University of South Alabama
College of Medicine
Teaching • Research • Service

ANNUAL REPORT
October 1, 2008 through September 30, 2009
ANNUAL REPORT
UNIVERSITY OF SOUTH ALABAMA
COLLEGE OF MEDICINE

October 1, 2008 through September 30, 2009
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FOREWORD

The Annual Report of the USA College of Medicine reviews the achievements of faculty, students, residents, and staff in teaching, research, patient care, and community service activities during the 2008-09 academic year. Dr. William O. Richards, Ingram Professor of Surgical Sciences at Vanderbilt University was recruited to head our Department of Surgery; Dr. A. Michele Schuler, D.V.M., Ph.D. was appointed Director and Head Veterinarian of our Biological Resources Laboratories. Despite significant challenges in funding, new faculty were added in basic science and clinical departments to strengthen our educational, research and patient care programs. Our medical students continue to perform well on Board exams and to attract good residency positions at excellent institutions both inside and outside the State. A new Clinical Simulation Laboratory was completed at the USA Medical Center. This facility, together with another excellent facility at Children’s and Women’s Hospital, places us in a strong position to exploit this novel technology in the training of students and residents. The Biomedical Library has moved from the Mastin Building to the 3rd floor of the hospital and has been renamed the Health Information Resource Center with the addition of a consumer health collection. Goals for the 2009-10 year include the completion of a comprehensive self-study in preparation for a LCME Accreditation Site Visit in September, 2010; evaluation of multiple out-patient clinical practice sites for potential consolidation; continued assessment of strategies to deal effectively with the significant budgetary cuts in University and Hospital appropriations we have experienced within the last two years; assess the impact Health Care Reform initiatives might have on the reimbursement for patient care. Despite these formidable challenges, the faculty, staff, and administration will continue to strive to maintain excellence in our programs.

Samuel J. Strada, Ph.D.
Dean
University of South Alabama
College of Medicine
2008-2009
Summary of Scholarly Activities
Department of Biochemistry & Molecular Biology

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


Honkanen RE. Protein phosphatase inhibitors at the dawn of a clinical era. EHRLICH II: 2nd World Conference on Magic Bullets 2008 Oct 3-5; Nurnberg, Germany. New Drug Concepts p.144.


Tran T, Tam J, Teoh C, Wong L, Chong O, Leung B, McNeill K, Gerthoffer WT, Unruh H, Halayko A. Acquisition of airway smooth muscle cells towards a contractile phenotype is associated with increased cell survival signaling. Am J Respir Crit Care Med 2009 Apr;179:A3890.

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Barik S. Invited speaker: Translational research in biomedicine. Signature Interdisciplinary Research Program on Allergy, Immunology and Infectious Diseases, University of South Florida; 2009 Aug 13; Tampa, FL.
Barik S. Invited speaker. Viral manipulation of the host RNA interference machinery. University of South Florida; 2009 Aug 13; Tampa, FL.


Honkanen R. Invited speaker. Inhibitors of Serine/Threonin Protein Phosphatases at the dawn of a clinical era. EHRLICH II – 2nd World Conference on Magic Bullets; 2008 Oct 3-5; Nurnberg, Germany.

Rocic P. Invited speaker. Regulation of coronary collateral growth by AT 1R-mediated and redox-sensitive signaling. Medical College of Georgia; 2008 Nov 19-21; Augusta, GA.


Rocic P. Invited speaker. How to measure coronary collateral function in rodents. American Heart Association Scientific Sessions 2008; 2008 Nov 8-12; New Orleans, LA.

V. NATIONAL PROFESSIONAL RECOGNITION

Sailen Barik, Permanent Member, Standing NIH Study Section: Virology-B, 2006-2010; Associate Editor, BMC Microbiology.

