BOARD OF TRUSTEES MIAMI UNIVERSITY

June 26, 2009

Minutes of the Academic/Student Affairs Committee Meeting

The Academic/Student Affairs Committee of the Miami University Board of Trustees met on June 22, 2009 in Room 104 Roudebush Hall on the Oxford campus, Oxford, Ohio. The meeting was called to order at 1:00 p.m. by Committee Chair Sue Henry. Trustee members present were Donald Crain, Harry Wilks, Dennis Lieberman, Sharon Mitchell, and Student Trustee Lindsey Bullinger. Trustee Kay Geiger monitored the meeting via teleconference.

In addition to the Trustees, the following Miami staff members were in attendance during the meeting: David Hodge, President; Jeffrey Herbst, Provost and Executive Vice President for Academic Affairs; Barbara Jones, Vice President for Student Affairs; Mary Woodworth, Senior Associate Provost and Associate Vice President, Academic Affairs; Susan Mosley-Howard, Associate Vice President, Student Affairs and Dean of Students; Michael Dantley, Associate Provost and Associate Vice President, Student Affairs; Stephen Snyder, Secretary to the Board of Trustees; and David Keitges, Director, International Education.

Update on Regional Campus Committee Report

Provost Herbst reported that President Hodge and he have been asked to delay accepting recommendations of the Regional Campus Committee Report until time has been allowed for public input from the communities served by the Regional Campuses. The Middletown Campus Citizens Advisory Committee, an advisory committee to the Dean of the Middletown Campus, submitted a written response to the Committee's Report, and it is included as Attachment A. Jim Blount, a representative of a civic interest group, Friends of Miami University Hamilton, and Jim Fitton, chair of the Hamilton Campus Citizens Advisory Committee, were present at the meeting and requested that their groups have time to conduct a community forum and submit a response to the report by late July. A draft document, "Recommendations and Comments from the Friends of Miami University Hamilton," is included as Attachment B. Mr. Blount reported that the Hamilton Chamber of Commerce and the Lane Library are also active in the discussions. Mr. Blount stated that the interest group is not only looking at the Hamilton Campus from an educational perspective, but also from the perspectives of potential job creation and economic development. President Hodge commented that it is in the best interests of Miami University to serve community needs and indicated no decisions would be made or recommendations forthcoming until the September meeting of the Academic/Student Affairs Committee meeting.

Admissions Update and Review

Provost Herbst reported on enrollment confirmations and profile of the first-year class for Fall Semester 2009. Dr. Herbst reported that multicultural students comprise 11.7 percent of the first-year class. The socio-economic diversity of the class also increased this year, with 170 first-year students who are entering as Miami Access Scholars (tuition is provided to these academically qualified students with family

earnings up to \$35,000) compared to 148 last year. Seventy percent of applicants filed FAFSA applications this year, compared to sixty-one percent last year. Also, Pell Grant recipients increased by three percentage points. Miami's incoming total will fall short of its goal, with about 3,150 expected to attend in August compared to a goal of 3,500.

Dr. Herbst responded to a question about reasons for lower enrollment by reporting that an analysis of responses to a survey of students who declined admission and their given reasons is underway. The report will be shared with the Committee upon its completion. Mr. Wilks stated that for-profit institutions are in competition for our students, and Mrs. Geiger echoed Mr. Wilk's assertion. Dr. Herbst responded that an increasing number of Oxford Campus students are taking on-line courses to fulfill requirements, and the competition for students occurs not only before they arrive at Miami but while they are enrolled. Dr. Herbst commented that Miami must do a better job of marketing its residential experience and the philosophy of engaging students.

Dr. Jones reported that the Summer Orientation sessions have been successful thus far, and in an effort to minimize the customary "summer melt" of confirmed students not attending in the fall, efforts have been made to contact students who have not registered for an orientation session. Dr. Herbst reported that he is forming an Admission advisory committee comprised of faculty and staff members to advise him on policies and strategies concerning student recruitment. Mrs. Mitchell suggested adding nonemployee members to the advisory committee. Dr. Herbst agreed with her suggestion, and he did note that the Admission Office has a standing advisory committee of high school guidance counselors to assist the Admission staff. Dr. Herbst also reported that an outside consultant has been retained to assist Admission Office staff with all facets of the college campus visit experience, and consulting firms will be interviewed to assist with devising strategies for the award of financial aid. President Hodge commented that the "branding" effort underway is critical to Miami's future success in recruiting students. He emphasized that the incoming class is of high caliber and the most diverse in Miami's history. He also stated that the shortage in this fall's class is not a one-year problem, but on-going. New growth areas nationally for potential students must be sought.

At the conclusion of an extensive question and answer session among Committee members and administrators, Dr. Herbst was asked to prepare and distribute a report for the Board of Trustees outlining initiatives on admission and financial aid strategies and procedures.

International Students Discussion

David Keitges, Director of International Education, presented a report on the significant increase in the number of international students attending Miami University in the past four years, rising from 300 students to the 600 currently enrolled students. Included in Attachment C is statistical information for international students enrolled in spring semester 2009, including the number and geographic distribution of students and the number of students enrolled in the Schools or Divisions. Dr. Keitges also reviewed campus challenges related to the increase in the international student enrollment, and those challenges are summarized in a memo from Dr. Keitges included as Attachment D.

Vice President Jones described a number of programs designed to assist in acculturating and advising international students. The programs include an International Living/Learning Community; the "Made for Miami" orientation program prior to the

beginning of the academic year; the Connections undergraduate student mentor program; an international student program sponsored by the Rinella Center; special programs for international students developed by the Student Health Services Center; a mental health program sponsored by the Chinese Student Association; and workshops for faculty and staff regarding cultural differences. Dr. Mosley-Howard also reported that Student Affairs staff members arrange monthly meetings with international students, and that participation of international students in student organizations, fraternities, and sororities has increased significantly. Dr. Keitges commented that a three-week "Bridge" program prior to the beginning of the academic year is offered for international students, as well as a mandatory two-week orientation for all undergraduate international students.

