



**DEPARTMENT OF
BIOMEDICAL SCIENCES
COLLEGE OF OSTEOPATHIC MEDICINE**

**ANNUAL REPORT
ACADEMIC YEAR 2008-2009**

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DEPARTMENT OF BIOMEDICAL SCIENCES

SECTION I – OVERVIEW

1. An Overview of Department and the Department's Mission Statement if available.

EXECUTIVE SUMMARY

During 2008-2009, the Department of Biomedical Sciences (BMS) participated in the educational, research and service missions of the OU-COM. BMS continues to play key roles in the planning and delivery of the OU-COM curricula. Most of the leadership positions were held by BMS faculty (2 Directors, 9 Instructors of Record). Additionally, BMS served the needs of the CORE residency programs by providing presentations on advanced topics in the clinically-relevant biomedical sciences. While BMS faculty continued to participate in the Biological Sciences graduate program, they also contributed to graduate education across the OU campus in programs ranging from bioengineering to African studies. The year was also marked by intensified research efforts by BMS, supported by funds from 25 external as well as a number of internal grants. The laboratories of BMS faculty trained scores of graduate students (34), medical students (17), postdoctoral fellows (1) and undergraduate students (32). A testament of the high quality of this training is the awarding of top scores for student projects both here on campus (OU-COM Research Day, OU Creative and Scholarly Activity Fair) and at professional meetings. Additionally, BMS faculty traveled to remote sites (Ecuador, Egypt, Tanzania, Oman, Madagascar, Vietnam, Nigeria, Kenya, Denmark, Namibia) in order to collect data for studies in infectious diseases, biomechanics and paleontology. Faculty shared their scientific findings with the global research community via peer reviewed publications and professional presentations (49 and 139, respectively). To support future research, BMS faculty submitted 62 external proposals and participated in research training programs in order to stay abreast of current developments in research techniques. Finally, BMS faculty were instrumental in the development of a large animal research facility (occupied in Fall 2008) and some will be moving into the new Academic Research Center (due to be occupied Winter 2010). BMS members served on key committees that oversee College (CAC, CSP) and University concerns (Faculty Senate; Council on Research, Scholarship and Creative Activities) and are involved in the planning for the new Academic Health Center. Several BMS faculty members participated regularly in outreach programs that present scientific advances to the general public, including exposure on the Discovery Channel, National Geographic Channel, and History Channel as well as local school programs.

SELECTED HIGHLIGHTS

- Thad Wilson was hired in the Physiology search.
- Tenure and promotion to Associate Professor of Anatomical Sciences was granted to Patrick O'Connor.
- Grant funding received in 2008-2009 totaled over \$1 million. This includes awards of \$425,625 to Frank Horodyski and \$58,733 to Patrick O'Connor from the National Science Foundation and awards of \$177,000 to Fabian Benencia and \$165,938 to Ramiro Malgor from the National Institutes of Health.
- Yang Li filed two provisional patents.
- Felicia Nowak attended a workshop in Washington, DC, entitled "State of the art in immunocytochemistry and in situ hybridization."
- Nancy Stevens and Patrick O'Connor developed and installed an exhibit entitled "Tanzania in 'Deep Time' – A View from the Rift Valley," for the Dairy Barn Arts Center.

MISSION STATEMENT

Department of Biomedical Sciences

The mission of the Department is to serve the College of Osteopathic Medicine through 1) teaching in OU-COM undergraduate and graduate programs, and in the graduate and other appropriate programs in which department faculty are associated; 2) basic research, applied biomedical research, and research in medical education; and 3) service both to OU-COM and the osteopathic profession, to Ohio University and the southeast Ohio community, and to medical and scientific communities at the state, national, and international levels.

2. Recent developments and improvements in your Department.

- a. Thad Wilson (physiology) was hired as a new (Associate Professor) tenure-track faculty.
- b. Patrick O'Connor was awarded tenure and promotion to Associate Professor.
- c. A new large animal research facility has opened in Hebbardsville, OH.

3. Plans for the future of your Department.

- a. The new Academic Research Center will open this year. Space will be reallocated with an emphasis on fostering collaborative research.
- b. Planning has begun (contingent upon funding) for a new faculty hire. Consideration will be given to both teaching needs and research focus.
- c. The Academic Health Center is expected to become a reality by the end of the academic year. Plans for the integration of teaching, research and services will be developed.

4. Workload percentage your Department is to supply and supporting documentation indicating the amount and method by which your Department's workload is met.

Department workload expectations (% effort) are as follows: 30% teaching, 50% research and 20% service. According to the data supplied by the office of the Assistant Dean for Curriculum, the Department of Biomedical Sciences is committed to deliver 100% of the expected (required) teaching effort. This document lists faculty research and service activities.

5. Any other factors deemed appropriate based upon your Department's discipline.

Faculty continues to be involved in the Graduate Program of Biological Sciences and the Molecular and Cellular Biology program. Additionally, some faculty members interact with graduate students in the Russ College of Engineering and Technology and the College of Health and Human Services as well as the interdisciplinary program in African Studies at Ohio University. There is also significant effort in bolstering graduate education in Ecuador. Finally, BMS faculty participate in the DO/PhD and the Honors Tutorial College programs.

SECTION II – ORGANIZATION OF YOUR DEPARTMENT

1. The organizational structure of your Department.

The Department of Biomedical Sciences consists of 44 faculty members and 20 staff listed in Section III.

Staff members are located in Irvine and Grosvenor Halls, while BMS faculty are housed in Irvine Hall, Life Science Building, Biochemistry Building and Konneker Research Labs.

2. Any unique Departmental Policies and Procedures.

SECTION III – FACULTY AND DEPARTMENTAL STRUCTURE

1. A list of faculty members (full time, part time, and adjunct) including their degrees, years of experience and areas of specialization. Current faculty CV's are on file in the department office.

AREA OF SPECIALIZATION

FACULTY:	EXPERIENCE (Years)	STATUS	AREA OF SPECIALIZATION
Huzoor Akbar, Ph.D.	30	Associate Professor	Pharmacology
Charles Atkins, Ph.D.	39	Semi-retired	Genetics
Fabian Benencia, Ph.D.	13	Assistant Professor	Immunology
Mark Berryman, Ph.D.	17	Associate Professor	Medical Histology
Bonita Biegalko, Ph.D.	20	Associate Professor	Virology
Audrone Biknevičius, Ph.D.	19	Associate Professor	Anatomical Sciences
Jack Blazyk, Ph.D.	34	Professor	Biochemistry
Rathindra Bose, Ph.D.	27	Professor	Biochemistry
Xiao-Zhou Chen, Ph.D.	20	Associate Professor	Molecular Biology
Brian Clark, Ph.D.	3	Assistant Professor	Neuromuscular Physiology
Becky Code, Ph.D.	23	Instructor	Microanatomy
Karen Coschigano, Ph.D.	17	Assistant Professor	Biochemistry
Peter Coschigano, Ph.D.	18	Associate Professor	Microbiology
Joseph Eastman, Ph.D.	38	Professor	Anatomical Sciences
Mary Kay Eastman, M.S.	22	Instructor	Anatomical Sciences
Ken Goodrum, Ph.D.	30	Associate Professor	Immunology
Mario Grijalva, Ph.D.	11	Associate Professor	Immunology
Fredrick Hagerman, Ph.D.	44	Semi-retired	Physiology
Robert Hikida, Ph.D.	41	Semi-retired	Microanatomy
Frank Horodyski, Ph.D.	25	Professor	Molecular Biology
John Howell, Ph.D.	41	Semi-retired	Physiology
Sharon Inman, Ph.D.	19	Associate Professor	Renal Physiology
Calvin James, Ph.D.	23	Associate Professor	Virology
Peter Johnson, Ph.D.	41	Semi-retired	Biochemistry
Richard Klabunde, Ph.D.	33	Associate Professor	Physiology
Leonard Kohn, M.D.	44	Semi-retired	Endocrinology
John Kopchick, Ph.D.	26	Professor	Molecular Biology
Andrew Lee, Ph.D.	2	Instructor	Anatomical Sciences
Yang Li, Ph.D.	11	Associate Professor	Neurophysiology
Andrew Lee, Ph.D.	2	Instructor	Microanatomy
Ramiro Malgor M.D.	12	Assistant Professor	Pathology

Shadi Moghaddas, Ph.D.	17	Research Assistant Professor	Biochemistry
Erin Murphy, Ph.D.	6	Assistant Professor	Bacteriology
Felicia Nowak, M.D., Ph.D.	28	Associate Professor	Molecular Neuroendocrinology
Patrick O'Connor, Ph.D.	12	Assistant Professor	Anatomical Sciences
Biren Patel, Ph.D.	2	Instructor	Anatomical Sciences
William Romoser, Ph.D.	43	Semi-retired	Medical Entomology
Edwin Rowland, Ph.D.	32	Associate Professor	Parasitology
Robert Staron, Ph.D.	25	Associate Professor	Anatomical Sciences
Nancy Stevens, Ph.D.	8	Assistant Professor	PCC Administration & Anatomical Sciences
Susan Williams, Ph.D.	6	Assistant Professor	Anatomical Sciences
Thad Wilson, Ph.D.	9	Associate Professor	Physiology
Leon Wince, Ph.D.	30	Associate Professor	Pharmacology
Larry Witmer, Ph.D.	16	Professor	Anatomical Sciences

2. Staff:

Jamie Remy - Administrative Associate
Kathy Gossett – Administrative Assistant
Nancy Davis – Administrative Assistant
Dave Schleiter – Anatomical Assistant
Don Kincaid – Director of Body Donor Program
Bob Conatser – Laboratory Research Associate
Chad Keller – Laboratory Research Technician
Kevin Funk– Laboratory Research Assistant
Michelle Pate – Laboratory Research Assistant
Ryan Ridgely – Laboratory Research Assistant
Yuriy Slyvka – Postdoctoral Fellow
Joanna Sidoute – Research Technician
Dequan Tian – Scientist I
Kumika Toma – Research Technician
Cecilia Courreges – Laboratory Research Technician
Nanda Filkin - Research Technician
Rich Hoffman-Research Assistant
Denise House-Research Technician
Kira Slepchenko-Research Technician

3. Administration:

Chair (July-Dec)– **Ed Rowland, Ph.D.**
Chair (Jan-June) – **Audrone Biknevicius, Ph.D.**
Associate Chair (July-Dec) – **Audrone Biknevicius, Ph.D.**
Associate Chair (Jan-June) – **Peter Coschigano, Ph.D.**

4. Departmental Committees

a. The Promotion and Tenure Committee includes all faculty members with tenure at or

- above the rank being considered.
- b. The Annual Review Committee includes two members elected by the faculty and two members appointed by the Chair. This committee reviews the progress of probationary faculty and reports to the Chair.
 - c. The Advisory Committee includes the Annual Review committee and the Associate Chair. This group meets regularly and advises the Chair.
 - d. The Merit Review Committee is made up of five members appointed by the Chair and reviews the yearly productivity of each faculty with the intent of awarding merit through raise pool monies. Recommendations of this committee are reported to the Chair. This committee has also been charged with nominating faculty, staff and students for various awards or special recognition where appropriate.
 - e. The BMS Graduate Committee is composed of three BMS faculty members elected by each of the three research groups (Molecular/Microbiology, Cellular/Physiology, Anatomy/Biomechanics). These faculty members also serve on the BIOS graduate committee, where they represent the interests of BMS regarding graduate education.
 - f. The Anatomical Resources Committee includes the Director of Anatomical Sciences (appointed by the Chair), the Director of the Willed Body Program, the Administrative Assistant for the anatomical sciences program, and the Anatomical Assistant, with feedback from the Director of Plastinations. Duties include assessment of the teaching needs in the gross anatomy, microanatomy and neuroanatomy teaching.

5. Programmatic Efforts for Diversity

- a. Search committees for vacant faculty positions are structured to include at least one underrepresented minority member.
- b. As mandated by the President, the group of candidates interviewed for faculty positions includes an underrepresented minority.
- c. The departmental mentor program matches untenured faculty with a tenured faculty member with diversity issues in mind.
- d. All standing departmental committees have at least one underrepresented minority member.

