



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

**ANNUAL REPORT
ACADEMIC YEAR 2007-08**

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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 2007-2008, 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, 12 Instructor of Records). BMS faculty also spearheaded the extensive reorganization of the CPC as well as the innovative training program in OMM palpatory skills using the Haptic Back. Furthermore, BMS served the needs of the CORE residency programs by providing presentations on advanced topics in the clinically-relevant biomedical sciences. While BMS 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 32 external and 25 internal grants. The laboratories of BMS faculty trained scores of graduate students (30), medical students (8), post-doctoral fellows (2) and undergraduate students (41). 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, Costa Rica, Tanzania, Yemen, Madagascar, Vietnam, Australia) in order to collect data for studies in infectious diseases, biomechanics and paleontology. Faculty shared their scientific findings with the global research community via record numbers of peer-reviewed publications and professional presentations (64 and 150, respectively). To support future research, BMS faculty submitted 40 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 (to be occupied in Fall 2008) that will provide long-needed resources to both OU-COM and OU-wide faculty. BMS members served on key committees that oversee college (CAC, CSP) and university concerns (Faculty Senate; Council on Research, Scholarship and Creative Activities). Several BMS faculty members participated regularly in outreach programs that present scientific advances to the general public, including exposure on the Discovery Channel and History Channel as well as local school programs.

SELECTED HIGHLIGHTS

- Fabian Benecia was hired in the joint COM-Engineering search for an Immunologist; Erin Murphy was hired in the Pathogenic Bacteriology search; Andrew Lee and Biren Patel were hired as Anatomical Sciences Instructors.
- Tenure and promotion to Associate Professor of Physiology was granted to Yang Li.
- The National Institute of Health awarded research grants to Karen Coschigano (\$221,250), Mario Grijalva (\$181,655), Mark Berryman (\$154,875) and John Kopchick (\$220,500).
- The Osteopathic Heritage Foundation awarded \$39,000 to John Howell (PI), along with Brian Clark, for an MRI study of back pain and OMT.
- Mark Berryman participated in the “Biology of the Inner Ear; Experimental and Analytical Approaches” workshop at Woods Hole.
- Nancy Stevens was invited to head a paleontological survey for Paleogene fossils in Yemen.

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. Two new tenure-track faculty hires occurred in 2007: Fabian Benecia (Immunology) and Erin Murphy (Bacteriology)
- b. Two new Anatomical Sciences Instructors were hired: Andrew Lee and Biren Patel
- c. Yang Li was awarded tenure and promotion to Associate Professor.
- d. Richard Klabunde was appointed CPC Director
- e. A new autoclave was installed in Irvine Hall

3. Plans for the future of your Department.

- a. Begin to strategize optimal use of the Academic and Research Facility.
- b. Enhance research experiences for medical and graduate students in biomedical and applied sciences.
- c. Promote OU-COM and the Biological Sciences graduate program in the university's reports for developing Centers of Excellence in the state of Ohio.

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 42 faculty members and 16 staff listed in Section III.

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

FACULTY:	EXPERIENCE (Years)	STATUS	AREA OF SPECIALIZATION
Huzoor Akbar, Ph.D.	29	Associate Professor	Pharmacology
Charles Atkins, Ph.D.	38	Semi-retired	Genetics
Fabian Benencia, Ph.D.	12	Assistant Professor	Immunology
Mark Berryman, Ph.D.	16	Associate Professor	Medical Histology
Bonita Biegelke, Ph.D.	19	Associate Professor	Virology
Audrone Biknevicus, Ph.D.	18	Associate Professor	Anatomical Sciences
Jack Blazyk, Ph.D.	33	Professor	Biochemistry
Xiao-Zhou Chen, Ph.D.	19	Associate Professor	Molecular Biology
Brian Clark, Ph.D.	2	Assistant Professor	Neuromuscular Physiology
Becky Code, Ph.D.	22	Instructor	Microanatomy
Karen Coschigano, Ph.D.	15	Assistant Professor	Biochemistry
Peter Coschigano, Ph.D.	15	Associate Professor	Environmental Microbiology
Joseph Eastman, Ph.D.	37	Professor	Anatomical Sciences
Mary Kay Eastman, M.S.	21	Instructor	Anatomical Sciences
Ken Goodrum, Ph.D.	29	Associate Professor	Immunology
Mario Grijalva, Ph.D.	10	Associate Professor	Immunology
Fredrick Hagerman, Ph.D.	43	Semi-retired	Physiology
Tobin Heironymus, M.S.	1	Instructor	Anatomical Sciences
Robert Hikida, Ph.D.	40	Semi-retired	Microanatomy
Frank Horodyski, Ph.D.	24	Professor	Molecular Biology
John Howell, Ph.D.	40	Semi-retired	Physiology
Calvin James, Ph.D.	22	Associate Professor	Virology
Peter Johnson, Ph.D.	40	Semi-retired	Biochemistry
Joe Jollick, Ph.D.	38	Semi-retired	Bacteriology
Richard Klabunde, Ph.D.	32	Associate Professor	Physiology
Leonard Kohn, M.D.	43	Semi-retired	Endocrinology
John Kopchick, Ph.D.	25	Professor	Molecular Biology
Yang Li, Ph.D.	10	Associate Professor	Neurophysiology
Andrew Lee, Ph.D.	1	Instructor	Microanatomy
Ramiro Malgor M.D.	11	Assistant Professor	Pathology

Erin Murphy, Ph.D.	5	Assistant Professor	Bacteriology
Felicia Nowak, M.D., Ph.D.	27	Associate Professor	Molecular Neuroendocrinology
Patrick O'Connor, Ph.D.	11	Assistant Professor	Anatomical Sciences
Biren Patel, Ph.D.	1	Instructor	Anatomical Sciences
Ron Portanova, Ph.D.	38	Semi-retired	Endocrinology
William Romoser, Ph.D.	42	Semi-retired	Medical Entomology
Edwin Rowland, Ph.D.	31	Associate Professor	Parasitology
Robert Staron, Ph.D.	24	Associate Professor	Anatomy
Nancy Stevens, Ph.D.	7	Assistant Professor	PCC Administration & Anatomy
Susan Williams, Ph.D.	5	Assistant Professor	Anatomical Sciences
Leon Wince, Ph.D.	29	Associate Professor	Pharmacology
Larry Witmer, Ph.D.	15	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 Willed Body Program
Kapil Bajaj – Laboratory Research Associate
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
Paul Wiehl – Research Technician

3. Administration:

Chair – **Ed Rowland, Ph.D.**
Associate Chair – **Audrone Biknevicus, 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)

Workload Summary

Between 6/23/2008 and 8/22/2008

Instructor Names	Total		Presentation		Group Discussion		Lab - Science		Lab - Clinical		Problem Set		Panel Discussion		Assessment		Directed Study		Class Meeting		Other		Meeting-Curriculum/ *				Other				Description	
	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr		
Akbar, Huzoor	1	6	1	6																												
Biegalka, Bonita	6	2											4	0							2	2										
Biknevicius, Audrone	2	2																			2	2										
BMS TBA,	20	31					18	27					2	4																		
Clark, Brian	2	2																			2	2										
Coschigano, Peter	6	2											4	0							2	2										
Eastman, Joseph	27	42					27	42																								
Eastman, Mary Kay	59	95	1	6			52	80	6	9																						
Goodrum, Kenneth	5	10	1	6																	2	2	2	2								
Inman, Sharon	2	2																			2	2										
James, Calvin	8	16							4	8			4	8																		
Kincaid, Donald	2	0	2	0																												
Klabunde, Richard	9	0												4	0			1	0		4	0										
Li, Yang	2	4											2	4																		
Malgor, Ramiro	2	2																			2	2										
Murphy, Erin	1	6	1	6																												
O'Connor, Patrick	4	4																			2	2	2	2								
Rowland, Edwin	4	0												4	0																	
Staron, Robert	50	83	1	6			43	68	6	9																						
Witmer, Lawrence	89	304	3	12			70	255	6	21				6	12						2	2	2	2								
Totals	301	613	10	42			210	472	22	47			6	12	24	16		1	0		22	18	6	6								

Workload Summary

Between 7/31/2007 and 11/19/2007

Instructor Names	Total		Presentation		Group Discussion		Lab - Science		Lab - Clinical		Problem Set		Panel Discussion		Assessment		Directed Study		Class Meeting		Other		Meeting-Curriculum/ *				Other				Description	
	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr		
Akbar, Huzoor	60	142	6	36	48	96									4	8							2	2								
Berryman, Mark	37	138					28	132							5.5	6						3.5	0									
Biegalko, Bonita	19	54	5	30			8	12					6	12																		
Biknevicius, Audrone	77.5	313	15	90			46	182					4	24	12.5	17																
Blazyk, John	26.5	96	4	24							2	12	8	48	11.5	11		1	1													
Chen, Xiaozhuo	65	148	5	30	52	104							2	4	4	8							2	2								
Clark, Brian	23	119	12	72							4	24	4	16	1	0		1	1			1	6									
Coschigano, Karen	7	42	7	42																												
Coschigano, Peter	75.5	145	4	8	50	100	8	12							4	8							9.5	17								
Eastman, Joseph	45	69					39	60	6	9																						
Eastman, Mary Kay	84.5	152	2	12			69	116	6	9			2	4	5.5	11																
Goodrum, Kenneth	33	154	13	78			8	28					8	48	4	0																
Grijalva, Mario	10	10	2	8											4	0		2	0				2	2								
Hagerman, Frederick	2	12	2	12																												
Hieronymus, Tobin	41	70					38	64							3	6																
Hikida, Robert	48.5	179	10	60			28	98							10.5	21																
James, Calvin	70	146	6	20	50	100			4	8			4	8	4	8							2	2								
Kincaid, Donald	3	6	2	0			1	6																								
Klabunde, Richard	20	92	5	20							8	48	2	4	3	18		2	2													
Lee, Andrew	30	46					28	42							2	4																
Li, Yang	38	154	15	90			16	34			4	24			3	6																
Malgor, Ramiro	10	48	7	42			1	2					2	4																		
Nowak, Felicia	2.5	3																					2.5	3								
O'Connor, Patrick	80	338	23.5	133			24	94			6	36	14	68	8.5	6		1	1		2	0			1	0						
Patel, Biren	83	137					79	133							4	4																
Romoser, William	58	114			52	104									4	8							2	2								
Rowland, Edwin	134	196			84	126	34	52							6	10							10	8								
Staron, Robert	60.5	103	1	6			57	92															2.5	5								
Stevens, Nancy	19	28	3	12			4	6					2	4				6	2				4	4								
Williams, Susan	3	10	1	6									2	4																		
Wince, Leon	77	160	12	46	50	100							2	4	8	8		3	0				2	2								
Witmer, Lawrence	105	382	3	12			88	333	6	21					8	16																
Totals	1447.5	3806	166	889	386	730	604	1498	22	47	24	144	62	252	120	184		16	7		6.5	6	40.5	49	1	0						

Workload Summary

Between 11/26/2007 and 3/21/2008

Instructor Names	Total		Presentation				Group Discussion		Lab - Science		Lab - Clinical		Problem Set		Panel Discussion		Assessment		Directed Study		Class Meeting		Other		Meeting-Curriculum/ *				Other		Description		
	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr			
Akbar, Huzoor	14	52	6	36	6	12							2	4																			
Atkins, Charles	152.5	300.5	4	8	122	244							4	24			6	12					16.5	12.5									
Berryman, Mark	31	166							22	132							7	34					2	0									
Biegalko, Bonita	10	36	2	12					4	24							4	0															
Biknevičius, Audrone	5	6	1	6													4	0															
Blazyk, John	27	122	15	90									4	24	4	8	4	0															
Chen, Xiaozhuo	87	185.5	9	38	70	136											4.5	8					3.5	3.5									
Coschigano, Karen	15	90	3	18									12	72																			
Coschigano, Peter	1	6	1	6																													
Eastman, Joseph	35	130	7	42				18	68						2	4	8	16															
Goodrum, Kenneth	20	64	4	24				4	24						4	8	8	8															
Grijalva, Mario	6	0															4	0		2	0												
Hieronymus, Tobin	67	126					53	98									14	28															
Howell, John	49	262	11	66									26	156	8	32	4	8															
Inman, Sharon	24	108	9	54									6	36	5	10	4	8															
James, Calvin	83.5	171.5	6	20	70	140											4	8					3.5	3.5									
Klabunde, Richard	61.25	312.5	26	156									7	42	16	96	9.25	15.5		3	3												
Kohn, Leonard	1	6	1	6																													
Kopchick, John	7	26	3	18											4	8																	
Lee, Andrew	37	126	8	48			17	54							4	8	8	16															
Malgor, Ramiro	15.5	69	2.5	15	1	6									6	28	4	8	2	12													
Murphy, Erin	1	6	1	6																													
Nowak, Felicia	14.5	71	9.5	57									1	6	4	8																	
O'Connor, Patrick	4	0															4	0															
Patel, Biren	16	36	2	12			10	16									4	8															
Rowland, Edwin	24	40			8	16	16	24																									
Stevens, Nancy	14	16	1	6															6	3			7	7									
Williams, Susan	47	274	6	36			35	210									6	28															
Wince, Leon	27.5	88	6	36									8	36	8	16	4.5	0		1	0												
Totals	896.75	2896	144	816	277	554	179	650					68	396	67	230	115	206	2	12	12	6	2	0	30.5	26.5							

Workload Summary

Between 3/31/2008 and 6/13/2008

Instructor Names	Total		Presentation		Group Discussion		Lab - Science		Lab - Clinical		Problem Set		Panel Discussion		Assessment		Directed Study		Class Meeting		Other		Meeting-Curriculum/ *								Other			
	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Hr	Cr	Cr	Description		
Akbar, Huzoor	6	36	6	36																														
Berryman, Mark	30	120	7	42			16	64							7	14																		
Biegalko, Bonita	24	92	3	18			2	12					10	60	4	0						5	2											
Biknevicius, Audrone	17.5	89	1.5	9			12	72							4	8																		
Blazyk, John	5	22	3	18									2	4																				
Chen, Xiaozhuo	4	24	4	24																														
Clark, Brian	1	6	1	6																														
Coschigano, Karen	5	20	1	6							4	14																						
Coschigano, Peter	74	136	4	8	52	104									11	22						7	2											
Eastman, Mary Kay	30	58					24	46							6	12																		
Goodrum, Kenneth	8	40	4	24							2	12	2	4																				
Grijalva, Mario	8.5	0	2	0											4	0		1	0			1.5	0											
Hieronymus, Tobin	71	146					57	118							14	28																		
Horodyski, Frank	62	122	4	8	52	104									4	8						2	2											
Inman, Sharon	17	76	9	54							4	14	4	8																				
James, Calvin	1	6	1	6																														
Klabunde, Richard	8	0																2	0			6	0											
Lee, Andrew	43	190	9	38			29	142					2	4	3	6																		
Li, Yang	1	6	1	6																														
Malgor, Ramiro	15.5	41	4.5	27					2	4			5	10	4	0																		
Murphy, Erin	3	18	3	18																														
Nowak, Felicia	5	25	5	25																														
O'Connor, Patrick	2	12	2	12																														
Patel, Biren	60	142	6	36			48	94							6	12																		
Rowland, Edwin	112	198	10	28	52	104	28	56							12	8						10	2											
Staron, Robert	56	286	6	36			40	230					4	8	6	12																		
Stevens, Nancy	12.5	0																5	0			7.5	0											
Williams, Susan	38	204					34	204							4	0																		
Wince, Leon	12	30	5	30											4	0		1	0			2	0											
Totals	732	2145	102	515	156	312	290	1038	2	4	10	40	29	98	93	130		9	0			41	8											

b. Graduate Education:

1. Graduate Course Involvement :

Mark Berryman:

1. MCB730; fluorescence microscopy lab, Spring 4 hours

Ken Goodrum:

1. BIOS 486A/586A Immunology (lecturer), 30 hr contact.
2. MCB 710 Advanced Cell Signaling, 1 hr lecture

Frank Horodyski:

1. Fall 2007, MCB760, Course Coordinator, total 28 hr
2. Winter 2007, MCB720, total 14 hr

Leonard Kohn:

1. MCB 710 Lecturer

Yang Li:

1. MCB 750. Classroom Lectures, 8 Hours X 8
2. MCB 750. Student discussion facilitator, 9 hours X 2

Susan Williams:

1. Clinically-oriented gross anatomy II & III(winter & spring)

Leon Wince:

1. Chemotherapy of Tropical Disease lecture (1 hr) (Dr. Romoser, course coordinator)

Lawrence Witmer:

1. Clinically-oriented gross anatomy I (fall).
2. BME 501 Witmer gave a one-hour presentation to Doug Goetz's Biomedical Engineering class. Witmer gave a PowerPoint presentation, and then ran through the capabilities and functioning of the OU μ CT.
3. BIOS 682 Evolution of Vertebrate Mineralized Tissues. Graduate seminar in Fall Quarter (1–2 hours per week). Witmer was co-Instructor of Record with Joe Daniel. Witmer helped develop and approved the reading list, and attended and participated in all class sessions.