In response to a question about the high number of Chinese and other international students enrolled at Miami, Dr. Herbst responded that the appreciation of currency, the demand for post-secondary education that cannot be met in China, and Miami's recruiting efforts in China and India are major contributing factors.

Centers of Excellence Resolution

Provost Herbst reviewed a resolution to submit proposals to the Ohio Board of Regents for Centers of Excellence. The resolution is included as Attachment E. Dr. Herbst explained that the concept of Centers of Excellence is a key element of the University System of Ohio Strategic Plan, and each Ohio public university has been asked to submit their proposals by June 30, 2009 with the approval of their respective Boards of Trustees. The Chancellor and members of his staff have visited the public university campuses to review prospective proposals. Dr. Herbst reviewed the following proposals, and a descriptive narrative is included with each proposal:

- Scripps Gerontology Center, Attachment F
- Armstrong Institute for Interactive Media Studies, Attachment G
- Institute for Entrepreneurship, Attachment H
- Ohio's Evaluation & Assessment Center for Mathematics and Science Education, Attachment I
- Center of Excellence in Structural Biology and Metabonomics, Attachment J
- Center for Aquatic and Watershed Sciences, Attachment K

Members of the Academic/Student Affairs Committee voted to recommend approval of the resolution to the Board of Trustees at its June 26, 2009 meeting.

With no other business to come before the Committee, the meeting was adjourned at 3:00 p.m.

Stepnen D. Snyger

Secretary to the Board of Trustees

MIAMI UNIVERSITY MIDDLETOWN CAMPUS CITIZEN ADVISORY COMMITTEE

INTRA-UNIVERSITY MEMORANDUM

To:

Office of the University President

From:

Miami University Middletown Campus Citizen Advisory Committee

Date:

June 8, 2009

Subject:

Response to the Report of the Regional Campus Committee

The Miami University Middletown Campus Citizen Advisory Committee ("MCAC") has been requested by the University President's Office to respond to the Report of the Regional Campus Committee. At the outset, the MCAC would like to thank the Regional Campus Committee ("RCC") for its hard work and analysis of current regional campus issues. It is apparent that the RCC has spent significant time analyzing and considering these important issues.

In the interest of brevity, while the MCAC agrees with many of the recommendations of the RCC, it would like to highlight the areas in which the MCAC disagrees with the Regional Campus Report.

First, the MCAC does not believe that the University's reputation will be diluted because of the regional campuses' obligations to address local needs. There are many reasons that students choose to attend regional campuses. Several have little to do with students' academic ability. Some students attend regional campuses because they are non-traditional students who work during the normal school day. These students often do not have time to commute to Oxford several times a week after a long work day. Other students attend regional campuses for financial reasons. This does not necessarily mean that they cannot afford to attend the Oxford campus. Rather, they may not have the financial resources to travel to and from Oxford on a daily basis. For example, a student from Warren County can easily commute to Middletown for class, but cannot afford the time or expense necessary to commute over an hour to Oxford (one way). Further, these students may not be able to afford additional childcare expenses while they commute and attend class. Many have other financial limitations that do not relate directly to tuition payments. Finally, for a variety of reasons, some students who have excellent academic ability upon graduating from high school may not be sufficiently equipped with particular skills or experiences that are necessary to succeed in a traditional college environment. After spending time at the regional campuses, however, these same students are able to excel at the Oxford campus. It has been shown time and time again that students who originate from the regional campuses often transfer to the Oxford campus and excel. The Middletown campus has compiled high-quality assessment data that substantiates this conclusion and would welcome the opportunity to share this information. Moreover, after these students graduate from Miami, they also excel in the workforce and enhance the reputation of the University as a whole. Accordingly, the MCAC believes that any concern that the University's reputation will be diluted by local students who attend regional campuses is misplaced.

This first concern is directly related to the MCAC's second major concern, which is the designation of a campus on the diploma or associated with the degree of a student who originates from or graduates from a regional campus. All students who graduate from Miami University should enjoy all the benefits of the University's strong reputation. Students who originate from or complete a degree at a regional campus should not be faced with the obligation to explain their degree designation when they apply for a job. The MCAC understands that this concern initially appears to be inconsistent with its position that regional campuses will not dilute the University's reputation. It is not inconsistent. Rather, it simply addresses the concern that potential employers may have a mistaken perception that the quality of teaching at a regional campus is different from the quality of teaching at the Oxford campus. Based upon the successes of regional campus students, the MCAC is confident that the quality of teaching and learning at regional campuses is not different. As mentioned above, the Middletown campus has data to support this conclusion. To the extent that some on the Oxford campus believe that the quality is different, the MCAC believes this perception will change as more Oxford professors teach students at the regional campuses. To this point, the MCAC applauds the RCC recommendation to permit, and perhaps require, Oxford professors to teach at regional campuses.

The RCC's recommendation to encourage professors to travel between campuses further supports the argument that degrees and diplomas should have no designation. Put simply, if students graduate from a program after taking many of the same classes from the same professors, there should be no difference in the degree the students earn. As one MCAC member stated:

A degree from Miami should be a degree from Miami. Whether obtained in Middletown, Hamilton or Oxford, or in combination, it should have the same name and value. If not, we are punishing the non-traditional and traditional students who choose to attend the regional campuses. Are the requirements different? They should not be. Is the quality of education lower or is the coursework less demanding? It should not be. Miami University needs to be an entity. The branch campuses are nothing more than an extension where students can obtain the same opportunities in a more convenient setting.

For these reasons, the MCAC believes the University should maintain its current practice of not placing an official campus designation on diplomas or degrees.

Third, the MCAC is concerned about the recommendation to eliminate the Dean level position at the regional campuses. History has shown that having an "Associate Dean" rather than a "Dean" as the leader of the regional campuses would significantly reduce the perception that the regional campuses are an important part of the University. It would diminish the regional campus in the eyes of the faculty, the students, and the communities in which the regional campuses reside. For these reasons, the MCAC recommends that the regional campuses maintain the presence of a Dean on each campus.