SECTION IV – TEACHING

1. **Number of hours spent in faculty - student contact (Teaching, Community Service, Clubs, Faculty Advisor, Mentor, Student Seminars, Elective Courses, etc.) [If possible, please breakdown by individual faculty member - listing individual teaching and advising assignments.]**
 - a. **Medical Student Education - BMS Teaching Workload Summary (data compiled by OU-COM Curriculum Office)**

b. Graduate Education:

1. Graduate Course Involvement :

Fabian Benencia:

1. BME 698 Winter 2007/2008
2. BME 698 Spring 2008
3. BME 698 Fall 2008

Mark Berryman:

1. BIOS 682, Fall (graduate microanatomy I)
2. BIOS 682, Winter (graduate microanatomy II)

Audrone Biknevičius:

1. ME 467 – 1 hour lecture on biomechanics of locomotion

Peter Coschigano:

1. Fall 08. ES690. 1 student, 10 contact hours

Ken Goodrum:

1. BIOS486A/586A Immunology, 35 enrolled. 30 hours lecture

Frank Horodyski:

1. Winter 2008, MCB720, total 14 hr
2. Fall 2008, MCB760, Course Coordinator, total 28 hr

Calvin James:

1. Virology. Online course. Catholic University of Ecuador Doctoral Program. Contact hours 30.

Susan Williams:

Leon Wince:

Lawrence Witmer:

2. Graduate Student Education:

Huzoor Akbar:

1. Mentor: Andrew Klaus, Graduate student in Biological Sciences

Fabian Benencia:

1. Advisor BME Master Student: Amritha Venkatesh Period: 2008-2010

Mark Berryman:

1. Medical student research supervisor, Winter: Jessica Kerr, MSI
2. Thesis Committee: Setu Kaushal, member (graduated summer, 2008)

3. Dissertation Committee: Chintia Bastian, member

Bonita Biegalko:

1. Graduate Student Advisor – 2 students

Audrone Biknevičius:

1. Major Advisor for two graduate students: Jennifer Hancock, Angela Horner
2. Dissertation committee member: Erin Rasmussen
3. Comprehensive exam committee: Angela Horner (major advisor); Mike Jorgensen (committee member)
4. External PhD committee member for Jesse Young (SUNY-Stony Brook)

Jack Blazyk:

1. Advisor: Jing He, Department of Chemistry & Biochemistry, Ph.D. candidate
2. Committee Member: Adam Jacoby, Department of Chemistry & Biochemistry, Ph.D. candidate

Xiaozhuo Chen:

1. PhD Advisor
 - a. Yanyan Cao – 4th year
 - b. Yi Liu – 2nd year
2. Committee member
 - a. Shuhua Du – PhD (Evans)
 - b. Yan Liu – PhD (Evans)
 - c. Eroica Soans – PhD (Evans)
 - d. Fernandez – PhD (Evans)
 - e. Wei Zeng – PhD (Faik)
 - f. Ma, Shuang – PhD (Nowak)
 - g. Stork – PhD (Yang Li)
 - h. Weihe Zhang – PhD (Bergmeier)
 - i. Mohor C. – PhD (P Coschigano)
 - j. Juan Ding – PhD (Kopchick)
 - k. Elahu (Kopchick)
 - l. Lucila (Kopchick)
 - m. Wei Lu – PhD (Wu)
 - n. Lei Wang – PhD (Wu)
 - o. PhD(Bose)
 - p. Lucila PhD (Kopchick)
 - q. Ziqi Liu PhD(Bonita Biegalko)
 - r. Yu Cai PhD (Bergmeier)

Brian Clark:

1. PhD Student Advisor: Petra Williams (Biological Sciences): 50 hours/yr

Karen Coschigano:

1. Committee member for Chris Lewis, PhD candidate, College of Arts and Sciences

2. Committee member for Svetha Swaminathan, Master's candidate, School of Human and Consumer Sciences, graduated winter 2008
3. Committee member for Zhenchao Wang, PhD candidate, College of Arts and Sciences
4. Committee member for Melissa Buelow, doctoral candidate, College of Arts and Sciences
5. Committee member for Lyndsey Howell, Masters candidate, College of Arts and Sciences
6. Research advisor for PhD candidate Sulalita Chaki, College of Arts and Sciences

Peter Coschigano:

1. Supervising 1 PhD Graduate student (M. Chatterjee).
2. Supervising 1 MS Graduate student (A. El-Zawily)
3. Serving on 3 PhD committees (J. Stengel from Mark McMills' lab, J. Wen and K. Zhao [PhD completed fall 2008] from Ting Gu's lab)

Joseph Eastman:

1. Committee member for Biological Sciences Ph.D. student Andre Fernandez, graduated June, 2008

Mario Grijalva:

1. Mauricio Lascano. Ph.D. Student. Biological Sciences graduate program. Advisor. 2003 – present
2. Charles Hart. Ph.D. Student. Biological Sciences graduate program. Advisor. 2004 - present
3. Carolina Sempertegui. Ph.D. Student. OU. Thesis advisor Winter 2006 to Present.
4. Sofia Ocana. Ph.D. Candidate. Catholic University, Ecuador. Thesis advisor Fall 2005 to present
5. Anita Villacis. Ph.D. Candidate. Catholic University, Ecuador. Thesis advisor Fall 2006 to present
6. Julia Nogueira. MAIA Candidate. Latin American Studies Program OU. Thesis advisor Winter 2007 – Spring 2008
7. Scaglioni, Maria. Masters student. Latino American Studies Program, Ohio University. Ecuador Summer 2008.
8. Vilaca, Camila. Masters student. Latino American Studies Program, Ohio University. Ecuador Summer 2008.
9. Walroth, Lynn. Masters student. International Development Studies Program, Ohio University. Ecuador Summer 2008.
10. Brendan Cherry. Masters student. Latino American Studies Program, Ohio University. Winter 2008 – fall 2008.
11. Burns, Nora, Medical Student OUCOM , Ecuador Summer 2008.
12. Gonzalez, Christina. Medical Student OUCOM , Ecuador Summer 2008.
13. Koch, Andrew. Medical Student OUCOM , Ecuador Summer 2008.
14. Patel, Tejal Medical Student OUCOM , Ecuador Summer 2008.
15. Sathe, Neeraj Medical Student OUCOM , Ecuador Summer 2008.

16. Wyatt, Kenneth; Ecuador Summer 2008.
17. Yarberr, Brandi, Ecuador Summer 2008.
18. Butler, Leroy, Kentucky School of Osteopathic Medicine. Ecuador Summer 2008.
19. Cormier, Michelle. XXXX. Ecuador Summer 2008.
20. Kang, Stephanie. Kentucky School of Osteopathic Medicine. Ecuador Summer 2008.
21. Josselyn García. B.Sc. Student. Catholic University, Ecuador. Thesis advisor Fall 2006 to Present.
22. Lotty Birnberg. B.Sc. Student. Catholic University, Ecuador. Thesis advisor Fall 2006 to Present.
23. Maria Victoria Suárez. B.Sc. Student. Catholic University, Ecuador. Thesis advisor Fall 2006 to Spring 2008.
24. Alejandra Zurita B.Sc. Student. Catholic University, Ecuador. Thesis advisor Spring 2007 to Present.

Frank Horodyski:

1. Betsy Justus – PhD committee. Advisor: Wyatt

Sharon Inman:

1. Tracey Hayes – M.S. student, primary advisor.
2. Fall, Winter and Spring 2006 – Summer 2008 – Edwin Jackson and Sayo Oshogwenoh – 2nd year medical students.
3. Yuriy Slyvka Post-Doc for the diabetes grant

Calvin James:

1. Graduate Committee Member (Completed degree Requirements): Jaja V. Yogo (MS): Advisor William Romoser February 2008
2. Research Advisor: Albert Saez, Year 2 COM Student: Advisor – Winter and Summer Research

Yang Li:

- a. Adviser for 3 graduate students in MCB and Biological Programs. Chinthasagar Bastian (Neuroscience, Biology program, Ph.D.)
- b. Christian Stork (MCB program, Ph.D.)
- c. Tripta Gupta (Neuroscience, Biology program, M.S.)
1. Advisory committee member for 6 graduate students.
 - a. Wei Lin (proposal defense and written exam, MCB program, Ph.D.)
 - b. Lin Yi (proposal defense and written exam, M.S.)
 - c. Yan Qin (Dissertation defense and graduation. Biology program, Ph.D.)
3. Adversary committee member for a student who completed her thesis. Yan Qin (Dissertation defense and graduation. Biology program, Ph.D.)
4. Research adviser of approved medical education for 2 medical students.
 - a. Caleb Molokwu MSII-VI, a research project sponsored by of Center of Excellence COE-COM).
 - b. Andrew Olson MS I, medical student summer research (RSA, OUCOM)

Ramiro Malgor:

1. Committee in the Thesis: “Novel Approaches for the Treatment and Diagnosis of Pancreatic Cancer.” A thesis proposal presented to the Graduate Committee of Anthony L. Schwartz Russ College of Engineering and Technology Biomedical Engineering Program degree Master’s in Biomedical Engineering.

Erin Murphy:

1. Research Advisor for two MCB Ph.D. Students started in Fall Quarter (William Broach and Andrew Kouse)

Felicia Nowak:

1. Advisor for Shuang Ma, Ph.D. candidate in Biological Sciences. Shuang completed her proposal defense and her experiments and is preparing her thesis. (50)
2. Advisor for Zhenchao Wang, Ph.D. candidate in MCB/Biological Sciences.

Patrick O’Connor:

1. BIOS 682 (formerly OCOM 785 (D03)) 6 credits (Fall 2008) *Neuromorphology*
2. BIOS 682—Topics in Ecology and Evolutionary Biology (Spring 2008)
3. Honors Tutorial Advisor (Spring 2008)—Sarah Gutzwiller
4. Dissertation Research Advisor—Advisee: Erin L. Rasmuson (Doctoral student in the Department of Biological Sciences, OU).
5. Dissertation Committee Member—Advisee: David Dufeu (Doctoral student in the Department of Biological Sciences, OU).
6. Dissertation Committee Member—Advisee: Joe Daniel (PhD student in the Department of Biological Sciences).
7. Dissertation Committee Member—Advisee: Tobin L. Hieronymus (Doctoral student in the Department of Biological Sciences, OU).
8. Master’s Thesis Committee Member—Advisee: Kaitlin McGuire (MS Geological Sciences, OU). Thesis Defense: May 2008.
9. Master’s Thesis Committee Member—Advisee: Liva Ratsimbaholison (DEA Paleontology, University of Antananarivo, Madagascar). Thesis Defense: April 2008 (in Madagascar).
10. Masters Thesis Committee Member—Advisee: Verne F. H. Simons (Master student in the Department of Biological Sciences, OU). Thesis Defense—May 2008.

Robert Staron:

1. graduate student committees: (*advisor: R.S. Staron)
 - a. Jenny Herman (PhD) 4th year in BIOS PhD program
 - b. Kumika Toma (PhD) 6th year in BIOS PhD program
 - c. Andrew Timothy (DO/PhD) 5th year in IIP program/2nd year in OUCOM
 - d. Sean Schumm (PhD) 3rd year in BIOS PhD program
 - e. David Dominguese (PhD) 3rd year in IIP program

- f. Lyndsey Howell (MS) 2nd year BIOS MS program/1st year in medical school
- g. Petra Williams (PhD) 2nd year in BIOS PhD program
- h. Justin Kemp (PhD) School of Biomed & Health Sci, Victoria University, Melbourne, Australia: external reviewer for dissertation 4/08

Nancy Stevens:

- 1. Graduate advisor: Verne Simons (completed in Spring)
- 2. Graduate advisor: Domoina Rakotoson (current)
- 3. Graduate committee member: Jennifer Hancock (current)
- 4. Graduate committee member: Angela Horner (current, defended proposal in spring)

Susan Williams:

- 1. PhD Advisor (1 student, Jillian Davis)
- 2. Master's Committee (1, Simons - defended spring, 2008)
- 3. Dissertation Committee (3, Dufeu, Rasmusson, Daniels)

Larry Witmer:

- 1. Doctoral students, Witmer major advisor: 4 (Hieronymus, Daniel, Dufeu, Porter)

c. Undergraduate Education:

1. Undergraduate Course Involvement

Ken Goodrum:

- 1. BIOS486A/586A Immunology, 35 enrolled. 30 hours lecture

Richard Klabunde:

- 1. Conducted a tutorial course (BIOS 399T) for an HTC student (Jacob Wright-Piekarski; fall)

2. Undergraduate Research Education

Mark Berryman:

- 1. Undergraduate research supervisor, Winter, Spring: Tami Coursey, junior, PACE
- 2. Undergraduate research supervisor, Winter & Spring: Heather Martin, senior
- 3. Undergraduate research supervisor, Winter & Spring: Abdi Mohamud, sophomore
- 4. Undergraduate research supervisor, Fall Winter: Tami Coursey, senior
- 5. Undergraduate research supervisor, Fall & Winter: Antimo Gazzillo, junior, PACE
- 6. Undergraduate research supervisor, Fall & Winter: Ryan Haake, senior

Bonita Biegalke:

- 1. Undergraduate Student Advisor – McNair Scholar Velma Lopez
- 2. Undergraduate research assistants – 1 for 3 quarters
- 3. Undergraduate independent discussion course – fall quarter

Audrone Biknevičius:

1. BIOS undergraduate research hours: Hannah Dunne
2. PURF advisor: Kristin Stover

Jack Blazyk:

1. HTC Tutorial - Bios 399T – Antibiotic Mechanisms and Resistance – tutorial for Erin Howlett, BIOS undergraduate student, met 3 hours per week in Fall Quarter

Brian Clark:

1. RSAF Student Advisor: Jon Umbel: 10 HOURS
2. SURF Student Advisor: Doug Dearth: 10 HOURS
3. Honors Tutorial College Mentor: 1 hour/week for 12 weeks per quarter
 - a. Doug Dearth (Biological Sciences): 2 quarters: 24 contact hours x 4 = 48 HOURS
 - b. Eden Almasude (Biological Sciences) 1 quarter: 12 contact hours x 4 = 24 HOURS
 - c. Bob Bender (Biological Sciences) 1 quarter: 12 contact hours x 4 = 24 HOURS

Karen Coschigano:

1. Research advisor for HTC undergraduate student Erika Swanson's thesis
2. Research advisor for undergraduates Audrey Lee and Amanda Harwood

Peter Coschigano:

3. Spring 08: HTC tutorial. 1 student, 10 contact hours.

Mario Grijalva:

1. Almasude, Eden. Ecuador, Summer 2008. PACE program. Fall 2008 – Present
2. Hornor, Melissa. Ecuador, Summer 2008.
3. Sikes, Roger. Ecuador, Summer 2008.
4. Lauren Milani. Work Study. Fall 2000 - Present
5. Earnest, JT, Wake Forest U. Ecuador, Summer 2008.
6. Faig, Jennifer. Wake Forest U. Ecuador, Summer 2008.
7. Fojtik, Megan. Ecuador, Summer 2008.
8. Krystoski, Amy. Ecuador, Summer 2008.
9. Merlino, Amanda. Loyola University . Ecuador, Summer 2008.
10. Mulligan, Maggie. Ecuador, Summer 2008.
11. Mullin, Andrew. University of Cincinnati. Summer 2008.
12. Thompson, March. Colorado State University.
13. Whiting, Katherine. Summer 2008.

