# Helaine Alessio

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#### PROFESSIONAL EDUCATION

Post-doctoral Research Fellow, 1986-1987 Johns Hopkins University, Baltimore, MD

National Institute on Aging

Department of Molecular Physiology and Genetics

Post-Doctoral Mentor: Richard G. Cutler

Ph.D., 1986 The University of Maryland, College Park, Maryland

Area of Concentration: Exercise Physiology

Secondary Focus: Gerontology

Dissertation: Effects of Endurance Training on Lipid Peroxidation and Scavenger Enzyme

Activity in Liver, Red and White Muscle

Chair: Allan H. Goldfarb

M.S., 1983 Ithaca College, Ithaca, New York Area of Concentration: Exercise Physiology

Secondary Focus: Biology

Thesis: Effects of Caffeine and Exercise on Body Composition

Chair: Robert R. Jenkins

B.S., 1981 Rutgers University, Douglass College, New Brunswick, New Jersey Health, Physical Education and Special Education

#### PROFESSIONAL EXPERIENCE

#### Miami University. Oxford, Ohio

- Chair, Department of Kinesiology and Health Miami University, July 2007 present
- Professor, Department of Kinesiology and Health, School of Education, Health and Society, 1999 – Present
- Distinguished Scholar of the Graduate Faculty 2006-present
- Affiliate Professor, Department of Biology, College of Arts and Science, 2003 present
- Scripps Gerontology Fellow, College of Arts and Sciences, 1993-present

# American University, Washington, D.C.

• Assistant Professor, Department of Health and Fitness Management, 1986

# Scholarship and Research

## Research Agenda

During my time at Miami University, I have continued work from my doctoral and post doctoral research on oxidative stress and exercise. The result has been over 22 refereed journal articles on the subject of oxidative stress (which have been cited over 3000 times in publications by other investigators world wide), several book chapters, a book, and four external grants (one as coprincipal investigator and three as principal investigator). My work has been funded by the National Cancer Institute, National Institutes of Health and National Institute on Aging.

In addition to oxidative stress, I have been directly involved in investigations on the risks as well as benefits of physical inactivity and exercise, adding the assessment of gene expression and associated health-related phenotypes as biomarkers to my previous main focus of oxidative stress. I have also collaborated with faculty from the Speech Pathology and Audiology department, studying the interactions of regular and acute exercise with speech and hearing sensitivity. Over 20 publications, including several book chapters have resulted from this line of research. I have also worked with the PC Project to develop tolerable exercises that can be performed by persons with an ultra rare skin disease, pachyonychia congenital.

My research interests continue to expand and I have recently been active in investigating personal and ecological health, and sustainability. I am also exploring teaching and research projects in Africa that address global health and sustainability. I remain active and engaged in a number of research projects, all of which include students involved in hypothesis generation, data collection, analyses, and paper/presentation preparation. These projects typically result in professional presentations and refereed journal articles.

#### **Books**

Alessio, H.M and Hagerman, A.E. Oxidative stress in exercise and aging. London: Imperial College Press, 2006.

## **Book Chapters**

- 1. Alessio, H.M. and Hutchinson, K. 2013. Chapter 6: Fitness and Better Hearing. In The Consumer Handbook on Hearing Loss and Hearing Aids: A Bridge to Healing, Richard Carmen (Ed.), 111-132.
- 2. Alessio, H.M. and Hutchinson, K. 2008. Is there a relationship between exercise and better hearing? In The Consumer Handbook on Hearing Loss and Hearing Aids: A Bridge to Healing, Richard Carmen (Ed.), 133-136.
- 3. Alessio, H.M. 2006. Oxidative stress and muscle size, type, and action. In H.M. Alessio and A.E. Hagerman (eds.) Oxidative stress, exercise and aging. London: Imperial College Press, pp 34-57.

4. Alessio, H.M. 2006. Oxidative stress across the exercise continuum. In H.M. Alessio and A.E. Hagerman (eds.) Oxidative stress, exercise and aging. London: Imperial College Press, pp 58-84.