In addition, if the University determines that maintaining a Dean on each campus is not feasible, the MCAC recommends that the person who is chosen to lead the regional campuses (currently referred to as a "Regional Campus Administrator") not be associated with any of the

current regional campuses. For example, if the Regional Campus Administrator has historically been associated with the Middletown campus, the MCAC is concerned that those associated with the other regional campuses may not believe that their interests are fairly considered. Similarly, the person holding the Regional Campus Administrator position may, intentionally or unintentionally, favor his or her home campus. It is important that all regional campuses have the opportunity for input and fair representation in all decisions impacting the regional campuses. It is also important that the Regional Campus Administrator has time to make routine campus-specific decisions in a timely manner. This is a concern that exists in the current structure, which often limits Middletown campus leaders from operating the campus in an efficient manner.

Fourth, the MCAC would like to direct attention to a statement in the Regional Campus Report that it finds particularly troubling. On page 8 of the report, the RCC states:

Administrators and faculty in Oxford are reluctant to oversee and administer degree programs that they have no interest in . . . and which will bring no income to the Oxford campus.

By facilitating this process, the University has made clear the importance of supporting and developing its regional campuses. By implication, the University believes that the development of its regional campuses will support the interests of the University's main campus and the University as a whole. For this to be successful, it is important that personal interests take a backseat to the interests of the University. The MCAC requests that the University not embrace beliefs that might impede the progress of these important goals.

Finally, and perhaps most importantly, the MCAC believes that the Regional Campus Report leaves many questions unanswered. This is not intended to imply that the Regional Campus Committee has produced a substandard analysis. The MCAC believes that the Regional Campus Committee has done an excellent job in its initial review. At the same time, however, the decisions that will be made regarding these issues will likely have the greatest impact on the regional campuses since the University made the decision to open the regional campuses. Thus, these decisions should not be made quickly or with incomplete information. For these reasons, the MCAC respectfully requests the University to make preliminary decisions based upon the Regional Campus Report, develop them more fully, and then provide the regional campuses with an opportunity to provide input on these better developed ideas. It is important to the MCAC that the University makes decisions that can be re-evaluated and analyzed further before final decisions are made.

Ronald Diver
Kathleen Klink
Les Landen
John Lazares
Catherine Mulligan
Sam Munafo
Tricia Neeley

Steve Price Michael Raymond Pat Schaefer Joe Scholler Phyllis Short Bill Triick Second draft -- Revised 6/18/09 -- Review & respond

Recommendations and Comments from the Friends of Miami University Hamilton

Friends of Miami University Hamilton are volunteers whose common concerns are the best interests and success of Miami University Hamilton and the Hamilton area. None have been appointed by the university or are employed by the university. The group supports positive Miami University changes that will enhance and expand the beneficial services of the regional campus. The following recommendations and comments from the Friends of Miami University Hamilton are based on the "Report of the Regional Campus Committee" dated March 21, 2009. The Friends of Miami University Hamilton: 1. Strongly recommend increased flexibility for the director/dean at Miami University Hamilton (MUH) and other administrative changes that will reduce and eliminate delays in the present decision process related to the regional campuses. Oppose adding another layer of management between the regional campuses and Oxford administration.

- 2. Support a regional campus structure that facilitates <u>quick response to</u> <u>community needs</u>, including, but not limited to, sudden shifts in the local economy that demand changes in the skills and training of the local work force.
- 3. Urge MUH continue to offer and promote associate degrees while establishing baccalaureate degrees at MUH, rejecting the provost's statement that "associate degrees [are] less viable for MUH." Urge decisions on baccalaureate degree offered be made at the regional campus level.
- 4. Suggest that MUH <u>marketing emphasize its obvious attractions</u> -- quality education, proximity, convenience, flexibility, affordability, etc. -- within the areas it serves.
- 5. Recommend MUH <u>continue and expand its many outreach and service</u> <u>programs</u> that benefit the community and build positive images of MUH. (See "Community & Culture" section on MUH web site.)
- 6. Urge Miami to enable and encourage scholarship programs specifically for MUH students based on various criteria (need, interest, academic achievement, etc.).
- 7. Request the university to <u>cooperate in efforts to build student housing near MUH</u>. If not built by Miami University, or on university property, at least permit inclusion of housing information in campus literature for students and prospective students.
- 8. Request <u>clear definitions and clarifications of the following terms and statements</u> in the provost's March 21 report: (a) Miami brand; (b) brand confusion; (c) "questions about the status or value of regional baccalaureate degrees" and (d) "How should the degrees offered by the regional campuses be made more distinct from Oxford?"

Following are relative excerpts from the "Report of the Regional Campus Committee" and earlier documents, as they relate to the numbered statements (1-8) above:

- 1. "Building organizational structures that afford the regional campuses greater independence and self-sufficiency."
- 2. "Establish Miami and its regional campuses as the economic driver for the region." (Harrison report, 2007) "Additionally, the regional campuses have been positioned in the Chancellor's plan for higher education to reinforce the economy of Ohio."
- 3. "Competitive pressure from community colleges and for-profit schools may also make associate degrees less viable for MUH and MUM."
- 4. "Hire a high-end marketing firm to attract students as well as public attention" to the campuses and "the Miami brand."
- 5. "Miami should ensure that each community understands that Miami is their state university, and all of its educational, research and cultural assets are available to them." (Harrison report)
- 6. "Establish scholarship programs for all of Miami's regional campus students who are part of the under represented groups." (Harrison report) "... reach out to under-served populations in their immediate surroundings."
- 7. Not mentioned in provost report.
- 8. "How should the degrees offered by the regional campuses be made more distinct from Oxford?" "It is important that offering new baccalaureate degrees at the regional campuses does not cause 'brand confusion' for Miami degrees."