Sharon Inman:

1. Summer 2008 Jin Mai – SURF Student

Yang Li:

1. Research adviser of approved undergraduate programs for 3 undergraduate students, 3 X
 - a. Ashlie Arthur (PACE program, Senior) winter/spring quarters
 - b. Aaron McAvoy (PACE program, Junior) (winter quarter)
 - c. Randy Robert (PACE program) (spring/summer/fall quarters)

Ramiro Malgor:

1. Summer student: Localization of Nitric Oxide Isoforms in Obese Zucker Rats with Diabetic Nephropathy. Student: Andrew Bandy (SURF program)

Erin Murphy:

1. Research Advisor to RSAF Summer student: 10 weeks at 40 hours/week of lab work (Bryan Baskin)
2. PACE Student: Started in Fall Quarter; 10 hours/week

Felicia Nowak:

1. Honors Tutorial (non-thesis) with John Blischak, topic: Molecular and Cellular Biology of Type 2 Diabetes, Fall 2008.
2. Jennifer Yee, undergraduate, three quarters.
3. Andrew Bandy, undergraduate SURF student, summer 2008.
4. Peng Wang, medical RSAF student, summer 2008.
5. Lindsay Wardell, MS II, who helps set up medications for HT study patients as needed

Nancy Stevens:

1. Co-supervised two undergraduate students (Gabriel Masai and Ahamed Mussa) from the University of Dar es Salaam on senior thesis projects during summer of 2008; served as external PhD dissertation advisor for Fidy Ralainasolo (University of Antananarivo, Madagascar) and Enas Ahmed (University of Mansoura, Egypt).

Susan Williams:

1. HTC Tutorials (Kristin Stover - Winter, Spring 2008)
2. HTC Thesis Advisor (Kristin Stover - Fall, 2008)

Lawrence Witmer:

1. HTC tutorials: Winter Quarter: Sarah Gutzwiller; Fall Quarter: Celeste Taylor.
2. Undergraduate research (BIOS 493): Spring and Fall Quarters: Amy Martiny.

2. **Faculty Teaching Assignment Policies.**

Taking into account the 3-fold faculty tasks, teaching-research-service, assignments are made to maximize overall productivity. Teaching assignments, for example, place the best qualified individuals in the appropriate duties while attempting to protect the research time of faculty based on research success and career stage. While the developmental mean for workload expectation is 30% teaching, 50% research and 20% service, variation exists for some faculty members based on their abilities, research funding and the needs of the College.

SECTION V – FACULTY RESEARCH

Publications, Research, Teaching Awards, Distinguished Lectures either produced or in the process of production by faculty members. This should include any discipline appropriate measures of productivity in research, scholarship and/or creative activity. This should also include any grants applied for as well as those received over the past year. Works currently in process should also be listed.

1. Publications in 2008

a. Peer Reviewed Publications

1. Depletion of dendritic cells delays ovarian cancer progression by boosting antitumor immunity. Huarte E, Cubillos-Ruiz JR, Nesbeth YC, Scarlett UK, Martinez DG, Buckanovich RJ, Benencia F, Stan RV, Keler T, Sarobe P, Sentman CL, Conejo-Garcia JR. *Cancer Res.* 2008;68(18):7684-91.
2. Wnt5a is expressed in murine and human atherosclerotic lesions. Christman MA 2nd, Goetz DJ, Dickerson E, McCall KD, Lewis CJ, Benencia F, Silver MJ, Kohn LD, Malgor R. *Am J Physiol Heart Circ Physiol.* 2008; 294(6):H2864-70.
3. Modulation of the antitumor immune response by complement. Markiewski MM, DeAngelis RA, Benencia F, Ricklin-Lichtsteiner SK, Koutoulaki A, Gerard C, Coukos G, Lambris JD. *Nat Immunol.* 2008; 9(11):1225-35.
4. Biological therapy with oncolytic herpesvirus. Benencia F, Coukos G. *Adv Exp Med Biol.* 2008; 622:221-33. Review.
5. Herpes virus oncolytic therapy reverses tumor immune dysfunction and facilitates tumor antigen presentation. Benencia F, Courrèges MC, Fraser NW, Coukos G. *Cancer Biol Ther.* 2008; 7(8):1194-205.
6. Whole tumor antigen vaccination using dendritic cells: comparison of RNA electroporation and pulsing with UV-irradiated tumor cells. Benencia F, Courrèges MC, Coukos G. *J Transl Med.* 2008; 6:21.
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b. Peer Reviewed Publications – Submitted or In Press

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 5. Penta-O-galloyl- α -D-glucose inhibits adipogenesis through selective actions independent of the early adipogenic signaling transduction Xueqing Liu, Yunsheng Li, Yanyan Cao, Xiaozhuo Chen As corresponding author
 6. p53 activation and apoptosis in human colon cancer RKO cells induced by Penta-O-galloyl- α -D-glucopyranose (α -PGG) are mediated through insulin receptor
 7. Yanyan Cao, **Xiaozhuo Chen**, Ahmed Malki, Eroica Soans, and Susan C. Evans As co-first author
 8. **CLARK, BC**. *In vivo* alterations in skeletal muscle form and function following disuse atrophy. Invited review. *Medicine and Science in Sports and Exercise*. Submitted November, 2008.
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26. Tian D, **Li YV** Effect of Zinc Chelation on Neurotransmission in Hippocampal Mossy Fiber-CA3 Synapse ---the inhibitory action of synaptically released Zinc. Submitted to *Experimental Neurology*
27. **Li YV** Imaging Extracellular Zinc. Submitted to *Cell Calcium*
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65. Holliday, C. M. and **L. M. Witmer**. In press. The epipterygoid of crocodyliforms and its significance for the evolution of the orbitotemporal region of eusuchians. *Journal of Vertebrate Paleontology*. (65 MS pp.)
66. Hurlburt, G. R., R. C. Ridgely, and **L. M. Witmer**. In press. Relative size of brain and cerebrum in *Tyrannosaurus rex*: an analysis using brain-endocast quantitative relationships in extant alligators. in Origin, Systematics, and Paleobiology of the Tyrannosauridae, J. M. Parrish, M Henderson, P. J. Currie, E. Koppelhus (Eds.), Northern Illinois University Press. (39 MS pp.)
67. Dilkes, D. W., J. R. Hutchinson, C. M. Holliday, and **L. M. Witmer**. In press. Reconstructing the musculature of dinosaurs. In J. Farlow and M. Brett-Surman (eds.) *The Complete Dinosaur, 2nd Edition*. Indiana University Press, Bloomington. (81 MS pp.)
68. **Witmer, L. M.** and R. C. Ridgely. In press. The Cleveland tyrannosaur skull (*Nanotyrannus* or *Tyrannosaurus*): new findings based on CT scanning, with special reference to the braincase. *Kirtlandia*. (51 MS pp.)

c. Other Publications

1. **Huzoor-Akbar**, Berryman, M, Funk, K, Perveen, R, Shang, X, and Zheng, Y.: Genetic and pharmacologic targeting of Cdc42 GTPase reveals its critical role in regulation of platelet activation. *Circulation* 118: S_408 (2008).
2. **Huzoor-Akbar**, Raines, J, Funk, K, Berryman, M, Shang, X, and Zheng, Y.: Essential role of the Rho GTPase Cdc42 in platelet adhesion, spreading, secretion and aggregation revealed by a novel Cdc42-activity specific inhibitor. *FEBS Journal* 275 (Suppl. 1) 328 (2008).
3. **J. Blazyk**, M. Pate, J. Hammer J. He, A. Hansen and J. Bellissimo, Enhanced Selectivity via Structural Perturbation of Linear Amphipathic Beta-Sheet Antimicrobial Peptides, *Biophysical Journal*, 94, 149 (2008)
4. **Yang V Li**. Zinc Release at the Synaptic Terminals. *Science Signaling* 2008 June, eLetter
5. C. BASTIAN, **Y. V. LI**. Determining the role of increased expression of Na_v1.5 channels in the hippocampus in pilocarpine induced epilepsy. Program No. 50.15. 2008 Neuroscience Meeting. Washington, DC: Society for Neuroscience, 2008. Online.

6. C. J. STORK, **Y. V. LI**. Release of intracellular Zn²⁺ from thapsigargin-sensitive calcium stores Program No. 353.10. 2008 Neuroscience Meeting. Washington, DC: Society for Neuroscience, 2008. Online.
7. D. TIAN, **Y. V. LI**. Effect of zinc chelation on neurotransmission in hippocampal mossy fiber-ca3 synapse---the inhibitory action of synaptically released zinc Program No. 734.13. 2008 Neuroscience Meeting. Washington, DC: Society for Neuroscience, 2008. Online.
8. C. J. STORK, **Y. V. LI**. Rising zinc, not calcium, is a causal factor of ogd-induced neuronal injury in the ca1 region of rat hippocampus Program No. 353.12. 2008 Neuroscience Meeting. Washington, DC: Society for Neuroscience, 2008. Online.
9. Wnt5a and Toll Like Receptor Cross-signaling in Pathogenesis of Atherosclerosis **Ramiro Malgor**, Chad M. Keller, Christopher J. Lewis, Douglas J. Goetz, Mitchell J. Silver, Leonard D. Kohn. BMES 2008 Annual Fall Meeting, St Louis October, 2008.
10. **Patel BA**. "Primate and non-primate biology." *Evolutionary Anthropology*. 17:125-126.
11. 2008. **NJ Stevens** and K. Carlson. Bridging the gaps between experimental and naturalistic approaches to the study of primate behavior. *International Journal of Primatology*. 29:1395-1399. (**invited editorial**)
12. Wallace IJ, Wheeler BC, **Su A**, Lodwick JL. (2008) Physical Anthropologists Return to America's Heartland. *Evolutionary Anthropology* 17:163-165.

d. **Other Publications – Submitted or In Press**

1. J. He, **J. Blazyk**, M. Pate, J. Hammer and J. Blazyk, Can Peptide-Lipid Interactions Predict Bactericidal and Hemolytic Activity in Antimicrobial Peptides?, 2009 Biophysical Society Meeting Abstracts. *Biophysical Journal*, 801-Pos (2009).
2. Williams, PS and **BC CLARK**. *Electromyography in the 21st Century: From voluntary signals to motor evoked potentials*. In 'Biomechanics: Principles, Trends and Applications.'" Nova Science Publishers. Hauppauge, NY. In Press.
3. McGlaughlin, MC, PA Analogue and **BC CLARK**. *External pelvic fixation during lumbar muscleresistance exercise*. In 'Biomechanics: Principles, Trends and Applications.'" Nova Science Publishers. Hauppauge, NY. In Press.
4. Villacís AG & **Grijalva MJ**. 2008. *Rhodnius ecuadoriensis*: su importancia en la transmisión en la Enfermedad de Chagas. [Importance of *Rhodnius ecuadoriensis* in Chagas disease transmission]. Nuestra Ciencia, Número 10, pag. 54. PUCE. Facultad de Ciencias Exactas y Naturales. Quito-Ecuador.
5. Villacís AG and **Grijalva MJ**. Educational booklet, "Proyecto educativo y Control de la Enfermedad de Chagas: Unámonos Todos y Eliminemos al Chinchorro por el Bien de Nuestra Comunidad" [Chagas disease control and education program: Let's get together and eliminate the triatomines for our community's own benefit] IMPREFEPP, Quito-Ecuador.
6. Protein kinase-C causes a reduction in the recovery of TBP in an in vitro transcription system. Albert Saez, B.A. and **Calvin James, PhD.**, Department of Biomedical Sciences, Ohio University, Athens, Ohio, 45701.
7. **A.H. Lee**. 2008. *Pachyrhinosaurus*. *Encyclopaedia Britannica*.

