Lean Six Sigma.

Miami University began its Lean journey in 2009. Since 2009, Miami employees have completed 1347 projects valued at \$68,022,238 in cost avoidance, cost reduction, and new revenue. In FY 2018 Miami completed 202 of those projects at a value of \$15,750,209.

Over 2500 employees have been introduced to Lean and 166 are currently in the Lean Certification Program with 64 of them having completed the program to achieve Senior Lean Leader status, 6 of the 64 attained this certification in FY2018. The certification process takes 24-30 months and includes over 100 hours of specialized formal training, involvement in 5 Lean Projects and Lean leader of three, plus the presentation of a significant project to the Miami Lean Review Board. In FY2017, the University added a tier system to the certification process to recognize milestones of certification completion with 13 people who achieved Tier 1 status and 16 people that achieved both tier 1 and tier 2 status in FY2018.

In addition to the training provided to Miami University staff and students, the Lean program has extended Lean training to other colleges and universities in Ohio. In FY2018, Miami shared the Lean program with Cincinnati State Technical and Community College and Youngstown State University. Miami also continued to collaborate with Bowling Green State University, The Ohio State University, and Wright State University regarding Lean.

As part of the Lean program, Miami has developed a Lean structure, Lean database with dashboard reporting, and standardized processes for Lean project management. Only one full-time and one part-time employee are dedicated to Lean. All of the other employees have other non-related Lean responsibilities. Presently, all divisions of the university have employees engaged in Lean.

5C Organizational structure: Each college/university should, as part or because of its cost diagnostic, review its organizational structure in line with best practices to identify opportunities to streamline and reduce costs. The college/university reviews should consider shared business services — among units or between college/university, when appropriate — for fiscal services, human resources, and information technology.

Note: Once fully implemented, this exercise is not necessary to conduct annually.

Did the college/university evaluate its organizational structure in FY18? If yes, please provide an overview of the process used and the key outcomes. If no change from FY17, please indicate.

No further changes to report. See activity under 5B for ongoing productivity efforts.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

Template

5D Healthcare costs: A statewide working group should identify opportunities to collaborate on health-care costs.

What initiatives or plan changes did the college/university implement in FY18 to manage or reduce healthcare costs?

Has the college/university achieved any expected annual cost savings through healthcare efficiencies in FY18? Please explain how cost savings were estimated.

Center of Excellence

Per a competitive bid process, Miami University sourced a hospital to provide a "center of excellence/bundled service" for knee/hip replacements effective January 1, 2017. The bundled service arrangement benefits both the University's healthcare plan and employees/dependents; the plan is guaranteed a fixed cost with warranty period for all knee/hip replacements performed by the facility via a specific panel of physicians and employees/dependents receive high value quality care with the added convenience of a single bill and explanation of benefits. The bundled service provides an enhanced level of benefit, ensures high value care and mitigates costs. The negotiated fixed cost with the selected hospital is less than the per episode cost incurred by the plan in prior plan years at other hospitals.

In calendar year (plan year) 2017, the health plan reported 10 patients in the Hip/Knee COE – Center of Excellence (2 hips & 8 knees). According to a regional average cost study performed by the consulting group Horan & Associates, the average cost is \$40,904 for a knee replacement and the average cost for a hip replacement is \$39,084. The University's contracted fixed cost for each of these procedures is significantly less than the average cost. Based on the number of procedures rendered in 2018, the avoided cost to the health plan is approximately $(108,648 + 23,226) = \$131,874$.

Health Plan / Rx Management

In calendar year (plan year) the PBM contains standard cost saving measures including prior authorization (savings \$754,807), quantity limits (savings \$543,848), and step therapy (\$238,623). These measures are designed to effectively manage utilization and spend within the pharmacy benefit. These clinical programs provided an estimated savings of \$1,536,668 in CY2017 to the health plan.

Three additional Rx clinical programs became effective 1/1/2018 to reduce waste and manage cost. The following "smart fill/90 day and Vigilant Rx" programs will encourage the use of generics and decrease potential waste due to drug tolerance. These clinical Rx programs include:

- Smart fill/split fill (oncology, HIV, MS, RA, Transplant) - cost avoidance & waste reduction
- Vigilant Rx - New drugs to market (requires clinical review)
- Vigilant Rx - Me Too - estimated cost savings 1% (\$70,000)

Mental/Behavioral Health

Effective 1/1/2018, Miami engaged the IUC agreement to engage Impact Solutions an enhanced EAP & Worklife benefit. This engagement offers additional benefits and expanded behavioral and mental health services both onsite and telephonically to employees and their household. They also offer services such as debt reduction and provide value added employee and management resources.

One example is the tobacco session courses. These courses are conducted telephonically by professionals, which provides employees flexibility as well as an additional option to stop smoking while earning a “premium discount” point to reduce their future health premium. In summary, this benefit increases mental and behavioral health benefits at a significantly reduced rate, provides value added services and offers appropriate referrals back to the health plan’s in-network providers avoiding inappropriate or avoidable costs and utilization.

Template

5E Data centers: The college/university must develop a plan to move its primary or disaster recovery data centers to the State of Ohio Computer Center (SOCC).

Please identify your institution's implementation status:

Progress made on implementing recommendation in FY18

If you implemented this recommendation in FY18, please briefly explain your implementation status.

We evaluated the costs associated with moving to the SOCC versus moving the cloud, and for us moving to the SOCC is substantially more expensive. It would cost us an additional \$1.7M over 5 years to move to the SOCC instead of moving to Amazon Web Services (AWS).

If the college/university previously moved its data center to the SOCC, please identify efficiencies gained, including monetary savings or enhanced security.

If the college/university has not implemented this recommendation to date, how is it addressing systems security and redundancy issues?

We are addressing both through intentional choices we are making while architecting our move to AWS

5F Space utilization: Each college/university must study the utilization of its campus and employ a system that encourages optimization of physical spaces. Please complete the section that aligns with the implementation status of your college/university.

Note: This exercise is not necessary to conduct annually.

Please identify your institution's implementation status.

Progress made on implementing recommendation in FY18

Please briefly explain your implementation status.

If the college/university implemented this recommendation in FY18, please provide an overview of the process used and the key outcomes, including efficiencies gained.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

Miami University has taken several steps this as year to implement recommendations from the space study conducted last year.

Classroom Seat utilization increased from 64% to 65.6%. The seat fill goal remains at 70%. Achieving this goal requires a focused effort to improve the flexibility of classrooms. Progress was made during this fiscal year with several targeted classroom renovation projects. Weekly room hours remained the same at 31 hours/week. The weekly room hours goal remains at 35 hours/week.

During this reporting period, recommendations to improve block scheduling were made to the Provost's office. The Provost is actively working through University governance protocol to make these modifications. It is expected that these modifications will be

implemented for the Fall semester in 2019. Implemented greater use of 'optimizer' function of room scheduling software to allow courses to be placed in classrooms that better fit size regardless of location on campus.

Other initiatives to optimize space and create swing space within existing buildings have been a priority. The University developed a long-range housing master plan (LRHMP) which it has been executing over the past several years. The plan called for a \$14,000,000 renovation of an existing dining facility in 2019. Teams within the University worked to find more efficient ways to deliver dining options to students in this region of campus. Alterations and a small addition were made to another dining facility that offered newer, more efficient delivery of services. These improvements were made for \$6,500,000. This permitted the closure of the dining facility and avoided the \$14,000,000 renovation expense and saved \$7,500,000. The closed dining facility has become valuable swing space, which was previously not available.

If the college/university has not performed this exercise to date, please explain why.

Template

Energy

Energy Efficiencies seek to refine sustainable methods utilized by the college/university to procure and use energy (resulting in more efficient use of energy), including but not limited to lighting systems, heating & cooling systems, electricity, natural gas, and utility monitoring.

FY18 Projects/Initiatives	Efficiencies Gained, including Monetary Impact
LED Lighting 2018 Project	This project replaced over 18,000 28-watt 4' fluorescent lamps, with 12-watt LED lamps. In addition, these lamps come with built-in drivers eliminating ballast losses too. Energy savings of 60% is realized. Nine academic buildings were completed (Hughes, Engineering, Phillips, Presser, King, Psychology, Upham, Benton, Garland). Received \$100,075 from the utility provider as a "Smartsaver" incentive payment.
VFD Fans & Pump Installation 2018	This project converted constant volume pumps and fans into variable volume operation in 4 academic and administrative buildings.
Wilks Theater LED conversion	This project converted the Armstrong Student Center theater space from 500-watt quartz to LED lighting.
Art Building HVAC replacement	This project replaced four end of useful life HVAC units with two zoned, high efficiency units, one with DOAZ heat recovery.
Center for Performing Arts HVAC/DDC Upgrades	This project replaced several air handlers, converted portions of the facility to VAV reheat, replaced end of life pneumatic controls with programmable DDC controls, and added vacancy sensors in all spaces to enhance efficiency
Scott/Minnich Residence Hall Renovations	Specific energy reduction strategies were intentionally integrated into these two residence halls. Prior to the renovations, these two halls had no central cooling. A goal was established to reduce energy costs by over 20%, even with the addition of a central cooling and increased electrical load. Reduction of water consumption is also included in the expectation. The project was successfully completed and on track to exceed 20%.
Goggin Corridor LED replacement	This project converted all 2'x2' fluorescent fixtures in corridor lay-in ceilings with 12-watt LED retrofits.
Hall Auditorium LED Stage Lighting Replacement	This project replaced all 1000 and 500-watt quartz stage lighting with LED lighting.
Duke Energy Smartsaver Rebate Program 2018	The University electric bill from Duke contains a non-bypassable energy efficiency rider that costs \$0.0167/kwh. This funds the Smartsaver Rebate Program. In FY18 the University paid in just over \$143K. The University applied for and received \$344,071 in FY18 from Duke in incentive rebate money from 20 efficiency related projects. These actions netted the University over \$200K. These 20 projects are listed below:

	Project Name	Amount Received
	Virtual Servers	\$16,000
	Shriver Center	\$19,456
	Hamilton Hall Renovation	\$29,542
	Clawson Hall Renovation	\$38,535
	Food Service, Armstrong	\$592.50
	Art Bldg rm #16	\$3,070
	Gunlock APC	\$39,313
	Hoyt Hall Renovation	\$3,061
	Shriver Ph #2	\$1,698
	ASC Phase #2	\$28,489
	Cole Service 2x4 Itg.	\$1,771
	Tunnel Lighting	\$692
	RSC VFD project	\$18,950
	ASC Ph 2 Food Service	\$1,382
	Goggin Floods for Murals	\$960
	2x2 Retrofit Kits	\$34,640
	Yager Stadium	\$2,281
	Middletown Upgrades	\$2,711
	LED Lighting 2018	\$100,075
	Hughes dimming T8 LEDs	\$852
	FY18 Total	\$344,071
<p>South Quad Heating Hot Water Conversion Phase 1</p>	<p>This project is a continuation of the Utility Master Plan, an initiative the University started in 2012 to convert the campus from steam heat to Heating Hot Water (HHW). The majority of the first phase of the 3-phase project was completed during FY 2018. Phase 1 converted the South Chiller Plant into an HHW Distribution Plant. Buried distribution piping was installed to serve 7 residence halls the first year. Existing steam piping was reused where practicable and converted to transport the HHW. Reductions in distribution loses and in cooling load in each building are anticipated.</p>	

<p>Eliminating Economizer below 55 to lower heating cost</p>	<p>The University has utilized Heat Pump Chillers to simultaneously produce cooling and heating. The low cost of electric on campus permits the production of HHW for \$3.80/mmbtu. In comparison, the cost for steam is \$6.44/mmbtu. The new strategy provides a 40% savings. The quantity of heat produced from the heat pump chillers is dependent on the cooling load. At one of the central plant facilities, the heat pump chillers satisfy all the heating load when the outside air temperature is above 55F. In the current state, the heating load becomes the dominant load instead of cooling. This must be supplemented with steam (at a higher cost) to satisfy the demand. This strategy eliminates the economizer below 55F on all the air handling units served from the central plant facility with HHW. This has the effect of increasing our cooling load and thereby getting more inexpensive heat out of each heat pump chiller.</p>
<p>Electric Capacity Charge Management</p>	<p>The University has on-site electric generation that can provide the majority of the campus electric load. The University is in the PJM RTO Grid. PJM sets their capacity charges based on the highest 5 peak hours on 5 different days during the summer demand period. This is called the facility's Peak Load Contribution (PLC). The PLC is set on the preceding year's performance. In 2017 the University was able to reduce the demand from an average load of 15,194KW's down to 1,269KW's for the five highest hours by operating on-site generation and implementing demand response measures during these peak times. The assessed value of capacity is based on the clearing price of the base residual auction (BRA). The BRA clearing price for 2018-19 is \$164.77/MW-day or \$60,141.05/MW. This equates to a cost avoidance of \$837,464.12.</p>

Have you gained efficiencies in FY18 from previously implemented projects/strategies? If yes, please discuss cumulative efficiencies gained.

Miami University has engaged in a number of energy efficiency initiatives. The University has been able to maintain the same energy consumption outcomes as compared to the previous fiscal year. However, the region experienced a 25% increase in heating degree days. While the indicators didn't show an improvement, actual performance was substantially improved avoiding cost. Campus energy efficiency initiatives resulted in a 36.5% decrease in energy consumption per gross square foot and a decrease in total energy consumption by 24.3% from a baseline fiscal year of 2008 through fiscal year 2018. Without these energy efficiency strategies, Miami University's annual energy costs would have been \$3.6 million higher in FY2018 compared to FY2008.

Western Geothermal Plant Phase 2 – This project expanded our existing geothermal plant and distribution system to 5 existing buildings (Hoyt, Presser, Clawson, Havighurst, and Child Development Center) to serve their heating and cooling needs. It was completed in FY17. In FY18 the University has seen dramatic improvements in the plant efficiency. The plant's Coefficient of Performance increased 20% year-over-year from 4.25 up to 5.10. The cost of production improved from \$3.05/mmbtu down to \$2.79/mmbtu, an 8.5% decrease. Major contributions to these improvements come from the installation of a 700-ton magnetic-bearing variable frequency drive centrifugal chiller and implementation of a free-cooling sequence.

Temporary

Regional Compacts

Ohio Revised Code Section 3345.59 requires regional compacts of Ohio’s public colleges and universities, with an executed agreement in place by June 30, 2018 for colleges and universities to collaborate more fully on shared operations and programs. Per O.R.C. §3345.59 {E} colleges and universities shall report within their annual efficiency reports the efficiencies gained as a result of the compact.