William T. Gerthoffer, Peer Review Panel Member, American Heart Southeastern Affiliate; Reviewer, NIH Challenge Grants Panel 19 (Lung Biology); Reviewer, NIH Challenge Grants Panel 20 (Vascular Biology); Editorial Board Member, American Journal of Physiology: Cell Physiology; Editorial Board Member, American Journal of Physiology: Lung Cell and Molecular; Editorial Board Member, Cell Health and Cytoskeleton; Member, Planning Committee, Respiratory Structure and Function Assembly, American Thoracic Society, 2008.

Sachin A. Gupte, Editorial Board Member, American Journal of Physiology: Heart and Circulation; Reviewer, American Journal of Physiology: Antioxidant & Redox Signaling; Reviewer, American Journal of Hypertension: Free Radical Biology & Medicine.

Richard E. Honkanen, Reviewer, NIH Roadmap Initiative (Assay Development for High Throughput Molecular Screening); Chair of the Tumor Biochemistry and Endocrinology Study Section of the American Cancer Society; Editorial Board Member, The Open Enzyme Inhibition Journal.
Petra Rocic, Reviewer, American Heart Association: Blood Pressure Regulation and Vascular Biology II; Reviewer, American Heart Association: Vascular Wall Biology; Editorial Board Member, American Journal of Physiology: Heart and Circulatory Physiology.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The department continues to undergo changes in personnel that were initiated in September, 2007 when Dr. William T. Gerthoffer assumed the Chair of the department. Dr. Donna Cioffi was recruited to join the department as an Assistant Professor. Her appointment began September 1, 2009. Dr. Cioffi brings an active research effort to the department that focuses on ion channels and proteins that control vascular endothelial permeability.

Additional searches to fill vacant faculty positions are ongoing, and there has been some turnover of existing personnel. Dr. Vira Bitko, Research Assistant Professor, relocated to Memphis, TN where she assumed a research position at a biotechnology firm. Several postdoctoral fellows (Drs. Manoj Tyagi and James Byrd) completed fellowships. Two new postdoctoral fellows were added to the department – Dr. Dhwajbahdur Rawat (Gupte Lab) and Dr. Kathy Bonness (Rocic Lab). Dr. Bonness completed her graduate work with Dr. Honkanen in the department in 2008. Dr. Roger Lane announced his retirement after 32 years of service to the department during which time he served as a researcher and highly respected medical educator.

With the addition of new faculty members and a refocusing of effort by current faculty members the style and content of the medical biochemistry course is in transition to a format more consistent with current trends in medical education. In addition, the contribution of the department to graduate student education has expanded. New faculty members (Gerthoffer, Gupte, Rocic and Cioffi) are all contributing to multiple IDL and departmental graduate courses. Dr. Gerthoffer has contributed to reorganization of IDL581 (Fundamentals of Basic Medical Sciences). Five new graduate students were recruited to train with department faculty members (Gerthoffer, Gupte, Rocic, Cioffi). Three current graduate students received extramural support for their training from the Graduate Research Scholar Program (GRSP) of ACHE.

The department also offers a summer biochemistry course as part of the DREAM program which targets disadvantaged undergraduate students interested in a medical career. Dr. Roger Lane served as course coordinator, and Drs. Gerthoffer, Honkanen and Gupte contributed lectures. Several labs also hosted second year medical students participating in the College of Medicine summer research program.
The level of research activity and research funding continued an upward trend due to new hires and new funding obtained by junior faculty members. Existing successful research programs directed by Drs. S. Barik (respiratory syncytial virus) and R. Honkanen (Protein phosphatase-5) and Gethoffer (small heat shock proteins) continue to be supported by NIH RO1 grants. Newly recruited faculty members are all supported by RO1 or R00 grants and supplements from NIH. Departmental research funding, submission of new grant applications and publication rate has continued to improve in the past year due in part to successful recruiting and in part due to ongoing active research by senior faculty members. The number of research awards has increased from 3 funded projects in 2006-2007 to 13 funded projects in 2008-2009. The enhanced level of scholarly activity also correlates positively with increasing numbers of invited presentations at national and international scientific conferences, participation on national and regional peer review committees and memberships on journal editorial boards. With continued expansion and development of recently hired faculty members the department anticipates further positive trends in medical and graduate education and scholarly activity in the near future.
2008-2009
Summary of Scholarly Activities
Department of Cell Biology & Neuroscience

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


Shevde LA, Riker AI. Current concepts in biobanking: development and implementation of a tissue repository. Front Biosci (Schol Ed) 2009 Jun 1;1:188-93.