8. **Patel BA.** “Comparative functional morphology in primates.” *Evolutionary Anthropology*.
9. Book Chapter: **Wilson, T. E.** Sweat gland Pharmacology and Physiology, *Textbook of Aging Skin*, editors: M. Farage, K. Miller, & H. Maibach, Springer, New York, NY

2. Presentations

a. **Invited Presentations**

1. **Audrone R. Biknevicius** Seminar at State University of New York at Stony Brook on 4/25: “The ‘usefulness’ of walk and run designations in vertebrates”
2. **Xiaozhuo Chen** Anti-cancer Strategies. Capital Normal University of Beijing. Beijing, China. 9/28/2008
3. **Xiaozhuo Chen** Graduate study in the US and at Ohio University. Shanghai University, Shanghai, China. 9/30/2008.
4. **Xiaozhuo Chen** Molecules of contradiction: Compounds with two opposing glucose transport activities DRI Retreat, Ohio University 7/18/2008
5. **Xiaozhuo Chen** Stop proliferation and induce apoptosis in cancer cells through glucose deprivation. MCB retreat. Ohio University, 10/10 – 10/11/2008.
6. **CLARK, BC**, National Aeronautics and Space Administration: Johnson Space Center. ‘Dazed and Confused: Corticospinal reorganization and skeletal muscle plasticity associated with disuse atrophy.’ Houston, TX. December, 2008.
7. **CLARK, BC**, Symposium presentation at the 2008 American College of Sports Medicine Annual Meeting. Regulation of muscle atrophy: wasting away from the outside in. BC Clark Presentation: *In vivo* alterations in skeletal muscle form and function following disuse atrophy. Co-Presenters: Maria Urso and Parco Siu. Indianapolis, Indiana. May, 2008.
8. **CLARK, BC**, Vascular Performance Enhancement Systems Incorporated. Blood flow restricted exercise: efficacy, mechanisms of action and safety. Santa Fe, NM. August, 2008.
9. **CLARK, BC**, Syracuse University Alumni Seminar Series. Dazed and Confused: Corticospinal reorganization associated with disuse atrophy. Syracuse, NY. November, 2008.
10. **Horodyski, F.M.** (2008). Diverse splicing patterns of insect allatotropin mRNAs. Invertebrate Neuropeptide Conference. Gamboa, Panama.
11. **Inman SR**, Preservation of renal function in the obese Zucker rat by antioxidant diet. Oral presentation at Experimental Biology meeting, San Diego CA, April, 2008.
12. **RE Klabunde**. Osteopathic Medical Education – Years 1 and 2. AACOM/AODME Annual Meeting, St. Louis, 4/08 (oral presentation and panel member)
13. **RE Klabunde**. Univ. of Kentucky Seminar: Teaching Physiology in a Changing World of Medical Education; *and*, I conducted a medical education workshop on this topic with the graduate students and several faculty.
14. **A.H. Lee**, Paleobiology seminar series at the Field Museum of Natural History in Chicago (9-3-08)
15. **Y. V. Li**, “Rising Zinc, not Calcium, is the Primary Cause of OGD-induced Neuronal Injury in the CA1 Region of Rat Hippocampus.” Invited speaker at Zinc Signals 2008, 10th Annual International Conference. Cooks Branch Ranch, The Woodlands, Texas, TX

16. **Y. V. Li**, “Effect of Zinc chelation on Neurotransmission in Hippocampal Mossy Fiber-CA3 Synapse” was presented by my post-doctoral fellow Dr. Tian. I served as the invited Chair of the Synaptic Zinc Session at Zinc Signals 2008, 10th Annual International Conference. Cooks Branch Ranch, The Woodlands, Texas, TX
17. **Y. V. Li**, “Synaptically Released Zinc Modulates Neural Transmission at the Mossy Fiber-CA3 Synapse of Rat Hippocampus” In the Inaugural Society for Zinc Biology Meeting at Banff, Alberta, Canada. 10 - 14 February 2008
18. **Erin R. Murphy** Research seminar at Ohio Branch ASM (3/29/08)
19. **Erin R. Murphy** Research Poster Presentation at Microbial Toxins and Pathogenesis Gordon Conference
20. **Erin R. Murphy** Research Seminar at MCB Retreat (10/11/08)
21. **Erin R. Murphy** Research Seminar at SUNY Geneseo (11/21/08)
22. OU-COM Research Day, September, 2008, poster presentation, Wang PE, Yee J, Wang Z, **Nowak FV**, Diabetes and nephropathy—the role of nitric oxide synthase (NOS) enzyme isoforms. Presentation by PE Wang.
23. OU 2008 Research and Creative Activity EXPO, June, 2008, OU Convocation Center. Three poster presentations by members of the lab were:
 - a. Zhenchao Wang presented a poster entitled “Regulation of Preoptic Regulatory Factor-2 expression and its contribution to diabetic nephropathy in Zucker rats.” Z Wang, **FV Nowak**.
 - b. Shuang Ma presented a poster entitled “PORF-2 inhibits cell growth and promotes apoptosis in neural stem cells”. S Ma, **FV Nowak**. Her poster won second prize in Biological Sciences Section 4.
 - c. Jennifer Yee presented a poster entitled “Effects of antioxidant diet on nitric oxide synthase expression in obese Zucker rat.” J Yee, Z Wang, SR Inman, **FV Nowak**. Her poster tied for first place in the Biomedical Sciences section.
24. DRI Retreat, July, 2008, OU M. Walter Hall, three presentations by members of the **Nowak lab**:
 - a. Suppression of PORF-2, a growth regulatory factor, by insulin and IGF-1, oral presentation by graduate student, Zhenchao Wang.
 - b. Antioxidant diet alters metabolic parameters in the diabetic Zucker rat, oral presentation by postdoctoral fellow, Yuriy Slyvka.
 - c. Effect of antioxidant diet on nitric oxide synthase expression in obese diabetic Zucker rat. Jennifer Yee, Zhenchao Wang, Sharon Inman and Felicia V. Nowak. Presentation by FV Nowak.
25. MCB retreat, October, 2008, OU Baker Center, two poster presentations:
 - a. Z Wang, **FV Nowak**. Regulation of preoptic regulatory factor-2 expression in vitro and its contribution to diabetic nephropathy in Zucker rats.
 - b. S Ma and **FV Nowak**. Porf-2 inhibits growth and promotes apoptosis in neural cells.
26. **O’Connor, P. M.**, University of Antananarivo (Madagascar)—Dept. of Palaeontology, April 2008
27. **O’Connor, P. M.**, National Museum of Kenya (Nairobi)—Department of Paleontology, June 2008
28. **Patel BA**. *Interpreting terrestriality in the primate fossil record*, Primatology Club Seminar, Department of Anthropology, Miami University-Ohio. 11/18/2008

29. **Patel BA.** *Not so fast! – The biomechanics of digitigrady in cercopithecine monkeys assessed with motion analysis, force plates and pressure pads.* Invited presentation at the symposium on “Comparative functional morphology in primates”, IPS Post-Congress Symposium, Durham University, United Kingdom, August 10-11, 2008.
30. **Patel BA.** *Visualizing variation in hind limb loading using the distal articular surface of the primate tibia.* Invited presentation at the symposium on “Comparative functional morphology in primates”, IPS Post-Congress Symposium, Durham University, United Kingdom, August 10-11, 2008.
31. **Patel BA.** *Morphological and experimental investigation of terrestrial hand postures in non-human primates,* Department of Cell Biology and Anatomy, Sophie Davis School of Biomedical Sciences, CUNY City College. 4/24/2008
32. **Patel BA.** *Morphological and experimental investigation of terrestrial hand postures in non-human primates,* Anthropology Department, University at Albany, State University of New York. 2/14/2008
33. **NJ Stevens,** “Primate Behavioral Ecology—Evolutionary history and modern diversity of East African nocturnal strepsirrhines and rainforest apes”, Kibale Research Station, Uganda, July, 2008.
34. **NJ Stevens,** “Primate Behavioral Ecology—Colobines and Cercopithecines of the East African Rift: Evolutionary History and the impacts of Environmental Change”, Semliki Research Station, Uganda, August, 2008.
35. **NJ Stevens,** “Tanzania in Deep Time”, Tanzania National Museum, Dar es Salaam, Tanzania, June, 2008.
36. **NJ Stevens,** “Scientific Research and Capacity Building in Economically Disadvantaged Settings: Perspectives from the Field”, African Studies Program, Center for International Studies, Ohio University, April, 2008.
37. **NJ Stevens,** “Egyptian Paleogene Vertebrates: Comparisons with broader Afro-Arabian Faunas”, Cairo University, Egypt, March, 2008.
38. **NJ Stevens,** “The Paleogene-Neogene transition in Western Africa: Perspectives from Namibia.” Namibian Geological Survey, Windhoek, Namibia, March 2008.
39. **NJ Stevens,** “Field biology: Understanding locomotion in the critically-endangered primates of Madagascar and Vietnam”, Anthropology Department, Miami of Ohio, March, 2008.
40. **NJ Stevens,** “Afro-Arabian Paleogene Vertebrate Faunal Evolution”, Department of Geology, Sultan Qaboos University, Oman, January, 2008.
41. **NJ Stevens,** “New discoveries from Southeast Asia: Fossil finds and modern biodiversity”, Southeast Asian Studies course, Ohio University, January, 2008.
42. **NJ Stevens,** “Pre-Miocene faunas from East Africa: the Rukwa Rift Basin of Tanzania”, Kenya National Museums, Nairobi, Kenya, January, 2008.
43. **Williams et al.** 2008. New technology for understanding primate masticatory form, function and evolution: a portable system for assessing jaw-muscle function in the field. International Mtg of the International Primatological Society; Edinburgh Scotland. (August 1-5, 2008)
44. **Witmer, L. M.,** Ohio University Geology Colloquium, 19 Sep 2008. “Digital dinosaurs: shedding light on dinosaur sensory biology and behavior using advanced 3D imaging.”

45. **Witmer, L. M.**, University of California, Davis. 30 Apr 2008. "Digital dinosaurs: shedding light on dinosaur sensory biology and behavior using advanced 3D imaging."
46. **Witmer, L. M.**, Athens Reading Club, Athens, Ohio, 18 April 2008. "Dinosaurs exposed: unlocking the riddles of dinosaurs using advanced medical imaging."
47. **Witmer, L. M.**, Dinosaur Lecture Series, Carnegie Museum of Natural History, Pittsburgh. 12 Apr 2008. "Dinosaurs exposed: unlocking the riddles of Carnegie's dinosaurs using advanced medical imaging."
48. **Witmer, L. M.**, Frontiers in Science Lecture, Florida Atlantic University, Boca Raton. 27 Mar 2008. "Digital dinosaurs: solving the riddles of dinosaurs using advanced medical imaging."

b. Presentations – Voluntary

1. **Huzoor-Akbar**, Genetic and pharmacologic targeting of Cdc42 GTPase reveals its critical role in regulation of platelet activation. Scientific Sessions 2008, The AHA national meeting (New Orleans, LA, November 10, 2008).
2. **Huzoor-Akbar**, Essential role of the Rho GTPase Cdc42 in platelet adhesion, spreading, secretion and aggregation revealed by a novel Cdc42-activity specific inhibitor. 33rd FEBS Congress & 11th IUBMB Conference (Athens, Greece, July 2, 2008).
3. **F. Benencia**, MCB Program, Ohio University "Interaction of dendritic cells with the tumor microenvironment" November 4, 2008
4. Akbar, H, **Berryman, MA**, Funk, K, Perveen, R, Shang, X, and Zheng, Y. 2008. Genetic and pharmacologic targeting of Cdc42 GTPase reveals its critical role in regulation of platelet activation. *Circulation*. 118:S_408. Poster presentation to American Heart Association National meeting "Scientific Sessions 2008", New Orleans, by H Akbar.
5. Akbar, H, Raines, J, Funk, K, **Berryman, M**, Shang, X, and Zheng, Y 2008. Essential role of the Rho GTPase Cdc42 in platelet adhesion, spreading, secretion and aggregation revealed by a novel Cdc42-activity specific inhibitor. *FEBS J*. 275 (Suppl.1) 328. Poster presented at 33rd FEBS conference in Athens, Greece by H Akbar.
6. Ballermann, BJ, Wegner, B, Kozlowski, K, Kulak, SC, Obeidat, M, Paes, J, Sorensson-Nystrom, J, **Berryman, M**. 2008. The chloride intracellular channel 5A protein interacts with podocalyxin and is required for normal glomerular podocyte and endothelial cell structure. Poster presented at Canadian Society of Nephrology meeting by BJ Ballermann.
7. Platform Presentation: **J. Blazyk**, M. Pate, J. Hammer J. He, A. Hansen and J. Bellissimo, Enhanced Selectivity via Structural Perturbation of Linear Amphipathic Beta-Sheet Antimicrobial Peptides, Biophysical Society National Meeting, Long Beach, CA, 2/3/08
8. Cao Y, Liu Y, and **Chen X**. Compound a-PGG and its derivatives inhibit basal glucose transport and induce p53-independent apoptosis in cervical and breast cancer cells. Endocrine Society Annual Meeting, San Francisco, CA, USA. 6/14 – 6/18/2008.