ODHE recognizes the regional compacts were due to be in place by June 30, 2018; therefore, please discuss your projected efficiencies gained as a result of each of the categories within the compact.

Category	Description	Monetary Impact
Reducing duplication of academic programming	<p>In response to the 2017 request by the Ohio Department of Higher Education, Miami University conducted a review of potential duplicate associate and baccalaureate degree programs with University of Cincinnati. The review included nine associate degree programs and 55 baccalaureate degree programs. To conduct this review, Miami evaluated programs in terms of the following indicators: (1) retention rates; (2) graduation rates; (3) enrollment pattern over past five years; (4) employment of its graduates; and (5) contributions to the core liberal education mission of the University. The Office of Institutional Research, in consultation with the Office of the Provost, compiled the program data and shared the information with the academic deans who offered feedback based on their contextual understanding of the program’s mission, purpose and effectiveness. Each academic dean determined whether the programs within their division warranted no action or further evaluation. In their review, the deans noted six bachelor degree programs and two associate degree programs that may benefit from further evaluation, including possible program elimination, realignment of the program within the University to improve efficiencies, or collaboration with University of Cincinnati.</p> <p>Below are some of the action steps implemented as a result of the study:</p>	

	<ul style="list-style-type: none">• Associate of Technical Studies (Engineering Technology Focus, Computer Information Technology Focus, and Commerce Focus): Although Miami has had no enrollment in these programs for the past eight years, the Ohio Department of Higher Education has mandated that we offer an ATS degree to make higher education degrees more accessible to students in Ohio Career Technical Centers. In 2018, Miami revised this degree program so that it aligns with the requirements and includes concentrations in relevant One-Year Option pathways.• Associate of Criminal Justice: This degree currently serves 53 students who typically use this associate degree as a gateway to the four-year bachelor's degree in criminal justice, and the enrollment has been increasing in the past two years. Because the associate degree requirements are folded into the baccalaureate degree requirements, there are no additional resources required to maintain the associate degree. Other students in this program are either working professionals who may find the bachelor's degree too time-consuming, daunting, or financially prohibitive or individuals who often use this degree to distinguish themselves when applying to police academies. Because enrollment in a police academy requires students to be at least 20 years old, this degree program enables students who come to us directly out of high school to complete two years of higher education prior to enrollment at a police academy.• Black World Studies BA: The outcomes and content of this program are critical to ensuring that Miami meets its goal of advancing inclusion and offering culturally relevant curricula to students. Despite its critical role in promoting inclusion and diversity, this program has experienced diminished enrollment in recent years. To address this challenge, the program was recently moved into the Department of Global and Intercultural Studies and has developed a proposal to revise and rebrand the degree as Critical Race & Ethnic Studies, with the goal of making the	
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degree more relevant and attractive to undergraduate students. The proposal was submitted to the CAS in spring, 2018. The dean's office has returned the proposal to the department with requests for some adjustments. A revised version is expected to be submitted during 2018-19.

- **Classical Humanities and Classical Languages BA:** Despite the fact that course offerings of the department are popular among Miami's undergraduate students, demand for the majors within this department has been low for some time. To address this issue, in concert with its program review in 2018-19, the department is developing a proposal to consolidate the two separate majors offered in the department into one degree with two tracks. For the past four years, this department has engaged in a productive course-based collaboration with Ohio University. Miami and OU faculty collaborate to offer one or two upper-level classes in Ancient Greek and Latin each semester, with faculty from each university delivering the course on alternate years. The courses are offered in face-to-face versions on the home campus with the students from the other university participating virtually via an IVDL connection.
- **Geography BA:** The program has developed a proposal to rebrand and rename the major, to "Geography and Sustainable Development." The proposal will be submitted in early fall, 2018. The department is simultaneously working with alumni and corporate partners to build their internship program and career development programming. The ultimate goal is for the program to grow and serve important needs of the state.
- **Hebrew Language Program:** During 2017-18, Miami foreign language faculty collaborated with foreign language faculty at the University of Cincinnati to share UC's introductory Hebrew language courses via remote video hookup. This pilot project ran for a year, with 5-8 Miami students enrolled each semester. In exchange, Miami's

	<p>faculty offered an advanced Russian class to UC students, but none enrolled. The project was discontinued due to logistical challenges, including calendar discrepancies, and the need for better technical support at UC. For 2018-19, Miami has suspended the offering of Hebrew language courses.</p> <ul style="list-style-type: none"> • Individualized Studies BA: Following a recent program review, in spring 2018 this program revised its curriculum to be more flexible and thus attractive to prospective students. • Medical Laboratory Science BS: Approximately four years ago the Miami University Clinical Laboratory Science (CLS) major was replaced by the Medical Laboratory Science (MLS) major, which currently has 46 majors. Miami University's Combined MLS Program, which consists of three or four years of core STEM classes, includes a one-year internship at an institution that offers a National Accrediting Agency for Clinical Laboratory Science (NAACLS)-accredited laboratory educational MLS internship. The required internship encompasses didactic courses and rigorous laboratory rotations in NAACLS-accredited MLS medical laboratories. As a result of its intensity, the number of majors that can be accommodated by the program is limited by design. Miami's MLS major is recognized statewide, regionally and nationally, as a premier Combined MLS Program. Nationwide, acceptance rates into NAACLS-accredited MLS Programs fall below 25%, whereas Miami students' placement rate is approximately 80%. Currently, the program is working on a number of strategies to increase the number of MLS majors, including developing more partnerships with NAACLS-accredited MLS medical laboratories. <p>Beyond the duplication study, Miami, along with UC and Cincinnati State, is a member of the Greater Cincinnati Collegiate Connection (GC3), which enables students to</p>	
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	<p>enroll in courses taught by another member institution as part of their schedule.</p> <p>Miami Regionals (along with Southern State Community College and Cincinnati State) is a member of the Southwest Ohio Council for Higher Education (SOCHE) which allows for collaboration with both public and private member institutions for course consortium.</p>	
<p>Implementing strategies to address workforce education needs of the region</p>	<p>Miami partners with regional Career Technical and Career Centers to provide courses and programs that offer critical workforce training. To facilitate this transition, Miami has submitted and received approval for hundreds of Transfer Assurance Guides and is now 100% compliant for all Career Technical Assurance Guides for which we are eligible. Miami is also actively participating in the One-Year Option and Transfer to Degree Guaranteed Pathways – all designed to obtain technical credits without unnecessary duplication or institutional barriers.</p> <p>Miami has also developed bilateral agreements that are designed to meet in-demand occupations in Ohio. For example, Miami has partnered with SSCC to create agreements related to engineering technology and commerce. It has partnered with UC to create agreements related to criminal justice, psychology and nursing. It has also partnered with Cincinnati State on agreements related to engineering technology (electromechanical and mechanical), computer programming, criminal justice, and commerce. With respect to electromechanical engineering, Miami delivers the second two years of the EMET and Electrical degrees on Cincinnati State’s campus via Live Video.</p> <p>The Miami associate provost serves on the Ohio Articulation & Transfer Advisory Board of ODHE.</p>	
<p>Sharing resources to align educational pathways and to increase access within the region</p>	<p>In 2018, Miami University’s associate provost partnered with leaders from University of Cincinnati, Cincinnati State Technical & Community College, Southern State Community College, and Sinclair Community College to create a grant</p>	

	<p>proposal for the “Tackling Transfer” Initiative through the Ohio Department of Higher Education. The proposal to develop two all-day summits on promoting transfer student success, was approved, and two summit events (one at UC Clifton and the other at SSCC, Mt Orab) were held in February and April of 2018 with over 50 participants from over ten campuses at each. See website for a summary of the events and outcomes. Two new bilateral agreements with Miami and UC for English Studies and University Honors resulted from these summits. Planning is already underway to hold a third summit at Sinclair Community College (Courseview Campus) in October 2018 which will focus on forging STEM-related partnerships.</p> <p>Miami partners with UC as a participant in the Southwest Regional Depository which is one of five regional depositories in Ohio that houses library materials of IUC members in lieu of new library space.</p> <p>Miami (along with the other Southwest Ohio institutions) has OhioLINK which negotiates the purchase and enables the sharing of library materials. It also joined the Open Textbook Network in 2017, and one Miami librarian serves as system leader. System leaders coordinate OhioLINK OTN awareness and advocacy initiatives regarding open educational resources and open textbooks on their campuses and throughout the state. As part of the consortium-wide membership, OhioLINK sends system leaders to OTN’s Summer Institute which is an intensive, five-day training program. OhioLINK system leaders coordinate full-day “train the trainer” workshops offered on their campuses and throughout all SW Ohio region and the state.</p>	
<p>Reducing operational and administrative costs to provide more learning opportunities and collaboration in the region</p>	<p>Miami participates in a courier delivery service to provide requested library material to public libraries, colleges, universities and the State Library of Ohio.</p> <p>Miami’s Institute for Learning in Retirement engages in joint programming with the Osher Lifelong Learning</p>	

	<p>Institute at the University of Cincinnati, in the West Chester area, to provide non-credit, enrichment programming for people age 50 and older.</p> <p>Discussions are beginning with OH-AHEAD about forming partnerships and coalitions among institutions in the southwest Ohio region, particularly in the areas of alternative format production and captioning.</p> <p>Representatives from all four institutions continue to meet with the goal of finding additional common services and efficiencies in Southwest Ohio.</p>	
<p>Enhancing career counseling and experiential learning opportunities for students</p>	<p>Miami Regionals (along with Cincinnati State, University of Cincinnati, and Southern State) is actively engaged in workforce education and pathway development through involvement with the Tech Prep Southwest Regional Center. Tech Prep staff members are located at Miami University Hamilton (along with Southern State Community College and Cincinnati State). Tech Prep also shares staff with a regional workforce development initiative, Partners for a Competitive Workforce, to further link the educational initiative with employers. College staff link their respective institutions to collaborative regional activities that address statewide goals focused on workforce education, pathway development and technical services. The center serves 16 secondary partner districts including three of Ohio's largest Career Technical Planning Districts (CTPDs); four urban districts; six rural CTPDs and one Compact.</p> <p>For the last four years, Miami Regionals, Cincinnati State, and UC have collaborated to offer annual conferences targeted to high school juniors and seniors interested in engineering careers. More than 1000 students have been impacted by shared expertise, business engagement and access to regional resources.</p> <p>Miami's Center for Career Exploration & Success recently partnered with REDI Cincinnati to share best practices and procedures relating to internships in the Cincinnati area.</p>	

	<p>Miami and UC have collaborated on several Ohio Means Internships & Co-Ops grants in the past five years to increase the number of internships and co-ops in the Southwest Ohio Region.</p>	
<p>Expanding alternative education delivery models such as competency-based and project-based learning</p>	<p>Although Miami does not offer formal competency based degree programs (due to Higher Learning Commission accreditation requirements), it does provide prior learning assessment and courses and programs with that have self-paced features or are offered in accelerated or flexible delivery modes.</p> <p>Miami has fully complied with the College Level Examination Program (CLEP) Initiative spearheaded by the ODHE which awards students specific and similar course credit when they reach a standard minimum score for each examination.</p> <p>Drawing from other Ohio public institutions (Columbus State, Kent State), Miami piloted a Math Emporium competency-based course for underprepared, incoming students. Success data, however, indicated that this approach was not effective. As a result, Miami applied and was accepted for participation in the two-year ODHE “Strong Start to Finish” initiative which will aim to develop co-requisite programs for gateway courses, improve placement processes, and enhance advisement of students who are academically underprepared for college. The Miami planning group is focusing efforts on gateway Math and English courses.</p> <p>In spring 2018, Miami launched a Prior Learning Assessment Portfolio approach to awarding credit for general education requirements. With guidance from the Office of Liberal Education, students with significant work or military experience may develop a portfolio (including reflections on how the learning relates to learning outcomes) in the Canvas Learning Management system which is then reviewed by Miami’s Liberal Education</p>	

	Council (general education committee) for possible general education credit.	
Implementing strategies to increase collaboration and pathways with information technology centers, adult basic and literacy education programs and school districts in your region	<p>Miami participates in the ODHE ASPIRE Program to provide free services for people in need of acquiring skills in post-secondary education and training, and employment. In 2017, Miami students conducted a research project that resulted in rebranding the program (formerly entitled ABLE). Miami University Regionals offers ASPIRE courses at Adult Education Opportunity Centers and other sites throughout the region.</p> <p>Miami also participates actively in the statewide College Credit Plus program that offers qualified students grades seven through 12 the opportunity to take college courses while earning credit for both high school and college at little or no cost to students. Over 700 students annually participate in Miami CCP courses.</p> <p>In 2017, Miami signed a partnership agreement with Cincinnati Public Schools to identify students early to introduce them to college-readiness activities and provide opportunities for mentorship and engagement on Miami's campus. Selected students receive the full cost of attendance (minus the family's estimated family contribution and an expected student self-help of \$3500) through a variety of aid sources and will receive faculty mentoring, specialized academic advising, structured curriculum, intensive academic summer programs, transition support services, career development and specialized CPS-specific recruitment programs.</p> <p>For fall 2018, five Cincinnati Scholars will be enrolling on the Oxford campus. Beginning in fall 2018, the partnership with CPS will expand to include both the M.O.R.E. and Girls to Women programs in an effort to broaden the diversity of the cohort and to increase the number of students with whom Miami regularly engages. For fall 2019, there is a goal of enrolling 15 Cincinnati Scholars.</p>	
Enhancing the sharing of resources between institutions to improve and	Miami and UC faculty have collaborated to secure seven external research grants in the past five years. Grants have	

<p>expand the capacity and capability for research and development</p>	<p>focused on such diverse topics as increasing the participation of women in STEM fields, understanding bipolar disorder, investigating racial bias, evaluating STEM in the play space, and advanced turbine cooling. In addition, Miami, UC, and Cincinnati State have collaborated on three regional submissions to the ODHE RAPIDS grant program, providing approximately \$3M in equipment used for education, research, and workforce training in SW Ohio.</p>	
<p>Identifying and implementing the best use of university regional campuses</p>	<p>To provide a seamless transition of students who relocate from one campus to another, Miami University (Oxford) and Miami University Regionals share the same general education requirements, academic policies, curricular approval processes, and are governed by a single University Senate and Board of Trustees. In addition, many administrative and instructional staff work at multiple campuses and collaborate on research projects as well as community and University service projects.</p> <p>Miami, UC and Cincinnati State are all members of the Greater Cincinnati Collegiate Connection (GC3) which enables students from all three (and other GC3) institutions to cross-register for courses and facilitates administrators, faculty and staff from all three as well as other GC3 member institutions to engage in joint professional development programming.</p> <p>Through the College Credit Plus program, all four institutions allow trained high school teachers to deliver college-level courses for their students so that they can receive both college and high school credit.</p> <p>The Pathways Program enables students who are not initially admitted to the Oxford campus to begin study on the Regional campuses. Students are co-enrolled in courses and receive specialized advising and support. If they meet all requirements, they are admitted to the Oxford campus in the spring semester of their first year. 23 students confirmed for the Pathways Program for the Fall 2018 (13 Hamilton and 10 Middletown). Planning is underway to</p>	

	broaden the program's scope to enable Ohio as well as students from across the US to begin classes on the Regional campuses while living on the Oxford campus.	
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Template

Section II: Academic Practices

Recommendation 6 | Textbook Affordability

6A Negotiate cost: Professional negotiators must be assigned to help faculty obtain the best deals for students on textbooks and instructional materials, starting with high-volume, high-cost courses. Faculty must consider both cost and quality in the selection of course materials.