II. PUBLISHED ABSTRACTS


Creighton J, Sayner S, Alexeyev M, Insel PA. Adenosine monophosphate kinase (AMPK) and cell-cell adhesion: a role for AMPK in pulmonary microvascular endothelial barrier function. FASEB J 2009 Apr;23:964.4.


Kayes SL. Teaching of biology with the virtual microscope. 48th Annual Southeastern Society of Parasitologists; 2009 Apr 15-17; Murray State University, Murray, KY. Abstract no. 27.


Sayner SL, Prassain N, Balczon R, Stevens T. Membrane and soluble adenyl cyclases generate discrete cAMP pools which discriminate between cytoskeletal binding proteins to regulate endothelial barrier. FASEB J 2009 Apr;23:965.16.

Sayner SL, Stevens T, Cooper DMF. Selective targeting of cAMP signaling components and adhesion molecules to caveolin-enriched fractions of pulmonary microvascular endothelial cells (PMVECs). FASEB J 2009 Apr;23:815.3.

Sayner SL, Stevens T. Pulmonary microvascular endothelial cells expresses an endogenous bicarbonate-sensitive adenyl cyclase that controls cytosolic cAMP. Proceedings from American Thoracic Society International Conference; 2009 May 15-20; San Diego, CA. Abstract no. 213.


III. PUBLISHED BOOKS


IV. INVITED PRESENTATIONS


Lin W. Invited speaker. Growth arrest and DNA damage 34 inactivation delays the onset of EAE in mice. National Multiple Sclerosis Society Tykeson Fellows Conference; 2008 Nov 4-7; Chicago, IL.

Savner SL. Invited speaker. Selective targeting of cAMP signaling components and adhesion molecules to caveolin-enriched fractions of pulmonary microvascular endothelial cells. Experimental Biology; 2009 Apr 18-22; New Orleans LA.

Tan M. Invited speaker. Targeting cancer therapy. 4th China Medical Biotech Forum; 2009 Aug 8-10; Dalian, China.

Wilson GL, Rachek LJ. Invited speakers. Different effects of saturated and unsaturated free fatty acids on mitochondrial DNA damage, mitochondrial dysfunction, apoptosis and insulin resistance in rat skeletal muscle cells. 69th Annual Meeting of the American Diabetes Association; 2009 Jun 5-9; New Orleans, LA.
V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Ronald Balczon served as Ad Hoc reviewer for the Lytmos Group LLC.

Dr. Phillip Fields served on the Society for the Study of Reproduction Awards Committee.

Dr. Anthony Gard served as an Ad Hoc reviewer for Journal of Neuroscience.

Dr. Valentina Grishko served as an invited reviewer for European Journal of Pharmacology, Arthritis and Rheumatism, Free Radical Biology and Medicine, Osteoarthritis and Cartilage, Tohoku Journal of Experimental Medicine.

Dr. Steve Kayes served as a Member of the Business Advisory Committee, Strategic Planning Committee in the American Society of Parasitologists; served as a Member of the Resolutions Committee in the Southeastern Society of Parasitologists; served as a Moderator for the Bionet Parasitology Listserve at the University of Indiana; served as a Member of the Board for the Alabama Department of Rehabilitation Services.

Dr. Susan LeDoux served as a Member of the NIEHS Environmental Health Sciences Review Committee; served on the Editorial Board, DNA Repair; served as President, Mitochondrial Research Society; was a Member of the LCME Site Visit Team at the University of South Carolina; was a Member of the Cell and Developmental Biology and Biochemistry Item Writing Committee of NBME.

Dr. Wensheng Lin served as an ad hoc reviewer for Laboratory Investigation, Expert Review of Neurotherapeutics, CNS Neuroscience & Therapeutics.