9. Cao Y, Kim, J, and **Chen X**. Anti-diabetic compound 6Cl-TGQ activates insulin receptor signaling without stimulating IGF-1 receptor signaling. Endocrine Society Annual Meeting, San Francisco, CA, USA. 6/14 – 6/18/2008.
10. Sonia Q. Doi, Chad M. Keller, Audrey A.C. Lee Nancy Koles, Daniela Gusmao and **Karen T. Coschigano**. Up-regulation of class A scavenger receptor in diabetic nephropathy is growth-hormone dependent. Accepted for a poster presentation at the 2008 annual meeting of the American Society of Nephrology in Philadelphia.
11. M. Chatterjee, JM Chandler, CR Cooper, and **PW Coschigano**. Proteomic Analysis of Anaerobic *p*-Cresol Metabolism by *Thauera aromatica* strain T1. MCB retreat. 10/11/08.
12. **K. Goodrum**, Eicosanoid and Endothelin Release by Human Lung Microvascular Endothelial Cells Cultured with Soluble Products of Penicillin-G Treated Group B Streptococci. K. J. Goodrum, Ohio University, Athens, OH ASM National Meeting, Boston, June 2008.
13. Victoria Suarez-Davalos, Olivier Dangles and **Mario J. Grijalva**, “Microdistribution of peridomiciliary and sylvatic populations of Chagas Disease vectors in Coastal Ecuador”. 57th Annual Meeting of the American Society of Tropical Medicine and Hygiene, December 2008, New Orleans. USA
14. **Mario J. Grijalva** Phenotype Differences and Adaptative Ability of *Rhodnius Ecuadoriensis* Population in the Ecuadorian Central-coastal and Southern-andean Region. 57th Annual Meeting of the American Society of Tropical Medicine and Hygiene, December 2008, New Orleans. USA
15. Shari L. Lydy, Mauricio Lascano, Josselyn Garcia, Gregory A. Dasch, **Mario J. Grijalva**. Seroprevalence and epidemiology of Bartonella bacilliformis infection in Ecuador. 57th Annual Meeting of the American Society of Tropical Medicine and Hygiene, December 2008, New Orleans. USA
16. Joan V. Cunningham, Velma K. Lopes, Aaron McAvoy, Merrian Brooks, Roger Sikes, Joshua O'Donnell, Margaret A. Romoser, Abbey Wojno, Benjamin Bates, Jaime Costales, **Mario Grijalva**, William S. Romoser. Drinking Water Safety in Rural Ecuadorian Communities. 57th Annual Meeting of the American Society of Tropical Medicine and Hygiene, December 2008, New Orleans. USA
17. Villacís AG, Baus EG, Yumiseva CA, Ocaña SB, Arcos-Terán L, **Grijalva MJ**. 2008. Evaluación de las Estrategias de Control de Poblaciones de Vectores de la Enfermedad de Chagas (Hemiptera: Reduviidae: Triatominae) en la Provincia de Loja-Ecuador [Evaluation of the Control Strategies of the vectors population of Chagas Disease]. Scientific Research and Technological Transfer Regional Center (CRILAR). I Jornadas de Ciencias Naturales de la Rioja. March 18 and 19. Anillaco-La Rioja-Argentina.
18. Yumiseva CA, Ocaña SB, Villacís AG, Baus EG, **Grijalva MJ**. 2008. Uso y aplicación del SIG en la investigación, prevención y control de la Enfermedad de Chagas. [SIG Use and Application in the research, prevention and control of Chagas Disease]. I Jornadas de Ciencias Naturales de la Rioja. March 18 and 19. Anillaco-La Rioja-Argentina.
19. XXXII Jornadas Nacionales de Biología, Universidad Politécnica del Ecuador, Loja, Ecuador. November **2008**:

- a. Yumiseva C, **Grijalva MJ**. Using SIG in predicting modeling for the presence of *R. ecuadoriensis* in Ecuador, based on climatic variables of Loja and Manabi province.
 - b. Latorre F, Terán D, Villacís AG, **Grijalva MJ**. 2008. Fecundidad de *Rhodnius ecuadoriensis* (Hemiptera: Reduviidae: Triatominae) en dos áreas geográficas del Ecuador bajo condiciones de Laboratorio. [*Rhodnius ecuadoriensis* (Hemiptera: Reduviidae: Triatominae) Fertility in two geographics areas of Ecuador under Laboratory conditions].
 - c. Villacís AG, Catalá SS. **Grijalva MJ**, 2008. Análisis Fenotípico de poblaciones de *Rhodnius ecuadoriensis* (Hemiptera: Reduviidae: Triatominae) en las Provincias de Manabí y Loja- Ecuador. [Phenotypic Analyses of *Rhodnius ecuadoriensis* populations in Manabí ad Loja-Ecuador].
20. **RE Klabunde**. Student learning is enhanced by condensing objectives and providing explicit readings linked to learning objectives. IAMSE annual meeting, Salt Lake City, 2008. Poster presentation
 21. **A.H. Lee**, L.N. Cooper, M.L. Taper, & J.R. Horner. 2008. Rapid growth of the hadrosaurs *Hypacrosaurus* reflects direct and indirect effects of predation. Society of Vertebrate Paleontology (SVP) Annual Meeting, Cleveland OH.
 22. J. Lindgren & **A.H. Lee**. 2008. Convergence of gigantism in mosasaurs does not reflect a convergence of growth strategy. SVP Annual Meeting, Cleveland OH.
 23. S. Werning, P. Spector, & **A.H. Lee**. 2008. How does sampling method influence our estimation of bone growth? Poster presented at SVP Annual Meeting, Cleveland OH.
 24. E.B. Davis, **A.H. Lee**, & K. Brakora. 2008. Evolution of development in ruminant headgear: potential for phylogenetic resolution. Poster presented at SVP Annual Meeting, Cleveland OH.
 25. **A.H. Lee** & S. Werning. 2008. Sexual maturity in subadult dinosaurs does not fit reptilian growth models. Society of Integrative and Comparative Biology Annual Meeting, San Antonio, TX.
 26. J. K. Ketterman, **Y. V. Li**, Direct evidence for vesicular zn²⁺ release: localization, kinetics, and pharmacology. In the Inaugural Society for Zinc Biology Meeting at Banff, Alberta, Canada. 10 - 14 February 2008
 27. C.J. Stork, **Y.V. Li**. Intracellular Zinc Elevation Measured with a “Calcium-Specific” indicator: A Question on Calcium Signal. In the Inaugural Society for Zinc Biology Meeting at Banff, Alberta, Canada. 10 - 14 February 2008
 28. **Y.V. Li**. Zinc and Calcium in ischemic stroke. International Stroke Conference 2008, February 20-22, New Orleans, LA
 29. Caleb O. Molokwu and Yang V. Li. Effect Of Zinc Chelator On Bone Mineral Density Of Ovariectomized Rats With Or Without The Treatment Of 17β-Estradiol. At the 49th NSRF in Galveston Texas. April 2008
 30. C. BASTIAN, **Y. V. LI**. Determining the role of increased expression of Na_v1.5 channels in the hippocampus in pilocarpine induced epilepsy. Program No. 50.15. 2008 Neuroscience Meeting. Washington, DC. November 10-14, 2008
 31. C. J. STORK, **Y. V. LI**. Release of intracellular Zn²⁺ from thapsigargin-sensitive calcium stores Program No. 353.10. 2008 Neuroscience Meeting. Washington, DC: Society for Neuroscience, November 10-14, 2008
 32. D. TIAN, **Y. V. LI**. Effect of zinc chelation on neurotransmission in hippocampal mossy fiber-ca₃ synapse---the inhibitory action of synaptically released zinc Program

- No. 734.13. 2008 Neuroscience Meeting. Washington, DC: Society for Neuroscience, November 10-14, 2008.
33. C. J. STORK, **Y. V. LI**. Rising zinc, not calcium, is a causal factor of ogd-induced neuronal injury in the ca1 region of rat hippocampus Program No. 353.12. 2008 Neuroscience Meeting. Washington, DC: Society for Neuroscience, November 10-14, 2008.
 34. C.J. Stork, **Y.V. Li**, Intracellular Zn²⁺ storage, 7th Annual Student Research and Creative Activity Fair, Convocation Center. Ohio University. May 12, 2008 (the 1st Place Award Poster)
 35. A.B. Arthur, **Y.V. Li**, The Effects of Zinc Chelators on Ischemic Stroke *in vivo*, 7th Annual Student Research and Creative Activity Fair, Convocation Center. Ohio University. May 12, 2008
 36. C. Bastian, **Y.V. Li**. Zinc in the Recurrent Mossy Fiber Pathway of the Epileptic Brain. Program No 3.044. 7th Annual Student Research and Creative Activity Fair, Convocation Center. Ohio University. May 12, 2008
 37. Andrew Olson, **Dr. Yang V. Li**, Effect of Zinc on Mammalian Skeletal Muscle Contraction. Research Day 2008, Ohio University College of Osteopathic Medicine, Irvine Hall.
 38. C.J. Stork, **Y.V. Li**, Zinc and Calcium Storage, MCB Retreat Oct 2, 2008, Ohio University
 39. **Erin R. Murphy** Oral Research Presentation to Tri-Beta Honor Society (3/11/08)
 40. **Erin R. Murphy** Oral Research Presentation to MCB Graduate Students (5/20/08)
 41. **Erin R. Murphy** Two Research Poster Presentations at OUCOM Research Day
 42. **Erin R. Murphy** Research Poster Presentation at Tri-Beta Research Day
 43. Sharon R. Inman, Edwin J. Jackson Jr., Olusayo Oshogwemoh, Yuriy Slyvka, **Felicia V. Nowak**. Preservation of renal function in the obese Zucker rat by antioxidant diet. Abstract accepted for poster and oral presentation at Experimental Biology Meeting, San Diego, CA, April, 2008.
 44. Slyvka Y, Feldman Y, Inman SR, **Nowak FV**. Kidney NOS isoform variance in female Zucker rats (fa/fa) on antioxidant diet. Poster presented at the International Conference on Modern Achievements in theoretical and clinical medicine, Sumy, Ukraine, April, 2008.
 45. Slyvka Y, Feldman Y, Inman SR, **Nowak FV**. Kidney eNOS, nNOS and iNOS splice form analysis in diabetic obese female Zucker rats (fa/fa) on antioxidant diet. Poster presentation at the 90th Annual Endocrine Society Meeting, San Francisco, CA, June, 2008.
 46. Yee J, Wang Z, Inman SR, **Nowak FV**. Effect of antioxidant diet on nitric oxide synthase expression in obese diabetic Zucker rats. Poster presentation at the 90th Annual Endocrine Society Meeting, San Francisco, CA, June, 2008.
 47. Wang Z, **Nowak FV**. Regulation of preoptic regulatory factor-2 expression in vitro and its contribution to diabetic nephropathy in Zucker rats. Poster presentation at the 90th Annual Endocrine Society Meeting, San Francisco, CA, June, 2008.
 48. Ma S, **Nowak FV**. PORF-2 inhibits cell growth and promotes apoptosis in neural cells. Poster presentation at the 90th Annual Endocrine Society Meeting, San Francisco, CA, June, 2008.

49. **Nowak FV**, Wang Z and Ma S. Suppression of PORF-2, a CNS growth regulatory factor, by insulin and IGF-1. Poster presentation at the Annual Meeting of the Society for Neuroscience, Washington, DC, November, 2008.
50. Inman SR, Slyvka Y, Feldman Y, **Nowak FV**. Renal NOS isoforms and splicing in 13 week obese female Zucker rats on antioxidant vs regular diet. Abstract submitted for presentation at the FASEB Meeting, New Orleans, LA, April, 2009.
51. Slyvka Y, Wang Z, Inman SR, **Nowak FV**. Renal function and expression of renal NOS isoforms and splicing in 13 week male Zucker rats: Effect of diet. Abstract submitted for presentation at the XXXVI International Congress of Physiological Sciences, Kyoto, Japan, July, 2009.
52. **O'Connor, P. M.**, N. J. Stevens, J. J. W. Sertich, E. M. Roberts, M. D. Gottfried, T. L. Hieronymus, J. Temba, and Z. A. Jinnah. A notosuchian crocodyliform from the Galula Formation, Red Sandstone Group (middle Cretaceous) of southwestern Tanzania. The Third Annual Latin American Congress of Vertebrate Paleontology, Neuquén, Argentina (accepted) (2008).
53. Stevens, N. J., **P. M. O'Connor**, E. M. Roberts, M. D. Gottfried, and J. Temba. New primate fossils from the late Oligocene Rukwa Rift Basin of Tanzania. *American Journal of Physical Anthropology* (submitted) (2008).
54. Roberts, E. M., K. Mgodli, T. J. Broderick, A. M. Yates, and **P. M. O'Connor**. Discovery of a densely packed “*Syntarsus rhodesiensis*” bone bed from the Late Triassic-Early Jurassic Forest Sandstone, Mano Pools Basin, Zimbabwe. *Journal of Vertebrate Paleontology* (accepted) (2008).
55. **O'Connor, P. M.**, J. J. W. Sertich, N. J. Stevens, E. M. Roberts, M. D. Gottfried, and S. Ngasala. The evolution of mammal-like crocodyliforms (Crocodyliformes: Notosuchia) in Gondwana: New evidence from the Middle Cretaceous Galula Formation, Rukwa Rift Basin, southwestern Tanzania. *Journal of Vertebrate Paleontology* (accepted) (2008).
56. Rasmusson, E. L., and **P. M. O'Connor**. Cross-sectional geometry of the forelimb skeleton and flight mode in peleciform birds. *Integrative and Comparative Biology* (Submitted) (2008).
57. **O'Connor, P. M.**, D. W. Krause, M. T. Carrano, S. H. Burch, and N. O. Ratsimbaholison. The Late Cretaceous (Maastrichtian) theropod fauna of the Maevarano Formation, northwestern Madagascar: New discoveries, new insights and new direction. The Third Annual Latin American Congress of Vertebrate Paleontology, Neuquén, Argentina (Submitted) (2008).
58. **Patel BA**. 2008. “Functional morphology of the *Equatorius africanus* hand.” Presented at Ohio University College of Osteopathic Medicine Research Day, September 19, 2008.
59. **Patel BA**. 2008. “Morphological investigation of cercopithecoid hand postures.” Presented at the XXII Congress of the International Primatological Society, Edinburgh, Scotland. August 3-9, 2008.
60. **Patel BA**, Wunderlich R. 2008. “Speed effects on palmar pressure in digitigrade baboons (*Papio anubis*).” Presented at annual AAPA meeting.
61. Carl KM, **Patel BA**, Larson SG. 2008. “Forearm kinematics and hand postures: implications for interpreting subchondral bone density patterns in the primate distal radius.” Presented at annual AAPA meeting.