Please identify your institution's implementation status:

Progress made on implementing recommendation in FY18

Please briefly explain your implementation status.

In 2017, Miami University selected a provider of online textbooks and course materials, e-Campus, which signaled a shift away from the traditional brick and mortar bookstore approach toward a virtual approach. The e-Campus bookstore not only lowers the overhead cost of running a physical bookstore, but it provides faculty, at a glance, multiple textbook options so that they can ensure that they are selecting high quality, affordable and accessible course materials for their students. Because the virtual bookstore is linked to the SIS system, students can easily purchase new, used, rental and digital textbooks instantly upon registering for particular courses. Miami faculty are provided training (via workshops and online videos) on how to use the software platform as well as how to select appropriate and cost-effective textbooks.

Miami is a member of OhioLink (the statewide library consortium) which has secured a wholesale pricing agreement on e-textbooks with four major textbook publishers: John Wiley & Sons, Inc., McGraw-Hill, Pearson and Macmillan Learning. These agreements will reduce the wholesale price of e-textbooks by up to 80 percent and courseware by up to 55 percent. The idea is that these texts would be available via the appropriate Canvas course site, and students and instructors could decide to use or to opt out of using these e-texts. During the 2018-2019 academic year, the Affordable & Open Educational Resources Committee at Miami will be developing a plan with the goal of implementing this opportunity by fall 2019

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

The cost of text has been reduced by over \$1 million.

If you have not implemented this recommendation to date, please explain.

6B Standardize materials: Colleges and universities must encourage departments to choose common materials, including digital elements, for courses that serve a large enrollment of students. Please complete the section that aligns with the implementation status of your college/university.

Please identify your institution's implementation status:

Progress made on implementing recommendation in FY18

Please briefly explain your implementation status.

Appointed by the provost and co-chaired by an associate provost and librarian with faculty representation from all academic divisions, the Open & Affordable Educational Resources Committee has developed and is implementing a strategic plan to advance affordable and free educational resources among Miami's students. The committee has crafted several programs and set of resources designed to target faculty teaching courses with the highest cost textbooks and largest enrollments. Successful applicants receive incentives for adopting and/or adapting OERs, creating their own online textbooks, and converting existing costly course packets to lower or no cost alternatives. Faculty in these programs receive: a robust site of resources and tips on Miami's Learning Management System (Canvas), consultation from the Scholarly Communications Coordinator and from specialist librarians, websites with guidance on selecting appropriate OERs, two-hour training orientation workshops, support of assessment of OER use, and professional development funding (with the amount varying by the faculty's level of engagement with the program). Although this effort has only been in existence since fall 2017, the preliminary results are promising. See the section, "Reducing Textbook Costs for Students," for more information.

In addition, when faculty submit their textbook selections in compliance with the Higher Education Opportunity Act (HEOA), it allows our staff and e-Campus vendor to suggest standardized materials, more affordable editions, or alternative resources. In the past two years, faculty on all campuses increased their compliance by as much as 52%.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

See 6A and 6C.

If you have not implemented this recommendation to date, please explain.

6C Develop digital capabilities: Colleges and universities must be part of a consortium to develop digital tools and materials, including open educational resources, that provide students with high-quality, low-cost materials. Please complete the section that aligns with the implementation status of your college/university.

Please identify your institution's implementation status:

Progress made on implementing recommendation in FY18

Please briefly explain your implementation status.

OhioLINK joined the Open Textbook Network in 2017 and selected seven member librarians, faculty and staff to become the OhioLINK Open Textbook Network (OTN) System Leaders. A Miami librarian was chosen to serve on the team. As system leader, she coordinates OhioLINK OTN awareness and advocacy initiatives regarding open educational resources and open textbooks on Miami's campuses and throughout the state. As part of the consortium-wide membership, OhioLINK sent system leaders to OTN's Summer Institute (OTNSI) which is an intensive, five-day training program at the University of Minnesota. The OhioLINK system leaders, in conjunction with OTN staff, coordinate full-day "train the trainer" workshops. These workshops focus on developing campus leaders and aid in their efforts to reduce textbook costs for students. The Miami representative also attended the OhioLINK-sponsored OER summit in 2017. Members from around the state discussed their OER activities and initiatives and attendees participated in some hands on activities exploring OER implementation.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

To date, the use of open materials has in \$111,556 in savings for students.

If you have not implemented this recommendation to date, please explain.

Reducing Textbook Costs for Students

Ohio Revised Code Section 3333.951(C) requires Ohio’s public colleges and universities to report their efforts toward reducing textbook costs for students. Please discuss all initiatives implemented, including those related to 6A, 6B, and 6C above, that ensure students have access to affordable textbooks.

Initiative	Explanation of Initiative	Cost Savings to Students
OER Explore	Based on a model developed by the Ohio Textbook Network, the OER Explore workshop is intended to help faculty better understand textbook affordability issues and possible solutions for addressing them. During this two-hour workshop, faculty learn about how the cost of textbooks can negatively impact student learning, are introduced to the concept of OER, and participate in hands-on activities using OER textbooks. The workshop concludes with an overview of Miami University’s OER and Affordable Learning grant programs. After faculty write and publish a review of an OER textbook in their field, they receive a modest stipend. Since its inception in 2016, 86 faculty members have completed the OER Explore program. Eight have gone on to participate in one of the other programs listed here where they have adopted a more affordable or open educational resources in their teaching.	
OER Adopt	<p>This selective grant program supports faculty in replacing their commercial textbook with an OER. Faculty submit an application; those selected must complete a three-phase program and receive professional development funds when each phase is successfully completed.</p> <ul style="list-style-type: none"> o Phase one: The faculty member teaches the course using a commercial textbook and required learning materials. Assessment is performed to gauge the impact of the traditional textbooks and other required materials on student learning and course outcomes. In collaboration with their Subject Librarian and the Coordinator of Scholarly Communications, the faculty member selects and prepares OER materials to be used in teaching future sections of the course. o Phase two: The faculty member teaches the course using the selected OER materials. Assessment is performed to gauge the impact of the OER textbook and 	\$39,208

	<p>other newly selected learning materials on student learning and course outcomes.</p> <ul style="list-style-type: none"> o Phase three: The faculty member makes necessary revisions to the OER text and learning materials based on previous assessment. The faculty member uploads any OER created or modified in the course to the OER Collection in Miami's institutional repository, the Scholarly Commons. The faculty member writes a report evaluating the impact of the OER on the course outcomes and student learning, and on student and faculty satisfaction as well as plans for future use. The final report is shared with the University Committee for Affordable and Open Educational Resources as well as colleagues within their Department or School and peers in the profession. <p>Twelve faculty members have been selected and are currently participating in this program which has led to over \$39,000 in cost savings to students to date and an estimated future cost savings of over \$150,000.</p>	
OER Create	<p>This grant program supports faculty who wish to write and publish their own OER textbook and learning materials. As an incentive to do so, Miami University provides faculty professional development funds as well guidance and support for publishing the OER (e.g., editorial services, layout, and electronic publishing). To accomplish this, the University agreed to be an inaugural partner (with nine other higher education institutions) in the OTN Publishing Cooperative. OER published as part of this grant program will be published to the OER Collection in Miami's institutional repository, the Scholarly Commons, and in the Open Textbook Library (OTL). This program will be piloted in fall 2018 in the hopes of launching the program on a larger scale by fall 2019.</p>	Started Fall 2018
Course Pack Consultation Service (CPCS)	<p>CPCS allows faculty to reduce or eliminate the costs associated with course packs. To be eligible for this program, faculty must currently be using a readings-based course pack (e.g., one that contains articles and</p>	\$6,439

	<p>book chapters) that students are required to purchase and must agree to use the University's Learning Management System (LMS) for making readings accessible to students in subsequent semesters. The Coordinator of Scholarly Communications reviews the list of materials included in the course pack to determine which readings can be made freely available to students through the library's purchased electronic collections (eBooks and electronic articles) or through other freely and legally accessible online outlets (e.g., linking to archival materials on state historical society website). Links to these works are posted on to a page in the instructor's LMS course site for students to access. Faculty participating in the CSPS are awarded modest professional development funds after the consultation.</p>	
Alternate Textbook Service	<p>The Alternate Textbook Service, or ATS, will launch in the summer of 2018 and will involve a collaboration between the course instructor, Library liaison, and the Coordinator of Scholarly Communications to replace the instructor's commercial textbook with an "alternate" textbook comprised of resources pulled from the library's electronic collections, from legal online resources, and reading selections made available in compliance with US copyright law. Not only will this alternate textbook be made freely available to students, but this collaboration between librarian and faculty will also promote the use of library resources and draw attention to the diversity of our collections. Faculty participating in this grant program are provided with modest professional development funds. This new program is currently being piloted with one faculty member teaching a graduate course. The cost savings per student is \$326.</p>	Started Fall 2018
Revision of Campus Textbook Selection Policies	<p>The University's textbook policy was revised to include a paragraph that explicitly encourages faculty consider textbook affordability when selecting a textbook. Additionally, the University's policy that requires multiple levels of approval for faculty wishing to teach courses that use a textbook they have authored was altered to</p>	

	eliminate any approvals for faculty teaching an OER which they authored.	
Revision of Annual Reports and Promotion Dossiers	To ensure that Department Chairs, Deans and Personnel Committees recognize the efforts of faculty to incorporate affordable texts into their courses, the committee created a proposal for revising the annual report and dossier format to include a specific mention of open and affordable educational resources under the category relating to innovative teaching.	
Affordable Education Leader Award	Modeled after a similar award at Texas A&M University, Miami University's OER Committee partnered with the leadership of Miami's student government to develop an annual award to be given to a continuing faculty member on any campus who demonstrates compelling and significant impact in areas related to affordable and open educational resources.	
Outsourced Text Book Sales	<p>This shift was implemented for summer 2017 and is being more fully implemented during the fall 2017 semester. Students estimated cost savings for textbooks is 15-20%. For the summer term of 2017 the savings for texts were on the higher end of our estimates (20.17%). Based on this performance expected savings for FY18 could be up to \$1.8 million. Actual sales savings for FY18 were 1,038,487. (See attached spreadsheet for calculation). In FY19, continued monitoring of vendor performance to focus on percent per unit savings to the student, by reviewing textbook by category (new, used, rental, marketplace, ebook). Encouraging early adoption facilitates leveraging buying power for the vendor to pass along savings to the students.</p> <p>There is an additional buying option to reduce cost to students referred to as Marketplace. This is comparative to Amazon private sellers that resale their used textbooks on their own. ECampus has committed to bundling these books with their larger orders from eCampus to ease customer stress and staff completing duplicative work in the moment. Course Adoptions by faculty were matched to previous years in the Bookstore. More efforts are</p>	\$1,038,487

	<p>proactively being taken by eCampus to ensure this number continues to rise.</p> <p>Rates Fall 2018: All Campuses – 79% Adopted Oxford – 79% Adopted Middletown – 85% Adopted Hamilton – 85% Adopted Luxembourg – 74% Adopted VOA/West Chester – 45% Adopted</p>	
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Textbook Cost Study

Ohio Revised Code Section 3333.951(D) requires Ohio's public colleges and universities to conduct a study to determine the current cost of textbooks for students enrolled in the institution and submit the study to the Chancellor by a date prescribed by the Chancellor. Please share the results of your study below.

In collaboration with the IUC, Miami is participating in the Textbook Cost Study. Miami has identified our top twelve undergraduate majors, consisting of 45.33% of the student population, and has mapped the typical course path to completion. With the use of the e-campus virtual bookstore textbook pricing data, Miami is currently calculating the four-year cost of required text purchases for each major. Through the various increased efforts, Miami students will recognize real cost savings on their textbook purchases. In addition, with almost 50% of the students taking these twelve majors, Miami is currently undertaking a more thorough review of the required cost textbooks and the students options for new, used, or rentals. Miami's Affordable and Open Educational Resources Committee will be consulting with the departments that house these majors to assist them in reducing or eliminating textbook costs. The average new required textbook costs \$96. The average used required textbook costs \$42. The average rental required textbook costs \$17. Separate data on eBooks are not available at this time.

E-Campus virtual bookstore textbook pricing data from fall 2019 was used to determine the average cost of new, used and rented textbooks. These prices are the average across all three of our main and regional campuses and includes required, as well as, suggested book selections.

Category	Amount
Average cost for textbooks that are new	\$96
Average cost for textbooks that are used	\$42
Average cost for rental textbooks	\$17
Average cost for eBook	

Textbook Selection Policy Ohio Revised Code Section 3345.025 requires the board of trustees of each state institution of higher education to adopt a textbook selection policy for faculty to use when choosing and assigning textbooks and other instructional materials. Has your college's/university's board of trustees adopted a textbook selection policy? Yes

Miami revised its policy in spring 2018. It was approved by the Board of Trustees in June 2018, and the policy is now in effect. See revised policy, MUPIM 10.4.

Recommendation 7 | Time to Degree

7A Education campaign: Develop an education campaign on course loads needed to graduate.

Note: This exercise is not necessary to conduct annually.

Please identify your institution's implementation status.

No change from prior year's report

Please briefly explain your implementation status.