Dr. Sarah Sayner served as an ad hoc reviewer for AJP Lung.

Dr. Lalita Shevde-Samant served on the Department of Defense Breast Cancer Research Program Study Section.

Dr. Ming Tan served as a reviewer for Cancer Research, Clinical Cancer Research, Molecular Cancer Therapeutics, Molecular Cancer Research, Molecular Carcinogenesis.

Dr. Glenn Wilson served on the Editorial Board of Molecular Development and Aging; served on the NIAAA Study Section; served on the NIEHS Study Section; served on the NIEHS Outstanding New Environmental Scientist (ONES) Study Section; served on the NIEHS Superfund Review.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department places strong emphasis on both teaching and research. To enhance its research efforts, the Department sponsored visits from three distinguished scientists to meet with members in the Department and to present seminars on their research.

Dr. Charlene McQueen from Auburn University presented a seminar titled “Xenobiotic induced changes in lipid homeostasis: Implications for fatty liver disease”, on September 18, 2008; Dr. Sonia Flores from the University of Colorado presented a seminar titled “Pulmonary arterial hypertension and HIV nef: From monkeys to humans”, on January 15, 2009; Dr. Mike Robbins from Wake Forest University presented a seminar titled “Radiation-induced brain injury: Pathogenesis and treatment” on March 26, 2009.

In the area of education, the Department continued to provide over 30% of the instruction given to medical students in the first two years. The mean scores of our first year medical students on the mini board in both Gross and Developmental Anatomy and Cell Biology and Histology exceeded the 70th percentile. For second year medical students, the Department played a leading role in presenting the Neuroscience course. Virtually all the problems that were experienced in this course when it was originally presented have been resolved. This is evidenced by the fact that the class average on the Neuroscience mini board was over the 90th percentile for the second straight year. Clearly, this has become one of the top Neuroscience courses in the country. Also, remedial courses in both Neuroscience and Gross Anatomy were presented for medical students in the summer. These courses were successful in helping specific students, predominantly from other schools, overcome their deficiencies. Also in the Medical School, faculty members from this Department taught Parasitology in the Medical Microbiology course and participated in the teaching of IDL I and IDL II, the Methods course and the Seminar course for first year graduate students. Moreover they taught in IDL 630 and 631 for more advanced students. In the area of resident training, a course on Pelvic Anatomy was provided for residents in the Department of Obstetrics and Gynecology. Additionally, Allied Health courses were presented on Gross Anatomy for both Physician’s Assistant students and Physical Therapy students, Histology for Biomedical Sciences students and Anatomy and Physiology for Biomedical Science students. Also, the Department presented two courses in the DREAM Program. The total teaching hours provided by the Department for the University was over 1360 hours.
In the area of community service, the Department expanded its efforts and provided health related education to 511 High School and Middle School students. Additionally, we played an integral part in the SCRUBS Program to attract students into the Medical Profession. The Department also presented a workshop for High School science teachers that was organized by the College of Education.

The Department is actively recruiting new faculty members and in the past year added two very talented young scientists. Dr. Sarah Sayner, a lung biologist, who did postdoctoral work in the Center for Lung Biology at the University of South Alabama and Dr. Xiangming Zha, a neuroscientist, who completed postdoctoral work at the University of Iowa.
I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. PRESENTATIONS

Lin W. Invited speaker. Growth arrest and DNA damage inactivation delays the onset of EAE in mice. National Multiple Sclerosis Society Tykeson Fellows Conference on Multiple Sclerosis; 2008 Nov 4-7; Chicago, IL.

Scammell JG. Invited speaker. Overexpression of FKB5 in a naturally occurring animal model of glucocorticoid resistance. FKB5 and Stress Are Associated with Depression and PTSD. 47th Annual Meeting of the American College of Neuropsychopharmacology; 2008 Dec 7-11; Scottsdale, AZ.
V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Jonathan G. Scammell serves on the Editorial Advisory Board of the Journal of Pharmacology and Experimental Therapeutics. He also served as a reviewer for Endocrinology, Endocrine, and the American Journal of Physiology. Dr. Scammell was invited to serve as a reviewer for American Recovery and Reinvestment Act (ARRA) Facility Improvement C06 and G20 Applications for the National Center for Research Resources of the National Institutes of Health.