62. Kingston A, Boyer DM, **Patel BA**, Larson SG, Stern JT Jr. 2008. "Hallucal grasping in *Nycticebus coucang*: further implications for the functional significance of a large peroneal process." Presented at annual AAPA meeting.
63. Jacobs RL, **Patel BA**, Boyer DM. 2008. "Does a large peroneal process on the first metatarsal reflect leaping behavior in prosimian primates?" Presented at annual AAPA meeting.
64. **Patel BA**, Uppal K, Polk JD. 2008. "Primate hand postures across symmetrical and asymmetrical gaits." Presented at annual SICB meeting.
65. Wunderlich RE, **Patel BA**. 2008. "Peak pressures and cheiridial postures in baboons (*Papio anubis*)." Presented at annual AAPA meeting.
66. Hatfield D.L., Kraemer W.J., Vingren J.L., Fragala M.S., Ho J.-Y., Thomas G.A., Volek J.S., Maresh E.M., Spiering B.A., Schuenke M.D., Kopchick J.J., **Staron R.S.** The effects of growth hormone receptor deficiency on skeletal muscle insulin-like growth factor-I protein expression. American College of Sports Medicine meeting in Indianapolis, May 28-31, 2008
67. (submitted) **NJ Stevens**, PM O'Connor, EM Roberts, MD Gottfried, J Temba. New primate fossils from the late Oligocene Rukwa Rift Basin of Tanzania. *Am. J. Phys. Anthropol.*
68. 2008. **NJ Stevens**. An emerging late Oligocene rodent fauna from the Nsungwe Formation, Rukwa Rift Basin, Tanzania. *J. Vert. Paleo.* 28(S3): 147A.
69. 2008. VFH Simons, **NJ Stevens**. Limb and contact structure morphometrics in extant anurans: implications for interpreting fossil frog locomotor morphology. *J. Vert. Paleo.* 28(S3): 143A.
70. 2008. PM O'Connor, J Sertich, **NJ Stevens**, MD Gottfried, EM Roberts. The evolution of mammal-like crocodyliforms (Crocodyliformes: Notosuchia) in Gondwana: New evidence from the middle Cretaceous Galula Formation, Rukwa Rift Basin, Southwestern Tanzania. *J. Vert. Paleo.* 28(S3): 122A.
71. 2008. PM O'Connor, **NJ Stevens**, JJW Sertich, EM Roberts, MD Gottfried, TL Hieronymus, J Temba, ZA Jinnah. A notosuchian crocodyliform from the Galula Formation, Red Sandstone Group (middle Cretaceous) of southwestern Tanzania. The Third Annual Latin American Congress of Vertebrate Paleontology, Neuquén, Argentina.
72. 2008. **NJ Stevens**. Linking in-situ and ex-situ approaches for studying primate locomotor responses to support stability. *International Primate Congress VIII*.
73. 2008. FB Ralainoso, JH Ratsimbazafy, **NJ Stevens**. Consumption of fall-back foods by *Eulemur albocollaris* at Manombo Forest, SE Madagascar. *International Primate Congress VIII*.
74. 2008. **NJ Stevens**, AS Schulp, M. Wosabi. The Yemen Paleontology Project: Borderless Paleontology. *Abs. 9th Cong. Geol. Arab World*.
75. 2008. M. Wosabi, AS Schulp, **NJ Stevens**. Dinosaur ichnosites: Evidence from Yemen. *Abs. 9th Cong. Geol. Arab World*.
76. **Williams SH**, Sidote JV (Jan, 2008) Ontogeny of rhythmic chewing and masseter activity in a selenodont artiodactyl. Annual Meeting of the Society for Integrative and Comparative Biology).
77. Two abstracts submitted with undergrads in 2008 for Annual Meeting of the Society for Integrative and Comparative Biology. Presentations were on Jan 4, 2009:

- a. Stover, KK and **Williams, SH**. Ontogeny and fusion of the mandibular symphysis in camelids.
 - b. Peiffer, E. and **Williams, SH**. Gape and bite force in the northern grasshopper mouse (*Onychomys leucogaster*) and the deer mouse (*Peromyscus maniculatus*)
78. Abstracts Submitted to FASEB (Federation of American Societies for Experimental Biology) in November of 2008 for the conference in April of 2009:
- a. **Wilson, T. E.**, Monahan, K. D., Kearney, M. L., Folsom, A. & Ray, C. A. Aerobic exercise training improves maximal in vivo cholinergic responsiveness but not sensitivity of eccrine sweat glands.
 - b. Gao, Z., **Wilson, T. E.**, & Monahan, K. D. Skin-surface cooling increases left-ventricular preload but not contractility older humans
 - c. Hess, K. L., **Wilson, T. E.**, Gao, Z., Ray, C. A., & Monahan, K. D. Aging augments pressor responses to mild skin surface cooling in humans
79. Abstracts Submitted to ACSM (American College of Sports Medicine) in November of 2008 for the conference in May-June of 2009:
- a. Monahan, K. D., Ray, C. A., **Wilson, T. E.**, & Hess, K. L. Mild skin surface cooling does not increase arterial stiffness in humans
 - b. Dearth, D. J., Umbel, J., Hoffman, R. L., Russ, D. W., **Wilson, T. E.** and Clark, B. C. Influence of fatigue-induced muscle afferent stimulation on motor evoked potentials
80. **Witmer, L. M.**, and R. C. Ridgely. 2008. Air spaces within the heads of dinosaurs and their contribution to cephalic structure. 68th Annual Meeting of the Society of Vertebrate Paleontology, Cleveland, OH. *Journal of Vertebrate Paleontology* 28(Supplement to 3):161A.
81. Daniel, J. C., and **L. M. Witmer**. 2008. What can sediment patterns tell us about soft tissue?: an actualistic taphonomic study of ostrich heads during and post-burial. 68th Annual Meeting of the Society of Vertebrate Paleontology, Cleveland, OH. *Journal of Vertebrate Paleontology* 28(Supplement to 3):69A.
82. Evans, D., **L. M. Witmer**, R. C. Ridgely, and J. R. Horner. 2008. Endocranial anatomy of lambeosaurine dinosaurs: implications for cranial crest function and evolution. 68th Annual Meeting of the Society of Vertebrate Paleontology, Cleveland, OH. *Journal of Vertebrate Paleontology* 28(Supplement to 3):75A.
83. Dufeu, D. L., and **L. M. Witmer**. 2008. Morphological patterns and phylogenetic trends in theropod braincase pneumaticity. 68th Annual Meeting of the Society of Vertebrate Paleontology, Cleveland, OH. *Journal of Vertebrate Paleontology* 28(Supplement to 3):73A.
84. Tsuihiji, T., **L. M. Witmer**, M. Watabe, R. Barsbold, and K. Tsogtbaatar. 2008. New information on the cranial anatomy of *Avimimus portentosus* (Dinosauria: Theropoda) including virtual endocasts of the brain and inner ear. 68th Annual Meeting of the Society of Vertebrate Paleontology, Cleveland, OH. *Journal of Vertebrate Paleontology* 28(Supplement to 3):153A.
85. Ridgely, R. C., and **L. M. Witmer**. 2008. Gross Anatomical Brain Region Approximation (GABRA): a new technique for assessing brain structure in dinosaurs and other fossil archosaurs. 68th Annual Meeting of the Society of Vertebrate Paleontology, Cleveland, OH. *Journal of Vertebrate Paleontology* 28(Supplement to 3):131A.

86. Walsh, S. A., A. C. Milner, P. M. Barrett, G. Manley, and **L. M. Witmer**. 2008. Can hearing and vocalization capacities be estimated from cochlear duct endocasts? 68th Annual Meeting of the Society of Vertebrate Paleontology, Cleveland, OH. *Journal of Vertebrate Paleontology* 28(Supplement to 3):157A.
87. Smith, D., D. L. Dufeu, R. K. Sanders, R. C. Ridgely, and **L. M. Witmer**. 2008. The cranial endocast of *Eutretauranosuchus delfsi* (Crocodyliformes, Goniopholididae) and its relationship to other cephalic spaces. 68th Annual Meeting of the Society of Vertebrate Paleontology, Cleveland, OH. *Journal of Vertebrate Paleontology* 28(Supplement to 3):144A.
88. Degrange, F., K. Moreno, S. Wroe, C. Tambussi, and **L. M. Witmer**. 2008. A computational biomechanical approach to the reconstruction of predatory behavior in the terror bird *Andalgalornis steulleti*. 68th Annual Meeting of the Society of Vertebrate Paleontology, Cleveland, OH. *Journal of Vertebrate Paleontology* 28(Supplement to 3):71A.
89. Hieronymus, T. L., and **L. M. Witmer**. 2008. The facial skin of *Majungasaurus crenatissimus* (Abelisauridae: Saurischia): pronounced dermal metaplasia as the cause of rugosity in abelisaurid skulls. 68th Annual Meeting of the Society of Vertebrate Paleontology, Cleveland, OH. *Journal of Vertebrate Paleontology* 28(Supplement to 3):90A.
90. Iwaniuk, A. N., H. F. James, S. L. Olson, D. R. W. Wylie, R. C. Ridgely, and **L. M. Witmer**. 2008. Evidence of extreme somatosensory specialization in an extinct duck. Program No. 79.13. 2008 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2008.
91. Degrange, F. J., C. P. Tambussi, K. Moreno, S. Wroe, and **L. M. Witmer**. 2008. *Andalgalornis steulleti* (Aves, Phorusrhacidae): respuesta biomecánica del cráneo ante acción de fuerzas extrínsecas. III Latin American Congress of Vertebrate Paleontology, Neuquén, Argentina.

3. Grants

a. External Research Grants

1. External Grants Submitted (AY 2008-09 data from OU-COM Research Office)
2. Active External Grants (AY 2008-09 data from OU-COM Research Office)

b. Internal Research Grants:

1. OU-COM Office of Research (AY 2008-09 data from OU-COM Research Office)

4. **Special Research Activities**

The Biomedical Sciences faculty have been involved in a number of research related activities in addition to the productivity in their specific programs. Due to their expertise, nearly all faculty have been active in manuscript reviews for journals with some faculty even serving on editorial boards. Similarly, some of the faculty have served on grant review panels for regional and federal agencies. The following is a listing of research activities of our faculty over the last year that go beyond the typical activities described in other sections of this report.

Huzoor Akbar:

1. Securing free of cost genetically knockout mice and specifically designed and custom synthesized pharmacologic agents.
2. Secured research funds from HEC, Pakistan to tarin a post-doctoral fellow from Pakistan.

Mario Grijalva:

1. Conducted field research in 24 rural communities located in Loja province, Ecuador
2. An expansion and renovation of our office space was completed in our Research Center in Ecuador.

Sharon Inman:

1. Sharon R. Inman, Edwin J. Jackson Jr., Olusayo Oshogwemoh, Yuriy Slyvka, Felicia V. Nowak. Preservation of renal function in the obese Zucker rat by antioxidant diet Abstract accepted for poster and oral presentation at Experimental Biology meeting, April, 2008.
2. Slyvka Y, Feldman Y, Inman SR, Nowak FV. Kidney eNOS, nNOS and iNOS splice form analysis in diabetic obese female Zucker rats (fa/fa) on antioxidant diet. Abstract accepted for presentation at the 90th Annual Endocrine Society Meeting, San Francisco, CA, June, 2008.
3. Yee J, Wang Z, Inman SR, Nowak FV. Effect of antioxidant diet on nitric oxide synthase expression in obese diabetic Zucker rats. Abstract accepted for presentation at the 90th Annual Endocrine Society Meeting, San Francisco, CA, June, 2008.
4. Inman SR, Slyvka Y, Feldman Y, Nowak FV. Renal NOS isoforms and splicing in 13 week obese female Zucker rats on antioxidant vs. regular diet. Submitted to Experimental Biology, April, 2009. New Orleans.

Yang Li:

1. Filed three (x3) Disclosures of Invention to OHIO UNIVERSITY TECHNOLOGY TRANSFER OFFICE
2. Filed two (x2) provisional patent applications with the U.S. Patent and Trademark Office (USPTO)
3. Distributing two Technology Briefs (to market our technology)
4. Mentoring three Graduate students for MCB program and Biological Sciences Program.
5. Mentoring a medical student in summer 2008 for Research and Scholarly Advancement Program (RSA, OUCOM).
6. Mentoring a medical student sponsored by Center of Excellence, OUCOM.