2. Graduate Student Education:

Mark Berryman:

1. Ph.D. Dissertation Committee: Liang Huang, (graduated November)
2. Ph.D. Dissertation Committee: Jinu Abraham
3. Ph.D. Dissertation Committee: Harjinder Sardar
4. Ph.D. Dissertation Committee: Virginia Lehmkuhl

5. Ph.D. Dissertation Committee: Chintha Bastian
6. Ph.D. Dissertation Committee: Christian Stork
7. Medical student research supervisor, Summer: Amy Wirtz, MS1

Bonita Biegalko:

1. Graduate Student Advisor – 2; proposal defense for Ziqi Liu
2. Graduate Student Committee - 3

Audrone Biknevičius:

1. Advisor: 2 BIOS PhD student (Jennifer Hancock; Angela Horner)
2. Committee member for DO/PhD student (Amy Zidron)
3. Committee member: 3 graduate students (Tobin Heironymus, Eric McElroy, David Dufeu)
4. Committee member for Mechanical Engineering graduate students: (Bob Setlock, Mahmoud Shaltout)

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. Ph.D. Advisor: Yanyan Cao – 50 hrs
2. Ph.D. Advisor: Yi Liu – 25 hr
3. Ph.D. Advisory committee member
 - a. Rui Huang (Jim Zhu of EE department) –defense on 3/12/07 and graduated = 30 hr
 - b. Yan Liu (Susan Evans)
 - c. Shuhua Du (Susan Evans)
 - d. Eroica Soan (Susan Evans)
 - e. Fernandez (Susan Evans)
 - f. Shuang Ma (Felicia Nowak)
 - g. Juan Ding (Kopchick)
 - h. Elahu (Kopchick)
 - i. Lucila (Kopchick)
 - j. Ziqi Liu (Bonita Biegalko)
 - k. Yu Cai (Bergmeier)
 - l. Weihe Zhang (Bergmeier)
 - m. Wei Zeng (Faik)

Brian Clark:

1. PhD Student Advisor: Petra Williams (Biological Sciences):

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

3. Committee member for Zhenchao Wang, PhD candidate, College of Arts and Sciences
4. Committee member for Stacy Hartman, Master's candidate, School of Human and Consumer Sciences; graduated summer 2007
5. Committee member for Melissa Buelow, doctoral candidate, College of Arts and Sciences
6. Committee member for Lyndsey Howell, Masters candidate, College of Arts and Sciences

Peter Coschigano:

1. Supervising 1 PhD Graduate student (R. Bhandare, PhD awarded Fall 2007).
2. Serving on 1 MS committees (J. Krinks from Guy Riefler's MS awarded Summer 2007)
3. Serving on 3 PhD committees (J. Stengel from Mark McMills' lab, J. Wen and K. Zhao from Ting Gu's lab)

Joseph Eastman:

1. Committee member for Ph.D. Student Kristen Kuhn, University of Delaware College of Marine Studies, Lewes, Delaware, graduated June, 2007

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. M.Sc. Candidate. 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 - Present
7. Carrizo Leonardo. Masters student. L Photo Journalism Ohio University, Ohio University. Ecuador Summer 2007.
8. Hunter Alexandra. Masters student. International Development Studies Program, Ohio University. Ecuador Summer 2007.
9. Joshua O'Donnell. Masters student. International Development Studies Program, Ohio University. Ecuador Summer 2007.
10. Mauger John. Masters student. Geography Department, Ohio University. Ecuador Summer 2007.
11. Moss Jeremy. Masters student. Film School Ohio University. Ecuador Summer 2007.
12. Parsons Bruce. Masters student. Film School Ohio University. Ecuador Summer 2007.
13. Meredith Maxwell. Honors Tutorial. Thesis tutorial

Frank Horodyski:

1. Heather Sanders – PhD committee.
2. Advisor: Wyatt/Rothwell completed PhD, Aug. 2007.
3. Betsy Justus – PhD committee.

Calvin James:

1. Graduate Committee Member:
 - a. Jennifer Minter (MS) Advisor: Edwin Rowland - March 2007
 - b. Reena Bhandare (Ph.D.), Advisor: Peter Coschigano - December 2007
 - c. Mauricio Lascano (Ph.D): Advisor; Mario Grijalva (Comprehensive Exam)
 - d. Zhenchao Wang (Ph.D): Advisor: Felicia Nowak (Proposal and Comprehensive Exam)

Leonard Kohn:

1. Mentor: Summer program Medical Students: M. Violet

Peter Johnson:

1. Committee member for 2 Ph.D. students (Majdka and Soneja), dissertation defenses held in Fall quarter.

Richard Klabunde:

1. HTC thesis advisor for Ozan Suer (during fall 2006 – spring 2007)

Yang Li:

1. Adviser for 3 Graduate students in MCB and Biological Sciences Programs.
 - a. Chinthasagar Bastian (Neuroscience, Biology program, Ph.D.)
 - b. Christian Stork (MCB program, Ph.D.)
2. Advisory committee member for 7 graduate students.
 - a. Wei Lin (proposal defense and written exam, MCB program, Ph.D.)
 - b. Yin Li (thesis defense and graduation. Biology program, M.S.)
 - c. Lin Yi (proposal defense and written exam, M.S.)
4. Research adviser of approved medical education for 2 medical students. 2 X
 - a. Caleb Molokwu MSII-III, a research project sponsored by of Center of Excellence COE-COM).
 - b. Shalin Shah MS I, medical student summer research (RSAF, OUCOM)

Ramiro Malgor:

1. Committee Member in the Thesis: “Wnt5a Expression in Atherosclerosis Tissue from Human and ApoE Deficient Mice”. Student: Mark A Christman, Master of Science in Chemical Engineering in the Department of Chemical and Biomolecular Engineering.
2. Danielle Greco (OUCOM Summer student)

Felicia Nowak:

1. Advisor for Shuang Ma, Ph.D. candidate in Biological Sciences.
2. Advisor for Zhenchao Wang, Ph.D. candidate in MCB/Biological Sciences.

Patrick O'Connor:

1. Dissertation Research Advisor—Advisee: Erin L. Rasmusson (Doctoral student in the Department of Biological Sciences, OU). (50 hours)
2. Dissertation Committee Member—Advisee: David Dufeu (Doctoral student in the Department of Biological Sciences, OU). Proposal Defense—October 2007. Comprehensive Exam—December 2007.
3. Dissertation Committee Member—Advisee: Joe Daniel (PhD student in the Department of Biological Sciences). Comprehensive Exam—March 2007.
4. Dissertation Committee Member—Advisee: Tobin L. Hieronymus (Doctoral student in the Department of Biological Sciences, OU).
5. Masters Thesis Committee Member—Advisee: Kaitlin McGuire (MS Geological Sciences, OU). Proposal Defense: April 2007.
6. Dissertation Committee Member—Advisee: Sifa Ngasala (PhD student in the Department of Geology, Michigan State University).
7. Masters Thesis Committee Member—Advisee: Liva Ratsimbaholison (DEA Paleontology, University of Antananarivo, Madagascar).
8. Masters Thesis Committee Member—Advisee: Verne F. H. Simons (Master student in the Department of Biological Sciences, OU). Proposal Defense—April 2007.

Ed Rowland:

1. Advisor for Jennifer Minter, MS student.
2. On Committee for Mauricio Lascano

Robert Staron:

1. Graduate student committees: (*advisor: R.S. Staron)
 - a. *Jenny Herman (PhD).....third year in BIOS PhD program, comp exam 6/07
 - b. *Andrew Timothy (PhD)....fourth year in IIP program, comp exam 6/07
 - c. Stuart Inglis (PhD).....dissertation defense 1/29/07
 - d. Kumika Toma (PhD).....fifth year in BIOS PhD program
 - e. *Sean Schumm (PhD).....second year in BIOS PhD program
 - f. David Dominguese (PhD)..second year in IIP program
 - g. Lyndsey Howell (MS).....first year in BIOS MS program, proposal meeting 8/31/07
 - h. Michele Courtney (PhD)...first year in BIOS PhD program
 - i. Justin Kemp (PhD).....School of Biomed & Health Sciences, Victoria Univ, Melbourne, Australia

Nancy Stevens:

1. Graduate advisor: Verne Simons (current)
2. Graduate committee member: Jennifer Hancock (current)
3. Graduate committee member: Amgela Horner (current)
4. Honors Tutorial advisor: Kristin Stover (Fall)
5. Honors Tutorial advisor: Sarah Gutzwiller (Fall)

Susan Williams:

1. Master's Committee (2: Simons; Tickhill, defended fall, 2007)

2. Dissertation Committee (3, Dufeu, Rasmusson, Daniels)

Larry Witmer:

1. HTC tutorial (Winter Quarter): Molly Semones (1 hour per week). **Note:** Molly's work led to her being a co-author on a manuscript that was submitted and accepted for publication.
2. HTC tutorial (Spring Quarter): Kristin Stover (1 hour per week)
3. HTC Apprentice (Summer): Doug Dearth (30 hours/week for 10 weeks). This apprentice was listed above under Internal Grants, but this was also a huge teaching commitment because Doug was trained in numerous activities in the Witmer lab, including 3D visualization
4. Doctoral students, Witmer major advisor: 3 (Hieronymus, Daniel, Dufeu)
5. Masters students, Witmer major advisor: 1 (Tickhill)

c. Undergraduate Education:

1. **Undergraduate Course Involvement** (BMS faculty are also active in HTC tutorials. These are listed in the next section)

Ken Goodrum:

1. BIOS 486 Immunology

2. Undergraduate Research Education

Mark Berryman:

1. Undergraduate research advisor Amy Schnees, senior, PACE
2. Undergraduate research supervisor, Fall: Tammy Coursey, senior, PACE
3. Undergraduate research supervisor, Fall: Heather Martin, senior
4. Undergraduate research supervisor, Fall: Abdi Mohamud, sophomore

Bonita Biegalke:

1. 1 SURF student, summer quarter
2. Undergraduate student advisor – McNair Scholar Velma Lopez
3. 2 undergraduate research assistants – 2 for winter, spring quarters; 1 - summer quarter, 2- fall quarter

Audrone Biknevicus:

1. Primary advisor – 2 PACE researchers (Jessica Frieman, Kristin Stover)

Xiaozhuo Chen:

1. Undergraduate student supervising Mark Kuhner

Brian Clark:

1. Honors Tutorial College Mentor Fall (1 student [Doug Dearth]: Meet 1 hour per week for 12 weeks: $12 \times 4 = 48$ hours)

Karen Coschigano:

1. Research advisor for 2006-2007 PACE student Jennifer Ball
2. Carried out a tutorial with HTC undergraduate student Erika Swanson winter quarter.
3. Research advisor for Appalachian Rural Health Institute Diabetes Research Initiative (AHRI DRI) 2006-2007 and 2007-2008 undergraduate research intern and 2007-2008 PACE student Audrey Lee
4. Research advisor for Jenna Steele (undergraduate, SURF program, 7 weeks) and Brett Buller (medical school student, Research and Scholarly Advancement Program, 10 weeks) during summer of 2007

Peter Coschigano:

1. Supervising Undergrad students working in lab (PACE: S. Garwick, 2 quarters, SURF H. Atkins-Miller summer).

Mario Grijalva:

1. Dave Deliverato. PACE program. Fall 2006 – Spring 2007.
2. Eric Carlsen., Undergraduate research Winter and Spring 2007, Ecuador Summer 2007
3. Stephanie White. Work study Fall 2006 – Spring 2007. Ecuador Summer 2007.
4. Kellogg Michael, Undergraduate Student Film School, Ohio University. Ecuador Summer 2007.
5. Keppler Brian, Undergraduate Student Chemistry, Ohio University. Ecuador Summer 2007.
6. Leistner Christine, Undergraduate Student, Plant Biology, Ohio University. Summer 2007.
7. Maxey Meredith, Undergraduate Student, Honors Tutorial College, Ohio University Tutorial Winter and Spring 2007. Ecuador Summer 2007.
8. Mrosko Jodi, Undergraduate Student, Biological Sciences, Ohio University Summer 2007.

Sharon Inman:

1. SURF student, John Adame Summer 2007

Leonard Kohn:

1. Mentor: Anthony Schwartz: bioengineering Program
2. Mentor: Marie Yong Braasch (Undergrad Honors Tutorial)

Yang Li:

1. Research advisor for 5 undergraduate students
 - a. Ashlie Author (PACE program, Senior)
 - b. Aaron McAvoy (PACE program, Junior)
 - c. Gordy Ruchty (HTC apprentice summer program)
 - d. Sara Simpson

Ramiro Malgor:

1. Summer students: Jenna Steele (SURF program)

Felicia Nowak:

1. Undergraduate Research: Jennifer Yee, 2 quarters
2. Supervised two SURF students, Jennifer Yee and John Adamo)
3. Supervised two RSAF students, Yelena Feldman and Josh McIntire, the latter in conjunction with Calvin James.

Nancy Stevens:

1. Co-supervised two undergraduate students (Edica Nyambuge and William Leonard) from the University of Dar es Salaam on senior thesis projects during summer of 2007.

Susan Williams:

1. Advising two undergraduate students in my lab on independent research projects (Erika Peiffer and Sonya Ford).

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 2007**

a. **Peer Reviewed Publications**

1. **Huzoor-Akbar**, Kim, J., Funk, K., Cancelas, J. A., Shang, X., Chen, L., Johnson, J. F., Williams, D. A. and Zheng, Y. Genetic and pharmacologic evidence that Rac1 GTPase is involved in regulation of platelet secretion and aggregation. *J Thromb Haemost* 5, 1747-1755 (2007)
2. Littler, DR, Harrop, SJ, Brown, LJ, Pankhurst, GJ, Mynott, A, Luciani, P, Mandyam, RA, Mazzanti, M, Tanda, S, **Berryman, MA**, Breit, SN, Curmi, PMG. 2007. Comparison of vertebrate and invertebrate CLIC proteins: the crystal structures of *Caenorhabditis elegans* EXC-4 and *Drosophila melanogaster* DmCLIC. *Proteins*. [Epub ahead of print]

3. J.A. Hancock*, **N.J. Stevens** and **A.R. Biknevičius**. 2007. Whole-body mechanics and kinematics of terrestrial locomotion in the elegant-crested tinamous (*Eudromia elegans*). *Ibis* 149: 605-614.
4. S.M. Reilly, E.J. McElroy* and **A.R. Biknevičius**. 2007. Posture, gait and ecological relevance of the locomotor costs and cost-savings in tetrapods. *Zoology* 110: 271-289.
5. R. Friscia*, B. Van Valkenburgh, and **A.R. Biknevičius**. 2007. An ecomorphological analysis of extant small carnivorans. *Journal of Zoology, London* 272: 82-100.
6. R.V. Balaji, C. Knisely, and **J. Blazyk**, Internal Grant Competitions: A New Opportunity for Research Officers to Build Institutional Funding Portfolios, *J. Research Admin.* **38**, 44-50 (2007).
7. **Chen, X.** (2006) From medicinal herbs to novel anti-diabetic compounds: combining TCM with modern molecular and cell biology in development of anti-diabetic pharmaceuticals. *Chinese Medicine* 1: 53-55.
8. Ren, Y. **Chen X.** (2007) Distribution, Bioactivities and Therapeutica Potentials of Pentagalloylglucopyranose. *Current Bioactive Compounds* **3**: 81-89.
9. Klein, G., Kim, K., Himmeldirk, K., Cao Y., **Chen, X.** (2007) Anti-diabetes and anti-obesity activity of *Lagerstroemia speciosa*. *eCAM Advance Access* published on March 14, 2007.
10. Ma, Y., **Chen, X.**, Sun, M., Wan, R., Zhu, C., Li, Y., & Zhao, Y. (2007) DNA cleavage function of seryl-histidine dipeptide and its application. *Amino Acids*. 2007 Nov 2; : 17973075 . (DOI 10.1007/s00726-007-0597-x.)
11. Cook, Summer B., **BRIAN C. CLARK** and Lori L. Ploutz-Snyder. Effects of exercise load and vascular occlusion on skeletal muscle function. *Medicine and Science in Sports and Exercise*. 39(10): 1708-1713, 2007.
12. **CLARK, BRIAN C.**, Joseph R. Pierce, Todd M. Manini and Lori L. Ploutz-Snyder. Disuse-induced decrements in neuromotor performance are contraction type and muscle group specific. *European Journal of Applied Physiology*. 100(1): 53-62, 2007.
13. **CLARK, BRIAN C.**, Todd M. Manini and Lori L. Ploutz-Snyder. Fatigue-induced changes in phasic muscle activation patterns during trunk extension exercise. *American Journal of Physical Medicine and Rehabilitation*. 86(5): 373-379, 2007.
14. Monzon, Agatha, Paul F. Hemler, Michael A. Nalls, Todd M. Manini, **BRIAN C. CLARK**, Tamara B. Harris and Mathew J. McAuliffe. Segmentation of magnetic resonance images of the thighs for a new National Institutes of Health initiative. *Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE): Medical Imaging*. 6212: 65123L, 2007.
15. Manini, Todd M., **BRIAN C. CLARK**, Michael A. Nalls, Bret H. Goodpaster, Lori L. Ploutz-Snyder and Tamara B. Harris. Reduced physical activity increases inter-muscular adipose tissue. *American Journal of Clinical Nutrition*. 85(2): 377-384, 2007.
16. **CLARK, BRIAN C.**, Summer B. Cook and Lori L. Ploutz-Snyder. Reliability of techniques to assess human neuromuscular function *in vivo*. *Journal of Electromyography and Kinesiology*, 17: 90-101, 2007.