Miami students not only can easily access degree path information, but they are also educated on how to make purposeful choices about their academic plans. Access to degree paths is made available through: (1) the student's Degree Audit Report which a student can run at any time for his or her chosen major as well as for any other major he or she may be considering; (2) the General Bulletin, the Guidebook for New Students and advising guides for each major (the latter are available in divisional advising offices) which provide clear listings of degree program requirements and term-by-term suggested schedules; and (3) term-by-term academic plans which are created as part of the UNV 101 course in consultation with the student's academic advisor.

Academic advisors also are trained in and have access to the EAB Student Success Collaborative which not only displays suggested term-by-term schedules for each student's degree program but also indicates when and how each student might have moved off track so that immediate advising interventions can be made. This fall, the University is also requiring departments to display transfer advising plans for all of Miami's academic partnership agreements, using a common template for ease of use.

Plans are underway to implement U.Achieve Planner, a web application technology designed to allow students and advisors to explore multiple degree paths and identify a four-year, term-by-term schedule for success. This system also enables chairs and deans to plan course schedules well in advance and ensure the appropriate number and array of courses are available to meet student needs.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

Miami University's advising has resulted in \$2.2 million in savings for students.

If you have not implemented this recommendation to date, please explain.

7B Graduation incentive: Establish financial and graduation incentives to encourage full-time students to take at least 15 credits per semester.

Note: Once fully implemented, this exercise is not necessary to conduct annually.

Please identify your institution's implementation status.

No change from prior year's report

Please briefly explain your implementation status.

Miami University has implemented the Miami Tuition Promise. Under the Miami Tuition Promise undergraduate students' tuition and fees are fixed over four years. Additionally, Miami University does not charge additional tuition for enrollment in more than 12 credit hours per semester. Miami freshmen take an average of 15.7 credit hours per term already, negating the need for a financial incentive.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

If you have not implemented this recommendation to date, please explain.

Temporary

7C Standardize credits for degree: Streamline graduation requirements so that most bachelor's degree programs can be completed within 126 credit hours or less, and associate degree programs can be completed within 65 credit hours or less. Exceptions are allowed for accreditation requirements.

Please identify the share of programs at your institution that require more than 126 credit hours to earn a baccalaureate or more than 65 credit hours to earn an associate degree.

Three years ago, Miami revised its requirements for graduating with a bachelor's degree to align with ODHE policy, and all departments and programs have worked diligently to revise their curricular requirements to ensure that whenever possible students can graduate with 126 credits. The only exceptions are programs that have professional accreditation standards. The programs listed below modestly exceed the 126 credit threshold in order to deliver a high quality curriculum to its students and comply with the standards of their professional accrediting bodies (which are also listed below):

Creative Arts Degree Programs

B.S. Art with Multi-age Visual Arts Licensure [National Association of Schools of Art & Design (NASA); Council for the Accreditation of Education Preparation (CAEP)]

BFA, Studio Art (National Association of Schools of Art & Design - NASAD)

B.A, Architecture (NASA)

B of Music in Music Education (National Association of Schools of Music - NASM; CAEP)

B of Music in Music Performance (NASM)

Teacher Education Program

B.S. Education, Science Education (Earth Science Concentration) (CAEP)

Engineering and Computing Programs

BS Engineering in Bioengineering (Engineering Accrediting Commission of ABET)

BS Engineering in Chemical Engineering (ABET)

BS Engineering in Computer Engineering (ABET)

BS Engineering in Electrical Engineering (ABET)

BS Engineering in Engineering Management (ABET)

BS Engineering in Manufacturing Engineering (ABET)

BS Engineering in Mechanical Engineering (ABET)

Please explain the major reasons specific academic program may require more than 126 or 65 credit hours to earn the respective degree.

Compliance with the standards of their professional accrediting bodies.

7D Data-driven advising: Enhance academic advising services so that students benefit from both high-impact, personalized consultations and data systems that proactively identify risk factors that hinder student success.

Please identify your institution's implementation status:

Progress made on implementing recommendation in FY18

Please briefly explain your implementation status.

Beginning in 2015, Miami shifted its academic advising model to focus on clear outcomes, a shared university-wide advising approach, required comprehensive (six part) training for all advisors, four levels of advisor recognition, and ongoing assessment of advising. In addition, the model features the use of the EAB Student Success Collaborative which provides advisors up-to-the-minute and predictive data about each advisee so that the advisor can provide customized intervention and communicate with advisees easily and regularly. Advisors are required to record summaries of each advising session in order to track each student's progress and build upon previous advice given. The academic advising effort is led by an associate provost with the guidance of a university wide committee. Each year, the committee produces an annual assessment report which summarizes findings from the multiple measures used to assess advising at Miami (e.g., national surveys, retention and graduation rates, advisor training completion rates, surveys and focus groups) and offers multiple recommendations for future improvement.

New strategies implemented in the past year include:

- **Nudge Campaigns:** In fall 2017, three different nudge campaigns were initiated—all targeted at students with moderate or low persistence prediction scores identified in Civitas and labeled as coming from the University's president. Each included a specific call to action and directed students to contact the Dean of Students or the Student Success Center (depending on the student's record). A total of 903 students were contacted through the fall campaign. In spring 2018, two different nudge campaigns were implemented—the first went to 787 students who were first-generation and/or Pell eligible students. These messages (sent from the student's academic dean) directed the student to contact the appropriate academic advisor. The second nudge went to 290 students who were identified by the Civitas Platform as having very low, low, or moderate persistence scores and directed to contact the Student Success Center for assistance.
- **Outreach Campaign:** At the end of fall 2017, the Student Success Center contacted 444 students who were identified by Civitas as having very low, low, or moderate persistence scores. Those students were divided among the Student Success Center staff based on a variety of factors and then were invited to participate in a series of meetings with a staff member in the spring semester.

Beginning in 2018, Miami will pilot a centralized university-wide registration override system that allows students to add themselves to a "waitlist" for oversubscribed courses. The system provides all pertinent student and curricular information to the advisor and faculty who is then able to assess the overall demand for the course. This will provide timely and actionable information during the registration process that will translate into students with the greatest need as it pertains to "on-time" graduation access to the seats in the class and assist with appropriate and efficient staffing models for high demand courses.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

Data driven advising has resulted in \$1.2 million in savings for students.

If you have not implemented this recommendation to date, please explain.

Template

7E Summer programs: Evaluate utilization rates for summer session and consider opportunities to increase productive activity.

Please identify your institution's implementation status.

Progress made on implementing recommendation in FY18

Please briefly explain your implementation status.

In 2017, Miami created guidelines for accelerated or compressed delivery of courses to ensure that summer and winter term course offerings are of high quality and follow federal and regional (Higher Learning Commission) academic and credit hour regulations. Additionally, each year, summer and winter term course evaluations and enrollments are analyzed by academic deans, and course schedules are adjusted accordingly. Low or no enrollment courses are discontinued, and sections of courses with smaller enrollments are combined.

Under the leadership of its e-learning offices, Miami has also engaged in careful planning of online and hybrid course offerings in the summer and winter to aid students' progress toward degree, and in 2016, Miami instituted a 20% reduction in tuition for online courses taken during the summer and winter terms by resident undergraduate students.

Miami is also implementing a multi-term scheduling approach so that students and advisors may plan more purposefully for winter and summer terms as well as the fall and spring semesters.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

Discounted summer and winter online courses have resulted in \$2.1 million in savings.

If you have not implemented this recommendation to date, please explain.

7F Pathway agreements: Develop agreements that create seamless pathways for students who begin their educations at community or technical colleges and complete them at universities.

Please provide the details of the work completed related to this area in FY18 only.

At the end of FY18, how many articulation pathway agreements does your college/university have in place? How many are 2+2? How many are 3+1? Is the number of pathways available for students increasing?

Over 240 Miami courses are matched with Transfer Assurance Guides or Career-Technical Assurance Guides to ensure that transfer students within the state of Ohio are making timely degree progress, and in the past two years, Miami revised its CLEP, Advanced Placement and International Baccalaureate course alignments to increase opportunities for students to gain specific college course credit by 15%. In the past five years and in keeping with Miami's 2020 Strategic Plan which calls for increasing partnerships, Miami faculty and staff have also forged dozens of academic articulation agreements and MOUs. A list of domestic and international agreements is available via a public website. This fall, the University is also requiring departments to display transfer advising plans (which display term-by-term suggested pathways) for all of Miami's academic partnership agreements to promote greater transparency and accessibility. These efforts are supported by an Academic Partnerships Committee (which is chaired by an associate provost) as well as an online partnership agreement workflow platform (which enables easy storage and tracking of agreements). The Partnerships Committee also works with departments to encourage new and sustainable partnerships with two- and four-year institutions. As a result of these efforts, the number of academic partnerships has increased by 75% in the past three years.

Please discuss efficiencies gained by implementing this recommendation. Please discuss how students have benefited, in terms of both cost and quality of their education.

These efforts are supported by an Academic Partnerships Committee (which is chaired by an associate provost) as well as an online partnership agreement workflow platform (which enables easy storage and tracking of agreements). The Partnerships Committee also works with departments to encourage new and sustainable partnerships with two- and four-year institutions. As a result of these efforts, the number of academic partnerships has increased by 75% in the past three years.

7G Competency-based education: Consider developing or expanding programs that measure student success based on demonstrated competencies instead of through the amount of time students spend studying a subject.

Please provide the details of work completed related to this area in FY18 only.

Although Miami does not have competency-based degree programs (due to Higher Learning Commission accreditation standards), Miami sent its director of general education to a workshop hosted by the Council for Adult and Experiential Education (CAEL) to gain knowledge about competency-based education. This development opportunity resulted in the development of a portfolio process for evaluating the competencies gained through the training and experiences of our active military and veteran students. This portfolio opportunity was formally launched in fall 2018, and two students have already received general education course credit for the competencies gained through their military experiences and training.

Please discuss efficiencies gained by implementing this recommendation. Please discuss how students have benefited, in terms of both cost and the quality of their education. In particular, how many students are estimated to be served by the college's/university's competency-based education programs? Has your college/university seen improvements in completion rates? Have students seen cost savings?

Recommendation 8 | Course and Program Evaluation

This recommendation is not applicable this year. Per O.R.C 3345.35, the colleges and universities need to address this recommendation every five years. The next applicable date is FY22.

What steps, if any, did your college/university take in FY18 to share courses/programs with partnering colleges/universities?

If you implemented course/program sharing, please discuss efficiencies gained, including cumulative efficiencies to date.

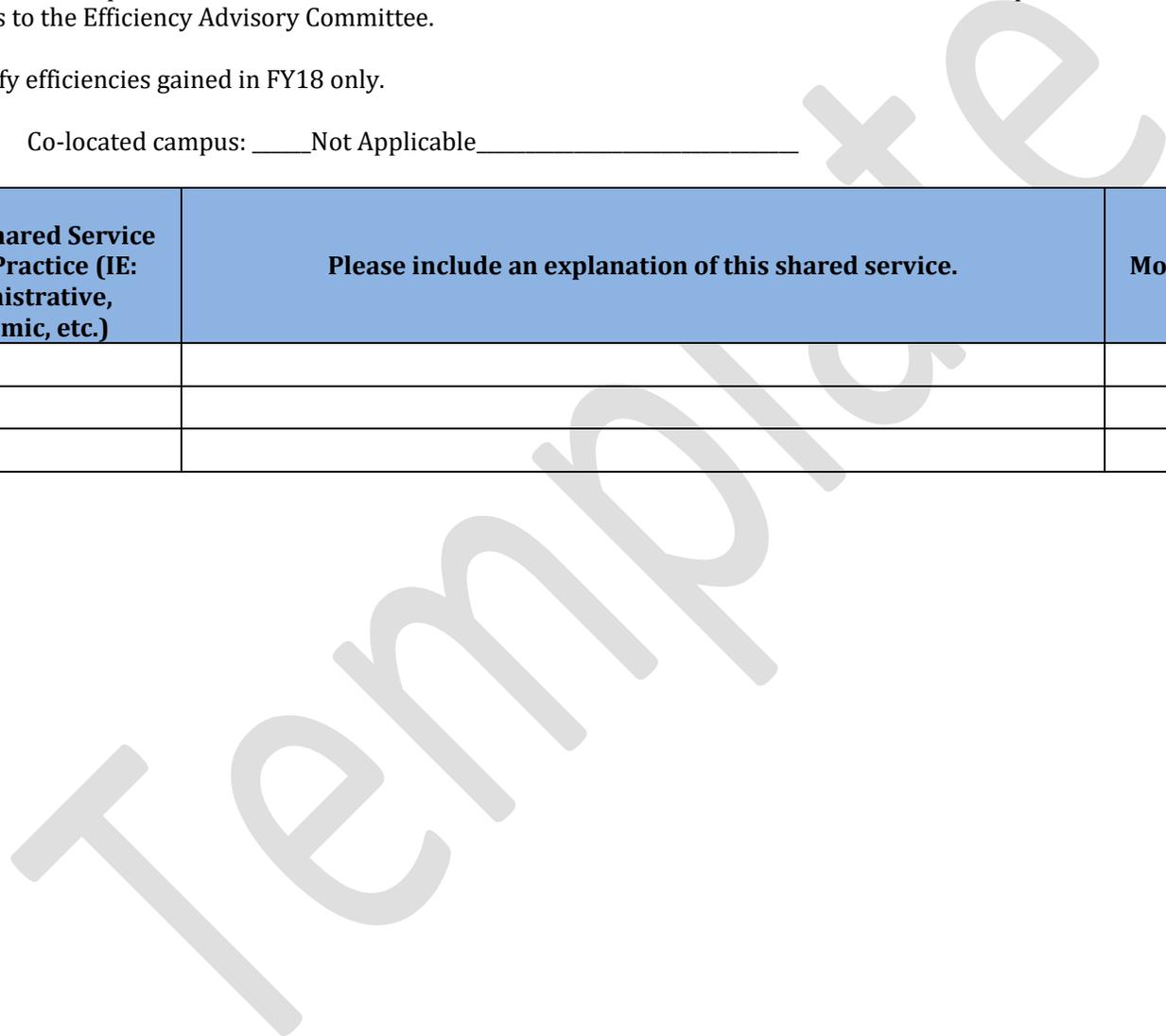
Recommendation 9 | Co-located Campuses

Ohio Revised Code Section 3333.951 requires Ohio’s co-located colleges/universities to annually review best practices and shared services in order to improve academic and other services and reduce costs for students. Co-located campuses are then required to report their findings to the Efficiency Advisory Committee.

Please identify efficiencies gained in FY18 only.