7. Mentoring two undergraduate students including students from PACE program.
8. Participating OUCOM Research Day.
9. Participating OU-MCB retreat.
10. Participating OU Research and creative Fair
11. Mentoring the medical student in research rotation

Erin Murphy:

1. Getting my lab up and running
2. Hosted two undergrads from Ohio Wesleyan for two week summer research experience

Felicia Nowak:

1. Attended all day workshop in Washington, DC, November 14, 2008, entitled “State of the art in immunocytochemistry and in situ hybridization.”
2. Completed CITI animal compliance training, 4/08, to maintain animal research certification

Patrick O’Connor:

1. Conducted a 6-week field expedition in **southwestern Tanzania** (Rukwa Rift Basin Project) examining Cretaceous and Paleogene terrestrial vertebrate-bearing sediments. This trip included the participation of numerous graduate students (from OU, other US institutions, and abroad, including 2 University of Dar es Salaam undergraduates (G. Masai and A. Mussa).
2. Conducted 3 ½ week (November) field expedition in **southern Egypt**.
3. Co-designed, developed and installed exhibit entitled “Tanzania in ‘Deep Time’ – A View from the Rift Valley,” for the Dairy Barn Arts Center. Opened December 2008 with projected display date through mid-February 2009.
4. Co-designed, developed and installed exhibit entitled “Tanzania in ‘Deep Time’ – A View from the Rift Valley,” at the National Museum of Tanzania, Dar es Salaam. Opened June 2008 with projected display date through early 2009.
5. Consultant, Newark Museum: Exhibit entitled “Bird Migration”—November 2008 – present.
6. Exhibit design and development, National Museum of Japan, Tokyo. Temporary exhibit entitled “Gondwanan Dinosaurs II,” opening March 2009.
7. Exhibit design and development, Tanzania National Museums. Permanent exhibit development team, coordinating with Dr. Paul Msemwa, Director, NMT, Dar es Salaam. (March 2008 – present).

Nancy Stevens:

1. Field research in Nsungwe Formation Paleogene deposits, as well as ongoing paleontology in Galula Formation Cretaceous deposits of the Rukwa Rift Basin of southwestern Tanzania.
2. Field research on Paleogene vertebrates in Ogawashi Asaba, Ameki and Imo Formations, southwestern Nigeria.
3. Laboratory research on primate locomotor biomechanics of fauna in Cuc Phuong National Park, Vietnam and in Manombo Special Reserve, Madagascar.
4. Field and laboratory research on Cenozoic mammals from Dhofar, Oman.

5. Museum collections research: Kenyan National Museum, Nairobi, Kenya; Egyptian Geological Survey, Egypt; Namibian Geological Survey Museum, Windhoek, Namibia.
6. Contributed to “Primates in Peril: World’s 25 Most Endangered Primates, 2008-2010” assembled for the IUCN by Conservation International President, Russell Mittermeier. This state-of-the-globe document is assembled on a biennial basis and serves to direct research, education, and conservation funding to spotlight critically-endangered taxa.

Anne Su:

1. Invited paleontological field research to the Fayum Depression, Egypt (Oct-Nov. 2008).

Susan Williams:

1. Larger Animal Research Facility officially opened.

Thad Wilson:

1. Visiting Research Scientist with N. H. Secher, Department of Anaesthesia, Rigshospitalet, Copenhagen Muscle Research Center & University of Copenhagen, Copenhagen, Denmark

Lawrence Witmer:

1. **OU μ CT:** The Ohio University Micro CT Scanning facility (OU μ CT) has represented a major research effort for Witmer in 2008. Witmer has a leadership role in managing the facility and is its Director. He is integrally involved in all aspects of its operation. He oversees and participates in the maintenance of the machine, and developed and updates protocols for its use. Witmer created and updates all of the documents pertaining to policies and procedures for use. Witmer generated and manages a web site for the facility (<http://www.oucom.ohiou.edu/ou-microct/>). Witmer chairs the oversight panel, reviews new applications for use, trains new operators, interfaces with the manufacturer regarding service, and interfaces with OU units (e.g., radiation safety, constituent units such as EBI, RCENT, etc.). The OU μ CT is a multi-user facility that has served many OUCOM faculty, as well numerous grad students, an OUCOM med student, and members of other units around campus. Witmer assumed this new role without any compensatory modifications to his workload or salary.

5. Departmental Specific Educational Programs (lectures series, journal clubs, etc.)

1. Biological Science Seminar Series
2. MCB Seminar
3. Ecology and Evolutionary Biology Colloquium (EcoLunch seminar series)
4. Molecular Biology Journal Club
5. Neuroscience Journal Club

SECTION VI – FACULTY SERVICE

1. **Community Service – Provided by faculty as part of your department's mission. (Community service may include things like the CHIPS VAN, Community screening programs, Community education programs, CAMP, Kids on Campus, Lice screening programs, etc.)**

Mark Berryman:

1. Judge Southeastern Ohio Regional Science Fair

Xiaozhuo Chen:

1. Advisor to the Chinese Student and Scholar Association (CSSA), the largest foreign student organization on campus

Karen Coschigano:

1. Gave talk to 5th-11th grade girls for Women in Science and Engineering Day in April at OU

Peter Coschigano:

1. Ohio Branch for the American Society for Microbiology (about 2 meetings/yr plus email, phone interactions) Executive committee
2. Science in elementary school (~3hr).

Frank Horodyski:

1. Presentation at The Plains Elementary School for approx 60 children
2. Presentation at the Athens Public Library

Sharon Inman:

1. Judge for Southeastern Ohio Science Fair, 2003-present
2. Also, I am the representative for this fair to recruit judges from Biomedical Sciences

Richard Klabunde:

1. Food and clothing distribution volunteer sponsored by Athens Community Church
2. Worked with CMDA to provide an evening meal for ~140 people in connection with GoodWorks.

Yang Li:

1. Judge, Ohio University Student Research and Creative Activity Fair
2. Judge, Southeastern Ohio Science Fair, Athens, OH (My students Christian Stork and Ashlie Arthur also participated in the event as student judges)

Erin Murphy:

1. Judge of student research posters at Ohio Branch American Society of Microbiology meeting
2. Panelist for student career questions at Ohio Branch American Society of Microbiology meeting
3. Judge student research posters at Southwest Ohio Science Fair

Nancy Stevens:

1. Worked with Ohio University International Programs Outreach staff to enhance international educational programs in rural Ohio.

Susan Williams:

1. Presentation to Warren High School Students (requested by Admissions Office)

2. Presentation to Shawnee State Tri-Beta Club (Biology Honor Society)

Leon Wince:

1. Served as chaperone for Athens HS Marching Band for Spring Break performance trip to New York City (March 2008)

Larry Witmer:

1. Extensive work with national and international media outlets involving television, radio, print, and internet stemming from various publications (e.g., *Anatomical Record*) and presentations (SVP).
2. Work with television documentaries was a major effort in 2008. Witmer filmed eight television documentaries with the History Channel, the Discovery Channel, and the National Geographic Channel. One of these aired in 2008. One History Channel weekly series (filmed in 2007) aired in 2008; of the 12 episodes, Witmer was on nine of the episodes extensively.
3. Witmer gave numerous talks and presentations to local school and business groups in 2008, as well as conducting a large number of tours of his laboratory. The increase in speaking engagements and tours no doubt resulted from the broad exposure on television, print, and other media.

2. **Department/College/University/Professional Service (Committees)**

Huzoor Akbar:

College of Medicine:

1. Volunteered to interview OUCOM applicants whenever asked.

Ohio University:

1. Member IACUC

Fabian Benencia:

Department of Biomedical Sciences:

1. Research Day 2008 Scientific Poster section judge.

Mark Berryman:

Department of Biomedical Sciences:

1. PCC Curriculum Steering Committee (PCCSC), member
2. Departmental Annual Review Committee, member (Winter, Spring)
3. Departmental Merit Review Committee, member (Fall, Winter)
4. Chair's Advisory Committee, member (Winter, Spring)

College of Medicine:

1. OUCOM Executive Committee, 1st Vice Chair of Faculty (Spring), Chair of Faculty (Fall, Winter)

Ohio University:

1. Radiation Safety Committee, member
2. Institutional Biosafety Committee, Vice Chair (Winter, Spring)

Bonita Biegalke:

Department of Biomedical Sciences:

1. Graduate student committee
2. Merit evaluation committee

College of Medicine:

1. CPC Steering Committee

Ohio University:

1. Institutional Biosafety Committee
2. Kennedy Lecture Series Committee

Audrone Biknevičius:

College of Medicine:

1. Student DO of the Year Selection Committee – member
2. OMM Real Patient volunteer (2 times)
3. Women’s Climate Study Committee – follow-up questionnaire for OU-COM Department Chairs

Jack Blazyk:

Department of Biomedical Sciences:

1. Promotion & Tenure Committee

College of Medicine:

1. Executive Committee
2. Research and Scholarly Affairs Committee
3. Institutional representative for OU-COM at the AOA Research Conference
4. AOA Accreditation team member
5. Organized Research Forum with OhioHealth (7/30/08)
6. Planned, organized and presented NIH funding workshop (12/11/08)

Ohio University:

1. Academic & Research Center Planning Committee
2. Conflict of Interest Review Committee
3. F & A Review Committee
4. Ohio Research Scholars Program (developed a proposal with Doug Goetz titled “Research Cluster in Molecular and Cellular Diagnostics and Therapeutics”)

Xiao-zhuo Chen:

Department of Biomedical Sciences:

1. Annual Review Committee

Ohio University:

1. Graduate Chair of MCB Program

Brian Clark:

Department of Biomedical Sciences:

1. Search Committee. Physiology Faculty Member

College of Medicine:

1. Research and Scholarly Affairs Committee (RSAC). Ohio University College of Osteopathic Medicine. Elected Member
2. Director, Institute for Neuromusculoskeletal Research

Ohio University:

1. Website development and maintenance for the Graduate Program in ‘Comparative and Exercise Physiology’ in the Department of Biological Sciences at Ohio University.

Karen Coschigano:

Department of Biomedical Sciences:

1. Appointed member and chair of the BMS Social Committee

College Of Medicine:

1. Appointed member of the Research & Scholarly Affairs Committee starting in July, 2006
2. Appointed member of the Student Selection Advisory Committee starting Sept 2008

Ohio University:

1. Served as a judge for the Student Research and Creative Activity Fair

Peter Coschigano:

Department of Biomedical Sciences:

1. Advisory/Annual Review Committee.
2. P&T Committee

College of Medicine:

1. Executive Committee (1-1.5 hr meetings about twice/month Jan-June).
2. Secretary of the College Faculty (Jan-June).
3. Ad hoc CBL Task Force (about 3 hours total).

Ohio University:

1. Faculty Senate (monthly meetings ~3 hrs),
2. Task Force on Centers of Excellence in Graduate and Professional Education
3. MSES Advisory Committee

Joe Eastman:

Department of Biomedical Sciences:

Ohio University:

1. Promotion Committee for Full Professors, Chair
2. Promotion Committee for Associate Professors, Member
3. Emeritus Nomination Committee, Chair
4. Search Committee for Anatomy Instructors, Chair
5. Task force to Study Gross Anatomy Practicals, Chair

College of Medicine:

1. Promotion and Tenure Committee

Ohio University:

1. Ohio University Research Council

Kenneth Goodrum:

Department of Biomedical Sciences:

1. P&T Committee (Associate Level), **Chairperson**

College of Medicine:

1. CAC member
2. Student Selection , Chairperson

Ohio University:

1. Institutional Biosafety Committee

Mario Grijalva:

Department of Biomedical Sciences:

1. Director, Tropical Disease Institute (Fall 2006 – Present)
2. Creator and manager and Tropical Disease Institute web site.
<http://www.oucom.ohiou.edu/tdi/> .
3. Director – Center for Infectious Disease Research, School of Biological Sciences, Catholic University, Quito, Ecuador.
4. Advisory Committee

College of Medicine:

1. Member of the International Programs Advisory Committee, OUCOM

Ohio University:

1. Center and Institutes Directors Group

Frank Horodyski:

Department of Biomedical Sciences:

1. Promotion and Tenure Committee
2. Life Sciences Building Committee

College of Medicine:

1. Dean's Evaluation Committee
2. Student Selection Committee
3. Promotion and Tenure Committee

Ohio University:

1. Radiation Safety Committee

Sharon Inman:

Department of Biomedical Sciences:

1. Attend CPC steering committee meetings 2004-present
2. CAC committee member, 2006-present
3. Urinary block team leader and Instructor of Record 2004-present
4. SURF representative for Biomedical Sciences, 2004-present
5. Search committee chair for Physiologist search
6. Urogenital block team IOR 2008-present
7. Annual Review and Advisory Committee, 2008

College of Medicine:

1. Student Selection Advisory Committee, 2006-present
2. Representative for the College of Osteopathic Medicine for Ohio University Science and Creativity Fair.

Ohio University:

1. Judge for Ohio University Science and Creativity Fair

Calvin James:

Department of Biomedical Sciences:

1. Department Representative on Graduate Committee
2. Department Merit Review Committee

College of Medicine:

1. Chair, COM Dean Evaluation Committee
2. Geriatrics P&T Committee: Department of Geriatric Medicine/Gerontology- Review

P&T documents and meet with committee to review progress towards tenure of Drs. Jen-Tzer Gau & Tracy Marx

3. Member DO/PhD Committee

Ohio University:

1. Member of Ohio University Interdisciplinary Council
2. Presidential Teaching Awards Committee (Year 1 of 3)

Richard Klabunde:

Department of Biomedical Sciences:

1. Member of Physiology Search Committee
2. Member of Advisory Committee

College of Medicine:

1. CV and Well Patient block representative on CPC Steering Committee
2. Member of the Dean's Budget Committee overseeing budget reductions
3. Faculty advisor to students of the COM chapter of the Christian Medical & Dental Association (CMDA).