STATISTICAL INFORMATION FOR INTERNATIONAL STUDENTS Spring 2009 International Students: Attachment C Continuing Students Enrolled in Spring Semester 2009 = 514 New Students Enrolled in Spring Semester 2009 = 68 Total International Students Enrolled - 582 Total International Students Enrolled - Oxford campus = 573 (branch campuses = 9) Total Students on Optional Practical Training = 45 Grand Total: 628 Male Int'l Students Enrolled - 248 (90 Grad, 158 UG) Female Int'l Students Enrolled - 334 (115 Grad, 219 UG) Geographic Distribution of International Students Who are Enrolled (66 countries): Undergrad TOTAL Grad TOTAL Grad Undergrad Bahamas Malawi Malavsia Bahrain Brazil Mexico Namibia Bulgaria Ω Cameroon Nepal Netherlands Canada Ö New Zealand China Colombia Nigeria Norway Cyprus Pakistan Czech Republic Peru Egypt Eritrea Philippines Poland Finland Portugal Ó France Georgia Qatar Germany Russia Saudi Arabia Ghana Honduras Serbia Singapore o. Hong Kong South Africa India Spain Indonesia Sri Lanka O Iran Sweden Israel Italy Taiwan Japan Thailand Jordan Turkey Ó Ukraine Kazakhstan United Kingdom Kenya Venezuela Laos Korea (South) Vietnam Lithuania West Bank Luxembourg Zambia Madagascar Zimbabwe Summary According to Schools or Divisions of the University (undergraduates): Arts & Science Applied Science Business Admin. Education Fine Arts Environ. Sci. Other/Undeclared **Total Undergraduates Total Graduate Students:**

MIAMI UNIVERSITY OFFICE OF INTERNATIONAL EDUCATION

Memorandum

TO: Academic Affairs Subcommittee of the Miami University Board of Trustees

FROM: David Keitges, Director of International Education

DATE: March 5, 2009

SUBJECT: Campus Challenges Related to International Undergraduate Students at Miami University

I write to briefly describe five current issues related to our effective support of international students from 66 countries now enrolled at Miami University. In spring 2009, 377 international undergraduate students are enrolled, compared to only 98 students five years ago. (Graduate students during this same period rose from 165 to 205). The diversity of international students has also changed as we now enroll 298 mostly undergraduate Chinese students compared to only 39 mostly graduate Chinese students five years ago. Finally, the number of international first-year applicants for fall 2009 has doubled since last year, and most are from China. We are challenged to provide a successful experience for this rapidly growing undergraduate population.

- 1. Providing appropriate support for this fast-expanding population. The Office of International Education and numerous other academic, administrative and support units are now upgrading visa-support, orientation, academic advising, English-language support, and wide variety of other social support services for these students. We have dramatically expanded our orientation activities, added a new presemester Academic Preparation and Culture Program, and made the campus aware of our rapidly growing and changing international student population. These efforts must continue to grow, too.
- 2. <u>Diversity of students in the international population</u>. Currently 60% of our international undergraduate population comes from one country, China, with the next largest population of 6% coming from Korea. Through increased recruitment efforts and more scholarship support we need to attract students from the other major sending countries of India, Korea, Japan, Canada, Taiwan, Mexico, Turkey, Saudi Arabia, Thailand and elsewhere. Miami must not become too dependent on a single source of students as political and economic upheavals overseas can and do disrupt foreign student flows to the United States.
- 3. Support faculty eager to serve the learning needs of these students. With this dramatic increase in international undergraduate enrollment, Miami faculty are now grappling with the need to find new and more effective ways to promote the learning of these students who bring culturally different expectations and skills to the classroom. With CELT and through consultation with departments, we are encouraging faculty to look anew at teaching practices to ensure maximum learning by these students.
- 4. Providing an authentic "Miami Experience" to our international students. Our goal with all undergraduate students is to provide an effective and exciting Miami educational experience on a culturally rich and supportive campus. International students receive a more intense version of this experience as they perfect their knowledge of language and culture as well as excel in their studies. We are gearing up to provide additional campus programming to integrate these students into the seamless whole of what it means to be a Miamian.
- 5. Making best use of our international students to "internationalize" Miami University. An important international education goal of the university is to utilize the presence, knowledge and enthusiasm of international students to help our Ohio and US students understand and appreciate different cultures and ways of thinking. We are now increasing "interaction" events between domestic and international students with the intention of bringing to the greater Miami mind the knowledge of different cultures.

6/26/2009 Agenda Item Academic Affairs Resolution #7

RESOLUTION R2009-

WHEREAS, the Chancellor of the University System of Ohio issued a Strategic Plan for Higher Education on March 31, 2008; and

WHEREAS, the development of Centers of Excellence is a key element of the Strategic Plan; and

WHEREAS, each institutional report must be approved by the institution's Board of Trustees prior to submittal to the Chancellor;

THEREFORE BE IT RESOLVED, that the Board of Trustees of Miami University approves the submittal of the following proposals for Centers of Excellence at Miami University to the Chancellor of the University System of Ohio in accordance with the Strategic Plan for Higher Education:

- o Scripps Gerontology Center
- o Armstrong Institute for Interactive Media Studies
- o Institute for Entrepreneurship
- o Ohio's Evaluation & Assessment Center for Mathematics and Science Education
- o Center of Excellence in Structural Biology and Metabonomics
- o Center for Aquatic and Watershed Sciences



Scripps Gerontology Center

The mission of the **Scripps Gerontology Center** is to provide research and education that make a positive difference in the lives of older people, their families, and their communities. Miami's vision for the center is to continue as a national leader in research designed to inform policy and improve practice, and to become a world leader in international gerontology. This vision will be realized through collaborative research and educational endeavors that are consistent with our current mission and successful track record. Scripps' current collaborators are scholars from Thailand, South Korea, and several Western European countries. In addition, about 20% of the graduate students who are accepted to study gerontology at Miami University are from outside the U.S.

Benchmarks against world-class excellence.

Scripps uses information on three dimensions to measure our success against national trends and standards.

Quality of educational programs. Miami University is one of less than 10 places in the world to offer all three levels of academic credential (baccalaureate, masters, and doctorate) in gerontology. Our Master of Gerontological Studies degree is one of the oldest in the nation, and was the first to be granted the Program of Merit status by the Association for Gerontology in Higher Education. Scripps' graduate and undergraduate students have impressive records of research, publication, and presentations at professional meetings. Our alums have leadership roles at the federal, state, and local levels, in government, non-profit, and private sectors.

External funding for research. Even though the Center is a small unit, Scripps Gerontology Center is among the top grant-getting units at Miami University. Grants and contracts, which make up about 75% of our budget, allow Scripps to maintain a research staff of about 19 people, which includes faculty members from the Department of Sociology and Gerontology who submit their grants and conduct their research through the Center.