Co-located campus: ____Not Applicable_____

Type of Shared Service or Best Practice (IE: Administrative, Academic, etc.)	Please include an explanation of this shared service.	Monetary Impact from Shared Service



Section III: Policy Reforms

Recommendation 10 | Policy Reforms

10A Financial Advising: Provide financial advising and training to students.

Please identify your institution's implementation status:

No change from prior year's report

Please briefly explain your implementation status.

Beginning in Fall 2016, Miami University implemented a financial advising program for students centered around student loan borrowing and debt. Students can view information on their student loan debt via a personalized website (MiamiOH.edu/KnowBeforeYouOwe), to obtain information on expected monthly payments, total costs for the loans, repayment plans, and budgeting tools. In addition, the site allows students to research median earnings for their chosen profession in order to gauge loans costs to anticipated income. We combined this with intrusive counseling strategies for students that are borrowing higher amounts. These strategies are a continuation of the strategies that we first implemented in FY17.

In FY18 we saw a \$3 million decrease in overall student loan borrowing, as compared to FY17, bringing the total loan reduction to about \$4.2 million since our advising program inception in FY16. In addition, the average student loan debt at graduation dropped for the second year in a row, with a decrease of \$522 in the average over the prior year.

If the college/university previously implemented this recommendation and saw efficiencies gained in FY18, please identify and include cumulative savings.

Miami University's financial advising has resulted in \$4.2 million decrease in student borrowing.

If you have not implemented this recommendation to date, please explain.

10B Obstacles: The Ohio Department of Higher Education and/or state legislature should seek to remove any obstacles in policy, rule, or statute that inhibit the efficiencies envisioned in these recommendations.

What legislative obstacles or policy roadblocks, if any, inhibit efficiencies and affordability practices at the college/university?

Construction Reform

Please discuss efficiencies gained in FY18 from the 2012 Construction Reform legislation.

Construction reform has been a substantial benefit to Miami University construction projects. Miami has been able to execute over \$756,800,000 since 2013 with zero litigation claims, reduced contingency expenditures, and increased quality (measurably fewer punch list and deficient work). The work has been performed with no increase in University staff to support the increase in capital projects executed. These outcomes have allowed Miami University to purchase more work directly benefiting students. Select outcomes and efficiency gains include:

- Average annual construction spending per capital project manager before construction reform was \$6,075,625. Average annual construction spending per capital project manager after construction reform is \$24,818,000. This represents a 3.6-time improvement in staff productivity (improved another 1.1 times from last fiscal year). Construction reform has resulted in an estimated 80% reduction in monthly paperwork processing time.
- Reduction in contingency funds allocated for work performed after construction reform.
 - o Contingency allocation before construction reform for renovation work - 15%
 - o Contingency allocation after construction reform for renovation work - 10%
 - o Contingency allocation before construction reform for new work - 7%
 - o Contingency allocation after construction reform for new work - 5%.
 - o Since construction reform, this equates to more than \$48,000,000 in avoided contingency allocation that was either saved or applied to more productive increase in scope of work (an additional \$7M since FY17 report).
- Overall reduction in number of change orders and value of change orders as a percentage of construction cost
- Article 8 Claims have been reduced to 0.
- Projects are consistently hitting key interim milestone and completion dates, with many projects running ahead of schedule. During this reporting period, the University managed over \$140 million in residence hall work that was completed well ahead of schedule
- Contracts for multiple building projects under one CM allows better buying power and lower first costs.
- Improved overall construction quality since construction reform. Quality outcomes due to best value procurement, with selections based on qualifications as well as price. Best Value Selection allows relationships with contractor to be built on past successes which leads to greater efficiency and eliminates learning curve with University standards, best practice, and working with staff & faculty.
- Shorter time to bring projects to market when the construction manager is hired early in design and bid packages can be sent out prior to full completion of drawings.
- Negotiating a guaranteed maximum price ahead of bidding allows owners to reduce risk and plan project budgets with a higher degree of accuracy.
- Smaller, local subcontractors are encouraged to pre-qualify with the construction manager prior to bidding to promote diversity and inclusion
- CMs substantially improved EDGE participation percentages on projects with their ability to commit personnel to community engagement and support of smaller start-up sub-contractors

Additional Practices

Are there additional efficiency practices your college/university implemented in FY18 to ensure students have access to an affordable and quality education? Please identify.

Template

Section IV: Master Recommendation #1 - Students Must Benefit

For chart #1, please provide the cost savings/avoidance in FY18 ONLY for the three specified categories. For chart #2, of the FY18 cost savings/avoidance to your respective college/university, please provide how much of that cost avoidance/savings was redeployed or invested into initiatives that benefit students and/or promote operational excellence.

NOTES: Please do NOT include cumulative savings as this is for FY18 only. Cumulative savings may be discussed in your above response to each recommendation. Feel free to add additional lines as necessary.

Chart #1:

Category	Recommendation	FY18 (Actual)
Cost savings/avoidance to the college/university in FY18 ONLY	3A) Campus Contracts	\$529,995
	3B) Collaborative Contracts	\$ 1,168,635
	4B) Operations Review	\$3,507,211
	5B) Productivity Measure	\$ 14,307,393
	5D) Health Care Costs	\$1,668,305
	Energy	\$1,269,669
	Subtotal of Institutional Efficiency Savings	\$22,451,445
New resource generation for the college/university in FY18 ONLY	4A) Asset Review	\$1,031,903
	4C) Affinity Partnerships	\$3,335,404
	Other	\$13,822,514
	Subtotal of New Resource Generation	\$18,189,848
Cost savings/avoidance to students in FY18 ONLY	6A) Negotiate Cost	\$1,038,487
	6C) Digital Capabilities	\$45,719
	7A) Educational Campaign	\$1,389,999
	7D) Data Driven Advising	\$192,168
	7E) Summer Programs	\$1,087,456
	10A) Financial Advising	\$3,000,000
	Subtotal of Student Savings	\$6,753,829

Chart #2:

Category	Amount Invested in FY18	Explanation
Reductions to the total cost of attendance (tuition, fees, room and board, books and materials, or related costs — such as technology)		
Student financial aid	\$17,081,494	
Student success services, particularly with regard to completion and time to degree	\$1,876,603	
Investments in tools related to affordability and efficiency		
Improvements to high-demand/high-value student programs	\$2,689,852	
Investments in STEM Facilities	\$17,081,494	

Section V: Master Recommendation #2 – Five-year Goals

An updated copy of the five-year goal template is attached. Please provide the data to complete the template, including information already provided in Section IV. In addition, if you have any updates or changes that need to be made to your five-year goals submitted in 2016, please update.

See attached MasterRecommendation2. Template to complete.

Miami University - MASTER RECOMMENDATION 2: FIVE-YEAR GOAL FOR INSTITUTIONAL SAVINGS AND NEW RESOURCE GENERATION													
Category	Recommendation	Component	Description	Savings from FY12 - FY16	FY 2017 Goal	FY2017 Actual	FY 2018 Goal	FY2018 Actual	FY 2019 Goal	FY 2020 Goal	FY 2021 Goal	Total Goal	
Efficiency Savings	3A	Campus Contracts	Require employees to use existing contracts for purchasing goods and services.	\$ 11,456,528	\$ 588,000	\$ 585,571	\$ 538,000	\$ 529,995	\$ 493,000	\$ 473,000	\$ 453,000	\$ 2,545,000	
	3B	Collaborative Contracts	Pursue new and/or strengthened purchasing agreements.	\$ 1,800,000	\$ 212,000	\$ 694,818	\$ 262,000	\$ 1,168,635	\$ 307,000	\$ 277,000	\$ 297,000	\$ 1,355,000	
	4B	Operations Review	Conduct assessment of non-academic operations that might be run more efficiently by regional cooperative, private operator or other entity.	\$ 8,200,000	\$ 800,000	\$ 2,070,000	\$ 300,000	\$ 3,507,211	\$ 470,000	\$ 360,000	\$ 320,000	\$ 2,250,000	
	5A	Cost Diagnostic ¹	Produce a diagnostic to identify its cost drivers, along with priority areas that offer the best opportunities for efficiencies.									\$ -	
	5B	Productivity Measure ¹	ODHE should develop a common measurement of administrative productivity that can be adopted across Ohio's public colleges and universities.	\$ 11,300,910	\$ 1,071,576	\$ 3,845,348	\$ 2,140,291	\$ 14,307,393	\$ 3,206,164	\$ 4,269,209	\$ 5,329,438	\$ 16,016,678	
	5C	Organizational Structure ¹	Review organizational structure to identify opportunities to streamline and reduce costs.										\$ -
	5D	Health Care Costs	Take advantage of economies of scale, a statewide working group should identify opportunities to collaborate on health-care costs.	\$ 5,660,153				\$ 1,668,542					\$ -
	5E	Data Centers	Develop a plan to move their primary or disaster recovery data centers to the State of Ohio Computer Center.	\$ 1,633,114					\$ 50,000	\$ 50,000	\$ 50,000		\$ 150,000
	5F	Space Utilization	Study the utilization of its campus and employ a system that encourages optimization of physical spaces.		\$ -		\$ -	\$ -	\$ 250,000	\$ 500,000	\$ 750,000		\$ 1,500,000
		Energy	Energy Efficiency		\$ 2,212,986	\$ 132,794	\$ 498,176	\$ 132,130	\$ 1,269,669	\$ 131,470	\$ 130,812	\$ 130,158	\$ 657,364
	6A	Negotiate Cost	Professional negotiators must be assigned to help faculty obtain the best deals for textbooks and instructional materials, starting with high-volume, high-cost courses.		\$ -	\$ 31,724	\$ 1,819,270	\$ 1,038,487	\$ 1,839,687	\$ 1,839,775	\$ 1,839,775	\$ 1,839,775	\$ 7,338,506
	6B	Standardize Materials	Encourage departments to choose common materials, including digital elements, for gateway courses that serve large volumes of students.			\$ -							\$ -
	6C	Digital Capabilities	Participate in a consortium to develop digital tools and materials, including open educational resources, that provide students with high-quality, low-cost materials.		\$ -	\$ 65,847	\$ 2,423,964	\$ 45,719	\$ 2,451,166	\$ 2,451,283	\$ 2,451,283	\$ 2,451,283	\$ 9,777,696
	7A	Educational Campaign	Develop a campaign to educate full-time undergraduates about the course loads needed to graduate on time.		\$ -	\$ 893,420	\$ -	\$ 1,389,999	\$ -	\$ 947,826	\$ 947,826	\$ 947,826	\$ 1,895,652
	7B	Graduation Incentive	Consider establishing financial incentives that encourage full-time students to take at least 15 credit hours per semester.										\$ -
	7C	Standardize Credits for Degree	Streamline graduation requirements so that most bachelor's degree programs can be completed within four years or less		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,107,800	\$ 4,189,956	\$ 8,297,756
	7D	Data Driven Advising	Enhance academic advising services so that students benefit from both high-impact, personalized consultations and data systems that proactively identify risk factors that hinder student success.		\$ 308,567	\$ 986,319	\$ 466,431	\$ 192,168	\$ 183,861	\$ 323,715	\$ 535,878	\$ 1,818,452	\$ 1,818,452
	7E	Summer Programs	Develop plans to evaluate utilization rates for summer session and consider opportunities to increase productive activity.		\$ 887,552	\$ 1,039,407	\$ 905,303	\$ 1,087,456	\$ 923,409	\$ 941,877	\$ 960,715	\$ 960,715	\$ 4,618,856
	7F	Pathway Agreements	Develop agreements that create seamless pathways for students who begin their educations at community or technical colleges and complete them at universities.			NA	NA	NA	NA	NA	NA	NA	NA
	7G	Competency Based Education	Consider developing or expanding programs that measure student success based on demonstrated competencies instead of through the amount of time students spend studying a subject.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Program Review (duplicative programs)	Consider consolidating programs that are duplicated at other colleges and universities in their geographic area.		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
10A	Financial Advising	Make financial literacy a standard part of students' education.				\$ 1,200,000		\$ 3,000,000				\$ -	
			Subtotal Student Savings	\$ -	\$ 1,196,119	\$ 4,216,717	\$ 5,614,968	\$ 6,753,829	\$ 5,398,123	\$ 10,612,276	\$ 10,925,433	\$ 33,746,918	
			Subtotal Institutional Efficiency Savings	\$ 42,263,691	\$ 2,804,370	\$ 7,693,913	\$ 3,372,421	\$ 22,451,445	\$ 4,907,634	\$ 6,060,021	\$ 7,329,596	\$ 24,474,042	
			Subtotal All Savings	\$ 42,263,691	\$ 4,000,489	\$ 11,910,630	\$ 8,987,389	\$ 29,205,274	\$ 10,305,757	\$ 16,672,297	\$ 18,255,029	\$ 58,220,960	

Category	Recommendation	Component	Description		FY 2017	FY2017 Actual	FY 2018	FY2018 Actual	FY 2019	FY 2020	FY 2021	Total Goal	
New Resource Generation	4A	Asset Review	Conduct an assessment of non-core assets to determine market value if sold,, leased or otherwise repurposed.		\$ 664,471	\$ 132,587	\$ 714,471	\$ 1,031,903	\$ 164,471	\$ 164,471	\$ 164,471	\$ 1,872,355	
	4C	Affinity Partnerships	Upon determining assets and operations that are to be retained, evaluate opportunities for affinity relationships and sponsorships.		\$ 3,154,762	\$ 3,180,333	\$ 3,154,762	\$ 3,335,404	\$ 3,154,762	\$ 3,154,762	\$ 3,154,762	\$ 15,773,810	
		Other Revenue	Other Resource Generation		\$ 24,114,041	\$ 6,348,726	\$ 5,898,182	\$ 10,672,523	\$ 13,822,541	\$ 12,001,562	\$ 17,001,562	\$ 22,001,562	\$ 68,025,935
Subtotal New Resource Generation					\$ 24,114,041	\$ 10,167,959	\$ 9,211,102	\$ 14,541,756	\$ 18,189,848	\$ 15,320,795	\$ 20,320,795	\$ 25,320,795	\$ 85,672,100
TOTAL OF COMBINED INSITUTIONAL OPPORTUNITIES FOR STUDENT AFFORDABILITY					\$ 66,377,732	\$ 12,972,329	\$ 16,905,015	\$ 17,914,177	\$ 40,641,293	\$ 20,228,429	\$ 26,380,816	\$ 32,650,391	\$ 110,146,142
SPECIFIC RE-DEPLOYMENT OF SAVINGS TO STUDENTS: Please use the space below to describe, in detail, how you plan to re-deploy institutional resources that are saved and/or generated through the task force components outlined above.													
					FY 2017	FY2017 Actual	FY 2018	FY2018 Actual	FY 2019	FY 2020	FY 2021	Total Goal	
			Increase undergraduate student financial aid	\$ 31,809,204	\$ 8,000,000	\$ 10,729,821	\$ 14,000,000	\$ 17,081,494	\$ 20,000,000	\$ 25,000,000	\$ 30,000,000	\$ 97,000,000	
			Student Success Collaborative	\$ 355,000	\$ 161,000	\$ 315,047	\$ 161,000	\$ 1,876,603	\$ 161,000	\$ 161,000	\$ 161,000	\$ 805,000	
			Investments in STEM facilities	\$ -	\$ 4,000,000	\$ 19,730,000	\$ 3,000,000	\$ 18,372,122	\$ -	\$ -	\$ -	\$ 7,000,000	
			Investments in faculty for high demand programs	\$ -	\$ 727,549	\$ 727,549	\$ 1,451,480	\$ 2,689,852	\$ 2,171,771	\$ 3,088,460	\$ 3,801,567	\$ 11,240,827	
			Total	\$ 32,164,204	\$ 12,888,549	\$ 31,502,417	\$ 18,612,480	\$ 40,020,071	\$ 22,332,771	\$ 28,249,460	\$ 33,962,567	\$ 116,045,827	

Notes:

1. Savings attributable from initiatives falling under components 5A, 5B and 5C are all shown under 5B.

SIGNIFICANT CHANGE(S) IN 5-YEAR GOALS FROM FY16 SUBMISSION TO FY18 SUBMISSION: Please use the area below to describe, in detail, significant deviation in your institution's 5-year goals from the FY16 submission to the FY17 submission, if applicable.