17. Smid JR, Rowland JE, Young WG, **Coschigano KT**, Kopchick JJ, Waters MJ (2007) Mouse molar dentin size/shape is dependent on growth hormone status. *J Dent Res* 86:463-8.
18. Davies JS, Gevers EF, Stevenson AE, **Coschigano KT**, El-Kasti MM, Bull MJ, Elford C, Evans BA, Kopchick JJ, Wells T (2007) Adiposity profile in the dwarf rat: an unusually lean model of profound growth hormone deficiency. *Am J Physiol Endocrinol Metab* 292:E1483-94.
19. Venken K, Movérare-Skrtic S, Kopchick JJ, **Coschigano KT**, Ohlsson C, Boonen S, Bouillon R, Vanderschueren D (2007) Impact of androgens, growth hormone, and IGF-I on bone and muscle in male mice during puberty. *J Bone Miner Res* 22:72-82.
20. Zhang X, Mehta RG, Lantvit DD, **Coschigano KT**, Kopchick JJ, Green JE, Hedayat S, Christov KT, Ray VH, Unterman TG, Swanson SM (2007) Inhibition of estrogen-independent mammary carcinogenesis by disruption of growth hormone signaling. *Carcinogenesis* 28:143-50.
21. R. Bhandare and **P. W. Coschigano**. Genetic analysis of the *tutH* gene of *Thauera aromatica* strain T1.
22. **Eastman, J.T.** and M.J. Lannoo. 2008. Brain and sense organ anatomy and histology of the Falkland Islands mullet, *Eleginops maclovinus* (Eleginopidae), the sister group of the Antarctic notothenioid fishes (Perciformes: Notothenioidei). *Journal of Morphology*, **269**:84-103.
23. Ainley, D., Ballard, G., Ackley, S., Blight, L.K., **Eastman, J.T.**, Emslie, S.D., Lescroël, A., Olmastroni, S., Townsend, S.E., Tynan, C.T., Wilson P. and E. Woehler. 2007. Paradigm lost, or is top-down forcing no longer significant in the Antarctic marine ecosystem? *Antarctic Science*, 19:283-290.
24. di Prisco, G., **J.T. Eastman**, D. Giordano, E. Parisi and C. Verde. 2007. Biogeography and adaptation of notothenioid fish: hemoglobin function and globin-gene evolution *Gene*, 398:143-155.
25. Wujcik, J.M., G. Wang, **J.T. Eastman** and B.D. Sidell. 2007. Morphometry of retinal vasculature in Antarctic fishes is dependent upon the level of hemoglobin in circulation. *Journal of Experimental Biology*, **210**:815-824.
26. **Eastman, J.T.** and M.J. Lannoo. 2007. Brain and sense organ anatomy and histology of two species of phylogenetically basal non-Antarctic thornfishes of the Antarctic suborder Notothenioidei (Perciformes: Bovichtidae). *Journal of Morphology*, **268**:485-503.
27. La Mesa, M., **J.T. Eastman** and P. Licandro. 2007. Feeding habits of *Bathydraco marri* (Pisces, Notothenioidei, Bathydraconidae) from the Ross Sea, Antarctica. *Polar Biology*, **30**:541-547.
28. La Mesa, M., V. Caputo and **J.T. Eastman**. 2007. Gametogenesis in the dragonfishes *Akarotaxis nudiceps* and *Bathydraco marri* (Pisces, Notothenioidei: Bathydraconidae) from the Ross Sea. *Antarctic Science*, **19**:64-70.
29. Vacchi, M., M. Bottaro, E. Pisano, **J.T. Eastman** and R.R. Eakin. 2007. Aspects of gonadal morphology in the South Georgian plunderfish *Artedidraco mirus* (Perciformes: Artedidraconidae). *Polar Biology*, **30**:125-131.
30. Xu., J., Tan, L., **Goodrum, K.J.**, and Kieliszewski, M.J. 2007. High-yields and extended serum half-life of human interferon $\alpha 2b$ expressed in tobacco cells as arabinogalactan-protein fusions. *Biotechnology and Bioengineering* 97:997-1008.

31. **Hieronymus, T.L.** (2008) Chemical senses: comparative anatomy and physiology in aquatic birds. *In: Thewissen, J.G.M., and S. Nummela (eds), Sensory Evolution on the Threshold, Adaptations in Secondarily Aquatic Vertebrates.* University of California Press.
32. Thewissen, J.G.M., and **T.L. Hieronymus** (2008) Evolutionary relationships of aquatic birds. *In: Thewissen, J.G.M., and S. Nummela (eds), Sensory Evolution on the Threshold, Adaptations in Secondarily Aquatic Vertebrates.* University of California Press.
33. SB Bender, EK Herrick, ND Lott and **RE Klabunde**. Diet-induced obesity and diabetes reduce coronary responses to nitric oxide due to reduced bioavailability in isolated mouse hearts. *Diabetes, Obesity & Metabolism* 9:688-696, 2007.
34. **RE Klabunde**, KM Ryan and CE Paxson. Effects of acute hyperglycemia on coronary vascular function in isolated, perfused rat hearts. *Diabetes, Obesity & Metabolism* 9:696-705, 2007.
35. SB Bender and **RE Klabunde**. Altered role of smooth muscle endothelin receptors in coronary endothelin-1 and α 1-adrenoceptor-mediated vasoconstriction in type 2 diabetes. *Am J Physiol Heart Circ Physiol* 293:H2281-2288, 2007.
36. Giuliani, C., Saji, M., Bucci, I., Fiore, G., Liberatore, M., Singer D. S., Monaco, F., **Kohn, L. D.**, and Napolitano, G.: Transcriptional regulation of major histocompatibility class I gene by insulin and IGF-I in FRTL-5 cells. *J. Endocrinol.*, 189, 605-615 (2006).
37. Suzuki, K. and **Kohn, L. D.**: Differential regulation of apical and basal iodide transporters in the thyroid. *J. Endocrinol.*, 189, 247-255. (2006).
38. Grassadonia, A., Tinari, N., Fiorentino, B., Nakazato, M., Chung, H-K., Giuliani, C., Napolitano, G., Iacobelli, S., Howcroft, T. K., Singer, D. S. and **Kohn, L. D.**: Upstream Stimulatory Factor (Usf) Regulates Constitutive Expression and Hormonal Suppression of the 90k (Mac-2bp) Protein. *Endocrinology*, 148, 3507-3517 (2007).
39. Kim, W. B., Lewis, C. J., McCall, K. D., Malgor, R., Kohn, A. D., Moon, R. T. and **Kohn, L. D.**: Overexpression of Wnt-1 in Thyrocytes Enhances Cellular Growth But Suppresses Transcription of the Thyroperoxidase Gene via Different Signaling Mechanisms. *J. Endocrinology*, 192, 93-106 (2007).
40. McCall, K. D., Harii, N., Lewis, C. J., Malgor, R., Kim, W. B., Saji, M., Kohn, A. D., Moon, R. T., **Kohn, L. D.**: High Basal Levels of Functional Toll-like Receptor 3 (TLR3) and Non-Cannonical Wnt5a Are Expressed in Papillary Thyroid Cancer (PTC) and Are Coordinately Decreased by Phenylmethimazole Together with Cell Proliferation and Migration. *Endocrinology*, 148, 4226-4237. (2007).
41. Sillitti, D. F., Puggina, E., Lagranha, C., Doi, S. Q., Pithon-Curi, T., **Kohn, L. D.** and Suzuki, K.: TGF-like Transcriptional Effects of Thyroglobulin (Tg) in Mouse Mesangial Cells. *Endocrin J.*, 54, 449-458 (2007).
42. Ketterman JK, **Li YV***. Presynaptic Evidence for Zinc Release at the Mossy Fiber Synapse of Rat Hippocampus. *Journal Neuroscience Research*. 2007 Sep 10; [Epub ahead of print]
43. Bastian C, **Li YV***. Fluorescence imaging study of extracellular zinc at the hippocampal mossy fiber synapse. *Neuroscience Letter*. 2007 May 29;419(2):119-24.
44. McCall, K.D., Harii, N., Lewis, C.J., **Malgor, R.**, Kim, W.B., Saji, M., Kohn, A.D., Moon, R.T., Kohn, L.D. High Basal Levels of Functional Toll-like Receptor 3 (TLR3) and Non-Cannonical Wnt5a Are Expressed in Papillary Thyroid Cancer

- (PTC) and Are Coordinately Decreased by Phenylmethimazole Together with Cell Proliferation and Migration. *Endocrinology* 2007 148 (9):4226-4237.
45. **O'Connor, P. M.** The postcranial axial skeleton of *Majungasaurus crenatissimus* (Theropoda: Abelisauridae) from the Late Cretaceous of Madagascar. *Journal of Vertebrate Paleontology Memoir Series* Vol. 27(Suppl. 2):127-162 (2007).
 46. Feldmann, R. M., **P. M. O'Connor**, **N. J. Stevens**, M. D. Gottfried, E. M. Roberts, S. Ngasala, E. L. Rasmusson, and S. Kapilima. A new freshwater crab (Decapoda: Brachyura: Potamonautidae) from the Paleogene of Tanzania, Africa. *Neues Jahrbuch für Geologie und Palaontologie* Vol. 244:71-78 (2007).
 47. Farke, A. A., and **P. M. O'Connor**. Pathology in *Majungasaurus crenatissimus* (Theropoda: Abelisauridae) from the Late Cretaceous of Madagascar. *Journal of Vertebrate Paleontology* Vol. 27(Suppl. 2):180-184 (2007).
 48. Krause, D. W., Sampson, S. D., Carrano, M. T., and **P. M. O'Connor**. Overview of the history of discovery, taxonomy, phylogeny, and biogeography of *Majungasaurus crenatissimus* (Theropoda:Abelisauridae) from the Late Cretaceous of Madagascar. *Journal of Vertebrate Paleontology Memoir Series* Vol. 27(Suppl. 2):1-20 (2007).
 49. Fajardo, R. J., E. Hernandez, and **P. M. O'Connor**. Postcranial skeletal pneumaticity: A methods case study in the use of quantitative microCT to assess vertebral structure in birds. *Journal of Anatomy* Vol. 211:138-147 (2007).
 50. Boyer DM, **Patel BA**, Larson SG, Stern JT Jr. “Telemetered electromyography of peroneus longus in *Varecia variegata* and *Eulemur rubriventer*: implications for the functional significance of a large peroneal process.” *Journal of Human Evolution*.53:119-134.
 51. Young JW, **Patel BA**, Stevens NJ. “Body mass distribution and gait mechanics in fat tailed dwarf lemurs (*Cheirogaleus medius*) and patas monkeys (*Erythrocebus patas*).” *Journal of Human Evolution*. 53:26-40.
 52. Costales, Jaime and **Edwin Rowland**. 2007. A role for protease activity and host cell permeability during the process of *Trypanosoma cruzi* egress from infected cells. *Journal of Parasitology* 93:1350-1359.
 53. Rana S.R., Chleboun G.S., Gilders R.M., Hagerman F.C., Herman J.R., **Hikida R.S.**, Kushnick M.R., **Staron R.S.**, Toma K. (2007) Comparison of early phase adaptations for traditional strength and endurance, and low-velocity weight resistance training programs in college-aged women. *J. Strength Cond. Res.* 22:1-9
 54. Schuenke M.D., Reed D.W., Kraemer W.J., Hymer W.C., **Staron R.S.** (2007) Effects of spaceflight on fiber type composition in rat fast hindlimb muscles. *Med. Sci. Sports Exerc.* 39:S324
 55. Toma K., Werner T., **Hikida R.S.**, Gilders R.M., **Staron R.S.**, Roe R.M., Hagerman F.C. (2007) High-carbohydrate versus high-protein, low-carbohydrate diets on high-intensity aerobic training. *Med. Sci. Sports Exerc.* 39:S409
 56. 2007. J Young, BA Patel, **NJ Stevens**. Body mass distribution and gait sequence pattern in fat-tailed dwarf lemurs (*Cheirogaleus medius*) and patas monkeys (*Erythrocebus patas*). *Journal of Human Evolution*. 53(1):26-40.
 57. 2007. KAI Nekarlis, **NJ Stevens**. Not all lorises are slow: rapid arboreal quadrupedalism in the newly recognized red slender loris (*Loris tardigradus tardigradus*) of Sri Lanka. *American Journal of Primatology*. 69(1):112-120.

58. Ross CF, Dharia R, Herring SW, Hylander WL, Liu ZJ, Rafferty KL, Ravosa MJ, **Williams SH**. 2007a. Modulation of mandibular loading and bite force in mammals during mastication. *J Exp Biol* 210:1046-1063.
59. Ross CF, Eckhardt A, Herrel A, Hylander WL, Metzger KA, Schaerlaeken V, Washington RL, **Williams SH**. 2007b. Modulation of intra-oral processing in mammals and lepidosaurs. *Integr Comp Biol* 47:118-136.
60. Vinyard CJ, Ravosa MJ, **Williams SH**, Wall CE, Johnson KR, and Hylander WL (2007) Jaw-muscle function and the origins of primates. In MJ Ravosa and M Dagosto (eds.): *Primate Origins: Adaptations and Evolution*. New York: Springer, pp. 179-231.
61. **Williams SH**, Vinyard CJ, Wall CE, Hylander WL. 2007. Masticatory motor patterns in ungulates: a quantitative assessment of jaw-muscle coordination in goats, alpacas and horses. *J Exp Zool Part A Ecol Genet Physiol* 307:226-240.
62. Sereno, P. C., J. A. Wilson, **L. M. Witmer**, J. A. Whitlock, A. Maga, O. Ide, and T. A. Rowe. 2007. Structural extremes in a Cretaceous dinosaur. *PLoS ONE* 2(11): e1230. doi:10.1371/journal.pone.0001230.
63. Sampson, S. D. and **L. M. Witmer**. 2007. Craniofacial anatomy of *Majungasaurus crenatissimus* (Theropoda: Abelisauridae) from the Late Cretaceous of Madagascar. *Memoirs of the Society of Vertebrate Paleontology, Journal of Vertebrate Paleontology* 27(Supplement to 2):32–102.
64. Holliday, C.M. and **L. M. Witmer**. 2007. Archosaur adductor chamber evolution: integration of musculoskeletal and topological criteria in jaw muscle homology. *Journal of Morphology* 268:457–484.

b. Peer Reviewed Publications – Submitted or In Press

1. "DEPLETION OF DENDRITIC CELLS DELAYS OVARIAN CANCER PROGRESSION BY BOOSTING ANTI-TUMOR IMMUNITY" Eduardo Huarte^a, Juan Cubillos-Ruiz^a, Yolanda Nesbeth^a, Uciane Scarlett^a, Diana Martinez^a, Ronald J. Buckanovich^{b, c}, **Fabian Benencia**^a, Tibor Keler^e, Karina Pino-Lagos^a, Randolph J. Noelle^a, Charles Sentman^a, and Jose R. Conejo-Garcia^a, submitted to *Cancer Cell*.
2. **Berryman, M**, Train, L, Bullock, T, and Tanda, S. The *Drosophila* *Clic* gene plays critical roles in thermotolerance and life span.
3. Wegner, B, Sorensson-Nystrom, J, Fierlbeck, W, Granqvist, A, Kulak SC, Obeidat, M, Jahroudi, N, Paes, J, **Berryman, M**, and Ballermann, B. Simplification of podocyte foot processes and vacuolization of glomerular endothelial cells in chloride intracellular channel 5 deficient jitterbug mice.
4. **J. Blazyk**, M. Pate, J. Hammer and J. He, Optimization of the Activity of Linear Amphipathic β -Sheet Antimicrobial Peptides Through Structural Perturbation, *Proc. Natl. Acad. Sci. USA* (2007).
5. ^{1,2,*}Yanyan Cao, ^{3,4*}Ahmed Malki, ^{2,5}**Xiaozhuo Chen**, ³Eroica Soans, and ^{2,3,6}Susan C. Evans. Penta-O-galloyl- α -D-glucopyranose (α -PGG) induces insulin receptor signaling-mediated p53 elevation and apoptosis in RKO cells
6. McGlauglin, Chris, Philip A. Anloague and **BRIAN C. CLARK**. External pelvic fixation during lumbar muscle resistance exercise.
7. Cowley, Patrick M., **BRIAN C. CLARK** and Lori L. Ploutz-Snyder. Kinesthetic Motor Imagery Acutely Increases Spinal Excitability.

8. **CLARK, BRIAN C.**, and Todd M. Manini. SARCOOPENIA ≠ DYNAPENIA. Invited *Green Banana* ("outside the box") article. *Journals of Gerontology: Medical Sciences*. In Press.
9. Jones, C.D., M.E. Anderson, A.V. Balushkin, G. Duhamel, R.R. Eakin, **J.T. Eastman**, K.L. Kuhn, G. Lecointre, T.J. Near, A.W. North, D.L. Stein, M. Vacchi and H.W. Detrich III. 2007. Abundance, new records and population structure of demersal fishes from the northern Scotia Arc islands and Bouvetøya. *Polar Biology*, (submitted).
10. Fenaughty, J.M., **J.T. Eastman** and B.D. Sidell. 2007. Biological implications of low condition factor "ax handle" specimens of the Antarctic toothfish, *Dissostichus mawsoni*, from the Ross Sea. *Antarctic Science*, (in press).
11. La Mesa, M., V. Caputo and **J.T. Eastman**. 2007. The reproductive biology of two epibenthic Antarctic nototheniid fish of the genus *Trematomus*. *Antarctic Science*, (in press).
12. Carla L. Black, Sofia Ocaña, Diana Riner, Jaime A. Costales, Mauricio S. Lascano, Santiago Davila, Laura Arcos-Teran, J. Richard Seed, and **Mario J. Grijalva**. 2006. Household Risk Factors For *Trypanosoma cruzi* Seropositivity In Two Geographic Regions Of Ecuador. *Journal of Parasitology*. In press. **93: 12-16**
13. **Hieronimus, T.L.**, and L.M. Witmer (in prep) Adaptation, exaptation, and convergence in rhinocerotid skin evolution. Submitted to *Nature* (5/28/07), *Science* (9/10/07), *Proceedings of the National Academy of Sciences* (10/9/07), currently in preparation for submission to *Proceedings of the Royal Society, Series B*.
14. Giuliani, C., Noguchi, Y., Harii, N., Napolitano, G., Tatone, D., Piantelli, M., Monaco, F. and **Kohn, L. D.**: The Flavonoid Quercetin Regulates Growth and Gene Expression in Rat FRTL-5 Thyroid Cells. *Endocrinology* (2007)
15. Arima, T., Shimojo, N., Yamaguchi, K-I., Tomiita, M., **Kohn, L.D.**, and Kohno, Y.,: Enhancement of experimental Graves' disease by intranasal administration of a T cell epitope of the thyrotropin receptor. *Clinical Immunology*. (2007).
16. Christman, M. A., II, Goetz, D. J., Silver, M., **Kohn, L. D.** and Malgor, R.: Wnt5a is Expressed in Murine and Human Atherosclerotic Lesions. *Circulation* (2007).
17. Deosarkar, S. P., Malgor, R., Fu, J., **Kohn, L. D.**, Hanes, J. and Goetz, D. J.: Polymeric Particles Conjugated with a Ligand to VCAM-1 Exhibit Selective, Avid and Focal Adhesion to Sites of Atherosclerosis. *Circulation* (2007).
18. **A.H. Lee**. In review. Interplay between growth and locomotion in the cross-sectional limb bone geometry of dinosaurs. *Journal of Anatomy*
19. **A.H. Lee** and S. Werning. In press. Sexual maturity in growing dinosaurs does not fit reptilian growth models. *Proceedings of the National Academy of Sciences*
20. Tian D, **Li YV***. Inhibitory Action of Synaptically Released Zn²⁺ at Mossy Fiber CA3 Synapses of Rat Hippocampus. Submitted to *Journal of Neurophysiology*
21. Stork CJ, **Li YV***. Evidence of Rising Zinc, not Rising Calcium, is the Primary Cause of Ischemic neuronal Death. Submitted to the *Journal of Neuroscience*
22. **Li YV***, Stork CJ. Zinc Overload or Calcium Overload in Ischemic Neuronal Death. *Stroke*. Accepted, 2007.
23. Ketterman JK, **Li YV***. Presynaptic Evidence for Zinc Release at the Mossy Fiber Synapse of Rat Hippocampus. *Journal Neuroscience Research*. 2007 Sep 10; [Epub ahead of print]