- 5. Schweitzer, N.B. and Alessio, H.M. 2006. Gene expressions: oxidative stress, exercise, and aging. In H.M. Alessio and A.E. Hagerman (eds.) Oxidative stress, exercise and aging. London: Imperial College Press, pp 145-170.
- 6. Alessio, H.M. and Hutchinson, K.M. (2004). Questions and answers about hearing sensitivity and cardiovascular health. In Richard Carmen (Ed.) <u>The Consumer Handbook on Hearing Loss & Hearing Aids: A Bridge to Healing</u> (Second Edition). (pp. 132-134). Sedona, AZ:Auricle Ink Publishers.
- 7. Alessio, H.M. (2003). Exercise. In R.G. Cutler (Ed.) Oxidative Stress and Aging. Oxidative Stress and Aging: Advances in Basic Science, Diagnostics and Aging. (pp. 1120-1132). London: World Scientific Publishing.
- 8. Riedl, K.M.; Carando, S.; Alessio, H.M.; McCarthy, M; Hagerman, A.E. (2002) Antioxidant Activity of Tannins and Tannin-Protein Complexes. Assessment *in vitro* and *in vivo*. In Morello, M and Shahadi, F. (Eds.) <u>Free Radicals in Foods: Chemistry, Nutrition and Health</u> (pp. 188-2000), Washington, DC.: American Chemical Society.
- 9. Alessio, H.M. (2001). Physiological Aging. In L. Morgan and S. Kunkel (Eds.) <u>Aging:</u> the Social Context, 2<sup>nd</sup> Ed. (pp 107-137). Thousand Oaks, California: Pine Forge.
- 10. Alessio, H.M. (2000). Lipid peroxidation in healthy and diseased models. In C. Sen & L.Packer (Eds.) Exercise and oxygen toxicity, 2nd ed. (pp. 115-128). New York, N.Y.: Elsevier Science Publishers.
- 11. Alessio, H.M. (1998). Aging of the organism: Physiological aging. In L. Morgan & S. Kunkel (Eds.) <u>Aging: The social context</u> (pp. 105-135). Thousand Oaks, California: Pine Forge Press.
- 12. Alessio, H.M. (1994). Lipid peroxidation process in healthy and diseased models. In C.K. Sen, L. Packer, & O. Hanninen (Eds.) <u>Exercise and oxygen toxicity</u> (pp. 269-295). New York: Elsevier Science Publishers.

# Refereed Journal Articles

- **1.** Alessio, H.M., Malay, N.J., Maurer, K., Bailer, A.J., and Rubin, B. Examining the effect of proctoring on online test scores. Journal of Online Learning, In Press.
- **2.** Alessio, H.M., Hutchinson Marron, K., Cramer, I., Stephenson, S., Marciondo, K., Wagner, S., Wharton, T., Hughes, M. Sproat, B., Bunger, A. Effects of health factors and personal listening behaviors on hearing acuity in college-aged students. *International Journal of Audiology*. Under Revision.

**3.** Hutchinson Marron, K., Malott, L., Alessio, H.M., Bunger, and Szymczak, C. 2015. Gender factors that affect health and hearing acuity in personal listening device users and non-users. *Journal of Women's Health, Issues, and Care*, 4, 4:1-7.

- **4.** Hutchinson, K.M., Marchiondo, K., Stephenson, S., Wagner, S., Cramer, I., Wharton, T., Hughes, M., Sproat, B., and Alessio, H.M. 2015. (epub ahead of print 2014) College Students' personal listening device usage and knowledge. *International Journal of Audiology*. 54,6:384-390.
- **5.** Hutchinson, K.M., Sproat, B., Ross, D., Wagner, S., and Alessio, H.M. 2014. Music listening behavior, health, hearing and otoacoustic emission levels. *International Journal of Environmental Research and Public Health*, 11: 7592-7607.
- **6.** Alessio, H.M., Ansinelli, H., Threadgill, C., and Hagerman, A.E. 2014. Comparison of gene and protein expressions in rats residing in standard cages with those having access an exercise wheel. *Biomedical Research International*. Article ID 950516: 1-9.
- **7.** Alessio, H.M. and Hutchinson-Marron, K.M. 2014. Fitness and Better Hearing, Part 2. *Hearing Review.com*, 18-24.
- **8.** Alessio, H.M. and Hutchinson-Marron, K.M. 2014. Fitness and Better Hearing, Part 1. *Hearing Review.com*, 30-36.
- **9.** Alessio, H.M., Rogers, J.L., Radina, M., and Wasburn-Moses. 2014. Role of Ecological Literacy in a College of Education: Acknowledging the Intersection of Person and Place in Pursuit of Health and Well-being. *Journal of Health, Wellness and Society*, 3: 67-83.
- **10.** Alessio, H.M. 2011. Uselessness and potential harms of antioxidant supplementation. International Journal of Exercise Science, 5: Article 14.
- **11.** Simonsen, M.L., Alessio, H.M., White, P., Newsome, D.L. and Hagerman, A.E. 2010. Acute physical activity effects on cardiac gene expression. Experimental Physiology. <u>95</u>: 1071-1080.
- **12.** Hutchinson, K.M. and Alessio, H.M. 2010. Examination of the Associations between Cardiovascular Health and Hearing: Comparative and Historical Perspectives. Canadian Journal of Audiology, 6: 20-29.
- **13.** Hutchinson, K.M., Alessio, H.M., Baiduc, R.R. 2010. Association between cardiovascular health and hearing function: Pure-tone and distortion product otoacoustic emission measures. American Journal of Audiology, 19: 26-35. [Earned the honor of the #1 most frequently read articles out of the top 50 in the American Journal of Audiology]
- **14.** Alessio, H.M., Schweitzer, N.B., Snedden, A., and Hagerman, A.E. Spontaneous tumor development is reduced in laboratory rats given access to physical activity and exercise. 2009. Journal of the American Association for Laboratory Animal Science, 48: 1-5.
- **15.** Baker, S.E., Hipp, J., and Alessio, H.M. 2008. Ventilation and speech characteristics during sub-maximal aerobic exercise. Journal of Speech, Language, and Hearing Research, 51: 1203-1214.
- **16.** Peters, P., Alessio, H.M., Hagerman, A.E., Nagy, S., and Wiley, R.K. 2006. Oxidative stress in exercise-induced blood pressure changes in hypertensives. International Journal of Cardiology, 110:199-205.
- **17.** Schweitzer, N.B., Alessio, H.M., Berry, S.D., Roeske, K., and Hagerman, A.E. 2006. Exercise-induced changes in cardiac gene expression and its relation to spatial maze performance. Neurochemistry International, 48: 9-16.