BOARD OF TRUSTEES
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Resolution R2019 - 16
Review to Practice Standards Policy

WHEREAS, the Board of Trustees in 2005 adopted a Practice Standards policy for all financial services providers doing business with the University; and

WHEREAS, improvements in corporate and industry ethics reporting provide greater assurance today and make it simpler to affirm compliance with the policy

NOW, THEREFORE, BE IT RESOLVED: that the Miami University Board of Trustees adopts the revisions to the Practice Standards policy for financial services providers doing business with Miami University as shown in the attached policy statement.

Approved by the Board of Trustees
December 14, 2018

A handwritten signature in black ink, appearing to read 'T. O. Pickerill II', with a long horizontal flourish extending to the right.

T. O. Pickerill II
Secretary to the Board of Trustees

SUMMARY OF PRACTICE STANDARDS
MIAMI UNIVERSITY
Updated December 2018

Miami University (referred to herein as the "University") has the following expectations for its financial services providers, including investment management firms, investment consultants, banks, and other similar financial providers.

- Financial services providers are expected to conduct themselves with integrity and honesty in their dealings with the University, with all other clients and customers, with their employees, and with their peers.
- Financial services providers are expected to comply with the spirit as well as the letter of all applicable laws, rules, and regulations governing their professional, financial, and business activities. They are expected not to knowingly participate in, or assist, any acts that violate any applicable laws, rules, or regulations.
- Financial services providers are expected to have in place a governance structure that effectively promotes ethical principles of behavior.
 - For public companies, the governance structure must comply with the regulatory requirements established by the SEC, the NYSE and/or other regulatory agencies, as applicable.
 - For private companies, the governance structure is expected to include a board of directors, an audit function, and a compliance function, all of which have the authority to exercise independent judgment in carrying out their responsibilities.
 - Financial services providers are expected to fully disclose and explain their corporate governance structure to the University, and to inform the University of any changes in the governance structure when they occur.
- Financial services providers are expected to have a code of business conduct and ethics in effect, to share their code with the University, and to disclose to the University any waivers and/or violations of the code. Providers are expected to proactively promote ethical behavior in their organization.
- Financial services providers are expected to place the interests of their clients ahead of their own personal or corporate interests. Therefore, the codes of business conduct and ethics adopted by financial services providers should include, at a minimum:
 - Prohibition against conduct involving dishonesty, fraud, deceit, or misrepresentation.
 - Prohibition against activities in which conflicts of interest either exist or may be perceived to exist.
 - Prohibition against use of corporate property, information, or position for personal gain.

- Financial services providers are expected to deal fairly with their customers, suppliers, competitors, and employees. Specifically, insider trading is both unethical and illegal and is not to be tolerated.
- Financial services providers are expected to establish a compensation philosophy that provides incentives for management and employees to achieve performance goals while at the same time maintaining a high standard of accountability and ethical behavior.
- Financial services providers are expected to maintain the confidentiality of information entrusted to them by the University, and not to disclose such information unless disclosure is authorized by the University or is legally mandated.
- Financial services providers are expected to promptly and fully disclose to the University any significant violations of the above expectations that affect the University's relationship with the provider. Disclosure is expected to include the specific activities that took place, the context in which they occurred, and the actions taken by the provider to correct the situation.

The University recognizes that it does not have available to it the resources which would be necessary for it to audit its financial services providers to determine that they meet these expectations. Accordingly, by providing services to the University, financial services providers accept responsibility for ensuring that their operations and services meet these expectations. All University Requests for Proposals (RFPs) and contracts for financial services shall require financial service providers to provide to the University at the time of engagement of their services and thereafter annually or otherwise upon request by the University a copy of a code of ethics or, if appropriate, the SEC Form ADV Part 2 which includes firm disclosures and updates regarding disciplinary information, code of ethics, and other related internal policies.

SUMMARY OF PRACTICE STANDARDS MIAMI UNIVERSITY

Updated ~~August 31, 2005~~ December 2018

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- Financial services providers are expected to maintain the confidentiality of information entrusted to them by the University, and not to disclose such information unless disclosure is authorized by the University or is legally mandated.
- Financial services providers are expected to promptly and fully disclose to the University any significant violations of the above expectations that affect the University's relationship with the provider. Disclosure is expected to include the specific activities that took place, the context in which they occurred, and the actions taken by the provider to correct the situation.

The University recognizes that it does not have available to it the resources which would be necessary for it to audit its financial services providers to determine that they meet these expectations. Accordingly, by providing services to the University, financial services providers accept responsibility for ensuring that their operations and services meet these expectations. All University Requests for Proposals (RFPs) and contracts for financial services shall require financial service providers to~~will~~ provide to the University at the time of engagement of their services and thereafter annually or otherwise upon request by the University a ~~written statement confirming that they have reviewed the above expectations and that their procedures, rules and policies are such that they comply with this Summary of Practice Standards and meet these expectations. Such written statement shall include also an undertaking that they will provide the University with written notice of any subsequent changes in or violations of their procedures, rules and policies which would constitute a violation of the expectations set forth in this policy statement above.~~copy of a code of ethics or, if appropriate, the SEC Form ADV Part 2 which includes firm disclosures and updates regarding disciplinary information, code of ethics, and other related internal policies.



BOARD OF TRUSTEES
ROUDEBUSH HALL ROOM 212
OXFORD, OHIO 45056
(513) 529-6225 MAIN
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December 14, 2018
Other Business

RESOLUTION R2018-17
Revisions to the Foundation Code of Regulations

WHEREAS, the Miami University Foundation desires to amend the Code of Regulations of the Miami University Foundation, including Articles III Members, and IV Directors; and

WHEREAS, Articles III and IV of the Code of Regulations of the Miami University Foundation, providing for the selection of Directors and defining Members, shall not be amended without the approval and consent given by the affirmative vote of two-thirds of all voting members of the Board of Trustees of Miami University.

NOW, THEREFORE BE IT RESOLVED: that the Miami University Board of Trustees hereby approves and consents to the amendment of the Code of Regulations of the Miami University Foundation as set forth in the changes indicated below:

Approved by the Board of Trustees
December 14, 2018

T. O. Pickerill II
Secretary to the Board of Trustees

[DRAFT 11-02-2018](#)

AMENDED AND RESTATED

CODE OF REGULATIONS

OF THE

MIAMI UNIVERSITY FOUNDATION

MISSION STATEMENT:

The mission of the Miami University Foundation (the "Foundation") is to support Miami University's educational and research activities, as well as its vibrant student life including arts, athletics and co-curricular endeavors. The Foundation Board does so through the identification and solicitation of philanthropic support and effective oversight of the management and stewardship of the endowment and other financial assets of the Foundation.

ARTICLE I: OFFICES

The principal office of ~~the Miami University~~ Foundation (~~the “CorperationFoundation”~~) at which the general business shall be transacted and where the records of the ~~CorperationFoundation~~ shall be kept shall be located in the City of Oxford, Butler County, Ohio. The ~~CorperationFoundation~~ may have such other offices, either within or ~~outsidewithout~~ the State of Ohio, as the Directors may designate or as the activities of the ~~CorperationFoundation~~ may require from time to time.

ARTICLE II: FISCAL YEAR

The fiscal year of the ~~CorperationFoundation~~ shall commence on the first day of July in each year and end on the last day of the following June, or be such other period as the Directors designate by resolution.

ARTICLE III: MEMBERS

The ~~CorperationFoundation~~ shall have no Members. The Directors shall ~~have all the rights and privileges of~~ ~~be considered the~~ Members ~~as are provided under Ohio nonprofit corporation law~~ in accordance with Ohio Revised Code ~~S~~section 1702.14, as it may be amended.

ARTICLE IV: DIRECTORS

4.1 Powers. The Board of Directors (collectively hereinafter referred to as “Directors” or individually referred to as a “Director”) shall have the control and management of the business and property of the ~~CorperationFoundation~~. It may adopt by-laws not inconsistent with these Regulations. A Director shall perform his or her duties as a Director of the ~~CorperationFoundation~~, including his or her duties as a member of any committee of the ~~CorperationFoundation~~, in good

faith, in a manner he or she reasonably believes to be in, or not opposed to, the best interests of the ~~Corporation~~Foundation and with the care that an ordinarily prudent person in a like position would use under similar circumstances.

4.2 Number. The number of Appointed Directors shall be ~~seven-eight (78)~~ and be such persons provided for in Section 4.3 of these Regulations. The number of Elected Directors shall not be ~~less-fewer~~ than fifteen (15) ~~persons and no more than twenty-five (25) persons~~ elected as provided in Section 4.4 of these Regulations. The Board of Directors shall determine and fix the exact number of persons to serve as Elected Directors from time to time provided, however, that no decrease in the number of Elected Directors shall have the effect of removing an Elected Director prior to the expiration of such Elected Director's term of office.

4.3 Appointed Directors. The persons holding the following positions shall serve as Appointed Directors:

(a) The Chair of the Board of Trustees of Miami University or a member of the Board of Trustees of Miami University appointed by the Chair of the Board of Trustees of Miami University;

(b) The President of Miami University;

(c) The Executive Vice President for Academic Affairs and Provost of Miami University;

(d) The Senior Vice President for Finance and Business Services of Miami University (who shall also serve as the Treasurer of the ~~Corporation~~Foundation);

(e) The Senior Vice President for University Advancement of Miami University (who shall also serve as the ~~Executive Director~~President of the ~~Corporation~~Foundation);

~~(fgf)~~ The Vice President for Student LifeAffairs of Miami University; ~~and~~

~~(ghg)~~ A representative of the Board of Trustees of Miami University appointed by the Chair of the Board of Trustees of Miami University; ~~and~~.

(h) The Senior Vice President for Enrollment Management and Student Success.

4.4 Elected Directors.

4.4.1 Election. The Elected Directors shall be elected by the Directors from the slate of candidates nominated by the Governance Committee (as that term is hereinafter defined). Election shall be by a majority vote of the Directors constituting a quorum at aa meeting of the Directors. At least two thirds (2/3) of the Elected Directors shall be alumni or former students of Miami University.

4.4.2 Term. Elected Directors shall ~~serve and hold office~~ be elected to a term of for a term of three four (34) years which shall commencing commence at the conclusion of the Annual Meeting ~~at which the Elected Director is elected~~ following their election ~~(or if elected at a meeting of the Directors other than the Annual Meeting then such term shall commence at conclusion of the next Annual Meeting unless filling an Elected Director vacancy or otherwise provided by the Board in the election of such Elected Director)~~ and ending shall terminate at the conclusion of the ~~third~~ fourth Annual Meeting thereafter, ~~or until such Elected Director's successor is elected and qualified, except in the event of such Director's earlier resignation, removal or death.~~

4.4.3 Term Limits. Elected Directors may serve a maximum of two (2) full consecutive three four-year terms. Service as an Elected Director for fewer than 30 months of a four year term shall not be considered a full term for the purpose of term limit restrictions. ~~After serving two (2) consecutive three year terms, an Elected Director again may be elected to serve as an Elected Director after such Elected Director has not served as a Director for one (1) year, provided, however, in no event shall any person serve as an Elected Director or Special Appointee for more than an aggregate total of thirteen (13) years (except for a person continuing to serve as President Chair of the Corporation Foundation as provided in the last sentence of this Section 4.4.3 below).~~ Service as an Elected Director for a term of less than three (3) years shall not count

~~as a term for the purposes of the term limits provided in this Section 4.4.3. In extreme and extraordinary exceptional, extraordinary or unusual special circumstances as determined by the Board of Directors, an Elected Director who has ~~person who has~~ served two full terms (as defined at the time of service) may be elected by the Board of Directors to a ~~n~~ additional ~~third~~ ~~four~~ year term of two (2) years or less after ~~having not served as a d~~Director or a ~~s~~Special ~~a~~Appointee for a minimum of one year. Such ~~e~~ Election of a Director to serve a third term should be ~~are to be~~ considered rare and unusual and must be ~~must be~~ justified by a significant need that ~~can~~may not otherwise ~~otherwise~~ be satisfied ~~otherwise~~ by a current ~~D~~irector or by the election of another ~~d~~Director who has not yet served two terms. In ~~extraordinary circumstances,~~ an Elected Director who has served two ~~four~~ year terms may be elected to a ~~third~~ ~~four~~ year term after having not served as an Elected Director for a minimum of one year. Such elections are to be considered rare and must be justified by a significant need that cannot otherwise be satisfied. Nevertheless, if an Elected Director is serving as President ~~Chair~~ of the Corporation~~Foundation~~ and his or her second three year term as a Director will expire prior to the end of his or her term as President~~Chair~~, such Elected Director shall continue to serve as an Elected Director until the expiration of his or her term as President ~~Chair~~ regardless of the term limits described above.~~

————— 4.4.4 ~~Staggered Terms.~~ The Elected Directors may be divided into three ~~four~~ ~~(34)~~ groups or classes consisting of approximately one third of the then current total number of Elected Directors. The Elected Directors in each group shall be elected for a term of three ~~four~~ ~~(34)~~ years such that the term of office of one such group shall terminate each year. To maintain three classes of Elected Directors consisting of approximately the same number of persons, certain Elected Directors may be assigned to and shall serve one year and two year terms so as to establish or maintain staggered terms whereby approximately one third of the Elected Directors' terms expire each year.