24. Bastian C, **Li YV***. Fluorescence imaging study of extracellular zinc at the hippocampal mossy fiber synapse. *Neuroscience Letter*. 2007 May 29;419(2):119-24.
25. **Li YV***, Stork CJ. Zinc Overload or Calcium Overload in Ischemic Neuronal Death. *Stroke*. Accepted, 2007.
26. Mark A. Christman II, Douglas J. Goetz, Eric Dickerson, Kelly D. McCall, Mitchell J. Silver, Leonard D. Kohn, and **Ramiro Malgor**. Wnt5a is Expressed in Murine and Human Atherosclerotic Lesions. Submitted
27. Sudhir P. Deosarkar, **Ramiro Malgor**, Jie Fu, Leonard D. Kohn, Justin Hanes, Douglas J. Goetz Polymeric Particles Conjugated with a Ligand to VCAM-1 Exhibit Selective, Avid and Focal Adhesion to Sites of Atherosclerosis
28. Kraemer W.J., Schuenke M.D., Kopchick J.J., **Staron R.S.** (2008) Effect of circulating growth hormone on muscle IGF-IEa protein concentration in female mice. *Growth Hormone and IGF Res.* (submitted)
29. Schuenke M.D., Kopchick J.J., Hikida R.S., Kraemer W.J., **Staron R.S.** (2008) Effects of growth hormone over expression vs. growth hormone receptor gene disruption on mouse hindlimb muscle fiber type composition. *Histochem. Cell Biol.* (submitted)
29. **NJ Stevens**. Exploring the relationships between field and laboratory based approaches for the quantification of kinematic data on primate locomotion.
30. **NJ Stevens**, KA Wright. Tail postures during arboreal quadrupedalism in *Pygathrix nemaeus*, *Pygathrix cinerea*, *Trachypithecus delacouri* and *Trachypithecus hatinhensis* at the Endangered Primate Rescue Center, Cuc Phuong National Park, Vietnam.
31. AS Schulp, M Al-Wosabi, **NJ Stevens**. First dinosaur tracks from the Arabian Peninsula.
32. P Holroyd, **NJ Stevens**. Differentiation of *Phiomys andrewsi* from *Lavocatomys aequatorialis* (gen and sp nov) in the Oligo-Miocene interval on continental Africa.
33. **NJ Stevens**. The effects of branch diameter on primate gait sequence pattern. *American Journal of Primatology*.
34. **NJ Stevens**, MD Gottfried, EM Roberts, S Ngasala, S Kapilima, PM O'Connor. Paleontological exploration of Africa: A view from the Rukwa Rift Basin of Tanzania. *Developments in Primatology: Progress and Prospects*.
35. AR Al-Sayigh, S Nasir, AS Schulp, **NJ Stevens**. The first described *Arsinoitherium* from the Eocene Aydim Formation of Oman: Biogeographic implications. *Paleoworld*.
30. **Williams SH**. In review. In vivo mandibular corpus bone strain in selenodont artiodactyls: implications for biomechanical interpretations of mandibular form. *J Morph.*
31. Vinyard CJ, Wall CE, **Williams SH**, Mork AL, Garner BA, Melo LCO, Valença-Montenegro MM, Valle YBM, Monteiro da Cruz MA, Lucas PW, Schmitt D, Taylor AB, and Hylander WL (In press) The evolutionary morphology of tree gouging in marmosets. In LC Davis, SM Ford and PL M. (eds.): *The Smallest Anthropoids: The Marmoset/Callimico Radiation*. New York: Springer
32. **Williams SH**, Vinyard CJ, Deffenbaugh M, Glander KE, Teaford MF, Thompson C. In press. A preliminary report on a novel telemetry system for recording jaw-muscle function from free-ranging primates in the field. *Int J Primatol*.

33. **Williams S**, Wall C, Vinyard C, Hylander W. In press. Symphyseal fusion in selenodont artiodactyls: new insights from in vivo and comparative data. In: Vinyard CJ, Ravosa MJ, Wall CE, editors. *Primate Craniofacial Function and Biology* New York: Springer.
34. **Witmer, L. M.** and R. C. Ridgely. Submitted December 2007. In review. The paranasal air sinuses of predatory and armored dinosaurs (Archosauria: Theropoda & Ankylosauria) and their contribution to cephalic architecture. *Anatomical Record*. (63 MS pp.)
35. Holliday, C. M. and **L. M. Witmer**. Submitted November 2007. In review. Cranial kinesis in dinosaurs: intracranial joints, protractor muscles, and their significance for cranial evolution and function in diapsids. *Journal of Vertebrate Paleontology*. (66 MS pp.)
36. Sereno, P. C., J. A. Wilson, **L. M. Witmer**, J. A. Whitlock, A. Maga, O. Ide, and T. A. Rowe. Submitted October 2007. Published November 15 2007. Structural extremes in a Cretaceous dinosaur. *PLoS ONE* 2(11): e1230. doi:10.1371/journal.pone.0001230. (57 MS pp. including Supplementary Information)
37. Hieronymus, T. L. and **L. M. Witmer**. Submitted October 2007. In review. Adaptation, exaptation, and convergence in rhinocerotid horn evolution. *Proceedings of the National Academy of Sciences*. (41 MS pp. including Supplementary Information)
38. **Witmer, L. M.**, R. C. Ridgely, D. L. Dufeu, and M. C. Semones. Submitted October 2007. Accepted December 2007. In press. Using CT to peer into the past: 3D visualization of the brain and ear regions of birds, crocodiles, and nonavian dinosaurs. In R. Frey and H. Endo (eds.), *Anatomical Imaging: Towards a New Morphology*. Springer-Verlag, Tokyo. (61 MS pp.)
39. **Witmer, L. M.**, R. C. Ridgely, D. L. Dufeu, and M. C. Semones. Submitted October 2007. Accepted December 2007. In press. Using CT to peer into the past: 3D visualization of the brain and ear regions of birds, crocodiles, and nonavian dinosaurs. In R. Frey and H. Endo (eds.), *Anatomical Imaging: Towards a New Morphology*. Springer-Verlag, Tokyo. (61 MS pp.)
40. 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.)
41. 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.)
42. **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. **Bonita Biegalka**, Invited review; *International Journal of Biochemistry and Cell Biology*; “Human cytomegalovirus: Host immune modulation by the viral US3 gene”

2. M. Pate and **J. Blazyk**, Methods for Assessing the Structure and Function of Cationic Antimicrobial Peptides in *New Antibiotic Targets*, Methods in Molecular Medicine, W. S. Champney, ed., Humana Press Inc., Totowa, NJ, Vol. 142, pp. 155-173 (2007).
3. **J. Blazyk**, M. Pate, J. Hammer and J. He, Modulation of the Activity of Linear Amphipathic Beta-Sheet Antimicrobial Peptides Through Structural Perturbation, 2007 Biophysical Society Meeting Abstracts. *Biophysical Journal*, Supplement, 69a, 322-Pos (2007).
4. **CLARK, BRIAN C.**, Patrick M. Cowley, Robert Conatser and Lori L. Ploutz-Snyder. Role of biarticular muscles in regulating task failure and muscle synergies. *Medicine and Science in Sports and Exercise*. 39(5): 1670, 2007.
5. Cook, Summer B., **BRIAN C. CLARK** and Lori L. Ploutz-Snyder. Effects of exercise intensity and vascular occlusion pressure and duration on skeletal muscle function. *Medicine and Science in Sports and Exercise*. 39(5): 2248, 2007.
6. Monzon, Agatha, Paul F. Hemler, Michael A. Nalls, Todd M. Manini, **BRIAN C. CLARK**, Tamara B. Harris and Mathew J. McAuliffe. Semi-automatic tissue classification of magnetic resonance images of the thigh for application to large-scale datasets. *Proceedings of the Society of Photo-Optical Instrumentation Engineers*. 6212: 65123L, 2007.
7. Ocaña S., **Grijalva MJ.** 2007. Un sueño cada vez más real: la interrupción de la transmisión de la Enfermedad de Chagas [Chagas disease transmission interruption: A dream becoming a reality], Nuestra Ciencia Journal, Ecuador. Volumen 9:24-27
8. **Grijalva M.** 2007. Chagas Disease. in *Linked by a Common Purpose: Global efforts for improving pediatric heart disease. A report by Children's HearthLink*, Minneapolis, MN
9. Nowak FV, Yee J, Jackson E, **Inman SR.** Urinary nitric oxide is elevated in obese diabetic Zucker rat. Submitted to The Endocrine Society's 89th Annual Meeting, January, 2007.
10. **Inman SR**, Koloze M, Johnson M, Jackson E, Nowak FV. The obese Zucker fa/fa rat has higher urinary nitric oxide levels compared to their lean littermates. Accepted to *Experimental Biology*, April 2007.
11. Jackson EJ, Jr., Oshogwemoh S, Nowak F, Slyvka Y and **Inman SR.** The effects of an antioxidant diet on renal function in the obese type II diabetic obese Zucker rat. September, 2007. Presented at OUCOM Research Day. Received 1st Place.
12. **Inman SR**, Jackson E, Oshogwemoh O, Nowak FV. Preservation of renal function in the obese Zucker rat by antioxidant diet. Submitted to *Experimental Biology Meeting*, April 5-9, 2008. San Diego, CA.
13. **Kohn, L.D.**, Suzuki, K., Mori, A., Iishi, K., Klinman, D. M., Rice, J. M.: Immune activation by double strand polynucleotides. Australian Patent 2004201249 September 2007
14. **Kohn, L. D.**, Harii, N., Benavides-Peralta, U., Gonzalez-Murguiondo, M., Lewis, C. J., Napolitano, G., Giuliani, C., Malgor, R., and Goetz, D. J.: Use of Phenylmethimazoles, Methimazole derivatives, and tautomeric cyclic thiones for the treatment of autoimmune/inflammatory diseases associated with Toll-like receptor overexpression. U.S. Patent Pending. Application Serial No. 11/130,922 (2005).
15. **Kohn, L. D.**, Goetz, D., Benavides-Peralta, U., Gonzalez-Murguiondo, M., Harii, N., Lewis, C., Napolitano, G., Daga N.: Compositions and methods for treatment of colitis. Japanese patent pending, Application Serial No. 2007-524823 (2004).

16. **Kohn, L.D.**, Suzuki, K., Mori, A., Iishi, K., Klinman, D. M., Rice, J. M.: Immune activation by double strand polynucleotides. European Patent Application No. 99969109.0 (2006).
17. Stork CJ, **Li YV***. Don't we want to know whether zinc accumulation contributes to the calcium transient measured with these 'calcium' fluorophores? *Cell Calcium*. 2007 Sep;42(3):343-4.
18. Claessens, L. P. A. M., **P. M. O'Connor**, and D. M. Unwin. Respiratory evolution facilitated the origin of pterosaur flight and aerial gigantism. *Science In Review*.
19. Schulp, A. S., **P. M. O'Connor**, D. B Weishampel, A. Al-Sayigh, A. Al-Harthy, J. W. M. Jagt, and A. F. Hartman. Ornithopod and sauropod dinosaur remains from the Maastrichtian Al-Khod Conglomerate, Sultanate of Oman. *Sultan Qaboos University Journal of Sciences In Review*.
20. **O'Connor, P. M.** Evolution of archosaurian *Bauplans*: Pulmonary and non-pulmonary of an air-sac breathing apparatus. *Journal of Experimental Zoology In Review*
21. Stevens, N. J., Gottfried, M. D., Roberts, E. M., Kapilima, S., Ngasala, S., and **P. M. O'Connor***. Paleontological exploration in Africa: a view from the Rukwa Rift Basin of Tanzania. *Developments in Primatology. In Press.*(*Authors contributed equally)
22. Coleman MN, Baden AL, Jacobs R, **Patel BA**. "From hobbits to giants: Blue skies prevail in stormy Philadelphia." *Evolutionary Anthropology*. 16:123-125.
23. **Rowland, Edwin**. 2007. Introduction of Raymond E. Kuhn as the 2007 C.P. Read Mentor Award Recipient. *Journal of Parasitology* 93:1262.
24. **Wince, L.C.:** Role of ET-B receptors in the cardiac contractile force effects of endothelin-1. *The FASEB J*. 21: 726.15, 2007.

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

1. **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, 2008 Biophysical Society Meeting Abstracts. *Biophysical Journal*, Supplement, 30a, 149-Plat (2008).
2. **CLARK, BRIAN C.**, Richard L. Hoffman and Leatha A. Damron. Quantification of the cortical silent period evoked via transcranial magnetic brain stimulation. *The Journal of the Federation of American Societies for Experimental Biology (FASEB Journal)*. Abstract 6288: In Press.
3. **CLARK, BRIAN C.**, Lailah C. Issac, Jason L. Lane, Richard L. Hoffman. Temporal changes in corticospinal excitability with 21-days of forearm immobilization. *Medicine and Science in Sports and Exercise*. In Press.
4. **CLARK, BRIAN C.** Regulation of muscle atrophy: wasting away from the outside in: *In vivo* alterations in skeletal muscle form and function following disuse atrophy. *Medicine and Science in Sports and Exercise*. In Press.
5. **Sharin Inman**, Manuscript to be submitted to "Diabetes" in December.
6. **BA Patel**, Dissertation: *Biomechanics and functional morphology of digitigrade hand postures in cercopithecoid primates*. Submitted to the Graduate School, Stony Brook University, Stony Brook, NY. Defense date: January 28, 2008

2. Presentations

BMS faculty presented 115 oral and poster presentations at national and international professional meetings and conferences.

a. **Invited Presentations**

1. **J. Blazyk**, “Advances in the Design of Linear Amphipathic Beta-Sheet Antimicrobial Peptides” presented at the Gordon Research Conference on Antimicrobial Peptides, Lucca, Italy on 4/30/07
2. **J. Blazyk**, “Antimicrobial Peptides – With a New Twist” presented at OU-COM, Athens, OH, on 9/7/07
3. **J. Blazyk**, “Antimicrobial Peptides – With a New Twist” presented at Ohio Wesleyan University, Delaware, OH, on 11/1/07
4. **Chen X.** Antidiabetic and anticancer compounds. Shanghai University of Science and Technology, August 6, 2007, Shanghai, China
5. **Chen X.** An emerging paradigm – Diversified bioactivities of anti-diabetic compounds through insulin receptor signaling. Southwest Jiaotong University, August 17, 2007, Chengdu, China
6. **J. Eastman**, Invited talk. Stanford University, Hopkins Marine Station, Pacific Grove, California. June 1, 2007
7. **J. Eastman**, The Marcel Naseer Ali Memorial Lecture in Aquatic Biology, University of Guelph, Ontario, Canada, November 14, 2007
8. **Grijalva MJ.** Application of New technologies for the sustainable control of Chagas disease. International Workshop on sustainable Chagas disease control with special emphasis in Central America. Copan, Honduras. February 2007.
9. **Grijalva MJ.** Tropical disease control in Ecuador: Can science make it happen? Western Kentucky University. March 2007
10. **Grijalva MJ.** Chagas disease in Ecuador. Global Initiative for Chagas Control meeting. Geneva, Switzerland July 2007
11. **Horodyski, F.M.,** S. Neupert, M. Lytle, R. Predel, and J.L. Witten (2007). The peptide content of Manse-ATL-II-immunoreactive cells from the larval terminal abdominal ganglion is consistent with the detection of an alternatively-spliced mRNA from the allatotropin gene in *Manduca sexta*. Invertebrate Neuropeptide Conference, Luang Prabang, Laos.
12. **Horodyski, F.M. .**, Invited Seminar: Kenyon College, Biology Department. Regulation and multiple functions of allatotropin: An insect neuropeptide. Nov. 2007.
13. **Inman, SR,** Koloze M, Johnson M, Jackson Edwin, Nowak FV, Yee J. The Obese Zucker fa/fa rat has a higher urinary nitric oxide levels compared to their lean littermates. Poster presented at Experimental Biology April, 2007.
14. **Kohn, L.D.,** J.O. Watson Lecture @ Ohio Osteopathic Assoc. 109th Annual Meeting
15. **Kohn, L.D.,** Plenary Speaker: Salvatore Memorial Lecture U. of Naples, Naples, Italy
16. **Kohn, L.D.,** Plenary Speaker: Korean Thyroid Association, Seoul Korea.
17. **Li, YV,** Zinc, the Calcium of the 21st century” Invited talk at 22nd annual meeting of Ohio Physiological Society (OPS), a chapter of the American Physiological Society. November 3, 2007.