Dr. A. Michele Schuler served as a reviewer for the Journal of Medical Primatology, Journal of the American Association of Laboratory Animal Science, Comparative Medicine, Journal of Zoo and Wildlife Medicine, and the American Journal of Physical Anthropology. Dr. Schuler serves as a consultant on animal care to the U.S. Air Force at the Clinical Research Laboratory at Keesler Air Force Base, MS, where she also serves as a voting member of their Animal Care and Use Committee. Dr. Schuler also received funding for the final two years of her Special Emphasis Research Career Award from the National Center for Research Resources of the National Institutes of Health.

Dr. Susan V. Gibson served as a reviewer for the Journal of Medical Primatology, Primates, and the American Journal of Primatology.

Dr. Wensheng Lin, joint appointee with the Department of Cell Biology and Neuroscience, served as a reviewer for Laboratory Investigation, Expert Review of Neurotherapeutics, and CNS Neuroscience & Therapeutics.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The faculty and staff of the Department of Comparative Medicine participate in service, education, and research in the university’s animal care and use program. During 2008-2009, the department received word that the program received full accreditation from the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC International). In addition, Dr. Schuler was named Director of University Biological Resources. The department continues to upgrade and maximize the use of facilities with the goal of enhancing our research capabilities for the benefit of investigators throughout the university.

The department supported the purchase of the Vevo high resolution ultrasound imaging system from VisualSonics and oversees its operation. The surgical skills laboratory was completed, and we look forward to expanding its role in the animal care and use program. In response to American Recovery and Reinvestment Act, the department helped develop plans for animal housing within proposed research facilities for the Center for Lung Biology, Laboratory of Infectious Diseases, and the Mitchell Cancer Institute.
In addition, we submitted proposals to support repair, renovation, and upgrade within the Biologic Research Laboratory. We continued our contract to provide consultant veterinary services to the laboratory animal research program at Keesler Air Force Base in Biloxi, MS.

The faculty continued their expansion of both formal and informal educational commitments within the department to technical staff, supervisors, and colleagues and outside the department to graduate students, postdoctoral fellows, and faculty. The department sponsored a series of special seminars and workshops by representatives of Charles Rivers Laboratories, Harlan Sprague Dawley, Inc., VisualSonics, and Auburn University’s Department of Poultry Science.
2008-2009
Summary of Scholarly Activities
Department of Emergency Medicine

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Ambrose M. Invited speaker. The VA disability system and the military history. Flying Physicians Annual Meeting; 2008 Oct 26-30; Pensacola, FL.


Pettyjohn FS. Invited speaker. Asthma and chronic obstructive diseases in aircrew - an aeromedical problem. 567th International Congress of Aviation and Space Medicine; 2009 Sep 8-11; Zagreb, Croatia.

V. NATIONAL PROFESSIONAL RECOGNITION

Michael R. Ambrose serves as a member of the Secretary of Veterans Affairs Advisory Committee for Former Prisoners of War.
Melissa W. Costello serves in the following positions: Member, Council on Medical Education for State of Alabama; American Medical Association, Young Physicians Section, House of Delegates Handbook Review Committee; Medical Director, National Disaster for Medical Services; AL-3 Disaster Medical Assistance Team and Urban Search and Rescue Team, City of Mobile Fire & Rescue/ Federal Emergency Management Agency, United States Department of Homeland Security; Assistant Medical Director of LifeFlight; Board of Directors (Mobile County) EMS; Board of Directors (Alabama Chapter), American College of Emergency Physicians; EMS Core Curriculum Committee, American College of Emergency Physicians; Councillor, Tactical Section, American College of Emergency Physicians; Medical Association State of Alabama, Chair, Young Physician Section; Medical Association, State of Alabama Council of Medical Education.