**18.** Alessio, H.M., Hagerman, A.E., Nagy, S., Philip, B., Byrnes, R., Woodward, J., Callahan, P and Wiley, R.L. 2005 Exercise improves biomarkers of health and stress in animals fed ad libitum. Physiology and Behavior. 84: 65-72.

- **19.** Schweitzer, N.B., Alessio, H.M., Hagerman, A.E., Roy, S., Sen, C.K., Nagy, S., Byrnes, R.N., Woodward, J., and Wiley, R.L. 2005. Access to exercise and its relation to cardiovascular health and gene expression in laboratory animals. Life Sciences, 77: 2246-2261.
- **20.** Alessio, H.M. 2004. Student perceptions about and performance in problem based learning. Journal of Scholarship in Teaching and Learning. 4:25-36.
- **21.** Roy, S., Kuanna, S., Alessio, H.M., Vider, J., Bagchi, D., Bagchi, M., and Sen., C.K. (2002 Anti-angiogenic property of edible berries. Free Radical Research, 36: 1023-1031.
- **22.** Alessio, H.M., Hagerman, A.E., Romanello, M., Carando, S., Threlkeld, M.S., Rogers, J., Dimitrova, Y., Muhammed, S.and Wiley, R.L. 2002. Consumption of green tea protects rats from exercise-induced stress in kidney and liver. Nutrition Research, 22: 1177-1188.
- **23.** Alessio, H.M., Hutchinson, K.M., Price, A., Trchka, M., and Reinart, L. 2002 Cross sectional assessment of cardiovascular health and hearing acuity. Hearing Journal, 55, 32-40.
- **24.** Alessio, H.M., Hagerman, A.E., Rice, R., Fulkerson, B.K. & Wiley, R.L. 2000. Generation of reactive oxygen species after exhaustive aerobic and isometric exercise. Medicine and Science in Sports and Exercise, 32: 1576-1581.
- **25.** Hutchinson, K.M., Alessio, H.M., Hoppes, S., Gruner, A., Sanker, A., Ambrose, J. & Rudge, S.J. (1999). Effects of cardiovascular fitness and muscle strength on hearing ability. Journal of Strength and Conditioning Research, 14: 302-309.
- **26.** Cristell, M., Hutchinson, K.M., and Alessio, H.M. Effects of exercise training on hearing ability. Scandinavian Audiology, 1998, 27:219-224.
- **27.** Alessio, H.M. & Blasi, E. 1997. Physical activity as a natural antioxidant booster, and its effect on a healthy life span. Research Quarterly for Exercise and Sport, 68: 292-302.
- **28.** Berg, W.P., Alessio, H.M., Mills, E., and Tong, C. 1997. Circumstances and consequences of falls in independent community-dwelling older adults. <u>Age and Ageing</u>, 26, 261-268.
- **29.** Alessio, H.M. and Blasi, E. 1997. Physical activity as a natural antioxidant booster, and its effect on a healthy life span. Research Quarterly for Exercise and Sport, 68, 292-302.
- **30.** Hutchinson, K.M. and Alessio, H.M. 1996. The relation between personality and hearing levels in moderately fit adults. <u>Journal of Personality Type</u>, 39, 30-36.
- **31.** Alessio, H.M. 1995. Defining our niche in gerontology: Who we are and how we got here. <u>Generations</u>, <u>19</u>, 9-15.
- **32.** Manson J., Alessio, H.M., Cristell, M., and Hutchinson, K.M. 1994. Does Cardiovascular health mediate hearing ability? Medicine and Science in Sports and Exercise, 26: 866-871.
- **33.** Alessio, H.M. 1993. Exercise induced oxidative stress. <u>Medicine and Science in Sports</u> and Exercise, 25: 218-224.
- **34.** Cao, G., Alessio, H.M., & Cutler, R.G. 1993. Oxygen radical capacity absorbance assay for antioxidants. Free Radicals in Biology and Medicine, 14: 303-311.