18. **Li, YV**, “Presynaptic evidence of zinc release and preliminary data of zinc action” Invited speaker at Zinc Signals 2007, 8th Annual International Conference. Cooks Branch Ranch, The Woodlands, Texas, TX
19. **Li, YV**, “The Good, the Bad, and ‘the Ugly’: Emerging Story of Zinc in the Brain” OUCOM research seminar series, April 6, 2007. Ohio University.
20. OU-COM Research Day poster , McIntire J, **Nowak FV**, Wiehl P, James C, Investigation of PORF-1 as a transcription factor.
21. OU-COM Research Day poster , Feldman Y, Slyvka Y, Inman SR, **Nowak F**. Diabetic nephropathy and expression of eNOS, iNOS and nNOS isoforms in obese female Zucker (fa/fa) rats.
22. OU-COM Research Day poster , Jackson EJ, Jr., Oshogwemoh S, **Nowak F**, Slyvka Y and Inman SR. The effects of an antioxidant diet on renal function in the obese type II diabetic Zucker rat. Received 1st Place Prize for best poster.
23. DRI-BMIT Joint Retreat poster , Wang Z, Yee J, **Nowak FV**. Expression patterns of eNOS and PORF-2 in diabetic nephropathy.
24. DRI-BMIT Joint Retreat poster , Slyvka Y, Feldman Y, Inman SR, **Nowak FV**. Kidney eNOS, iNOS, nNOS Splice Form Analysis in Diabetic Obese Female Zucker Rats on Antioxidant Diet.
25. DRI-BMIT Joint Retreat poster , Ma S and **Nowak FV**. Role of PORF-2 in CNS.
26. Ohio University Research and Creativity Fair poster, Ma S and **Nowak FV**, “Function of PORF-2”.
27. **O’Connor, P. M.**, Macalester College, Department of Geology, Research Seminar Series (February 2007).
28. **Patel BA**, *Terrestrial adaptations in the hands of cercopithecoid primates*, Department of Pathology and Anatomical Sciences, University of Missouri School of Medicine. October, 2007
29. **Patel BA**, *Hand and wrist biomechanics in primates*, Department of Anatomy, College of Osteopathic Medicine, Midwestern University. November, 2007
30. **Patel BA**, *Experimental and morphological studies of Old World monkey hand postures*, Department of Anthropology, SUNY-Albany. February, 2008
31. **Rowland, Edwin**. Introduction of Raymond E. Kuhn as the 2007 C.P. Read Mentor Award Recipient. American Society of Parasitologists meeting, Merida, Mexico, June 21-25, 2007.
32. **NJ Stevens**, Yemen Geological Survey and University of Sana’a seminar “Afro-Arabian faunal transitions in the Cretaceous-Paleogene interval”. (February 2007)
33. **NJ Stevens**, Cairo Geological Museum seminar “Paleogene mammals from Tanzania: comparisons with faunas from the Jebel el Qatrani Formation of Egypt”. (August 2007)
34. **NJ Stevens**, Cairo Geological Museum: Conducted workshop on “Research techniques in Paleogene paleontology: Quantitative analyses of phiomorph and hyracoid mammals.” (August 2007)
35. **Williams, S. H.**, C. J. Vinyard, K. E. Glander, M. Deffenbaugh, M. F. Teaford, C. L. Thompson. 2007. A Preliminary Report on a New System for Recording Jaw-muscle Electromyograms From Free-ranging Primates. *Journal of Morphology* 268: 1150. (Invited Symposium Presentation at the International Congress on Vertebrate Morphology, Paris, France, July, 2007)

36. **L. M. Witmer** Ohio University, BMIT/DRI/EBI Joint Retreat. 10 Dec 2007. "OU μ CT: The Ohio University MicroCT scanner as a tool for visualization and quantitative analysis of small subjects."
37. **L. M. Witmer**, Georgia College and State University, Milledgeville. 12 Nov 2007. "Evolving an on-board flight computer: brains, ears, and the evolution of birds, dinosaurs, and pterosaurs."

b. Presentations – Voluntary

1. **Fabian Benencia**, "Dendritic Cell vaccines for antitumor therapies" coordinated by Ohio University Office of Research
2. Miller, I, Sams, D, **Berryman, M**, and Peterson, E. 2007. Is Anti-CtBP2 a Marker For Synaptic Ribbons in Vestibular Organs? Poster: Association for Research in Autolaryngology.
3. Obeidat, M, Wegner, B, Kulak, SC, Paes, J, **Berryman, MA**, and Ballermann, BJ. 2007. The chloride intracellular channel CLIC5A regulates glomerular ultrastructure in vivo. Poster: American Society for Nephrology.
4. American Society of Virology, 2007, Corvallis, Oregon; **B.J. Biegelke**, R. Rana and Z. Liu, Analysis of the Roles of the Human Cytomegalovirus UL34 Proteins.
5. **A.R. Biknevičius**, S.M Reilly, T.D. White, J.A. Hancock* & E.J. McElroy*. Interpreting the significance of whole body mechanics in primitive mammals. 8th International Congress of Vertebrate Morphology, Paris, France [abstract published in *J. Morphology* 268: 1049]
6. J.A. Hancock* and **A.R. Biknevičius**. Head-bobbing during terrestrial locomotion in birds: effects on center of mass. 8th International Congress of Vertebrate Morphology, Paris, France [abstract published in *J. Morphology* 268: 104]
7. A.M. Horner* and **A.R. Biknevičius**. Fossorial locomotion in a fossorial specialist: the kinematics and kinetics of the ferret (*Mustela putorius furo*). 8th International Congress of Vertebrate Morphology, Paris, France [abstract published in *J. Morphology* 268: 1086]
8. A.M. Horner* and **A.R. Biknevičius**. Subterranean and epigeal locomotion in the domestic ferret (*Mustela putorius furo*). Society of Integrative and Comparative Biology.
9. Poster: **J. Blazyk**, M. Pate, J. Hammer and J. He, Modulation of the Activity of Linear Amphipathic Beta-Sheet Antimicrobial Peptides Through Structural Perturbation, Biophysical Society National Meeting, Baltimore, MD, 3/4/07
10. Poster 1: Kim J., Cao Y., **Chen X**. Insulin-like acute glucose reduction induced by small compounds 6Cl-TGQ and TGX. Annual Endocrine Society Meeting, Toronto Canada, June 1-5, 2007
11. Poster 2: Cao Y., Malki A., **Chen X**. Evans S. Selective apoptosis induced by \square -PGG and 6Cl-TGQ in human tumor RKO cells. Annual Endocrine Society Meeting, Toronto Canada, June 1-5, 2007
12. *Regulation of muscle atrophy: wasting away from the outside in*. Podium symposium presentation selected for presentation at the 2008 American College of Sports Medicine Conference Meeting. **Brian C Clark** Presentation Title: *In vivo* alterations in skeletal muscle form and function following disuse atrophy. Co-Presenters: Maria L. Urso and Parco M. Siu.

13. **K. Coschigano**, Submitted an abstract entitled “Assessing Physiological and Molecular Indicators of Kidney Damage in Diabetic Mice Expressing a Kidney Androgen Regulated Protein (KAP) Transgene” with co-authors **Ramiro Malgor** and Chad Keller which was accepted for a poster presentation at the 2007 annual meeting of the American Society of Nephrology in San Francisco
14. **K. Coschigano**, Attended the Ohio University BMIT/DRI/EBI Joint Retreat on Dec 10th and presented three posters
15. R Bhandare and **PW Coschigano**. Site-directed mutagenesis of the *tutH* gene of *T. aromatica* strain T1. Ohio Branch meeting of the American Society for Microbiology. N. Canton, OH. 4/13/07-4/14/07.
16. JM Chandler, ER Treece, CR Cooper, and **PW Coschigano**. Proteomic Analysis of Anaerobic *p*-Cresol Metabolism by *Thauera aromatica* strain T1. Ohio Branch meeting of the American Society for Microbiology. N. Canton, OH. 4/13/07-4/14/07.
17. JM Chandler, ER Treece, TD Kim, CR Cooper, and **PW Coschigano**. Proteomic Analysis of Anaerobic *p*-Cresol Metabolism by *Thauera aromatica* strain T1. American Society for Microbiology Annual Meeting. Toronto, ON, Canada 5/21/07-5/25/07.
18. R Bhandare and **PW Coschigano**. Site-directed mutagenesis of the *tutH* gene of *T. aromatica* strain T1. American Society for Microbiology Annual Meeting. Toronto, ON, Canada 5/21/07-5/25/07.
19. J Krinks, G Riefler, B Stuart, **P Coschigano**, and C Socotch. Microbial Investigation of the Linden Bioremediation System Treating Acid Mine Drainage in the Huff Run Watershed. ODNR-DMRM Applied Research Conference Athens, OH, 12/5/07-12/6/07
20. OUCOM RSAC Research Day. 9/21/07. **K. J. Goodrum**. Interleukin-1 \square Antagonism of Penicillin Efficacy.
21. **Mario J. Grijalva**, Anita G. Villacis, Esteban G. Baus, Cesar A. Yumiseva, Sofia Ocaña-Mayorga, Paula Castellanos-Cuervo, Mauricio S. Lascano, Santiago Davila, Jorge Monroy-Nicola, Laura Arcos-Teran, Christopher J. Schofield. 2007. Selective deltamethrin spraying of triatomine infested houses for the control of Chagas disease in Southern Ecuador. 56th Annual Meeting of the American Society of Tropical Medicine and Hygiene, November 2007, Philadelphia, PA. USA
22. Margaret A. Romoser, Joshua O'Donnell, Catherine Taylor, Maureen Magee, Coleen Klingler, Brettania Lopes, Benjamin Bates, Anita James, Carolina Sempertegui, Mauricio Lascano, **Mario J. Grijalva**, **William S. Romoser**. An Interview-based Survey of Perceptions about Water Sources, Availability, Use, and Safety in Six Rural Ecuadorian Communities. 56th Annual Meeting of the American Society of Tropical Medicine and Hygiene, November 2007, Philadelphia, PA. USA
23. Cunningham V. Joan, Eli A. Balkin, Joshua Bear, Caroline Wilson, Carolina Sempertegui, Mauricio Lascano, Christine Leistner, Christa Tomc, Jacqueline Chan, Christina L. Nelson, Jenny Rauckis, Benjamin Bates, **Mario J. Grijalva**, William S. Romoser. An Assessment of Drinking Water Contamination and Container-breeding Mosquito Habitats in Six Rural Ecuadorian Communities. 56th Annual Meeting of the American Society of Tropical Medicine and Hygiene, November 2007, Philadelphia, PA. USA

24. Victoria Suárez, Olivier Dangles, Anita G. Villacís, César Yumiseva, Esteban Baus, **Mario J. Grijalva**. Preliminary results in the study of the Ecology of peridomiciliary and sylvatic Chagas Disease Vectors, Triatomines (Hemiptera: Reduviidae: Triatominae) in Loja and Manabi provinces
25. Lotty Birnberg, Jan Conn, **Mario J. Grijalva**. “Ecology and Diversity of *Anopheles spp.* in two Eco-regions in El Oro Province: Preliminary results”
26. Anita G. Villacís, Esteban G. Baus, César A. Yumiseva, Sofía B. Ocaña, Laura Arcos-Terán, **Mario J. Grijalva**. “Evaluation of Control Strategies for Chagas Disease Vectors (Hemiptera: Reduviidae: Triatominae) in Manabi Province”
27. **Hieronymus, T.L.**, and **L.M. Witmer**. (2007) Skinning dinosaurs: bony correlates and patterns of cephalic skin evolution in Archosauria. *Journal of Vertebrate Paleontology* 27(3, suppl.): 89A.
28. **Hieronymus, T.L.**, and **L.M. Witmer**. (2007) Turtle beaks, bird beaks, croc beaks? Parallel evolution of rhamphothecae in Sauropsida. *Journal of Morphology* 268(12): 1083-1084.
29. **Hieronymus, T.L.**, and **L.M. Witmer**. (2007) How dinosaurs build beaks: Homology between avian rhamphotheca and diapsid facial scales. *Integrative and Comparative Biology* 45(6, suppl.): e60.
30. **Hieronymus, T.L.**, and **L.M. Witmer**. (2007) Dinosaur faces: Fossil evidence for the evolutionary history of beaks and scales in birds and reptiles. OUCOM Research Day.
31. **Horodyski, F.M.**, S. Neupert, M. Lytle, R. Predel, and J.L. Witten (2007). Expression of alternatively spliced allatotropin mRNAs and detection of predicted allatotropin-like peptides. 9th International Conference on the Juvenile Hormones. York, UK.
33. Poster: COM Research Day, 2007. Analysis of TBP under conditions that promote PKC-induced repression of polymerase III. *Albert Saez* and **Calvin James**.
34. Poster: COM Research Day, 2007 Investigation of PORF-1 as a transcription Factor. Josh McIntire, Paul Wiehl and **Calvin James**.
35. SB Bender, **R Malgor**, **RE Klabunde**. Impact of diet-induced obesity and type 2 diabetes on coronary endothelial adhesion molecule expression in mice. *FASEB J* 21: Abstr #737.29, 2007. Oral presentation at Exp. Biol. 2007.
36. Suer, **RE Klabunde**. Interactions between nitric prostaglandins and oxide in the regulation of coronary artery function in type 2 diabetes. OU Research Fair, May 2007; and at the Ohio Physiological Society annual meeting, November 2007.
37. D. Slifko, S. House, **RE Klabunde**. Effects of Adenosine on Coronary Vascular Resistance in the Diabetic Mouse Heart. OUCOM Research Day, October 2007.
38. **A.H. Lee**. 2007. Interplay of growth and mechanics on dinosaur bone histology. ICVM, Paris, France
39. **A.H. Lee**. 2007. Bone microstructure reflects evolution of large size in horned dinosaurs. MM, Fort Lauderdale, FL
40. **A.H. Lee**. 2007. How *Centrosaurus* (and other ceratopsians) grew to large size. Ceratopsium Symposium, Drumheller, AB, Canada
41. **A.H. Lee**. 2007. How dinosaurs grew and the relationship between growth rates and bone vascular organization. Society of Vertebrate Paleontology Annual Meeting, Austin, TX

42. S. Werning and **A.H. Lee**. 2007. "Teenage pregnancy" in non-avian dinosaurs and its relevance to growth. Society of Vertebrate Paleontology Annual Meeting, Austin, TX
43. **A.H. Lee** and 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
44. Bastian, **Y.V. Li**. Zinc in the Recurrent Mossy Fiber Pathway of the Epileptic Brain. Program No 3.044. The 61st Annual Meeting of American Epilepsy Society, 2007. Philadelphia, PA.
45. Tian, **Y.V. Li**. Inhibitory action of synaptically released zinc in the adult hippocampal mossy fiber CA3 synapse. Program No 358. 2007 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience, 2007, San Diego, CA.
46. J. K. Ketterman, **Y. V. Li**, Direct evidence for vesicular zn²⁺ release: localization, kinetics, and pharmacology. Program No. 358.3. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007.
47. C.J. Stork, **Y.V. Li**. Evidence for Rising Zinc as the Primary Cause of Ischemic Neuron Death, not Calcium. Program No. 2007 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience, 2007, San Diego, CA.
48. A.B. Arthur, **Y.V. Li**, The Effects of Zinc Chelators on Hemostasis and Blood Clot Lysis. The 22nd Annual Meeting of Ohio Physiological Society. November 3, 2007. Ohio University. Athens, OH.
49. Bastian, **Y.V. Li**. A Comparative Study of Actions of Three Cell Impermeable Fluorescent Indicators on Synaptically Released Zinc. The 22nd Annual Meeting of Ohio Physiological Society. November 3, 2007. Ohio University. Athens, OH.
50. C.J. Stork, **Y.V. Li**. Intracellular Zinc Elevation Measured with a "Calcium-Specific" indicator: A Question on Calcium Signal. Gordon Research Conference on Calcium Signaling 2007. Tilden, NH.
51. Shalin Shah, **Yang V. Li**, ZINC, A Potential New Pharmaceutical Target in the Management of Diabetes. Research Day, Ohio University College of Osteopathic Medicine, Irvine Hall.
52. Caleb O. Molokwu and **Yang V. Li**. Effect of a zinc chelator and 17 β -estradiol administration on bone mineral density of ovariectomized rats. 2007 OOA and CORE Research. June 23 2007.
53. C.J. Stork, S. Wu, **Y.V. Li**, Intracellular Zinc Elevation Measured with a "Calcium-Specific" indicator: A Question on Calcium Signals. 2007 Experimental Biology meeting abstracts [on CD-ROM], Abstract #945.13
54. Caleb O. Molokwu and **Yang V. Li**. Effect of a Zinc Chelator and 17 β -Estradiol Administration on Bone Mineral Density of Ovariectomized Rats. 6th Annual Student Research and Creative Activity Fair, Convocation Center. Ohio University. May 12, 2007
55. C.J. Stork, **Y.V. Li**, Prevention of cellular damage during OGD/reperfusion, 6th Annual Student Research and Creative Activity Fair, Convocation Center. Ohio University. May 12, 2007 (the 1st Place Award Poster)
56. C.B. Arthur, **Y.V. Li**, The Effects of Zinc Chelators on Hemostasis and Blood Clot Lysis, 6th Annual Student Research and Creative Activity Fair, Convocation Center. Ohio University. May 12, 2007 (the 2nd Place Award Poster)

57. S. Simpson, **Y.V. Li.**, A means of identifying the neuroprotective mechanisms of zinc chelation, 6th Annual Student Research and Creative Activity Fair, Convocation Center. Ohio University. May 12, 2007
58. Tian, **Y.V. Li.** Zinc release and its action at mossy fiber-CA3 synapses. Gordon Research Conference on Dendrites. 2007. Ventura, California.
59. Wnt meeting UCSD San Diego California June 21-23, 2007, Wnt5a is Expressed in Murine and Human Atherosclerotic Lesions **R. Malgor**, M.A. ChristmanII, E. Dickerson, K. McCall, M.J. Silver, D. Goetz and **L. Kohn.**
60. BMES 2007 Annual Meeting, α -Vcam-1 Polymeric Particles Exhibit Selective, Avid And Focal Adhesion To Sites Of Atherosclerosis S.P. Deosarkar, **R. Malgor**, J.Fu, L.D. Kohn, J. Hanes and D.J. Goetz
61. BMES 2007 Annual Meeting, Wnt5a Expression in Murine and Human Atherosclerotic Lesions M.A. Christman, M.J. Silver, L.D. Kohn, D.J. Goetz and **R. Malgor**
62. **Nowak FV**, Yee J, Jackson E, Inman SR. Urinary nitric oxide is reduced in obese diabetic Zucker rat. Poster presented at the Endocrine Society 89th Annual Meeting, Toronto Canada, June 2007.
63. Ma S and **Nowak FV**. In vitro knockdown of Porf-2 in neural cells. Poster presented at the Annual Meeting of the Society for Neuroscience, San Diego, CA, November, 2007.
64. **Inman SR**, Jackson E, Oshogwemoh O, **Nowak FV**. Preservation of renal function in the obese Zucker rat by antioxidant diet. Submitted to Experimental Biology Meeting for presentation in San Diego, CA, April, 2008.
65. Wang Z, Yee J, **Nowak FV**. Expression patterns of eNOS and PORF-2 in diabetic nephropathy. Submitted for presentation at the Endocrine Society 90th Annual Meeting, San Francisco, CA, June, 2008.
66. Slyvka Y, Feldman Y, **Inman SR**, **Nowak FV**. Kidney eNOS, iNOS, nNOS Splice Form Analysis in Diabetic Obese Female Zucker Rats on Antioxidant Diet. Submitted for presentation at the Endocrine Society 90th Annual Meeting, San Francisco, CA, June, 2008.
67. Ma S and **Nowak FV**. PORF-2 regulates cell proliferation in CNS. Submitted for presentation at the Endocrine Society 90th Annual Meeting, San Francisco, CA, June, 2008.
68. **O'Connor, P. M.**, and H.-R. Duncker. Postcranial pneumaticity in charadriiform birds: Reexamining relationships among skeletal pneumaticity, body and diving behavior. Society for Integrative and Comparative Biology Annual Meetings (Accepted).
69. Roberts, E.M., Armstrong, R.A., **O'Connor, P.M.**, & **Stevens, N.J.** Late Mesozoic and early Tertiary sedimentary and tectonic evolution of the Rukwa Rift Basin: The 6th PESGB/HGS African Conference—Africa's Petroleum Systems: From Outcrop to Deepwater, p. 45 (2007).
70. Roberts, E. M., **P. M. O'Connor**, R. A. Armstrong, **N. J. Stevens**, and M. D. Gottfried. U-Pb geochronology of detrital zircons from the Rukwa Rift Basin, Tanzania: New data on the pre-Neogene tectonic and sedimentary evolution of the western branch of the East African rift system. *Geological Society of America, Abstracts with Programs* 39 (2007).