Alan E. Heins serves in the following positions: American College of Emergency Physicians Academic Affairs Committee; SAEM Membership Committee; Reviewer: Journal of Opioid Management; Journal of Pain Medicine; Annals of Emergency Medicine; Academic Emergency Medicine, EM Pain Line, American College of Emergency Physicians, Public Health and Injury Control (PHIC) Committee; Public Health and Injury Control (PHIC) Subcommittee Chair; Emergency Medicine Practice Committee (EMPC); Affairs Committee (AAC); Society for Academic Emergency Medicine, Membership Committee. Serves on Development Committee for Hope Center Clinic (Indigent Care) Fairhope, AL.

Frank S. Pettyjohn served in the following positions: Chairman, Department of Emergency Medicine; Cardiology Consultant to the Federal Aviation Administration; Board of Directors and Past-President, International Academy of Aviation and Space Medicine; Board of Directors, American College of Emergency Physicians (Alabama Chapter); Councillor, Air Medical Transport Section, American College of Emergency Physicians; Medical Director, Region 6 State of Alabama (Gulf Coast) EMS Region.

Michael L. Sternberg served in the following positions: Vice Chairman, Department of Emergency Medicine; Board of Directors, Southwest Alabama Emergency Medicine Services; Chairman, Bylaws Committee, American College of Emergency Physicians (Alabama Chapter); Public Relations Committee, American College of Emergency Physicians (Alabama Chapter); Board of Directors, American College of Emergency Physicians (Alabama Chapter).

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRAMS

The Department of Emergency Medicine continues to emphasize excellence in Clinical Emergency Medicine, education of the housestaff and medical students, and the ongoing academic development for the Faculty. The primary objective is to develop and implement broad-based educational programs utilizing bedside clinical teaching and advanced educational technologies.
The goal of acquiring a full Residency Program in Emergency Medicine continues. It is supported by the Dean, College of Medicine, Vice President for Health Sciences, and the Faculty. Recruitment of additional faculty is underway to maintain clinical capabilities, enhance the teaching program and provide the basis for the Emergency Medicine Residency Program.

**Education:** The Faculty of the Department of Emergency Medicine continues to emphasize education. Alan Heins, M.D., Melissa Costello, M.D. and Michael L. Sternberg, M.D. provide dedicated lectures for medical students in addition to participating in the Introduction to Clinical Medicine course for the second year medical students. The Emergency Medicine Interest Group is being reconstituted to further Emergency Medicine education. Medical students continue to voluntarily select the Emergency Medicine rotation as one of the most sought after training sites.

The Department of Emergency Medicine provides core faculty for the Introduction to Clinical Medicine course. This adds to the educational experience for the medical students and provides the initial interaction with the Emergency Medicine Attending Faculty. Alan E. Heins, M.D. directs the teaching activities for the third- and fourth-year medical student elective and the Acting Intern Program. Frank S. Pettyjohn, M.D. serves as Medical Director School of Continuing Education, EMS training providing education for Physicians, Medical Students and Emergency Medical Technicians.

**Recruiting Progress:** The recruiting program continues to be active with the goal of obtaining Emergency Medicine Residency Trained and Board Certified Emergency Medicine Physicians to meet the Emergency Medicine Residency Review Committee requirements.

**Faculty Development:** Melissa W. Costello, M.D. has been appointed Program Director for the Emergency Medicine Residency Program development. Alan E. Heins, M.D. has been appointed the Research Director for the Department of Emergency Medicine and completed an MPH degree from Emory University.

**Clinical Facilities:** During the 2008-2009 program year, the Department of Emergency Medicine continued to support the operations of the University of South Alabama Medical Center, Level I Trauma Center and Emergency Department. The Department is also responsible for providing Faculty support to the Children’s and Women’s Hospital Evaluation Center.