Quality of research staff and affiliated faculty. Researchers and faculty associated with the Scripps Gerontology Center have been involved in all levels of leadership by serving on editorial boards and on executive boards for local, state and national organizations in the field, and by testifying before state and federal legislators on issues related to aging and long-term care. Scripps' track record of externally-funded research and the number and quality of publications and presentations made by the Center's staff and affiliated faculty also speak to our national and international reputation.

Because of Scripps' ability to leverage external funding, the Center has been able to sustain a very efficient and effective infrastructure for generating grants, conducting research, and supporting academic programs in gerontology.

A viable development plan.

For the past decade, Scripps' strategic plan has included explicit goals for funding. In particular, the Center has shifted toward an increase in federal funding (bringing this source in balance with our state and local funding), and have been working with Miami's Development Office to seek private and corporate funding for several specific goals, including endowments for fellowships, lecture series, and an eminent scholar. The Center has had some success with these development efforts (Cottrell Fund, Colonial Senior Services gift, and the Whelpton Fund).

Impact on the local/regional economy.

Scripps' greatest impact on the economy is through applied and policy-relevant research. Our research on the structure and financing long-term care is sought and used by aging service planners, providers, and policy-makers both locally and nationally to support the expansion of home and community-based services. The direct result of this expansion of home care is a savings to Medicaid. Since Medicaid represents 24 % of state expenditures, reducing long-term care expenditures allows for more effective and flexible use of general revenue funds. The expansion of home care also results in new jobs for the administration. planning, and provision of these services. In addition, our research on the aging workforce, and particularly on the meeting the needs of people who are balancing employment with family caregiving responsibilities, has a significant, if indirect, impact on worker productivity, employer hiring and training costs, and worker income (via the ability to sustain employment). Finally, Scripps' academic programs in gerontology are training leaders in the planning and management of long-term care and other aging programs—some of the fastest growing industries in an aging society.



Armstrong Institute for Interactive Media Studies

The Armstrong Institute for Interactive Media Studies, founded in 1996, is an interdisciplinary program at Miami University that is dedicated to understanding the disruptive impact of digital media on nearly all aspects of modern life. Amongst the technologies under investigation are social networking, virtual reality, digital entrepreneurship, new models of marketing, gaming, information visualization and digital rapid prototyping. AIMS provides curriculum, research, and industry relationships that are designed to keep Miami University and the State of Ohio on the forefront of the new economy. Put simply, the Institute prepares students for the jobs that do not get outsourced — the jobs that require higher order conceptual, entrepreneurial, theoretical, contextual, and interdisciplinary skills that go far beyond simply knowing how to use a computer program. The Institute is also involved in important commercial ventures with major firms in Ohio, across the nation, and around the world.

Benchmark against World Class Excellence

AIMS was one of the first programs of its kind and it is therefore hard to formally benchmark. In a recent review, Dean Jeffrey Rutenbeck, Past President and Present Chairman of the International Digital Media and Arts Association found AIMS to be "a model program that reflects the growing impacts of digital media. . " and also noted that what AIMS "has accomplished these past few years shines brightly as a guiding light for other institutions to follow." Recent hires by AIMS are from the top graduate programs in their respective fields and enrollment demand for the major and minor is far beyond capacity.

Our world-class excellence is also measured by the market: Corporations who have engaged the AIMS students and faculty have been among the most successful, including Ohio companies such as P&G, Convergys, Cintas, as well companies with a strong Ohio presence, such as Tractor Supply Corporation, HP, and Gensler. It is also measured by the academic market, where MIT graduates and leading edge technology leaders recently released, at Miami University, a very important piece of software, Processing, as the result of work done in summits in Oxford.

Development Plan

Reflecting the importance of its work on digital media, AIMS has received significant gift pledges, including a \$14 million contribution by C. Michael Armstrong (ex-CEO and President of IBM, AT&T, and Hughes Electronics) and a

million dollar plus gift from John Smale (Ex-CEO of P&G), as well as a host of smaller gifts from alumni and corporations. The five-year strategic plan for AIMS involves expanding our impact regionally and globally through building on strategic relationships while continuing to solicit funds from individuals and corporations.

Impact on the local/regional economy

AIMS will have a major impact on the local/regional and national economy. For example, the Institute plans to create an Information Visualization Lab with P&G (ideally housed on the P&G campus) in the coming year. P&G--which has invested millions of dollars per year in this area--is interested in helping to train information savvy students, conduct white paper research, and create an international nexus of activity around information visualization, which they recognize is key to their agility as a corporation. This lab will yield strong graduates, internships, jobs, intellectual property, and build Ohio's third frontier brand. The P&G alliance has been solidified by a gift from John Smale that will allow Miami to create our own virtual reality center on campus that will work to support and strengthen our efforts with this world-class company.

AIMS has also worked with clients and offered classes in Shanghai, Dublin, and other global destinations. Finally, it will continue to focus on the regional digital community — by offering certificate programs for those in the workforce, specialized training and consulting for regional companies, by requiring internships for our students, and by requiring all of our students to take our capstone course where they work with a company to solve real-world problems. And while some of those projects are for the "P&Gs" of the world, many others are for small Ohio companies. This year AIMS is working on scoping projects with Bridge Worldwide, and small/medium digital content agency in Cincinnati, and Sage Quest, a Cleveland company working in the GPS space.

The AIMS program provides the technical skills, but more importantly, the problem solving skills and actual work experience to create a generation of knowledge workers that can help shape the economic future of the region. Southwest Ohio is actually one of the strongest "digital centers" in the country, apart from the coasts, as Pete Blackshaw of Nielsen's Interactive Division has noted many times in the press. By providing a stream of top-notch students, by working with local and regional clients, by providing certificates and worker (re)training, by hosting international events, by being a new model for higher education, AIMS will continue to seed and invest in the strong resource base of Ohio as it positions itself for the new economic realities that lie ahead.