**35.** Freysinger, V.J., Alessio, H.M., and Medizedeh, S. (1993) Re-examining the morale, physical health and activity relationship: A longitudinal study of time changes and gender differences. Activity, Adaptation, and Aging, 17: 25-42.

- **36.** Alessio, H.M. and Hutchinson, K.M. (1992). Cardiovascular responses to low- and high-intensity exercise do not regulate temporary threshold shift. <u>Scandinavian Audiology</u>, 21,163-172.
- **37.** Alessio, H.M. and Hutchinson, K.M. (1991). Effects of sub-maximum exercise and noise exposure on hearing loss. Research Quarterly for Exercise and Sport, 62, 413-419.
- **38.** Hutchinson, K.M., Alessio, H.M., Spatafore, M., and Adair R. (1991). Effects of low-intensity exercise on temporary threshold shift. <u>Scandinavian Audiology</u>, <u>20</u>, 121-127.
- **39.** Alessio, H.M. (1991). Use of educational games for difficult subject material. <u>Journal of Excellence in College Teaching</u>, 2, 71-76.
- **40.** Alessio, H.M. and Leviton, D. (1990). Field tests that evaluate adult physical fitness: A new emphasis on ease of administration, low cost and safety. <u>Activities, Adaptations</u>, and Aging, 14, 45-57.
- **41.** Alessio, H.M., Grier, L. and Leviton, D. (1989). Trailblazing recreational programming for the elderly: High-risk activities. <u>Activities, Adaptations, and Aging, 13</u>, 9-16.
- **42.** Alessio, H.M., Goldfarb, A.H., and Cutler, R.G. (1988). Malonaldehyde content increases in fast and slow twitch skeletal muscle with intensity of exercise in the rat. American Journal of Physiology, 255, C874-C877.
- **43.** Alessio, H.M., & Goldfarb, A.H. (1988). Lipid peroxidation and scavenger enzymes during exercise: Adaptive response to training. <u>Journal of Applied Physiology</u>, <u>64</u>, 1333-1336.
- **44.** Alessio, H.M. (1987). Health and wellness of the elderly: A case study. <u>Aging Network News</u>, <u>4</u>, 1-9.

#### **Refereed Web Publications**

Alessio, 2011. Five tips for staying healthy during the holiday season. Miami E-Report, December 9. http://www.m

Alessio, H.M. and Smith, D. 2009. Tolerable exercises for patients with Pacyhonychia Congenita. http://www.pachyonychia.org.

Alessio, H.M. 2008. Questions and Concerns about the PC Clinical Trial of 2008, <u>PC Project</u>, April. http://www.pachyonychia.org.

#### Presentations

Fernandez, J., Crowder, M., Cameron, T., Alessio, H.M. 2016. "Using Faculty Learning Communities to develop and sustain STEM educational practices across an institution." to be presented at *Transforming Undergraduate STEM Education: Implications for 21<sup>st</sup>-Century Society* conference in Boston, Massachusetts, November 3-5.

Alessio, H.M., Malay, N.J., Rubin, B. 2015. Examining the effect of proctoring on online test scores. Presented at the International Online Learning Consortium, Orlando, FL, October 16.

Alessio, H.M., Pradanos, L., Schwartz, T., Miller, B., Stephenson, B. 2014. Success and shortfalls of incorporating ecological literacy in teaching, research and service. Presented at the International Lilly Conference, Oxford OH Nov 22.

Ross, D.K., Mills, B.C., Alessio, H.M., Sproat, B., Wallpe, T., and Hutchinson Marron, K. 2014. Fitness as a determinant of hearing ability in adults. Presented at the American College of Sports Medicine Meeting, Orlando Florida, May 30.