71. **O'Connor, P. M.**, L. Claessens, and D. M. Unwin. Postcranial pneumaticity in pterosaurs: Perspectives on pulmonary structure and the evolution of body size. *Flugsaurier, The Wellnhofer Pterosaur Meeting*. September (2007).
72. Claessens, L., **P. M. O'Connor**, and D. M. Unwin. Lung ventilation in pterosaurs. *Flugsaurier, The Wellnhofer Pterosaur Meeting*. September (2007).
73. **O'Connor, P. M.** Evolution of archosaurian *Bauplans*: nonpulmonary adaptations of an air-sac based breathing apparatus. Eighth International Congress of Vertebrate Morphology—July (2007).
74. Rasmusson, E. L., and **P. M. O'Connor**. Morphology of the forelimb skeleton and locomotory behavior in birds: Pelecaniformes and Procellariiformes. Eighth International Congress of Vertebrate Morphology—July (2007).
75. Gottfried, M. D., **P. M. O'Connor**, **N. J. Stevens**, E. M. Roberts, and S. Ngsala. Recent discoveries from the Cretaceous and Paleogene of the Rukwa Rift Basin, Tanzania, including new Tanzanian fossil records of *Neoceratodus* and *Protopterus* (Dipnoi). Eleventh Conference on Vertebrate Evolution, Palaeontology and Systematics—April (2007).
76. **Patel BA**. “Morphological investigation of cercopithecoid hand postures.” To be presented at the XXII Congress of the International Primatological Society, Edinburgh, Scotland.
77. **Patel BA**, Wunderlich R. “Speed effects on palmar pressure in digitigrade baboons (*Papio anubis*).” To be presented at the 77th Annual Meeting of the American Association of Physical Anthropologists. Columbus, Ohio. April, 2008.
78. Carl KM, **Patel BA**, Larson SG. “Forearm kinematics and hand postures: implications for interpreting subchondral bone density patterns in the primate distal radius.” To be presented at the 77th Annual Meeting of the American Association of Physical Anthropologists. Columbus, Ohio. April, 2008.
79. Kingston A, Boyer DM, **Patel BA**, Larson SG, Stern JT Jr. “Hallucal grasping in *Nycticebus coucang*: further implications for the functional significance of a large peroneal process.” To be presented at the 77th Annual Meeting of the American Association of Physical Anthropologists. Columbus, Ohio. April, 2008.
80. Jacobs RL, **Patel BA**, Boyer DM. “Does a large peroneal process on the first metatarsal reflect leaping behavior in prosimian primates?” To be presented at the 77th Annual Meeting of the American Association of Physical Anthropologists. Columbus, Ohio. April, 2008.
81. **Patel BA**, Uppal K, Polk JD. “Primate hand postures across symmetrical and asymmetrical gaits.” Presented at the 2008 Annual Meeting of the Society for Integrative and Comparative Biology. San Antonio, Texas. January 2008.
82. Wunderlich RE, **Patel BA**. “Peak pressures and cheiridial postures in baboons (*Papio anubis*).” Presented at the 2008 Annual Meeting of the Society for Integrative and Comparative Biology. San Antonio, Texas. January 2008.
83. **Patel BA**, Rossie JB, Biechele M, Hill A. “Functional morphology of the *Equatorius africanus* hand.” Presented at the 2007 Annual Meeting of the Society of Vertebrate Paleontologists. Austin, Texas. October 2007.
84. Schuenke M.D., Reed D.W., Kraemer W.J., Hymer W.C., **Staron R.S.** Effects of spaceflight on fiber type composition in rat fast hindlimb muscles. American College of Sports Medicine meeting in New Orleans, May 30-June 2, 2007

85. Toma K., Werner T., **Hikida R.S.**, Gilders R.M., **Staron R.S.**, Roe R.M., Hagerman F.C. High-carbohydrate versus high-protein, low-carbohydrate diets on high-intensity aerobic training. American College of Sports Medicine meeting in New Orleans, May 30-June 2, 2007
86. **NJ Stevens**, S Ngasala, MD Gottfried, **PM O'Connor**, EM Roberts. A hyracoid from the Rukwa Rift Basin, Paleogene of Tanzania. *J. Vert. Paleo.*
89. EM Roberts, **PM O'Connor**, **TL Hieronymus**, MD Gottfried, **NJ Stevens**. Taphonomy of two Cretaceous dinosaur quarries, Tanzania, Africa: New insights into regional paleoclimate, paleoenvironments and paleobiogeography. *J. Vert. Paleo.*
90. AS Schulpe, M Al-Wosabi, **NJ Stevens**. The first dinosaur tracks from the Arabian Peninsula. *J. Vert. Paleo.*
91. MD Gottfried, **NJ Stevens**, **PM O'Connor**, EM Roberts, S Ngasala. A new fossil record for the African lungfish Protopterus from the Paleogene of Tanzania. *J. Vert. Paleo.*
92. EM Roberts, PM O'Connor, **NJ Stevens**, MD Gottfried. New Cretaceous and Palaeogene vertebrates from the East African Rift, Tanzania: stratigraphic, tectonic, and palaeobiogeographic implications: 14th Biennial Palaeontological Society of South Africa Annual Meeting Abstracts, p. 20.
93. VFH Simons, **NJ Stevens**. Functional Implications of the locomotor morphology of Paleogene (~Oligocene) African anurans. *J. Morph.*
94. KA Wright, CA Ruff, **NJ Stevens**, HH Covert, T Nadler. Long bone articular and diaphyseal structure in douc langurs: evidence of suspensory adaptations. *Am. J. Phys. Anthropol.*
95. KA Wright, **NJ Stevens**, DN Thanh, HH Covert, T Nadler. Arboreal and terrestrial substrate use by the endangered limestone langurs of Vietnam. *Int. Comp. Biol.*
96. **Williams, S. H.**, C. J. Vinyard, K. E. Glander, M. F. Teaford, M. Deffenbaugh and C. L. Thompson. 2007. EMG telemetry in free-ranging primates: pilot data from howling monkeys (*Alouatta palliata*) at La Pacifica, Costa Rica. American Journal of Primatology 69(S1):121-122. (Annual Meeting of the American Society of Primatologists. June 20-23, Winston Salem, NC)
97. **Williams, S. H.**, C. J. Vinyard, K. E. Glander, M. F. Teaford, M. Deffenbaugh, C. L. Thompson. 2007. A telemetry system for studying jaw-muscle activity in free-ranging primates: pilot data from howling monkeys (*Alouatta palliata*) at La Pacifica, Costa Rica. American Journal of Physical Anthropology Supplement 44:250. (Presented at the American Association of Physical Anthropologists. March 28-31, 2007 Philadelphia, PA)
98. **Wince, L.C.**, Presented "The Role of ET-B Receptors in the Cardiac Contractile Force Effects of Endothelin-1", Experimental Biology 2007, Washington, D.C.
99. Young, M. T., E. J. Rayfield, P. M. Barrett, P. Upchurch, and **L. M. Witmer**. 2007. Elucidating the feeding mechanics of *Diplodocus longus* using the Finite-element method. 51st Annual Meeting of the Palaeontological Association, Uppsala, Sweden. *Palaeontological Association Newsletter* 66:101.
100. Daniel, J. and **L. M. Witmer**. 2007. The role of soft tissues in sediment infilling and patterning: an actualistic study with ostrich heads. 67th Annual Meeting of the Society of Vertebrate Paleontology, Austin, TX. *Journal of Vertebrate Paleontology* 27(Supplement to 3):65A.

101. Dufeau, D. L. and **L. M. Witmer**. 2007. Ontogeny and phylogeny of the tympanic pneumatic system of crocodyliform archosaurs. 67th Annual Meeting of the Society of Vertebrate Paleontology, Austin, TX. *Journal of Vertebrate Paleontology* 27(Supplement to 3):70A.
102. Hieronymus, T. L. and **L. M. Witmer**. 2007. Skinning dinosaurs: bony correlates and patterns of cephalic skin evolution in Archosauria. 67th Annual Meeting of the Society of Vertebrate Paleontology, Austin, TX. *Journal of Vertebrate Paleontology* 27(Supplement to 3):89A.
103. Holliday, C. M. and **L. M. Witmer**. 2007. The epipterygoid of crocodyliforms and its significance in the evolution of the orbitotemporal region of eusuchians. 67th Annual Meeting of the Society of Vertebrate Paleontology, Austin, TX. *Journal of Vertebrate Paleontology* 27(Supplement to 3):90A.
104. Tsuihiji, T., M. Watabe, **L. M. Witmer**, T. Tsubamoto, K. Tsogtbaatar. 2007. A juvenile skeleton of *Tarbosaurus* with a nearly complete skull and its implications for ontogenetic change in tyrannosaurids. 67th Annual Meeting of the Society of Vertebrate Paleontology, Austin, TX. *Journal of Vertebrate Paleontology* 27(Supplement to 3):160A.
105. Holliday, C. M. and **L. M. Witmer**. 2007. Cranial kinesis in dinosaurs: significance for functional inferences and evolution. 8th International Congress of Vertebrate Morphology, Paris, France.
106. **L. M. Witmer** and R. C. Ridgely. 2007. Evolving an on-board flight computer: brains, ears, and exaptation in the evolution of birds and other theropod dinosaurs. 8th International Congress of Vertebrate Morphology, Paris, France.
107. Dufeau, D. L. and **L. M. Witmer**. 2007. Ontogeny and phylogeny of the tympanic pneumatic system of crocodyliform archosaurs. 8th International Congress of Vertebrate Morphology, Paris, France.
108. Ridgely, R. C. and **L. M. Witmer**. 2007. Gross anatomical brain region approximation (GABRA): a new technique for assessing brain structure in dinosaurs and other fossil archosaurs. 8th International Congress of Vertebrate Morphology, Paris, France.
109. Tickhill, J. and **L. M. Witmer**. 2007. The Virtual Pig head: digital imaging of cephalic anatomy. 8th International Congress of Vertebrate Morphology, Paris, France.
110. Hieronymus, T. L. and **L. M. Witmer**. 2007. Turtle beaks, bird beaks, croc beaks? Parallel evolution of rhamphothecae in Sauropsida. 8th International Congress of Vertebrate Morphology, Paris, France.
111. Tickhill, J. and **L. M. Witmer**. 2007. The Virtual Pig head: digital imaging of cephalic anatomy. Annual Meeting of the Society of Integrative and Comparative Biology, Phoenix, AZ.
112. Hieronymus, T. L. and **L. M. Witmer**. 2007. How dinosaurs build beaks: homology between avian rhamphotheca and diapsid facial scales. Annual Meeting of the Society of Integrative and Comparative Biology, Phoenix, AZ.
113. Tsuihiji, T. and **L. M. Witmer**. 2007. Reconstruction and possible evolutionary changes of muscle and ligament attachments in the occipital region and atlas-axis complex in non-avian theropod dinosaurs. Annual Meeting of the Society of Integrative and Comparative Biology, Phoenix, AZ.

3. Grants

a. External Research Grants

1. External Grants Submitted (AY 2007-08 data from OU-COM Research Office)
2. Active External Grants (AY 2007-08 data from OU-COM Research Office)

b. Internal Research Grants:

1. OU-COM Office of Research (AY 2007-08 data from OU-COM Research Office)

Submitted Research Grants for 2007-08

Principal Investigator	Title	Agency	Period	Amount Requested	Status
Akbar, Huzoor [Chen, Xiaozhuo]	Novel Insulin Mimetic Small Molecules as Antithrombotic Agents	American Diabetes Association	01/08-12/10	\$200,000	Denied
Akbar, Huzoor [Chen, Xiaozhuo]	Novel insulin mimetic small molecules as antithrombotic agents	American Heart Association	07/08-06/10	\$108,900	Denied
Akbar, Huzoor [Chen, Xiaozhuo]	Novel insulin mimetic small molecules as antithrombotic agents	American Diabetes Association	07/08-06/11	\$270,000	Denied
Akbar, Huzoor [Chen, Xiaozhuo]	Novel insulin mimetic small molecules as antithrombotic agents	National Institutes of Health	12/08-11/10	\$177,000	Denied
Benencia, Fabian [Malgor, Ramiro]	Early inflammation as a therapeutic target for pancreatic cancer	American Association of Cancer Research	07/08-06/10	\$100,000	Denied
Benencia, Fabian [McCall, Kelly]	Therapeutic effect of abrogating initial inflammation in pancreatic cancer	American Association of Cancer Research	07/08-06/10	\$100,000	Denied
Benencia, Fabian	The role of the tumor microenvironment in the efficacy of dendritic cell vaccines	Sidney Kimmel Foundation	07/08-06/10	\$200,000	Denied
Benencia, Fabian	Dendritic cell contribution to atherosclerosis development	American Heart Association	07/08-06/10	\$108,900	Denied
Benencia, Fabian	Effect of tumor factors on dendritic cell vaccines in ovarian cancer	Ohio Cancer Research Associates	07/08-06/10	\$50,000	Denied
Benencia, Fabian	Recruitment of bone marrow hematopoietic stem cells to tumors	National Institutes of Health	12/08-11/10	\$221,250	Pending
Benencia, Fabian	Modulation of dendritic cell vaccines by ovarian cancer microenvironment	Mary Kay Ash Foundation	07/08-06/10	\$100,000	Denied
Benencia, Fabian [Malgor, Ramiro]	Immunomodulation Of Mature Dendritic Cells By The Tumor Microenvironment	National Institutes of Health	04/09-03/14	\$1,090,800	Pending
Chen, Xiaozhou [Li, Yang]	Inhibition of basal glucose transport and apoptosis in cancer cells	National Institutes of Health	12/08-11/10	\$271,769	Denied
Chen, Xiaozhou [Li, Yang]	Zinc's role in insulin-mediated glucose transport	National Institutes of Health	12/08-11/10	\$221,250	Denied
Chen, Liwei* [Li, Yang]	Novel Neural Mechanotransduction via Piezoelectric Nanowires	National Institutes of Health	12/08-11/10	\$210,346	Denied
Clark, Brian	Neural Adaptations to Immobilization	National Football League Charities	01/09-06/10	\$125,000	Pending
Clark, Brian	Acute response to blood flow restricted exercise	National Institutes of Health	04/08-03/10	\$6,214	Denied
Clark, Brian [Heh, Victor] [Staron, Bob]	Control mechanisms of maximal force output	National Institutes of Health	12/08-11/11	\$199,125	Denied
Clark, Brian	Relative safety of blood flow restricted resistance exercise	American College of Sports Medicine	07/08-06/09	\$10,000	Denied
Clark, Brian	Blood flow restricted exercise to promote skeletal muscle health	National Institutes of Health	07/08-06/11	\$180,950	Denied
Grijalva, Mario	Research & Training Capability Strengthening of Catholic University of Ecuador	Catholic University - Ecuador	04/08-06/10	\$30,000	Funded