Leonard Kohn:

Department of Biomedical Sciences:

1. Chair: Immunologist Search Committee (end result the hiring of Fabian Benencia)

College of Medicine:

1. Member: Diabetes Research Initiative steering committee.''

Ohio University:

1. Member: Search Committee Bioengineering Faculty Member (Monica)
2. Radiation Safety Committee

Yang Li:

Department of Biomedical Sciences:

1. Member of BMS (Departmental) graduate committee
2. Member of Merit review committee

College of Medicine:

1. Committee member of D.O./Ph.D. Combined Degree Program, OUCOM.
2. Advisor to 2 COM medical student
3. Interviewing faculty candidates

Ohio University:

1. Committee member of Ohio University Graduate Program in Biological Sciences 2006-2008, 2008-2010
2. BMS representative of Physiology and Neuroscience Graduate (PNG) committee
3. Chair of Dissertation/thesis committee for 3 graduate students
4. Member of Dissertation/thesis committee for 3 graduate students
5. Faculty supervisors of the PACE program
6. Member of OU-MCB retreat Program committee (graduate program)

Ramiro Malgor:

Department of Biomedical Sciences:

1. From December 2007 member of Social Committee

College of Medicine:

1. Member in the Admission Committee of OU-COM
2. Committee on student progress

Erin Murphy:

College of Medicine:

1. OUCOM Team member at Relay for Life
2. Volunteer at OMM lab for first year students

Ohio University:

1. Judge at Research and Creative Activities Expo

Felicia Nowak:

Department of Biomedical Sciences:

1. Member, Promotion and Tenure Committee. Reviewed dossier of one applicant for promotion and tenure.
2. Met with candidates for Physiology faculty position: Brandon Biesadecki, Christina Lewis, Thad Wilson and Jianjie Wang.

College of Medicine:

1. OU-COM Promotion and Tenure Committee. Reviewed dossiers of two applicants for promotion and tenure, helped formulate recommendations to the Dean.
2. D.O./Ph.D. Program Director-- chair D.O./Ph.D. Committee, recorded, prepared and submitted meeting minutes to Dean Brose, revised integrated application for D.O./Ph.D. program (along with John Schriener), administered student project funds, monitored student progress, responded to student enquiries regarding the program, interviewed applicants to the program (11), continued efforts to streamline the admission process, coordinated with Don Holzschu regarding student applications, continued efforts to recruit students to the program. Successfully recruited Adam Jara.
3. Biomedical Sciences Chair Selection Committee, 9-08 to 11-08.

Ohio University:

1. Appointed to OURC 10-08. Reviewed proposals for November, 2008, grant cycle.

Patrick O'Connor:

College Of Medicine:

1. International Programs Advisory Committee
2. CAC/CPCSC
3. Research and Scholarly Affairs Committee

Ohio University:

1. Africa Studies Program, Member
2. Biological Sciences Graduate Committee, member (April 2005 – present)
3. Perspectives Magazine—Advisory Committee, member (January 2006 – December 2008)
4. Tropical Disease Institute, member (2003 – present)
7. Dean Evaluation Committee

Robert Staron:

Department of Biomedical Sciences;

1. Search committee for medical physiologist

College of Medicine:

1. Student Selection Advisory Committee
2. Liaison for Ortho-RPAC

Ohio University:

1. IRB Committee
2. Graduate Council

Nancy Stevens:

Department of Biomedical Sciences;

College of Medicine:

1. Admissions Committee (2004-present; substitute member) –alternate to fill in for student interviewers.
2. International Programs Committee (2004-present; member) –continued to help develop consistent admissions process, review legal and safety protocols for international medical research, education and service programs, expand the number of OU-COM international programs, and promote and publicize international research, education and service activities, review student applications for travel awards.
3. Tropical Disease Institute Committee (2002-present; member) –assisted with selection of new members and evaluation of travel grants.

Ohio University:

1. African Studies Program (2004-present; advisory board member) –engaged in discussions related to international programming and policies at OU, curricular advancements, program grant directions, conferences.
2. Search committee member, Center for International Studies Director (Fall 2007-Spring 2008; member) – invited by former Provost Krendl to represent international research in this university search. Resulted in hire of current Center Director, Dr. Daniel Wiener.
3. Participated in Ohio University Center for Ecology and Evolutionary Studies activities and planning for 2009 keynote lectures and associated outreach activities.

Susan Williams:

Department of Biomedical Sciences:

1. Member, Chair Selection Committee

College of Medicine:

1. Chair, RSAC
2. OUCOM Research Day Judge
3. Member, Multicultural Medical Education Committee

Ohio University:

1. Member, Vice President for Research and Dean of the Graduate School Search Committee
2. Member, Dean's Evaluation Committee

Leon Wince:

Biomedical Sciences;

1. Member, Pathogenic Microbiologist Search Committee (final candidate selected January of 2008)
2. Member, Merit Review Committee

College of Medicine:

- a. Member, PCC Steering Committee (monthly meetings)

Ohio University:

1. Member, IACUC (weekly research project protocol reviews, 2 hr monthly meetings, & 1-2 day facilities inspections every 6 months) through September 1st

Larry Witmer:

Department of Biomedical Sciences:

1. Promotion and Tenure Committee
2. Anatomical Director of Plastination

College of Medicine:

1. Curriculum Advisory Committee (CAC)
2. CORE General Surgery RPAC, Basic Science Liaison
3. CORE Otorhinolaryngology-Head & Neck Surgery RPAC, Basic Science Liaison
4. Gross Anatomy Lab Renovations planning

Ohio University:

1. Director, Ohio University MicroCT Scanning Facility (OU μ CT); also, Chair of OU μ CT Panel
2. Ohio Center for Ecology and Evolutionary Studies (OCEES), Advisory Committee Member
3. Ohio University Council on Research, Scholarship, and Creative Activity (CRSCA), Member, representing OUCOM
4. Faculty Technology Advisory Group (FTAG), Member, representing OUCOM
5. Invited participant, Mark Dion Art Exhibition, Kennedy Museum of Art and OU School of Art
6. Bioengineering Program Steering Committee

7. **SECTION VII - POST-DOCTORAL TRAINING**

1. **If your Department has an AOA approved internship and/or residency program, please list.**
 - a. **The name and type of internship/residency program.**
 - b. **The number of interns/residents your program is approved for.**
 - c. **The number of interns/residents currently in your program, listing their name and post-graduate year of training.**
 - d. **Please attach a copy of the most recent AOA inspection of your program.**

2. **Please list any involvement your Department may have with Ph.D. programs at Ohio University.**

BMS faculty members are actively involved in the M.S. and Ph.D. programs:

- a. Department of Biological Sciences (primarily role)
- b. Department of Chemistry and Biochemistry
- c. Molecular and Cellular Biology Program
- d. Russ College of Engineering (bioengineering)

This involvement includes delivery of graduate courses and the advising of masters and doctoral students. In 2008-2009, 34 graduate students conducted their graduate research in the labs of BMS faculty. See Section IV.b for details.

SECTION VIII – C.O.R.E. ACTIVITIES

The Ohio University College of Osteopathic Medicine is a partner in the Centers for Osteopathic Research and Excellence. Please list:

1. **The degree of involvement your Department/Unit has with the C.O.R.E.**

Biomedical Science faculty are involved in CORE activities including membership in a number of CORE committees (listed in #2 below) and delivery of a series of specialized RESIDENCY PROGRAMS presentations (listed in #3 below).

2. **C.O.R.E. meetings that members of your Department attend. (CASC, C.O.R.E. Board, etc.)**

CORE Board:

Ed Rowland (July-Dec. 2008); Audrone Biknevicus (Jan.-June 2009)

CORE Research Committee:

Ed Rowland (July-Dec. 2008)

CORE Academic Steering Committee:

Ed Rowland (July-Dec. 2008); Ken Goodrum (Jan.-June 2009)

SECTION IX – OTHER DEPARTMENTAL INFORMATION

- 1. Please list any unique Departmental holdings and/or resources (This could be multi-media, unusual research equipment, Departmental library holdings, etc.)**
 - a. The Ohio University Micro CT Scanning Facility (OU μ CT) is supported by BMS, with leadership provided by Larry Witmer and technical assistance by Ryan Ridgely.

- 2. Formal partnerships outside the College of Medicine or the University should be listed and their nature described.**
 - a. A formal interaction exists between COM and the Edison Biotechnology Institute (EBI). This partnership primarily exists through John Kopchick, Leonard Kohn and Xiao Chen, research scientists at EBI who are also fully active members of BMS. Other BMS faculty members who regularly utilize EBI facilities include Karen Coschigano, Ramiro Malgor, Fabian Benencia and Calvin James.
 - b. The Tropical Disease Institute (TDI), housed in BMS, has a cooperative agreement with the College of Arts and Sciences of Catholic University, Quito, Ecuador. In this agreement, TDI engages in research with Ecuadorian students and scientists in the general area of infectious disease while Catholic University provides assistance, including lab space, and collaboration.
 - c. Appalachian Rural Health Institute (ARHI) includes faculty members of BMS, COM faculty outside of BMS and faculty from other units at the University.

- 3. A list of interdisciplinary activity engaged in by faculty. (This is cross-discipline collaboration with other units in the university. It would also include teaching at the undergraduate level for other colleges at Ohio University.)**
 - a. The Interdisciplinary Institute for Neuromusculoskeletal Research (IINR) draws researchers from four colleges at OU (OU-COM, Russ College of Engineering and Technology, College of Health and Human Services, and College of Arts and Sciences).
 - b. The Ohio Center for Ecology and Evolutionary Studies (OCEES) encourages the education and training of students interested in ecology and evolutionary biology and provides a central focus for OU faculty within those fields.
 - c. In the area of graduate education, BMS faculty provide instruction in the MCB program and also have interactions with the programs in International Studies and Engineering.
 - d. BMS continues to have a minor role in the undergraduate curriculum of Biological Sciences (about 100 contact hours per year).

- 4. Describe how the department provides awards/recognition of excellence.**
 - a. The Annual Review Committee has been given the charge of nominating staff, faculty, and students for various awards. This group has also nominated individuals for special recognition where appropriate.
 - b. Individuals of exemplary research productivity are nominated for university honors.

- 5. Describe any creative/innovative programs by your department.**

- a. BMS Faculty Mentor Program
- b. Tropical Disease Institution (TDI)
- c. Interdisciplinary Institute for Neuromusculoskeletal Research (IINR)

APPENDIX I

Merit Evaluations Department of Biomedical Sciences

1. Distribution of Salary Pool

The merit awards will be based on a combination system for the distribution of merit salary increases. The system will consist of a portion of the raise pool (50%) dedicated to salary increases based on a percentage of salary, and a portion (50%) to be awarded on a dollar basis regardless of faculty rank or salary. All salary increases will be made as a function of faculty performance as determined by the self-evaluation procedures described later in this document. Thus, salary increases will be merit based and, IN PART, independent of salary. The following distribution scheme is proposed:

Board of Trustees/University Mandated Merit Increase Salary Pool

100%

50% (Percentage Pool)	50% (Straight Dollar Pool)
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Awarded based on a % of salary (Chair will do arithmetic)	Based on straight dollar amount as a function of monies available. This portion to be divided, according to the Provost/Board of Trustees directive into the Dean's pool and the Merit Committee pool.
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We support the position that all funds designated by the Trustees/Provost for salary increases be used for salary of continuing basic science faculty upon whose salary the % increase was based.

2. Criteria for Merit Ranking

Teaching Research Service

The relative % distribution of faculty effort in these areas will be agreed upon by the individual faculty member and the chair. Merit determination will be initiated by a SELF-EVALUATION, submitted to the chair for presentation to the faculty evaluation committee. The individual will characterize his or her performance as:

- “fully meeting the requirements, responsibilities and expectations of his or her position” (score = 1);
- “substantially exceeding the requirements, responsibilities and expectations of his or her position” (score = 2); or
- “barely meeting the requirements, responsibilities and expectations of his or her position” (score = 0).

Therefore, three (3) levels of performance will be used to assess merit. To allow an “objective” determination of overall individual faculty performance, the number 2, 1, and 0,

will be assigned to the three levels of performance. The faculty member will be expected to provide documentation to support their self-evaluation on a “Professional Activities Form” (attached). It is anticipated that a substantial majority (75-80%) of the faculty will rate themselves in the “1” group for each professional activity area. Merit raises for this group of faculty (the majority of us) will be drawn from both salary pools described above. Exceptional merit performance should be awarded on a dollar basis from that portion of the salary pool designated by the Provost as the Dean’s Merit pool. The awards in this category will have been identified by the SELF-EVALUATION process with the endorsement of the Biomedical Sciences Faculty Evaluation Committee and the chair.

All self-evaluations will be reviewed by the departmental committee. If the committee determines that the documentation provided does not support the self-evaluation, the faculty member will be so notified and asked to respond.

3. Biomedical Science Faculty Evaluation Committee

The Merit Evaluation Committee consists of five (5) faculty members appointed by the chair. The chair will participate in all meetings of the committee as a non-voting member. All committee actions will be by majority. It is suggested that self-evaluations be completed by December 1 and the committee act by February 1.