Ross, D.K., Alessio, H.M., Sproat, B., Walpe, T., and Hutchinson Marron, K. 2013. Fitness as a determinant of hearing ability in adults of different ages and personal listening device behaviors. Presented at the Midwest American College of Sports Medicine's annual meeting, Merrill, Illinois, November 9.

Alessio, H.M., Ansinelli, H., Threadgill, K., and Hagerman, A.E. 2013. Comparison of gene expression, protein abundance, and network clusters in young and old physically inactive and regular exercising rat. Presented at the American College of Sports Medicine Conference, in Indianapolis, IN, May 31.

Hutchinson Marron K, Wagner, S., Smith, K., Lenzini, S., Sproat, B. Alessio, HM. 2013. Effects of Health Factors and Personal Listening Behaviors on Hearing Levels. Presented at AudiologyNOW! at the American Academy of Audiology's annual meeting, AudiologyNOW! Anaheim, CA, April 3-6.

Alessio, H.M., Rogers, J., Schwartz, T., Radina, E., and Knight-Abovitz, K. 2013. The role of ecological literacy in a college of education: Acknowledging the intersection of person and place in pursuit of health and well-being. Presented at the Third International Conference on Health, Wellness, and Society, Sao Paulo, Brazil, March.

Alessio, H.M. and Darby, L. 2012. Do's and Don'ts for Successful Presentations for Graduate Students. Presented at the Midwest American College of Sports Medicine Conference, Oregon OH, November 2.

Alessio, H., Hutchinson Marron, K., Cramer, I., Marchiondo, K, Stephenson, S., Wagner, S., Wharton, T. 2012. Effects of Health & Earbud Use on Hearing Among Students. Presented at the American Speech and Hearing Association meeting, Atlanta GA, November 16. Earned Meritorious award for exceptional presentation.

Hutchinson Marron, K., Alessio, H., Cramer, I., Marchiondo, K, Stephenson, S., Wagner, S., Wharton, T. 2012. College-Age Student Perception of Personal Listening Device Volumes: Correct/Incorrect? Presented at the American Speech and Hearing Association meeting, Atlanta GA, November 16.

Hutchinson Marron, K., Alessio, H., Cramer, I., Marchiondo, K, Stephenson, S., Wagner, S., Wharton, T 2012. Effects of Personal Headphone Use on Hearing Among College-Age Students.

Presented at the American Speech and Hearing Association meeting, Atlanta GA, November 16.

Alessio, H.M., Cramer, I.M., Treadway, L., Marchiondo, K., Stephenson, S., Wagner, T., Wharton, T., Hughes, M., and Hutchinson, K.M. 2012. Effects of health factors and personal listening behaviors on hearing acuity in college-aged students who use earbud style headphones. Presented at the American College of Sports Medicine Conference, San Francisco, CA. June 1.

Alessio, H.M. Simonson, M.L., Levine, K. Taylor, M. White, P., Newsom, D.L., Hagerman, A.E. 2011. Acute exercise effects on cardiac gene expression in physically active and inactive rats. Presented at the American College of Sports Medicine Conference, Denver, Colorado, June 1.

Alessio, H.M., Simonsen, M.L., Levine, K., Edwards, K., White, P., Newsome, D.L., and Hagerman, A.E. 2010. Evidence of differentially expressed "Sedentary" genes in laboratory animals residing in standard cages. Presented at the Integrative Physiology of Exercise conference, Miami, Florida, September 23.

Alessio, H.M., Simonsen, M.L., Levine, K., White, P., Edwards, K. Newsome, D.L., and Hagerman, A.E. 2010. Evidence of differentially expressed "Sedentary" genes in laboratory animals residing in standard cages. Presented at the Midwest American College of Sportsmedicine conference, Indianapolis, Indiana, October 29.

Alessio, H.M., Simonsen, M.L., Levine, K., White, P., Newsome, D.L., and Hagerman, A.E. 2010. Do large changes in a small number of genes or small changes in a large number of genes influence health and disease phenotypes? Presented at the American College of Sports Medicine conference, Baltimore, Maryland, June 1.

Alessio, H.M. and Smith, D. 2009. Tolerable exercises for patients with Pachyonychia Congenita. Presented at the PC Project Patient Support Meeting, San Fransisco, California, March 10.

Alessio, H.M. 2009. Harry Potter and PC genetics. Presented at the PC Project Patient Support Meeting, Salt Lake City, Utah, September, 25.