Submitted Research Grants for 2007-08

Principal Investigator	Title	Agency	Period	Amount Requested	Status
Grijalva, Mario	The Effects of Environmental Variables on West Nile Virus Infection Rates in Culex Mosquitoes Using an 'Ecological Niche' Type Model	Ohio Mosquito Control Association	06/08-06/09	\$1,000	Pending
Grijalva, Mario	Research and training capability strengthening of catholic university of Ecuador	Catholic University - Ecuador	11/07-11/08	\$3,150	Funded
Grijalva, Mario	Research & Training Capability Strengthening of Catholic University of Ecuador	Catholic University - Ecuador	04/08-06/10	\$30,000	Funded
Grijalva, Mario	Continuation of Pilot Chagas Disease Control Program in Loja Province, Ecuador	Children's Heartlink	05/08-04/09	\$20,000	Funded
Horodyski, Frank	Molecular and functional characterization of the allatropin receptor	National Science Foundation	04/08-03/11	\$0	Denied
Horodyski, Frank	Molecular and functional characterization of the allatotropin receptor	National Science Foundation	11/08-10/11	\$420,000	Funded
Howell, John [Clark, Brian] [Eland, David]	A pilot magnetic resonance imaging (MRI) study of osteopathic manipulative treatment (OMT) of acute low back pain	Osteopathic Heritage Foundation	08/07-08/08	\$39,000	Funded
Inman, Sharon [Nowak, Felicia]	Role of antioxidants and nitric oxide in renal ischemia/reperfusion injury	National Kidney Foundation	07/08-06/09	\$9,378	Denied
James, Calvin [Kopchick, John]	Role of protein kinase C on temporal regulation of polymerase III transcription	National Institutes of Health	07/08-06/10	\$221,250	Denied
Kopchick, John	Mechanisms of Prostate Cancer Prevention by Down-Regulation of the GH/IGF Axis	University of Illinois - Department of Defense	09/09-08/12	\$66,375	Pending
Kopchick, John	Growth hormone/growth hormone receptor interactions	Diathegen	11/07-02/08	\$70,468	Denied
Kopchick, John	Biopotency of mouse pituitary growth hormone after a 30 day space flight	National Aeronautics and Space Administration	01/10-12/11	\$20,000	Pending
Li, Yang	Zinc and ischemic brain injury	National Institutes of Health	04/08-03/13	\$1,455,900	Denied
Li, Yang	Synaptic zinc and mossy fiber-CA3 LTP	National Institutes of Health	07/08-06/10	\$221,250	Denied
Li, Yang	Elevated zinc in ischemia and reperfusion	National Institutes of Health	12/08-11/13	\$1,483,444	Denied
Malgor, Ramiro [McCall, Kelly]	Understanding Wnt5a and TLR-4 cross-signaling during Atherosclerosis	National Institutes of Health	04/09-03/11	\$165,938	Pending
McCall, Kelly [Kohn, Len] [Malgor, Ramiro] [Schwartz, Frank]	Toll-like Receptor 3 in Type 1 Diabetes and Efficacy of a Novel Therapeutic	Juvenile Diabetes Research Foundation	07/08-06/09	\$110,000	Pending
McCall, Kelly [Kohn, Len] [Malgor, Ramiro] [Schwartz, Frank]	Role of TLR3 in T1D and efficacy of a novel therapeutic	National Institutes of Health	12/08-11/10	\$221,250	Denied
McCall, Kelly [Benencia, Fabian]	Therapeutic effect of phenylmethimazole, a specific toll-like receptor inhibitor on breast cancer	Susan G. Komen Breast Cancer Foundation, Inc.	03/08-02/10	\$400,000	Denied
Murphy, Erin	Temperature dependent regulation of S. dysenteriae heme receptor	National Institutes of Health	12/08-11/10	\$221,250	Denied

Submitted Research Grants for 2007-08

Principal Investigator	Title	Agency	Period	Amount Requested	Status
Nowak, Felicia [Li, Yang]	Role of Rho-like GTPase, PORF-2 on cell fate in CNS	National Institutes of Health	12/08-11/11	\$221,250	Denied
O'Connor, Patrick	CT Scanning Madagascar Fossils for Exhibit and Symposium at the National Museum of Japan	Yomiuri Group	04/08-03/09	\$6,275	Funded
Slyvka, Yuriy [Nowak, Felicia]	Role of NOS isoforms and splice variants In diabetic nephropathy	National Institutes of Health	07/08-06/11	\$153,822	Denied
Stork, Christian [Li, Yang]	Zinc's role in cerebral ischemia: interactions with Ca and mechanisms of damage	National Institutes of Health	04/08-03/11	\$122,916	Denied
Williams, Susan	Collaborative Research: Ecological and functional morphology of feeding in free-ranging mantled howling monkeys	National Science Foundation	05/08-12/08	\$6,200	Funded
Williams, Robert L. II* [Howell, John]	Extension of the virtual haptic back for advanced palpatory diagnosis with motion testing	American Osteopathic Association	01/08-12/09	\$20,000	Denied
Williams, Robert L. II* [Howell, John]	Haptic modules for palpatory diagnosis training	Brentwood Foundation	01/08-12/09	\$10,236	Funded
Williams, Robert L. II* [Burns, Janet] [Clark, Brian] [Eland, David] [Howell, John]	Lumbar muscle compliance and edema in low-back pain and spinal manipulation	National Institutes of Health	12/08-11/10	\$137,913	Denied
Wilson, Thad	In vivo characterization of agonist-induced sweating in humans	National Institutes of Health	04/09-03/12	\$221,250	Pending

* PI is not affiliated with OUCOM

TOTAL SUBMITTED:
TOTAL FUNDED:
TOTAL PENDING:

\$9,839,769
\$564,861
\$2,021,613

FY 2008 Active Research Grants

Principal Investigator [Co-Investigator]	Agency	Title	Period	Received in 2007-08	Total award to COM
Akbar, Huzoor	American Heart Association	Role and mechanism of action of Rac GTPases in regulation of platelet function	07/05-12/07	\$0	\$121,000
Berryman, Mark	National Institutes of Health	Role of Clic in epithelial morphogenesis	04/08-03/10	\$154,875	\$154,875
Blazyk, Jack [Biegalko, Bonita - 10%]	National Institutes of Health	Design of Novel Linear Cationic Peptides	08/06-07/09	\$0	\$220,500
Coschigano, Karen [Hikida, Robert - 5%] [Malgor, Ramiro - 10%]	National Institutes of Health	Cross-talk between growth hormone and inflammation pathways in kidney damage	03/08-03/10	\$221,250	\$221,250
Eastman, Joseph	National Science Foundation	Biodiversity, Buoyancy and Morphological Studies of Non-Antarctic Nototheniid Fishes	04/05-03/08	\$0	\$149,563
Grijalva, Mario	Catholic University - Ecuador	Research Capability Strengthening of Catholic University of Ecuador	12/05-06/08	\$0	\$24,285
Grijalva, Mario	Children's Heartlink	Pilot program for the Chagas disease control in Loja Province, Ecuador	05/07-04/08	\$0	\$17,216
Grijalva, Mario	Catholic University - Ecuador	Research Capability Strengthening of Catholic University of Ecuador	11/06-11/08	\$9,553	\$9,553
Grijalva, Mario	National Institutes of Health	Characterization of Trypanosoma Cruzi in Southern Ecuador	04/08-03/10	\$181,655	\$181,655
Grijalva, Mario	Catholic University - Ecuador	Strengthening of Catholic University of Ecuador	04/08-06/10	\$30,000	\$30,000
Grijalva, Mario	Children's Heartlink	Continuation of Pilot Chagas Disease Control Program in Loja Province, Ecuador	05/08-04/09	\$20,000	\$20,000
Grijalva, Mario	Catholic University - Ecuador	Strengthening of Catholic University of Ecuador	11/07-11/08	\$3,150	\$3,150
Howell, John	Osteopathic Heritage Foundation	The Virtual Haptic Back for Osteopathic Training	10/02-10/07	\$0	\$870,215
Howell, John [Clark, Brian - 40%] [Eland, David - 10%] [Walkowski, Stevan - 2%]	Osteopathic Heritage Foundation	A Pilot Magnetic Resonance Imaging (MRI) Study of Osteopathic Manipulative Treatment (OMT) of Acute Low Back Pain	08/07-08/08	\$39,000	\$39,000
Ice, Gillian	National Science Foundation	Gender, Caregiving and Nutrition among Luo Grandparents	08/05-07/08	\$0	\$265,000
Inman, Sharon [Nowak, Felicia - 50%]	National Institutes of Health	Antioxidants on Development of diabetic Nephropathy	01/06-12/08	\$0	\$217,303

FY 2008 Active Research Grants

Kopchick, John	Southern Illinois University - National Institutes of Health	Interaction of Caloric Restriction with Longevity Genes	09/06-08/11	\$45,276	\$226,379
Kopchick, John	Aarhus University Hospital	Proteomic analysis of serum exposed to GH: a future assay for detection of GH doping	01/07-12/09	\$80,000	\$240,000
Kopchick, John	National Institutes of Health	Creation and Characterization of GH Binding Protein Gene Disrupted Mice	07/07-06/10	\$220,500	\$220,500
Kopchick, John	Pfizer	Assay for GH Activity	01/07-12/07	\$0	\$110,946
Kopchick, John	Diathegen	Glyco GH, GH Antagonists and Members of GH Family: Production and Characterization	07/05-12/07	\$0	\$433,234
Li, Yang	National Institutes of Health	Elevated zinc in ischemia and reperfusion	04/06-03/08	\$0	\$220,500
Li, Yang	National Institutes of Health	Vesicular Zinc of Recurrent Mossy Fiber in Epilepsy	09/07-08/09	\$220,500	\$220,500
O'Connor, Patrick [Stevens, Nancy - 40%]	National Science Foundation	Closing the African gap-Cretaceous and paleogene paleontology in the Rukwas rift basin, SW Tanzania	08/06-08/08	\$111,834	\$245,208
O'Connor, Patrick	Yomiuri Group	CT Scanning Madagascar Fossils for Exhibit and Symposium at the National Museum of Japan	04/08-03/09	\$6,275	\$6,275
Reilly, Stephen* [Biknevicius, Audrone - 34%]	National Science Foundation	Locomotor Constraints & Innovations in Primitive Mammals	08/05-07/08	\$0	\$123,503
Stevens, Nancy [O'Connor, Patrick - 45%]	National Geographic Society	A view from both sides of the K-T boundary: cretaceous and paleontology of the Rukwa Basin, southwestern Tanzania	08/06-08/07	\$0	\$18,490
Williams, Robert L. II* [Burns, Janet - 5%] [Howell, John - 5%]	Brentwood Foundation	Haptic Modules for Palpatory Diagnosis Training	01/08-12/09	\$5,999	\$10,236
Williams, Susan	National Science Foundation	Ecological and functional morphology of feeding in free-ranging mantled howling monkeys	05/08-12/08	\$6,200	\$6,200
Williams, Susan	National Science Foundation	Craniofacial Biomechanics and symphyseal function in camelids: In Vivo and Comparative Studies in form and function	07/05-07/08	\$0	\$181,276

FY 2008 Active Research Grants

Williams, Susan	National Science Foundation	Collaborative Research: Ecological and functional morphology of feeding in the free-ranging mantled howling monkeys	09/07-08/09	\$50,542	\$91,784
Witmer, Larry	National Science Foundation	Brain Evolution in archosaurs: New implications for scaling, function and evolution of the modern conditions in birds and crocodylians	07/05-06/08	\$0	\$171,262
			TOTAL:	\$1,406,609	\$5,070,858

* indicates PI is not affiliated with OU-COM

RSAC proposals AY 2007-2008

PI	TITLE	CAT	DURATION	AMT. REQUESTED	AMT. FUNDED
Akbar, Huzoor	Anti-platelet actions of novel insulin mimetic molecules	S	7/1/07-6/30/08	\$6,500.00	(\$6,500.00)
Akbar, Huzoor	33rd FEBS Congress/11th IUBMB Conference (Travel)	T	5/23/08-6/30/08	\$637.00	(\$637.00)
Berryman, Mark	Biology of the Inner Ear: Experimental and Analytical Approaches (Course)	T	8/2/07-6/30/08	\$366.00	(\$366.00)
Chen, Xiao	Glucose transport inducing activity of antidiabetic compounds in muscle cells	S	7/1/07-6/30/08	\$6,475.00	(\$6,500.00)
Coschigano, Karen	Investigating the Role of STAT5a/b in Diabetic Nephropathy	S	7/1/07-6/30/09	\$6,500.00	(\$6,500.00)
Goodrum, Ken	Mechanisms of Interleukin-1 β Antagonism of Penicillin Efficacy Against Group B Streptococcal Infection	S	7/1/07-6/30/08	\$6,500.00	(\$6,500.00)
Grijalva, Mario	Household Risk Factors for <i>Trypanosoma Cruzi</i> Seropositivity in Two Geographic Regions of Ecuador	P	7/1/07-6/30/08	\$90.00	(\$90.00)
Howell, John, Eland, David, Burns, Janet, & Clark, Brian	Delta $\text{\textcircled{R}}$ Haptic Device from Force Dimension	E*	N/A	\$4,000.00	\$0.00
Kopchick, John	Role CIDE-A in Liver Steatosis	S	N/A	\$6,314.00	\$0.00
Lee, Andrew	Society of Vertebrate Paleontology 67th Annual Meeting (Conference Travel)	T	9/13/07-6/30/08	\$1,381.58	(\$1,381.58)
Malgor, Ramiro	Wnt5a is Expressed in Murine and Human Atherosclerotic Lesions (Publication)	P	6/10/08-6/30/09	\$890.00	(\$890.00)
Nowak, Felicia	90th Annual Meeting of the Endocrine Society	T	10/19/07-6/30/08	\$2,000.00	(\$1,000.00)
O'Connor, Patrick	Society for Integrative and Comparative Biology (Travel)	T	10/19/07-6/30/08	\$1,305.00	(\$652.50)
Patel, Biren	Society of Vertebrate Paleontology 67th Annual Meeting (Conference Travel)	T	8/29/07-6/30/08	\$1,012.00	(\$1,012.00)
Romoser, Bill	Ohio Mosquito Control Association Fall Conference (Travel)	T	N/A	\$300.00	\$0.00
Romoser, Bill	56th Annual Meeting of the American Society of Tropical Medicine & Hygiene	T	10/12/07-6/30/08	\$1,150.00	(\$900.00)
Stevens, Nancy	Society of Vertebrate Paleontology Meetings (Conference Travel)	T	10/12/07-6/30/08	\$1,394.00	(\$1,394.00)
Stevens, Nancy	Public Library of Science - ONE (Publication)	P	4/24-6/30/08	\$500.00	(\$500.00)
Williams, Susan	International Congress on Vertebrate Morphology (Conference Travel)	T	7/1/07-6/30/08	\$1,819.00	(\$1,819.00)

\$49,133.58 **(\$36,642.08)**

2. Other Internal Sources (2007)

Principal Investigator	Activity	Source	Amount
Brian Clark	Safety of blood flow restricted resistance exercise.	OURC	\$8,000
Susan Williams (Audrone Biknevicus, CoPI)	Large animal research and housing facility	Ohio University, 1804 Fund	\$50,000
Xiaozhuo Chen	Funding for 1 undergraduate student fellowship and 1 PhD student fellowship	AHRI/DRI	\$1,000/\$9,000
Xiaozhuo Chen	Novel anti-diabetic compounds with enhanced glucose transport inducing activity.	AHRI/DRI	\$6,000
Karen Coschigano	Funding for 1 undergraduate student fellowship	AHRI/DRI	\$1,000
Karen Coschigano	“Cross-talk between growth hormone and inflammation pathways in kidney damage”	AHRI/DRI	\$10,000
Leonard Kohn	Merging BNTT/BMIT/ARHI-diabetes research initiatives.	Ohio University NBTI Initiative	\$6,000,000 (6 yrs.)
Felicia Nowak	Funding for 1 undergraduate student fellowship and 1 graduate student	ARHI/DRI	\$1,000/\$9,000
Felicia Nowak	“Expression of preoptic regulatory factor-2 (PORF- 2) in the kidneys of Zucker rats: a putative factor for diabetic nephropathy”	ARHI/DRI	\$6,000

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.

Mark Berryman:

1. Attended a 2 week intensive research training course at MBL in Woods Hole entitled "Biology of the Inner Ear; Experimental and Analytical Approaches."
2. Spent 3 days as visiting scientist at Dr. Bechara Kachar's laboratory at NIH preparing ear samples for microscopic analysis.

Bonita Biegalko:

1. Direction of Rico Rana, Visiting Faculty member

Audrone Biknevičius:

1. 8-week research trip to University of Queensland, Australia to study locomotor biodynamics of monotremes and marsupials.

Jack Blazyk:

1. This year, I established collaborations with Prof. Mei Hong at Iowa State University to apply solid-state NMR techniques to probe intermolecular interactions of labeled versions of our antimicrobial peptides and with Prof. Ralf Hoffmann at University of Leipzig to develop a new variety of antimicrobial peptides.

Xiaozhuo Chen:

1. Internal oral presentations
 - a. BMS seminar – 4/9/2007 Anti-diabetic activity of novel small compound insulin mimetics
 - b. Chemistry and Biochemistry Department – seminar 2/26/07
 - c. DRI seminar series – 6/15/07
 - d. DRI – Nutrition seminar for medical professionals (Schwarz organized) 4/12/2007
 - e. EBI – Cincinnati U GRI retreat – seminar presentation – 8/31/07
 - f. EBI technology showcase – seminar presentation – 12/13/07
1. Internal poster presentations
 - a. DRI and BMIT retreat – two posters
 - b. Research Day (OU COM) – 2 posters
 - c. University Research Day (Convo) – 2 posters

Brian Clark:

1. Mini-Fellowship: Performed a Mini-Fellowship in Transcranial Magnetic Stimulation during September of 2007 in the Department of Neurology at Beth Israel Deaconess Medical Center of the Harvard University Medical School, Boston, MA
2. Laboratory Site Visit: Conducted a Laboratory Site Visit to Peter Cavanaugh's Laboratory in the Department of Biomedical Engineering at the Cleveland Clinic in February 2007.

Joe Eastman:

1. The Marcel Naseer Ali Award for Contributions to Aquatic Biology, Axelrod Institute of Ichthyology and College of Biological Science, University of Guelph, Ontario, Canada, November 14, 2007.

Mario Grijalva:

1. Conducted field research in 35 rural communities located in Loja and Manabí province, Ecuador
2. A small animal facility was completed in our Research Center in Ecuador.