Institute for Entrepreneurship

The Miami University Institute for Entrepreneurship housed in the Farmer School of Business is dedicated to the development of the next generation of successful entrepreneurs through innovative classroom instruction, hands-on practicum opportunities and engagement with active and aspiring entrepreneurs in Southwest Ohio and among Miami alumni nationwide.

We achieve this mission through the following entities housed within the Institute.

- Thomas C. Page Center for Entrepreneurial Studies (Page Center) which focuses on academic achievement and research.
- Center for Social Entrepreneurship (CSE) which provides students to apply entrepreneurial behavior to societal issues.
- Center for an Entrepreneurial Economy (CEE) which supports the entrepreneurial aspirations of Ohio residents with a primary focus on Southwest Ohio.

Benchmarks against World Class Excellence

Since its establishment in 1992 as the Page Center, the Miami program has been recognized by peer organizations—National Consortium of Entrepreneurship Centers and the US Association of Small Business and Entrepreneurship--and the Princeton Review as a leader in undergraduate entrepreneurship education. In October 2008, the Institute was ranked as the 16th best undergraduate entrepreneurship program in the country out of 2,300 institutions surveyed.

Development Plan and Resource Requirements

In April 2008, the Institute adopted a three-year business plan grounded in the following strategic principles.

- Entrepreneurship education must consist of more than in-class instruction. The Institute will provide multiple extra-curricular outlets through which our students may supplement their classroom experience and practice entrepreneurship.
- Resources must be targeted to programs and activities for which Miami has a competitive advantage and can serve as a national model for undergraduate entrepreneurship education.
- The program will expand its University-wide presence through strategic alliances with the other schools and colleges on the Oxford campus and programmatic partnerships with the regional campuses.

 The Institute should provide continuing education and programmatic support to graduates of the entrepreneurship program and area residents as they pursue their entrepreneurial dreams.

To fully implement this mission, the business plan calls for a total endowment of \$17 million. The current endowment including commitments is approximately \$6.5 million. Based on a survey of other leading entrepreneurship programs in the United States, the average endowment of a Princeton Review Top 25 entrepreneurship program is \$13.7 million.

Impact on Local/Regional Economy

The Institute impacts the local and regional economy in two ways. First, we have seen a significant increase in the number of Miami entrepreneurship students who are starting new ventures developed during their entrepreneurship studies. For example, four May 2009 graduates are launching a business in Dublin, OH which offers designer clothing for dialysis patients. The business was created as their capstone project in the entrepreneurship minor. A more general indication of the impact of the program on our graduates comes from a 2008 survey of Miami graduates with a minor degree in entrepreneurship. Twenty six percent of the respondents reported they had started a full-time or part-time business. Another fifty percent indicated they plan to start a business in the next three to five years.

Second, the CEE provides support to non-students who are aspiring entrepreneurs. The CEE offers an "open mic" session during which aspiring entrepreneurs can present their concept to a faculty panel and get advice on next steps, potential networking opportunities and available resources. Where appropriate, the Center may take on a presenter as a program client, engaging a class or a student team to work with the entrepreneur to further develop the concept.

This summer the CEE, in partnership with CEO-ACT in Cincinnati, is offering a weeklong boot camp during which area residents with a business concept will complete a feasibility study to determine the commercial potential of the concept. We are also in preliminary discussions with the City of Wilmington to conduct a similar workshop for residents affected by the DHL closing.

Over the longer-term, we hope that the Entrepreneurial Institute will use our growing center in Over-the-Rhine to promote entrepreneurship in that critical area. We perceive in Over-the-Rhine, and potentially in other areas as well, a tremendous demand on the part of would-be entrepreneurs for precisely the kinds of skills that the Institute can offer. Clearly, over the longer term, one of the greatest prospects for distressed areas is for the people who live within them to be able to develop and grow local businesses that are inevitably the foundation stone of sustained long-term growth.



Ohio's Evaluation & Assessment Center for Mathematics and Science Education

Ohio's Evaluation & Assessment Center for Mathematics and Science Education (E&A Center) is a specialized state-wide center that provides expertise in research and evaluation services and delivers reliable and accurate information about the outcomes of STEM academic program efforts and activities. The Center is at the forefront of the nation in developing approaches to assessment that are targeted to meet the needs of clients. The E & A Center partners with the *Discovery* Center to provide face-to-face and virtual academic content programs for mathematics and science educators. In order to assess and improve STEM academic programs, the Center collaborates with local, state, and national agencies, higher education institutions, school districts, professional development centers, and informal mathematics and science education groups across Ohio and the nation.

STEM Academic Program evaluation, assessment, and research activities include:

- Providing national, regional, state and local evaluation, assessment and research services. Academic program level services assess or evaluate quality and productivity, while project level services use appropriate measures and instruments to assess effectiveness, including changes in student learning.
- Offering technical assistance and consultation support for developing, implementing, evaluating, and revising academic programs, large-scale state and national research assessments, and P-20 STEM curricula.
- Facilitating and fostering the incorporation of evaluation and assessment methods in academic program development and in research designs for proposals for external funding.
- Translating research and evaluation findings for policymakers, as well as for the general public, and effectively disseminating evaluation and research findings through both scholarly and popular venues.

STEM Academic Program project activities include:

- Providing face-to-face and online content to P-20 STEM educators.
- Enhancing STEM educators' skills in using research-based instructional strategies.
- Providing a support network for STEM educators by connecting them via online learning communities across Ohio.

The vision of Ohio's Evaluation & Assessment Center for Mathematics and Science Education and its partner, *Discovery*, is to extend its existing virtual infrastructure to collaborate more directly with other providers of high-quality STEM teaching, learning, evaluation and research services across Ohio and the nation. The Center formally collaborates with the Evaluation Services Center, University of Cincinnati, and it taps the specific expertise of more than 50 state and national experts and affiliate faculty—uniting the "best of the best" for the improvement of STEM academic programs. The Center will continue to strategically partner with individuals and institutions which have

demonstrated potential to make significant contributions to STEM teaching, learning and assessment. Ultimately, the E & A Center seeks to serve Ohio and the nation by promoting assessment and evaluation as the lens through which to strategically improve STEM teaching and learning in every venue, from the schoolhouse to the statehouse.