~~4.4.4 Elected Directors' Compliance with Foundation Policies and Responsibilities. All Elected Directors shall comply with all the policies of the Foundation in compliance with the Miami University Foundation Board of Directors Statement of Commitment and Responsibilities.~~

4.4.5 Removal of Elected Directors. Any Elected Director may be removed from office upon the affirmative vote of a majority of the total number of Directors then serving.

~~4.4.6 Vacancies.- If a vacancy is created by the early termination of an Elected Director's term, for whatever reason, such vacancy shall be filled through the normal election appointment process set out in 4.4.12. Whenever a vacancy may occur, the Board of Directors may shall elect a new Elected Director to a four-year term in order to fill such a vacancy, that may occur in an Elected Director position by election of a successor to hold office. The term for an Elected Director filling a vacancy shall be a four year term, during the remaining unexpired term of the vacant Elected Director position. Election shall be by a majority of the Directors constituting a quorum and entitled to vote at such meeting.~~

4.5 Meetings.

4.5.1 Annual Meeting. The Annual Meeting of the Directors for the election of officers and the transaction of such other business as the Directors determine shall be held at the time and place, within or without the State of Ohio, as the Board of Directors designates.

4.5.2. Regular Meetings. The Board of Directors may establish regular meetings of the Board of Directors. Such meetings shall be held at such place or places, within or without the State of Ohio, as the Board of Directors designates.

4.5.3 Special Meetings. Special meetings of the Board of Directors may be called by the President, Chair, by the Board of Directors or upon the written request of two (2) or more Directors. Such meetings shall be held at such place or places, within or without the State of Ohio, as the Board of Directors designates.

4.6 Notice of Meetings.

4.6.1 Annual and Regular Meetings. Written notice of each annual and other regular meeting of the Board of Directors stating the time and place thereof shall be delivered personally, sent by fax or email, or sent by U.S. mail or courier service with postage and fees prepaid or by means of any authorized communications equipment not ~~less~~fewer than seven (7) days before the meeting, excluding the day of the meeting, to each Director at his or her address according to the current records of the [CorperationFoundation](#), unless notice is waived.

4.6.2 Special Meetings. Written notice of each special meeting of the Board of Directors stating the time, place and purpose thereof shall be delivered personally, sent by fax or email, or sent by U.S. mail or courier service with postage and fees prepaid or by means of any authorized communications equipment not less than seven (7) days before the meeting, excluding the day of the meeting, to each Director at his or her address according to the current records of the [CorperationFoundation](#), unless notice is waived. No business shall be transacted at any special meeting other than the business specified in the notice of such meeting.

4.6.3 Waiver of Notice. Notice of any meeting of the Board of Directors may be waived in writing before, at or after such meeting by any Director. Such waiver shall be filed with or entered upon the records of such meeting. Attendance of any Director at any meeting of the Board of Directors without protesting, prior to or at the commencement of the meeting, the lack of proper notice of such meeting shall be deemed to be a waiver of such notice by such Director.

4.7 Attendance. ~~All Directors shall be in compliance with the Miami University Foundation Board of Directors Attendance Policy.~~ Directors may attend meetings in person, or participate by any authorized communications equipment (as provided in Chapter 1702 of the Ohio Revised Code) including, but not limited to, by telephone conference, video conference or other electronic technology or communications equipment as long as all persons participating in the meeting can contemporaneously communicate with each other. Participation by authorized

communications equipment shall constitute presence at such meeting.

4.8 Quorum. The attendance by any means authorized pursuant to section 4.7 above of a majority of the total number of Directors then serving shall be necessary to constitute a quorum for a meeting of the Directors. At all meetings of the Board of Directors, each Director shall be entitled to cast one vote on any question coming before the Board. Unless otherwise provided in these Regulations, a majority vote of the Directors present at any meeting, if there is a quorum, shall be sufficient to transact any business. A Director shall not appoint a proxy for himself or herself or vote by proxy at a meeting of the Board of Directors.

4.9 Written Action. Any action which may be taken at a meeting of the Directors may be taken without a meeting, if authorized in a writing or writings signed by all of the Directors, which writing or writings shall be filed or entered upon the records of the ~~Corporation~~Foundation. Any electronic transmission by authorized communications equipment (as provided in Chapter 1702 of the Ohio Revised Code) that contains an affirmative vote or approval of a Director is a signed writing for such purposes.

4.10 Committees.

4.10.1 Authority. The Directors shall appoint such committees as shall be necessary from time to time and shall designate the duties of such committees. The committee members shall serve at the pleasure of the Directors. No committee shall consist of fewer than four (4) members. At least one member of each committee shall be ~~a member of the staff of Miami University, whether or not such member is also~~ an Appointed ~~or Elected~~ Director. A majority of the ~~quorum members~~ of any such committee may determine its action and fix the time and place of its meetings unless the Board of Directors otherwise provides. All committees at all times shall be subject to the control and direction of the Board of Directors and shall report all actions taken at the next succeeding meeting of the Board of Directors. With the exception of the President of Miami University, aAll Directors, whether Appointed or Elected, must serve on at

least one (1) committee.

4.10.2 Executive Committee. The ~~Corporation~~Foundation shall have an Executive Committee to help the Miami University Foundation Board of Directors function efficiently and effectively. The Executive Committee shall have the broad authority of the Board of Directors to act on behalf of the full ~~board~~Board during the interval between meetings of the Board of Directors on any matters that the Executive Committee determines should not be delayed until the Board's next regularly scheduled meeting, or until a special meeting of the Board is called as specified in th~~isese~~se Code of Regulations. The Executive Committee shall be composed of the ~~President~~Chair of the ~~Corporation~~Foundation Board, who shall act as the Chair of the Executive Committee, the ~~Executive Director~~President of the ~~Corporation~~Foundation, and such other Directors appointed by the Board of the ~~Corporation~~Foundation upon the recommendation of the ~~Chair of the Board~~President of the Corporation Foundation.

4.10.3 Governance Committee: The ~~Corporation~~Foundation shall have a Governance Committee to (a) provide oversight of the ~~Corporation~~Foundation's structure, polices and processes to ensure compliance with the ~~Corporation~~Foundation's mission and general good governance practices and (b) identify, recruit, nominate and educate qualified and diverse candidates to serve as Elected Directors and Officers of the ~~Corporation~~Foundation Board (unless such persons are otherwise designated or appointed under the terms of these Regulations). The Governance Committee shall be composed of not ~~less~~fewer than five (5) nor more than ~~seven~~nine (~~7~~9) Directors, including within that number, the ~~Executive Director~~President of the ~~Corporation~~Foundation and ~~at least two members of the Executive Committee of the~~the Chair of the Board ~~Corporation Foundation Board~~. The Governance Committee Chair shall be appointed by the Board of the Corporation Foundation and the Governance Committee members (other than the Executive Director President) shall be appointed by the Board of the Corporation Foundation upon the recommendation of the President of the Corporation Foundation and the Chair of the

~~Board. President Chair of the Corporation Foundation Board.~~

4.11 ~~Special Appointees.;~~ ~~Advisory Board.~~ ~~Special Appointees Persons~~ may be appointed by the Directors ~~to serve as advisors to~~ ~~on~~ ~~on~~ ~~the Board of Directors and/or a~~ ~~on a committee(s) of the Board of Directors to assist~~ ~~it~~ ~~the Board or a committee~~ ~~in carrying out its~~ ~~their~~ ~~responsibilities.~~ ~~an Advisory Board~~ ~~Such special appointees shall~~ ~~to~~ ~~serve for a term of one (1) year~~ ~~which term may be renewed for one (1) additional year.~~ ~~or until their successors are elected and qualified.~~ ~~Foundation.~~ ~~Special a~~ ~~Appointees shall be advisory only to the Board of Directors and/or a committee on which they serve~~ ~~(s).~~ ~~Special Appointees may serve more than one (1) term on an Advisory Board~~ ~~be re-appointed.~~ The Directors shall fix the number of Special Appointees, which number may vary from time to time as the Directors shall determine. ~~Special Appointee and~~ shall have no voting rights at any meeting of the Board of Directors or any committee meeting. ~~Special Appointees may review and make comments and give counsel on the general direction~~ ~~mission in which~~ ~~and activities of the Board of Directors and/or a committee(s).~~ ~~proceeds with specific reference to the purposes of the organization as stated in its Articles of Incorporation~~ ~~Foundation.~~ ~~Special Appointees shall be advisory only to the Board of Directors and/or a committee(s).~~ ~~but substantial weight will be given to their suggestions.~~ ~~Special Appointees may meet with the Board of Directors at such times and places as the Directors shall designate.~~

ARTICLE V: ~~ELECTED OFFICERS OF THE FOUNDATION~~

~~OF THE BOARD~~

5.1 Generally. The elected officers of the Foundation ~~Board~~ shall be elected by a majority vote of the Directors present at the Annual Meeting, if there is a quorum. The elected officers shall be a President ~~Chair~~, Vice President ~~Chair~~, Secretary, and, Board Treasurer, ~~Executive Director, Treasurer of the Corporation~~ ~~Foundation~~, ~~Chief Investment Officer, Chief~~

~~Development Officer, Chief Administrative Officer and any other officers the Board of Directors may designate or determines. All elected officers shall be Elected Directors of the The appointed officers of the CorporationFoundation shall be the President, t o of the CorporationFoundation, Treasurer, of the CorporationFoundation, Chief FinancialInvestment Officer, Chief Development Officer, and Chief Administrative Officer. The Chief InvestmentFinancial Officer, Chief Development Officer, and Chief Administrative Officer areshall not be directors and shall not have voting rights.~~

5.2 PresidentChair. The PresidentChair shall preside at all Board meetings and perform such other and further duties as may be from time to time be required by the Directors. ~~The President Chair shall be an Elected Director.~~

5.3 Vice PresidentChair. The Vice PresidentChair shall perform all of the duties and have all the authority of the PresidentChair in case of the latter's absence or disability. In case both the PresidentChair and Vice PresidentChair are absent or unable to perform their duties, the Directors may appoint a PresidentChair pro tempore by a majority vote of the Directors present at a meeting, if there is a quorum. ~~The Vice President Chair shall be an Elected Director.~~

5.4 Secretary. The Secretary shall review and certify all minutes of the CorperationFoundation as prepared by the Executive DirectorPresidentChief Administrative Officer. ~~The Secretary shall be an Elected Director.~~

5.5. Term. The Chair shall be elected for one (1) two-year term. The Chair shall not be eligible for re-election to such position. The Vice-Chair and Secretary shall be elected for a one (1) year term, but may serve two (2) consecutive one-year terms. Terms shall commence at the conclusion of the Annual Meeting at which the Chair officer is elected and end at the conclusion of the next applicable Annual Meeting, or until such officer's successor is elected and qualified.

5.6 Removal. The Board of Directors may remove any elected officer at any time, with or without cause, by the affirmative vote of a majority vote of the Directors present at a meeting.

if there is a quorum.

5.7 Vacancies. The Board of Directors may fill any vacancy that may occur in any office by electing a successor to hold office during the unexpired term of the vacant office.

5.5 Board Treasurer. The Board Treasurer shall review all statements prepared by the Chief Investment Officer or the Treasurer of the CorporationFoundation. The Board Treasurer shall be an Elected Director.

ARTICLE VI: APPOINTED OFFICERS OF THE CORPORATIONFOUNDATION

6.1 Generally. The appointed officers of the CorporationFoundation shall be the President, Treasurer, Chief Financial Officer, Chief Development Officer, and Chief Administrative Officer. The Chief Financial Officer, Chief Development Officer, and Chief Administrative Officer shall not be directors and shall not have voting rights.

56.2.6 Executive DirectorPresident. The Executive DirectorPresident shall be the Vice Senior Vice President for University Advancement of Miami University as referenced under Section 4.3(e) of these Regulations. Subject to Ohio law and the rules, policies, and procedures of Miami University, the Executive DirectorPresident shall oversee the hiring of staff personnel and have overall responsibility for the day to day operation of all functions of the organization. The Executive DirectorPresident shall provide reports on the operation of the organization to the Board of Directors on a periodic basis or as requested by the Board of Directors. The Executive DirectorPresident shall keep an accurate record of all transactions of the CorporationFoundation. The Executive DirectorPresident shall give all notices required by law or these Regulations. The

~~Executive Director~~President shall keep a proper record book and shall properly record therein all minutes of all corporate meetings and such other matters as shall be proper or necessary. Further, the ~~Executive Director~~President may also advise the Directors with respect to potentially problematic transactions.

~~65.37~~ Treasurer of the Corporation Foundation. ~~The~~ Treasurer of the ~~Corporation Foundation~~ shall be the Senior Vice President for Finance and Business Services of Miami University as referenced under Section 4.3(d) of these Regulations. Subject to Ohio law and the rules, policies, and procedures of Miami University, ~~t~~The Treasurer of the ~~Corporation Foundation~~ shall be responsible for the oversight of the financial operations of the Foundation.

~~56.84~~ Chief Investment Financial Officer. ~~The~~ Chief Financial Officer (CFO) shall be the Chief Investment/Treasury Officer of Miami University. Unless otherwise directed or provided by the Directors, the CFO shall have the duties and responsibilities provided in this section. Subject to Ohio law and the rules, policies, and procedures of Miami University, the CFO shall be responsible for planning, implementing, managing, and controlling all financial activities of the Corporation Foundation. The CFO shall supervise the annual preparation of the Corporation Foundation's financial statements and the external audit of such statements. The CFO shall support such committees as determined by the Directors and the committee chairs. The CFO shall not be an Elected Director nor an Appointed Director of the Corporation Foundation and shall have no voting rights. ~~The Chief Investment Officer (CIO) shall be the Chief Investment Officer of Miami University. Unless otherwise directed or provided by the Directors the CIO shall have the duties and responsibilities provided in this section. The CIO shall oversee the finances and supervise the custody of all monies and investments, financial records and documents of the Corporation Foundation unless otherwise determined by the Directors. The CIO shall supervise the annual preparation of the Corporation Foundation's financial statements~~

~~and the external audit of such statements. The CIO shall support such committees as determined by the Directors and the committee chairs. The CIO shall be not be an Elected Director nor an Appointed Director of the CorporationFoundation and shall have no voting rights.~~

~~56.9—5~~ Chief Development Officer. The Chief Development Officer (CDO) shall be ~~the manager of the Office of Development within the Division ofof the Senior Associate Vice President of9/20/2018~~ University Advancement of Miami University. Subject to Ohio law and the rules, policies, and procedures of Miami University, and u unless otherwise directed or provided by the Directors, the CDO shall have the duties and responsibilities provided in this section. The CDO shall oversee the donor development activities of the ~~CorporationFoundation~~. The CDO shall support such committees as determined by the Directors and the committee chairs. The CDO shall not be an Elected Director nor an Appointed Director of the ~~CorporationFoundation~~ and shall have no voting rights.