Tobin Hieronymus:

1. Research team member, Rukwa Rift Basin Project, with Nancy Stevens and Patrick O'Connor (6/2/07-7/2/07)

Leonard Kohn:

1. Support for Grants by Junior Faculty Members
 - a. Susan G. Komen for the Cure: Investigator-Initiated Research Grant proposal "Therapeutic effect of phenylmethimazole, a specific toll-like receptor inhibitor, on breast cancer" submitted by Kelly McCall, PhD and Fabian Benencia, PhD.
 - b. R21: TLR in Type 2 diabetes by Kelly McCsll,

Yang Li:

1. Successfully submitted and received approval of IACUC protocol 'In vivo Stroke Model'
 - * We have four active IACUC protocols.
2. "The Good, the Bad, and 'the Ugly': Emerging Story of Zinc in the Brain" OUCOM research seminar series, April 6, 2007. Ohio University.
3. Mentoring two Graduate students for MCB program and Biological Sciences Program.
4. Mentoring a medical student in summer 2007 for Research and Scholarly Advancement Program (RSA, OUCOM).
5. Mentoring a medical student sponsored by Center of Excellence, OUCOM.
6. Mentoring undergraduate students including students from OU-HTC.
7. Participating OUCOM Research Day.
8. Participating OU Science Fair
9. Propose a symposium 'Zn²⁺ and Ca²⁺ interaction' for Society for Neuroscience meeting 2007.
10. Presentations in neuro-lunch and in joint seminar series (Depts. Biological Sciences and Biomedical Sciences). 2007

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 3 Ohio University graduate students (T. Hieronymus, E. Rasmusson, and V. Simons), 2 Michigan State University graduate students (A. Jerve and S. Ngasla) and 2 University of Dar es Salaam undergraduates (E. Masisi and W. Leonard).
2. Conducted 3-week (July-August) field expedition in northwestern Madagascar (Maevarano Formation).
3. Conducted 1-week (October) field expedition to southern Utah.
4. Conducted museum research at the following institutions: Museum of the Rockies (January 2007), Science Museum of Minnesota (February 2007), Malawi Division of Antiquities (May 2007).

Nancy Stevens:

1. Field research in newly discovered Paleogene deposits, as well as ongoing paleontology in Cretaceous deposits of the Rukwa Rift Basin of southwestern Tanzania.
2. Field research on Paleogene vertebrates in Hadramaut Region, Yemen.
3. Laboratory research on primate locomotor biomechanics of fauna in Cuc Phuong National Park, Vietnam and in Manombo Special Reserve, Madagascar.
4. Laboratory research on Cenozoic mammals from Dhofar, Oman.
5. Museum collections research: Kenyan National Museum, Nairobi, Kenya; Egyptian Geological Survey, Egypt; Smithsonian Institute, National Museum of Natural History, Washington, DC.

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 2007. 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. Faculty Development Activities

The office of faculty development continues to be involved in the department through individual professional development plans, workshops, regular professional development communiqués, evaluation reviews and regular meetings with the department head. Steve Davis, Ph.D. (OU-COM's Faculty Development Specialist) provided the following list of faculty development activities:

1. Monthly Faculty Development Notes:

- 12 Tip for Managing Email
- Active Lecturing Tips
- Teaching Wisdom
- Faculty Appreciated Attributes
- Techniques for Active Learning
- Mind Mapping
- Copyright and Plagiarism and Fair Use primer
- Better Beginnings: How to Start a Presentation
- Question Strategies “What are your Questions?”
- 2. Faculty Development module on Patient Safety, Cultural Competence and Evidence Based Medicine via HRSA grant
- 3. NBOME Test Item Writing workshop
- 4. 10 members of DBS serving as small group facilitators and attending the weekly facilitator’s
- 5. Other resources provided to the faculty:
 - Monthly medical journal indexes for: Academic Medicine, Medical Education, Family Medicine, Teaching and Learning in Medicine, Medical Teacher
 - International Association of Medical Science Educators (IAMSE) web cast Spring series

6. 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.)**

Huzoor Akber:

1. Elected member of the Central and Executive Committees of the Athens County Democratic Party.

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 (Jan-present).
2. Science in elementary school (~3hr).

Mary Kay Eastman:

1. Athens County Habitat for Humanity Board of Directors - Secretary
2. Athens County Habitat for Humanity Partnership Committee – Co-Chairman

Frank Horodyski:

1. Presentation at The Plains Elementary School for approx 60 children

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 (monthly).

Yang Li:

1. Judge, Ohio University Student Research and Creative Activity Fair (I assigned my technician Mr. Josh Ketterman and post-doctoral fellow Dr. Tian Dequan to the student research fair 2007 because I went to a national conference)
2. Judge, Southeastern Ohio Science Fair, Athens, OH (My students Christian Stork and Ashlie Arthur also participated in the event as student judges)

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. Service as chaperone for Athens HS Marching Band for some football games & for competition at Colerain HS in Cincinnati, OH; served as judge's assistant at the Annual Athens HS Band Festival fundraiser; chaperoned men's cabins at AHS band camp at Cedar Lakes in Ripley, WV; volunteer at Dinner Concert fundraiser committee for Athens HS Concert Band at Blue Gator restaurant.

Larry Witmer:

1. Extensive work with national and international media outlets involving television, radio, print, and internet stemming from various publications (e.g., *PLoS ONE*) and presentations. Also, filmed television documentaries with the History Channel, the Discovery Channel, and the National Geographic Channel, and was featured on National Public Radio.

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

Mark Berryman:

Department of Biomedical Sciences:

1. Cell Physiology Search Committee, member
2. Annual Review Committee, member
3. Cell Development Microbiology Committee for student progress member

College of Medicine:

1. Judge: OUCOM Research Day
2. Executive Committee, Secretary of Faculty & 1st Vice Chair of Faculty
3. Research & Scholarly Affairs Committee, member
4. Student Selection Committee, ad hoc interviewer

Ohio University:

1. Ohio University Radiation Safety Committee (2004-present, member): evaluate proposals
2. Ohio University Institutional Biosafety Committee (2004-present, member): evaluate proposals

Bonita Biegalko:

Department of Biomedical Sciences:

1. Medical Microbiologist Search Committee

College of Medicine:

1. CPC Steering Committee

Audrone Biknevičius:

Department of Biomedical Sciences:

1. Associate Chair, Biomedical Sciences
2. BMS Advisory Committee
3. Anatomical Sciences coordinator
4. HTC liaison

College of Medicine:

1. OU-COM's Women's Climate Study (co-chair); - The report was finalized in 11/2007, however, I continue to serve Dean Brose as part of a workgroup charged with evaluating the recommendations of the report.
2. Committee on Student Progress (CSP)
3. Research Day student poster judge
4. DVD project for recruitment (Admissions)

Ohio University:

1. OU New Faculty orientation

Jack Blazyk:

Department of Biomedical Sciences:

1. Promotion & Tenure Committee

College of Medicine:

1. CORE Research Committee
2. CPC Steering Committee
3. Executive Committee
4. Research and Scholarly Affairs Committee

5. Institutional representative for OU-COM at the AOA Research Conference

Ohio University:

1. Academic & Research Center Planning Committee
2. Tech Transfer Office Director Search Committee
3. Conflict of Interest Review Committee
4. Research and Creative Activities Implementation Team [Vision Ohio]
5. Research Deans Committee
6. 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. Member of Merit (Annual Review) Committee
2. Task force: PhD/DO, MS/DO program

College of Medicine:

1. Coordinator of Alternative and Chinese Medicine Project

Ohio University:

1. Graduate Chair of MCB Program
2. Committee member: IACUC (until September 2007)

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

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. Member of the Cell Physiology/Development search committee
2. BMS representative for the Cell, Developmental and Microbiology (small) section to the Bios Grad committee starting in July, 2006
3. Appointed to the BMS Social Committee November, 2007; helped organize the December holiday social

College Of Medicine:

1. Appointed member of the Research & Scholarly Affairs Committee starting in July, 2006

Ohio University:

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

Peter Coschigano:

Department of Biomedical Sciences:

1. Chair of Medical Microbiology search Jan-Sept (Murphy hire).
2. Advisory/Annual Review Committee.
3. P&T Committee (Li case) Sept-Dec

College of Medicine:

1. Student Selection Committee (winter 4 interview days, spring 1 interview day, summer 1 interview day, fall 5 interview days, plus alternate ranking meeting).
2. Dean's Evaluation Committee (5-10 hr total) Jan-May.
3. Executive Committee (1-1.5 hr meetings about twice/month) July-present.
4. COCA Standard 2 team member Dec-present.
5. Mission Statement Committee (2 1 hr meetings) Dec-present.

Ohio University:

1. Faculty Senate (At least monthly meetings ~3 hrs), plus P&T committee (weekly 2 hr meetings plus prep work up of at least 1 hr/week).
2. Task Force on Centers of Excellence in Graduate and Professional Education (weekly 1-2 hr meetings) Sept-Dec.

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

College of Medicine:

1. Promotion and Tenure Committee

Ohio University:

1. Ohio University Research Council

Kenneth Goodrum:**Department of Biomedical Sciences:**

1. Annual Review/Advisory Committee, Conducted Chair's Evaluation. (Jan – June 2007 only)
2. Medical Microbiology Faculty Search Committee
3. Immunology Faculty Search Committee
4. P&T Committee (Associate Level), **Chairperson**
5. RPAC Basic Science Liaison (Emergency Medicine)

College of Medicine:

1. CAC member
2. Student Selection Committee member
3. College Accreditation work group leader (COCA Standard 4:Faculty)
4. CPC Director Search Committee

Ohio University:

1. Institutional Biosafety Committee
2. Lab Safety Coordinator Search 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

Tobin Hieronymus:

1. Student Representative, Biological Sciences Graduate Committee (1/07-6/07)

Frank Horodyski:

Department of Biomedical Sciences:

1. Cell Physiology Search Committee
2. Systems Physiology Search Committee
3. Promotion and Tenure Committee
4. Merit Evaluation Committee (to June, 2007)

College of Medicine:

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

Ohio University:

1. Radiation Safety Committee
2. Judge, Ohio University Student and Research Creative Activity Fair

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

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. Member of Immunology Search Committee: Dr. Benencia

College of Medicine:

1. Chair, COM Dean Evaluation Committee
2. Chair: Membership and Nominations Committee
3. Member, Women Climate Study Committee
4. 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

Ohio University:

1. Member of Ohio University Interdisciplinary Council

Richard Klabunde:

Department of Biomedical Sciences:

1. Member of Physiology Search Committee

College of Medicine:

1. Chaired the Curriculum Advisory Committee until 6/30/07 – advised the Dean on COM curricular issues
2. Chaired CAC Testing Philosophy subcommittee.
3. Member of the CPC Steering Committee – coordinate and oversee CPC curriculum.
4. Member of CAC Task Force on Computerized Assessment.
5. Faculty advisor to students of the COM chapter of the Christian Medical & Dental Association.

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:

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
2. Graduate Committee Member of Physiology and Neuroscience Section
3. Interviewed prospective graduate students
4. Dissertation committee chair for 2 graduate students
5. Faculty supervisors of the PACE program
6. Program committee of MCB retreat (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

Felicia Nowak:

Department of Biomedical Sciences:

1. Member, Promotion and Tenure Committee. Reviewed dossier of one applicant for promotion and tenure.
2. Chair, Faculty Search Committee for Cell Physiologist/Developmental Biologist. Reviewed all 54 applications and, along with committee, ranked applicants. Invited six applicants to interview; four accepted. Met with all applicants. Conducted Chalk Talk hour with each applicant (these were very informative). Summarized applicant status and ranking for Human Resources.

College of Medicine:

1. Chair, OU-COM Promotion and Tenure Committee. Reviewed dossier of one applicant for promotion and tenure, collated committee review and comments for 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 (12), continued efforts to streamline the admission process, coordinated with Don Holzschu regarding student applications, continued efforts to recruit students to the program.

Patrick O'Connor:

Biomedical Sciences:

1. DBS Social Committee

College Of Medicine:

1. International Programs Advisory Committee
2. CAC/CPCSC

Ohio University:

1. Africa Studies Program, Advisory Board (since September 2006)
2. Biological Sciences Graduate Committee, member (April 2005 – present)
3. Perspectives Magazine—Advisory Committee, member (January 2006 – present)
4. Tropical Disease Institute, member (2003 – present)

Ed Rowland:

Department of Biomedical Sciences:

1. Chair

College of Medicine:

1. Executive Committee
2. Committee on Student Progress
3. CORE Research Committee
4. CORE Academic Steering Committee (CASC)
5. Student Selection Committee (interviewing)
6. Space Advisory Committee

Ohio University:

1. Search Committee for the Lab Safety Coordinator position, EHS
2. Review Committee for Five year Review of Edison Biotechnology Institute
3. Vision Ohio Research Implementation Team

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;

1. Biomedical Sciences Immunology Search Committee (Fall 2006-Spring 2007; member) –
2. Reviewed applications to successfully fill new faculty position in BMS.

College of Medicine:

1. Patient-Centered Continuum Director –continued program assessment and evaluation, monitored and improved curricular process and content, represented curriculum at college level, disseminated information about program to prospective and incoming students
2. PCSC Committee Chair–provided leadership to oversee admissions process and program development, including curricular maintenance and innovations, organized regular communication among clinical, biomedical and social medicine faculty.
3. Committee for Student Progress Member (2003-spring 2007; member) –participated in making recommendations to the Dean regarding student progress in OU-COM curricula.
4. Clinical and Community Experiences Committee (2003-7; member) –represented PCC in decision-making about early clinical and community contact experiences.
5. Clinical Anatomy Immersion Committee (Fall 2007; member) –represented PCC curriculum in decisions relating to new clinical curriculum for Year 3 students that will begin in 2009.
6. Admissions Committee (2004-7; substitute member) –acted as an alternate to fill in for student Interviewers.
7. Curriculum Advisory Committee (2003-7; member) –represented PCC in the context of
8. OU-COM curricular directions, participated in the implementation of strategic plan.
9. Assessment and Validation of the Curriculum Subcommittee of the CAC(2004-7; member) – continued to work with staff in admissions and others to provide baseline information, gather PCC data, contributed to CPC/PCC test philosophy discussions.
10. International Programs Committee (2004-7; member) –continued to help develop consistent admissions process, establish legal and safety protocols for international medical research, education and service programs, and promote and publicize international research, educational and service activities.
11. Evaluation Coordinator Search committee (Spring-Summer 2007; member) –represented PCC curriculum in selecting a new evaluation coordinator for Academic Affairs.
12. Office of Institutional Research committee (Winter-Spring 2007; member) –represented PCC curriculum in establishing a new division for institutional research and evaluation.
13. Tropical Disease Institute Committee (2002-7; member) –assisted with development of travel grant and program evaluation paperwork.
14. Philosophy of Assessment Subcommittee of the CAC (2006-2007) –developed a rationale for student assessment at OU-COM.
15. COCA Mock Accreditation Faculty Team (2006-2007) –assisted in improving faculty awareness about various aspects of OUCOM curricula.

Ohio University:

1. African Studies Program (2004-present; advisory board member) –engaged in discussions related to international programming and policies at OU.
2. Search committee member, International Studies Director (Fall 2007-present; member) – invited by Provost Krendl to represent international research in this university search.

Susan Williams:

Department of Biomedical Sciences:

1. Search Committee Member, Anatomy Instructor

College of Medicine:

1. RSAC, Member and Chair (starting Fall, 2007)

Ohio University:

1. Member, Vice President for Research and Dean of the Graduate School Search Committee
2. Presentation to OU Vet-Club

Leon Wince:

Department of Biomedical Sciences:

1. Member, Pathogenic Microbiologist Search Committee (candidate hired)
2. Member, Merit Review Committee (July 1st to present)

College of Medicine:

1. Member, CAC (2 hr monthly meetings) through July 1st
2. 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

College of Medicine:

1. CORE General Surgery RPAC, Basic Science Liaison
2. CORE Otorhinolaryngology-Head & Neck Surgery RPAC, Basic Science Liaison

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 OUCOMBioengineering Program Steering Committee

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 2007, 30 MS and PhD students were conducting 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

CORE Research Committee:

Ed Rowland

CORE Academic Steering Committee:

Ed Rowland

Residency Program - RPAC Members/Participants

RPAC	Faculty Member/Participant
Emergency Medicine	Ken Goodrum
General Surgery	Larry Witmer
Orthopedics	Bob Staron
Otolaryngology, Head and Neck Surgery	Larry Witmer

3. Any teaching and or planning involvement members of your department have had with C.O.R.E.

a. Educational Presentations:

Name	Date	RPAC	Topic	Duration	Mode
Benencia	10/24/2007	EM	Immune response in infants	1 hour	ohiONE
Biknevicus	10/1/2007	EM	Functional Anatomy: Balance	1 hour	live
Johnson	3/28/2007	EM	Effects of Ethanol and Its Metabolites on Cells	1 hour	live
Staron	4/6/2007	Ortho	Clinical Anatomy of the Shoulder and Elbow	1 hour	ohiONE
Staron	8/3/2007	Ortho	Gross Anatomy of the Ankle/Foot	1 hour	ohiONE
Witmer	1/23/2007	GS	Clinical anatomy of the large intestine	1 hour	Video
Witmer	2/27/2007	GS	Clinical anatomy & histology of the upper gastrointestinal system	1 hour	Video
Witmer	3/27/2007	GS	Clinical anatomy of the biliary apparatus: relations & variations	1 hour	Video
Witmer	4/24/2007	GS	Clinical anatomy of the anterior abdominal wall in its relation to hernia	1 hour	live
Witmer	5/10/2007	ORL-HNS	Clinical anatomy of the larynx and associated neck structures	1 hour	live
Witmer	9/25/2007	GS	Clinical anatomy of the thyroid and adrenal glands	1 hour	live

b. The BMS Chair is a member of the C.O.R.E. Board and therefore participates in C.O.R.E. Board meetings.

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 Coshigano, Ramiro Malgor and Fabian Benecia.
 - 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.

- 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. BMS continues to have a minor role in the undergraduate curriculum of Biological Sciences (about 100 contact hours per year).
 - d. 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.

- 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)

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)

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.

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.