Alessio, H.M. 2009 Core exercises for PC. Presented at the PC Project Patient Support Meeting, Salt Lake City, Utah, September, 25.

Hutchison KM and Alessio, HM. Cardiovascular health, hearing, and aging. Presented at the 2<sup>nd</sup> Annual Miami-Seoul Symposium on October 23, 2008.

Siekemeyer L, Kellems B, Guth J, Reed C, Baker Brehm S, Alessio HM FACSM, Cox R. Assessment of breathlessness and speech quality when using an active workstation. Presented at the Midwest American College of Sports Medicine Conference, October 24, 2008.

Guth J, Cox, R, Reed, C, Alessio, HM FACSM, Baker Brehm S, Kellems B, and Siekemeyer L. Assessment of cardiovascular response and metabolic cost of speaking while using an active workstation. Presented at the Midwest American College of Sports Medicine Conference, October 24, 2008.

Alessio, HM, Schweitzer, NB, Snedden, AM, and Hagerman, AE. Lifelong exercise enhances spatial maze performance in female Sprague Dawley rats. Presented at the American College of Sports Medicine Conference, June 1, 2007, in New Orleans, LA.

Simmonsen, M., Alessio, HM, Schweitzer, NB, and Hagerman, AE. Access to lifelong exercise improves phenotypic and genetic markers of health and longevity in Sprague-Dawley rats. Presented at the Ohio Collaborative Conference on Bioinformatics, June 9, 2007, in Oxford OH.

Simmonsen, M., Alessio, HM, Schweitzer, NB, and Hagerman, AE. Access to lifelong exercise improves phenotypic and genetic markers of health and longevity in Sprague-Dawley rats. Presented at Midwest American College of Sports Medicine Conference October 2007, in Columbus OH.

Baker,S, and Alessio HM. Effect of inspiratory training on speech and dyspnea during exercise. American Speech and Hearing Association, November 15, 2007 in Boston, MA.

#### **Invited Presentations**

Alessio, H.M. Antioxidant use in exercise. Symposium organized by Dr. Carine Platat of the United Arab Emirates University, El Ain, 2011.

Alessio, H.M. Why sedentary lab animals are bad models for health research. Presented at Wright State University Biology Research Forum, October 18, 2010.

Hutchinson, K.M. and Alessio, H.M. Hearing loss: Does age really matter? Presented at Miami University KNH Research Forum, October 20, 2010.

Alessio, H.M. and Hutchinson, H.M. Hearing loss: Does age really matter? Presented at Miami University One Day University, Voice of America Campus, November 13, 2010.

Panel Discussion: Expectations at the college level. Presented at the Champs/Lifeskills program for KNH 112, Oxford Ohio, September 23, 2009.

Alessio, H.M. and Spanja, S. 2009. Academic freedom in the classroom. Presented at the Greater Cincinnati Consortium of Colleges and Universities. Xavier University, Cincinnati Ohio, October 30.

Alessio HM. Exercise Activities for Aging Populations in the New Millennium. Presented at the 9th international conference special pedagogy in the light of legislative amendments and the 4th International Dramaterapeutic Conference at Palacky University, Olomouc, Czech Republic on March 13, 2008.

Alessio, H.M. What a difference a few genes make. Tutorial presented at the Midwest American College of Sports Medicine Conference, October 24, 2008.

#### **External Research Grants**

1. Alessio, H.M. (Principle Investigator). 2008-2010. Gene expression and phenotypic consequences of laboratory housing in aging rats. National Institutes of Aging. (1R15AG029653-01A1) \$204,000. Funded. No-cost extension through 2012.

- 2. Alessio, H.M. (Principle Investigator). 2003-2006 Access to physical activity and its relation to health. National Institute of Health. (1 R15 AG 20526-01A1) \$201,000. Funded
- 3. Alessio, H.M. (Co-Investigator with Hagerman, A.E., Chemistry and Biochemistry, Principal Investigator) 1999-2001 Tannins as biological antioxidants. <u>National Cancer Institute</u>. \$100,000. Funded.
- 4. Alessio, H.M. Principle Investigator. 1986 (1R43AG05018-01A2) Health and wellness in elderly. National Institute of Health \$50,000. Funded.