~~56.406~~ Chief Administrative Officer. The Chief Administrative Officer (CAO) shall be the ~~Senior Director of Advancement AdministrationAssistant Vice President for University Advancement, Donor Engagement and Board Relations~~ of Miami University. Subject to Ohio law and the rules, policies, and procedures of Miami University, and u unless otherwise directed or provided by the Directors, the CAO shall have the duties and responsibilities provided in this section. The CAO shall oversee the administration of the ~~CorporationFoundation~~ and stewardship of gifts to the ~~CorporationFoundation~~. The CAO shall coordinate and schedule the meetings of the ~~CorporationFoundation~~, prepare resolutions, and fulfill such other duties as determined by the ~~Executive DirectorPresident~~ or the Directors. The CAO shall support such committees as determined by the Directors or Committee chairs. The CAO shall be not be an Elected Director nor an Appointed Director of the ~~CorporationFoundation~~ and shall have no voting rights.

~~5.11—Term.~~ Except with respect to the Chair, President, Executive Director, President, Treasurer of the CorporationFoundation, CIO, CDO and CAO, each officer of the

~~CorporationFoundation shall be elected for a one (1) year term commencing at the conclusion of the day of the Annual Meeting at which the officer is elected and ending at the conclusion on the day of the next Annual Meeting, or until such officer's successor is elected and qualified. Each of these officers may serve two (2) consecutive one year terms. The President Chair shall serve for one (1) two year term and shall not be eligible for re-election to such position.~~

~~5.12 — Removal. Except with respect to the Executive DirectorPresident, Treasurer of the CorporationFoundation, CIO, CDO and CAO, the Board of Directors may remove any officer at any time, with or without cause by the affirmative vote of a majority of the Directors present at a meeting, if there is a quorum.~~

~~5.13 — Vacancies. Except with respect to the Executive DirectorPresident, Treasurer of the CorporationFoundation, CIO, CDO, and CAO, the Board of Directors may fill any vacancy that may occur in any office by electing a successor to hold office during the unexpired term of the vacant office.~~

ARTICLE VII: INDEMNITY

The ~~Corporation~~Foundation shall indemnify to the full extent permitted by the nonprofit ~~corporation~~Foundation laws of the State of Ohio each person who was, is or will be a Director, officer, volunteer or employee of the ~~Corporation~~Foundation (including the heirs, executors, administrators or estate of such person) against any liability, cost or expense incurred by such person in such person's capacity as such a Director, officer, volunteer or employee, or arising out of such person's status as such a Director, officer or employee (including serving at the request of the ~~Corporation~~Foundation as a trustee, director, officer, partner, member, employee or agent of another organization). The ~~Corporation~~Foundation may, but shall not be obligated to, maintain insurance at its expense to protect itself and any such person against any such liability, cost or

expense.

ARTICLE VIII: CONSISTENCY WITH ARTICLES OF INCORPORATION

If any provision of this Code of Regulations shall be inconsistent with the CorporationFoundation's Articles of Incorporation (as they may be amended), the Articles of Incorporation~~corporation~~Foundation shall govern.

ARTICLE ~~VIII~~IX: SECTION HEADINGS

The headings contained in this Code of Regulations are for reference only and shall not be construed as part of or as affecting the meaning or interpretation of this Code of Regulations.

ARTICLE IX: AMENDMENTS

This Code of Regulations (as it may be amended) may be amended or restated by the affirmative vote of a majority of the total number of Directors then serving. Any proposed amendment shall be submitted in writing to each Director at least fifteen (15) days prior to the meeting at which the same is to be voted upon by mailing, faxing or otherwise sending a copy thereof to each Director in any manner authorized for delivering notices of meetings under Section 4.6 of these Code of Regulations. Provided, however, that Articles III and IV, providing for the selection of Directors and defining Members, shall not be amended without the approval and consent of the Board of Trustees of Miami University given by the affirmative vote of two thirds (2/3) of all members of the Board of Trustees of Miami University.

ARTICLE XI: EMERGENCY REGULATIONS

In the event of an "emergency" as defined in Ohio Revised code section 1701.01(U), as it may be amended, corporate actions may be taken in accordance with Ohio Revised Code section 1702.11(C) and (G), as they may be amended.

ARTICLE XII: PROVISIONS FOR REGULATIONS OF BUSINESS AND CONDUCT OF AFFAIRS OF THE CORPORATION FOUNDATION

124.1 Books and Records. The [Corporation Foundation](#) shall keep correct and complete books of account and minutes of the proceedings of its Directors and any committees.

124.2 Conflicts of Interest.

124.2.1 Gifts. As provided in further detail in the [Corporation Foundation's](#) Conflict of Interest Policy (the "Policy"), no Covered Person (as defined in the Policy) shall solicit or accept, directly or indirectly, anything of substantial monetary value (including any gift, gratuity, favor, entertainment, loan or other consideration) from any person or entity which has, or is seeking, a contractual, donative, employment, financial or other beneficial relationship with the [Corporation Foundation](#) without first making a disclosure of such conflict of interest to the Board of Directors. All of the Directors, officers, employees, committee members and certain other volunteers of the [Corporation Foundation](#) are "Covered Persons" as defined under the Policy (with respect to volunteers of the [Corporation Foundation](#) the Policy applies to such other volunteers determined and identified as a "Covered Person" under the Policy).

124.22.2_—Conflict of Interest Procedure. When the Board of Directors is considering a proposed transaction that may benefit the private interest of a Covered Person of

the [CorperationFoundation](#), the procedure outlined in the Conflict of Interest Policy adopted by the Board of Directors shall be followed.

~~412.2.3~~ Appointed Directors. Appointed Directors (under Section 4.3 of these Regulations) are subject to all applicable laws and University policies including Ohio Ethics laws and related University policies. In the event of any conflict between such Ohio Ethics laws and University policies for Appointed Directors, the Ohio Ethics laws and University policies shall prevail and take priority over the conflict of interest procedures and provisions contained in this Section ~~124.2~~.

~~124.3~~ Compensation. Service by Elected Directors shall be strictly voluntary and such Elected Directors shall not receive compensation for their services to the [CorperationFoundation](#) as Directors.

~~412.4~~ Dissolution. The [CorperationFoundation](#) shall be dissolved only upon the affirmative vote of a majority of the total number of Directors then serving and with approval of two-thirds of the members of the Board of Trustees of Miami University voting at a regular meeting of the Board of Trustees of Miami University.

Upon dissolution, all of its property of whatever nature and wheresoever situated shall vest immediately and absolutely in Miami University, to be used in total for the purposes of Miami University, subject, however, to any and all limitations and conditions under which it is held by the [CorperationFoundation](#) at the time of dissolution.

ARTICLE XIII: DEADLOCK

In the event of deadlock in the Directors' management of the corporate affairs, the provisions for the appointment of the provisional Director under Ohio Revised Code section 1702.521 shall be used to resolve the deadlock.

ARTICLE XIV#: SUPERSEDES PRIOR CODE OF REGULATIONS

This Amended and Restated Code of Regulations amends, restates and supersedes in the entirety all previous codes of regulations (regardless of how titled) and all prior resolutions by the Directors amending such codes of regulations. This Amended and Restated Code of Regulations shall be the only code of regulations of the [CorperationFoundation](#) and only may be amended, modified or restated only in accordance with the terms of these Regulations.

CERTIFICATE OF ADOPTION

The foregoing Amended and Restated Code of Regulations was duly adopted by the Board of Directors of the [CorperationFoundation](#) with the approval and consent of the Board of Trustees of Miami University effective as of the ____ day of _____, 201789/20/2018.5

Secretary Signature
Printed Name: _____

Board of Trustees

December 2018



MIAMI UNIVERSITY

University Advancement Report

Tom Herbert, J.D.

Senior Vice President, University Advancement
President, Miami University Foundation



MIAMI UNIVERSITY

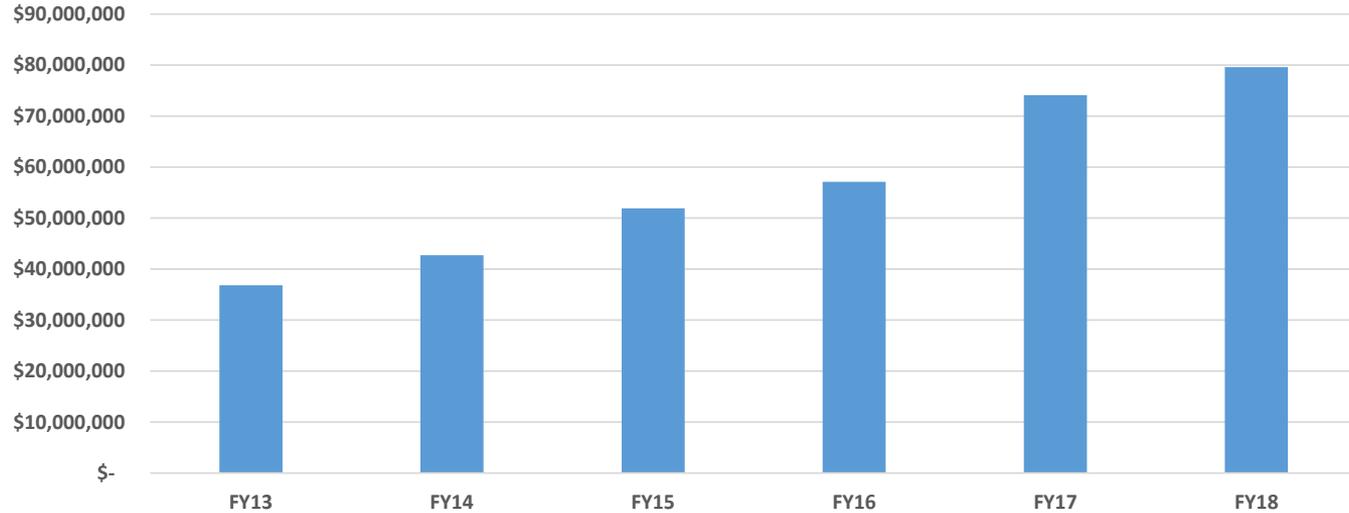
FY'18 Fundraising

- » Goal: \$80 million
- » Raised: \$83.5 million (105% of goal)

Three-year rolling averages

- FY'13: \$36.8 million
- FY'14: \$42.7 million
- FY'15: \$51.9 million
- FY'16: \$57.1 million
- FY'17: \$74.1 million
- FY'18: \$79.6 million

Three-year rolling averages



FY'18 Cash

- » Overall cash received: \$34.8 million
- » Cash generated by Administrative Fee: \$4.8 million

FY'19 Fundraising

- » Goal: \$100 million
- » Raised: \$15 million (15% of goal)

Miami Promise Scholarship Campaign

- » Goal: \$100 million
- » Raised to date: \$139.1 million (139% of goal)

Miami Promise Scholarship Campaign Goals

- » FY'15: \$18.0 million -- \$19.8 million raised
- » FY'16: \$18.0 million -- \$30.3 million raised
- » FY'17: \$18.7 million -- \$29.4 million raised
- » FY'18: \$20.7 million -- \$53.2 million raised
- » FY'19: \$24.6 million -- \$6.4 million raised to date

Graduating Champions Campaign

- » Goal: \$70 million
- » Raised to date: \$78.3 million
- » Pushing on to \$80 million



Farmer School of Business Campaign

- » Five year campaign for \$250 million
- » Timeline: July 1, 2016 – June 30, 2021
- » Raised to date: \$59.3 million
- » Proposed revised completion date of June 30, 2023

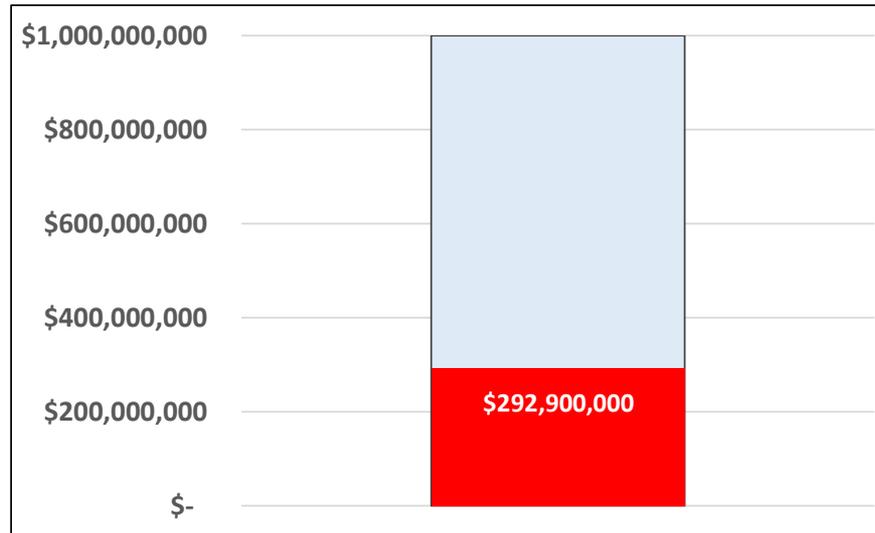
The Humanities Center

- » Fundraising target: \$1.5 million (NEH Challenge Grant, by July '19)
- » Met or surpassed all goals so far: FY'16, FY'17, FY'18
- » Raised to date: \$1,482,572
- » \$17,428 to raise (by July 2019) to complete the challenge

\$1B Campaign Progress Report

- » Campaign to date:
 - » Goal: \$1 billion
 - » Raised to date: \$292.9 million (29% of goal)

\$1B Campaign Progress Report



Thank you!