Benchmarks against World Class Excellence

The E & A Center and its partner, Discovery, are recognized nationwide for providing superior evaluation, assessment and academic program services and products for STEM educators, and have experienced unchecked growth in both clientele and revenue. The Center serves repeat clients and garners new business based on an excellent and longstanding reputation for the quality and efficiency of its work. The E & A Center routinely provides evaluation and assessment services to more than 25 large externally-funded projects, located at institutions of higher education. The E & A Center conducts 13 project or program evaluations for the National Science Foundation at more than 44 universities across the US. The award of contracts for the evaluation of multi-year, multi-million dollar projects, including two large, urban Mathematics and Science Partnership projects (New York City and Philadelphia) and two of five Undergraduate Research Centers (Ohio State and Purdue University), provides evidence of the Center's reputation for delivering worldclass evaluation services. Its closest competitors are high-profile national providers of evaluation services such as Horizon Research, Inc., Inverness Research, SRI International, and WestEd, which provide a benchmark to gauge the work of the Center, as well as motivation for promoting the Centers' work in new venues with new clients. Additionally, the work of the E & A Center is vetted via invited presentations at national and state conferences (26 in 2008-09) and peer-reviewed publications.

Development Plan

Since July of 2008, the E & A Center has increased revenue from current projects by more than \$1,000,000 with \$4.49 million in projected revenue from currently funded contracts (through 2014). This represents a 50% increase in the number of projects from January of 2008. According to Ohio Board of Regents' records, annual revenue of the E & A Center is more than \$1.3 million. Its partner, *Discovery*, also has experienced tremendous growth in the *iDiscovery* program (online professional learning communities) that now serves more than 4,000 teachers across Ohio. *Discovery* is largely supported by state funding, so intense efforts have begun to pursue federal funding sources via collaborative E & A Center grants.

impact on the local/regional economy

The economic impact of the E & A Center and its partner, *Discovery*, is both local and state-wide, specific and broad-based. More notably, the Centers impact the Ohio economy by providing a measure of accountability for the quality of STEM teaching and learning in Ohio schools, colleges, and universities. Through its delivery and evaluation of academic programs, it provides research-based examples of excellence in STEM education that ensure that students have the skills, knowledge and dispositions to enter and remain in STEM careers.



Center of Excellence in Structural Biology and Metabonomics

Miami University has already achieved world-class excellence in Structural Genomics and Structural Biology. Indeed, one thing that sets Miami University apart from other structural biology centers in the state is its long involvement in a nationally and world recognized major initiative for Structural Genomics. As a result, Miami University has established a platform that can be used to advance structural biology at an accelerated pace, in comparison to conventional university research laboratories. Miami University plans to build on its success in Structural Genomics and Structural Biology to establish a world-class leadership role in Metabonomics, a relatively new discipline that uses NMR spectroscopy to measure the profile of small molecule metabolites in biological fluids with the goal of determining biomarkers for human diseases. Towards achieving this goal, Ohio Eminent Professor Michael Kennedy has already established the Ohio Consortium for Metabonomics Studies of Childhood Diseases at Miami University. The consortium is founded on collaborations with physicians at Cincinnati Children's Hospital Medical Center, Nationwide Children's Hospital in Columbus, and Rainbow Babies Hospital in Cleveland, representing three of the top ten children's hospitals in the Unites States. Additional collaborations include physicians at New York Presbyterian Hospital at Columbia University in New York, directed at studies of human pancreatic cancer.

We propose now to create a *Center of Excellence in Structural Biology and Metabonomics* to advance and accelerate the pace of biomedical research in the state of Ohio. Our plan includes a substantial expansion in the scope of research and education centered around this center. While Miami University currently has state-of-the-art world class facilities to support a Center of Excellence in this area, our vision to establish a truly unique center with a novel suite of instrumentation will require expanding the repertoire of instrumentation beyond that which currently exists at Miami University, in particular, with the addition of a 950MHz NMR spectrometer and a 7T small animal imaging facility to enable parallel longitudinal metabonomics and imaging studies in animal models for human diseases.

Viable Development Plan

Miami University is a member of the Northeast Structural Genomics Consortium, NESG, one of four Large Scale Production Centers supported by the National Institutes of Health's Protein Structure Initiative. The NESG receives ~\$10 million annually through this initiative. NESG has become a world leader in Structural Genomics, and is poised to receive continued funding in PSI-Biology, the third phase of this NIH program, which will continue through 2015. Miami University's involvement in NESG has been made possible through investments by the Ohio Board of Regents and Miami University, which supports Professor Kennedy as an Ohio Eminent Scholar in the Department of

Chemistry and Biochemistry. The Ohio Board of Regents funding, together with additional Miami University funding, enabled Miami University to assemble a state-of-the-art Magnetic Resonance facility with more than \$5 million in NMR spectrometers, including a showcase 850 MHz NMR system. Miami University also recently received a National Science Foundation Major Research Instrumentation award enabling the purchase of a high-field pulsed EPR spectrometer, representing one of only three in the country with its specialized capabilities for characterizing the structure of biological macromolecules, further setting Miami University apart as a world class facility for structural biology research.

We eventually want to establish Miami University as the "go to" site for medical researchers at the hospitals in the State of Ohio who have a need and interest in disease related research that requires a comprehensive and interdisciplinary approach in order to make critical advances for difficult medical research problems. We plan to offer a powerful array of solutions for medical research, including parallel structural biology, metabonomics, and longitudinal small animal imaging studies of animal models for human diseases. In terms of Structural Biology, we will build on ten years of NIH funding and participation in the Protein Structure Initiative to establish a unique State of Ohio resource for protein structure-function studies driven by collaborations medical doctors carrying out research at the various hospitals across the state. In terms of Metabonomics studies, we build on an established network of collaborations at the three major children's hospitals in the state of Ohio. In terms of small animal imaging studies, we plan significant expansion of our existing small animal model studies of human diseases to augment our structural biology and metabonomics studies. Collectively, the combined and parallel application of the technical approaches that will found our Center of Excellence would provide unparalleled capabilities for advancing biomedical science in the state.