Internal Research Grants (since 2009)

- Miljkovic, T., Kim, S. Alessio, H.M. and Claytor. R.P. 2016. Disparities in Body Mass Index among U.S. Adults during Period 1984-2014 and Gambians during a similar Period. (\$6,000).
- Alessio, H.M. and Barth, Ed. 2016. Portable Technology to Measure Heart Rate Variability for Cardiovascular Health Assessment. (\$14,200). Awarded.
- Alessio, H.M. 2015. Joyce Barnes Farmer Award (\$6,000) Awarded.
- Alessio, H.M. and Cameron, T. 2015. STEM and Sustainability. Faculty Learning Community Grant (\$10,000)
- Alessio, H.M. and Radina, M.E. 2014. Personal and Ecological Health Faculty Learning Community Grant (\$10,000)
- Alessio, H.M. and Radina, M.E. 2013. Personal and Ecological Health Faculty Learning Community Grant (\$10,000)
- Massie B. and Alessio, H.M. 2013. Meti-Man Patient Simulator, Student Tech Fee (\$60,000)
- Smith, D. and Alessio, H.M. 2013. Anatomage Virtual Cadaver, Student Tech Fee (\$60,000)
- Alessio, H.M. and Hutchinson. 2010-2011. Factors that influence hearing sensitivity in collegeaged students who listen to music with earbud headphones. \$2500 and ~\$20,000 for a Graduate Assistant. Miami University Committee on Faculty Research. Funded.
- Alessio, H.M. 2009. Take the Lead For Health, Miami University Parents' Fund, \$4500. Funded.

# Service

# Editorial and Board membership

Frontiers in Physiology Editorial Board of Oxidative Physiology, 2014-present Midwest American College of Sports Medicine, Board of Directors, 2012-present American College of Sports Medicine ActivEarth National Committee – member, 2016- present American College of Sports Medicine-Research Advisory Board 2007-2012 Co-Chair, American College of Sports Medicine, International Oxidative Stress Interest Group 2003-present

International Journal of Health, Wellness, and Society, Associate Editor, 2013-present Journal on Excellence in College Teaching, Editorial Board 2007-present Pachyonychia Congenita, Patient Advisory Board Member 2008-present Current Psychopharmacology Editorial Board 2011-present

#### PROFESSIONAL ACTIVITIES NATIONAL AND REGIONAL

Reviewer, The National Institute of Health, Loan Repayment Grant Panel, April 2016.

Reviewer, The Centers for Disease Control and Prevention (CDC) Special Emphasis Peer Review Panel, April 2015.

External Reviewer for Montana State University, April 2015.

Reviewer of research proposals, San Antonio Life Sciences Institute, November, 2014.

NIH Reviewer, Review applications for the National Institute of Child Health and Human Development (NICHD) Loan Repayment Project (LRP). April, 2014.

NIH Reviewer, Review applications for the National Institute of Child Health and Human Development (NICHD) Loan Repayment Project (LRP). May, 2013.

Reviewer of the Ohio State University PhD and MS Proposal for New Degree in Kinesiology (2012).

Coordinator of Awards for the Midwest American College of Sports Medicine Annual Meeting, Oregon, OH, November 2-3, 2011

Abstract Reviewer for the Midwest American College of Sports Medicine Annual Meeting, Oregon, OH, November 2-3, 2011

Moderator of Doctoral student presentations for the Midwest American College of Sports Medicine Annual Meeting, Oregon, OH, November 3, 2011

National Institute of Health, to review applications in response to the Minority Biomedical Research (MBRS) program, Bethesda, Maryland, December 6, 2010.

Center for Disease Control Special Emphasis Panel (SEP) to review applications in response to FOA PAR07-231 CDC Grants for Public Health Research Dissertation (R36), Atlanta, Georgia, April 28, 2009 (4 proposals)

Center for Disease Control Special Emphasis Panel (SEP) to review applications in response to CD09-001 Translating Research to Protect Health, Atlanta, Georgia, July 20-22, 2009. (40 proposals)

Pearson, Benjamin Cummings-Reviewed Exercise Physiology Animation Storyboards for innovative academic learning products, 2008.

Journal Reviewer Activities

American College of Sports Medicine book chapter

American Journal of Human Biology

American Journal of Physiology

American Medical Journal

Applied Physiology, Nutrition, and Metabolism

Brazilian Journal of Medical and Biological Research

Clinical Journal of Sports Medicine.

Comparative Biochemistry and Physiology

Contemporary Gerontology

Diabetes Care

European Journal of Applied Physiology

Experimental Physiology 2015

Free Radicals in Biology and Medicine.

Grant proposals for the University and Polytechnic Grants Committee in Hong Kong

International Journal of Health, Wellness and Society

International Journal of Sports Nutrition and Exercise Metabolism

Journal of Applied Physiology

Journal of Comparative Physiology

Journal of Excellence in College Teaching 2015, 2016

Journal of Medicinal Food 2015

Journal of Sport and Health Science 2016

<u>Living Well: Health in Your Hands</u>, 2nd Edition, (Byer and Shainberg, Eds.), Health Education text book.

Medicine, Exercise, Nutrition and Health

Medicine and Science in Sports and Exercise

Physiological Genomics

Spine 2015

Sports Medicine

Journal of Nutritional Biochemistry

Society for Experimental Biology and Medicine

Text Book: Exercise and the Aging Adult: A Guide for Health Promotion and Rehabilitation.

Rockville, Maryland: Aspen Publishers.

#### **Book Reviews**

The Athletic Body Puzzle, J. LaCaze and D. Dalrymple, Reviewed 2011

Topics in Geriatric Rehabilitation, 2010

Text Book: Get Fit, Stay Healthy: Personal Choices for Lifelong Wellness, Benjamin Cummings Publisher, 2008

# American College of Sports Medicine

Regional Representative to National ACSM, Elected 2012-present

Research Advisory Council, Member, Selected 2007-present

Cellular Signaling and Oxidative Stress Interest Group, Co-Chair, Elected 2000-present

#### PROFESSIONAL ACTIVITIES LOCAL

2015- Presented: New Age Anatomy with the Anatomage Table to Elementary School Students from Cincinnati Public Schools, October 22.

2015- Organized intergenerational community event: Dancing with the Stars, November 17, Oxford Community Arts Center

2014- present Sustainability Committee at Miami University and Oxford Community

2009 - present Oxford Senior Center Advisory Board, Member

2012- present, member Oxford AFS (American Field Service) Intercultural Programs Oxford Board.

2000 - present Volunteer, St. Mary's Church-lead youth groups, participate in community outreach programs designed to improve health and well being, and Relay for Life for the American Cancer Society

2008 - 2009 Advisory Committee for the Family and Consumer Sciences programs at Talawanda Middle School. Member

# UNIVERSITY, SCHOOL, AND DEPARTMENTAL SERVICE

Miami University LMS Steering Committee (2015-present)

Miami University Sustainability Committee (2014-present)

Miami University Learning Management Steering Committee (2015-present)

Miami University LEAN Committee (2015-present)

Miami University Research Advisory Council (2011-present)

EHS Advisory Instructional Facilities Committee (2015-present)

Dean's Council of Chairs (2007-present)

EHS Alumni Advisory Council (2007-present)

University Responsibility Centered Management Collaboration Committee (2013-present)

Student Affairs Council (2008-2014)

Miami University Committee on Academic Integrity (2012-2014) Created a "best teaching" practices document or implementation manual to help faculty define and highlight issues of integrity in the classroom; Examined the role of advisers, syllabi, e-scholar program, first year and second-year education programs, use of ethics program, Rinella

Peer Reviewer for Dr. Susan Baker Brehm in the Department of Speech Pathology and Audiology (September 7<sup>th</sup> and 9<sup>th</sup>, 2013).

EHS Representative to the Graduate School (2010-11)

NCATE Steering Committee (2007-present)

Committee on Faculty Rights and Responsibilities (1994-2007)

Graduate Program Prioritization Committee (2007-2008)

Miami University Undergraduate Research Forum Task Committee Member (2003-2006)

The Graduate Students' Achievement Fund Committee (2004-2007)

Miami University Academic Policy Committee (2004-2007)

PHS Personnel Committee, Member (2004-2007)

PHS Graduate Committee, Member (2003-2006)

PHS Committee on Graduate Reform (2003-2005)

Special Committee Member on Research Misconduct Case (2008)

School of Education and Allied Professions Grant Advisory Committee member (2006-2009)

School of Education, Health and Society, Strategic Planning Committee member (2007-2009)

## Community Service

Oxford Seniors/Miami University Affiliation (2012-present)

AFS/USA Intercultural Program- (2012-present) Hosted and provided support to students from Denmark, Brazil, Saudi Arabia, Norway

St. Mary's Church, Youth Group Volunteer (1988-present)

#### **HONORS AND AWARDS**

Inducted into the Miami University chapter of The Honor Society of Phi Kappa Phi, 2011 2009 Midwest American College of Sports Medicine Founder's Award Distinguished Professor of the Graduate Faculty, Miami University, 2005-present Knox Teaching Award, Co-recipient, 2004 Fellowship Status. American College of Sports Medicine, 1994.

# Faculty Advisor to Student Groups

- Miami University Pre-Occupational and Physical Therapy Club (2000-present)
- Miami University Gymnastic Club (2005-present)
- Miami University Synchronized Swimming Club (2009-present)