Impact on the local/regional economy

We anticipate that the Miami University Center of Excellence in Structural Biology and Metabonomics will have a significant and long-term positive impact on the local and regional economy. The largest impact will come from training a next generation of PhD level students in state-of-the-art biotechnology capabilities that we expect will provide a feedstock of highly trained and educated individuals that will stimulate continued growth in the are of biotechnology in the state. We expect that these individuals will not only expand the base of high paying biotechnology jobs around the state, but we also anticipate that the new PhD's trained in this environment will contribute to innovation and entrepreneurial activities in the state, thus contributing to a stronger and growing economy for Ohio. At Miami University, we anticipate that the advent of the Center of Excellence will lead to the creation of new staff and faculty lines that will be used to support and expand the Center of Excellence. The prospects for commercialization are also strong. Indeed, we have had serious discussions with BioStart in Cincinnati concerning our ambition to establish a commercial venture company that would conduct metabonomics based screening for biomarkers for hospitals, thus creating jobs for a new business sector in the state. This commercial venture could become a shining example of how university-based research is propelling

new sectors of the Ohio economy forward at a time when traditional manufacturing is declining.



The Center for Aquatic and Watershed Sciences

Understanding the interface between human needs and the availability of high quality freshwater resources is the most sensitive link in the climate-energy impact chain in Ohio. The availability of clean freshwater is essential not only for human drinking, bathing, and recreation, but also for alternative energy production through biofuels and hydroelectric power, for agricultural food production, and for most industries ranging from food and beverage processing to pharmaceuticals. A predicted 2 percent decline in water based transportation due to climate change in Ohio will result in an estimated nearly \$10 billion and 50,000 job impact. Ninety-seven percent of all cities, villages, schools, businesses, and industries in Ohio rely on ground water, and Ohio farmers use about 2 billion gallons of ground water per year to irrigate their crops. Indeed, the ability to make rationale decisions about the management of Ohio's surface and groundwater resources may be the most important economic development and sustainability issue we will face in the next decade.

The proposed **Center for Aquatic and Watershed Sciences (CAWS)** at Miami University will address these major issues. This center will focus on understanding the relationship between water quality and environmental change including climate change and other human-related management issues ranging from shifting land use patterns, agricultural practices and production, toxic algae blooms (such as the one that has just closed down Grand Lake Saint Mary's), to carbon cycling and greenhouse gas storage/production in reservoirs. A central focus will be the development and application of advanced instrumentation techniques that will facilitate and automate water quality assessment through partnerships with industry that reach out to the Global Lake Ecological Observatory Network (GLEON).

The Center will be led by an internationally prominent and productive group of faculty, including Ohio Eminent Scholar in Ecology, Dr. Craig Williamson. Dr. Williamson and his students have been active participants in GLEON, and faculty from five science departments at Miami have submitted two major NSF proposals to begin to fund CAWS and forge links with industry through iDCAST and GLEON.

Benchmarks against World Class Excellence

- Existing Graduate Program in aquatic and terrestrial ecology include 36 faculty associates; the proposed Ph.D. program in Ecology, Evolution, and Environmental Biology (EEEB) would have 45 faculty associates in 7 departments
- Over the past 5 years (2004-08), EEEB faculty acquired more than \$17,000,000 in external funding, an average of ~\$110,000 per faculty member per year. This is a 66% increase in funding (per faculty member) over the previous 5-year period, indicating that the group is getting stronger.
- Faculty in the CAWS group are principal investigators and active participants on an NSF Research Experiences for Undergraduates (REU) grant that is currently in its 8th year of funding.
- CAWS is part of a pending NSF Major Research Instrumentation (MRI) proposal to assemble a suite of instrumentation that will integrate 10 major research topics from 13 labs across 6 departments. This large interdisciplinary group will be involved in the education/training of the following new/existing personnel: 7 postdocs, 21 graduate students, 37 undergraduates per year. Thus, there is a high impact of long-term integrative education/training of personnel in research areas essential to Ohio economy.

Available Resources

- CAWS has institutional support in place at the level of cost share (30% total equipment budget) as well as a permanent salary line for a full time technician supported by the College of Arts and Science. A business plan to support CAWS on a long-term basis is also in place.
- A prominent resource available to CAWS is the Miami University Ecology Research Center (www.cas.muohio.edu/erc/), a 69 hectare field station located 3 km from the Oxford campus. The ERC contains experimental ponds, experimental mesocosms for aquatic and terrestrial research, and a state-of-the-art meteorological station that provides continuous data and is part of national climate networks including the National Atmospheric Deposition Program and the US EPA Clean Air Status and Trends (CASTNET) program.

Impact on the local/regional economy

The potential impact of the Center on the local and regional economy is great. Following are some examples of where the Center's research could have the greatest impact:

- Two of the world's leading manufacturers of water quality instruments are located in Ohio:
 Fondriest Environmental, Inc., and Yellow Springs Instruments. We plan to partner with these two industrial leaders and link with global demand to develop better tools for water quality assessment through GLEON.
- The Center's research on lake quality will directly to pertain to the measurement, prevention, and
 possible remediation of pollution in Ohio's waters. It is estimated that the economic costs of
 eutrophication of US freshwaters is \$2.2 billion per year, due to reduced property values and lost
 recreational opportunities.
- In particular, the Center's work on climate change will help Ohio policymakers and businesses cope with toxic algae. Toxic blue-green algae thrive in warmer waters, and are likely to increase in future years. In addition they are favored by excess nutrient supply, often from agricultural runoff. A current example is the bloom of toxic blue-green algae occurring in Grand Lake St. Mary's, Ohio's largest inland lake. Because of this bloom, the Ohio EPA has issued warnings against swimming and waterskiing in the lake. According to the Auglaize and Mercer Counties Convention and Visitor Bureau, these warnings are likely to significantly reduce tourism in the area, an activity that brings \$40 million annually to the area.
- Finally, the Center's work on promoting water quality has a direct impact on some of Ohio's most important tourism assets. For instance, in 2006, \$2.96 billion was spent through fishing, hunting and wildlife recreation activities in Ohio. A considerable fraction of Ohio tourism is water-based.