The Departmental offices are on the 10th floor of the University of South Alabama Medical Center. These facilities continue to be upgraded to include advanced audiovisual capabilities, 35mm and digital photographic laboratory, PowerPoint slide development and presentation production areas, and a multi-center computer learning system. A simulation laboratory has been constructed at the USA Medical Center. The overall computer support system in the University of South Alabama Medical Center Emergency
Department has implemented an upgraded hospital intranet providing ready access to laboratory data and x-ray. The ED has an updated computer and viewing screen for teleradiology which provides the same resolution as the Department of Radiology. A telemedicine capability is in the Emergency Medicine Conference Room to facilitate educational conferences by national and international experts and Grand Rounds.

The Department of Emergency Medicine continued to provide on-going support to the University of South Alabama Children's and Women's Hospital. Alan E. Heins, M.D. provided Attending coverage and is appointed Medical Director of the Children's Evaluation Center. Close coordination between the University of South Alabama Medical Center, Level I Trauma Center, and the Children's and Women's Evaluation Center has been maintained to provide rapid response for appropriate patient care and transfer requests. Coordination is also maintained between the Department of Obstetrics/Gynecology at the U.S.A. Children's and Women's Hospital and the U.S.A. Medical Center Emergency Department to provide rapid treatment capabilities for adult patients presenting to Children and Women's Hospital with acute medical or surgical conditions.

Research: The Division of Clinical Research entered the fourteenth year of operation. The primary clinical site has been relocated from the Medical Office Park Three at the Infirmary West Hospital Campus to the Moorer Building which is located on the University of South Alabama Medical Center Campus. The program is under the direction of the Principal Investigator, Frank S. Pettyjohn, M.D., with Afifa Halim-Kirolos, M.D., as the Coordinator of the Clinical Research Division. All members of the Attending Faculty of the Department of Emergency Medicine support the ongoing clinical research studies. Current projects cover a wide range of clinical areas, ranging from antihypertensive agent trials, dyslipidemic treatment trials, cardiovascular therapy and diabetic trials. This clinical research provides a unique opportunity, clinical support, and an educational location for the Department of Emergency Medicine.
2008-2009
Summary of Scholarly Activities
Department of Family Medicine

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Duffy RL. Invited speaker. Lessons learned from running a marathon. USA Medical Alumni Association Annual Meeting; 2009 Jun 6; Orange Beach, AL.

Linder MM. Invited speaker. Over use injuries. Alabama Academy of Family Physicians Annual Meeting; 2009 Jun 28; San Destin, FL.

Linder MM. Invited speaker. The shoulder exam. Alabama Academy of Family Physicians Annual Meeting; 2009 Jun 27; San Destin, FL.

Molokhia EA. Invited speaker. E-prescribing. The implementation of electronic prescribing in the family practice center and its impact on healthcare and patient safety. Mobile Chapter, Medical Group Management Association; 2009 Mar 18; Mobile, AL.

Perkins A. Invited speaker. How to read x-rays. Alabama Academy of Family Physicians Annual Meeting; 2009 Jun 27; San Destin, FL.

Perkins A. Invited speaker. Lipid management in women. University of South Alabama Department of Obstetrics and Gynecology 18th Annual OB/GYN Conference; 2009 Apr 3; Mobile, AL.

Perkins A. Invited speaker. Management of lipids. Alabama Primary Health Care Association 24th Annual Conference and Clinical Forum; 2009 Sep 30; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Allen Perkins was elected to the office of President of the Alabama Rural Health Association and continues to serve on the Board of Directors of the Alabama Academy of Family Physicians and the Alabama Academic Family Medicine Council. He is a member of the Communications and Technology Committee for the Association of Family Medicine Residency Directors and a member of the Program Committee for the Association of Departments of Family Medicine.

Ehab A. Molokhia continues to serve as Vice Chair of the Alabama Breastfeeding Committee whose mission is the promotion, support and protection of breastfeeding across Alabama.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Dr. Ehab Molokhia was promoted to the rank of Associate Professor.

Dr. Carol Motley and Dr. Allen Perkins were recognized by the College of Medicine Class of 2009 as Distinguished Faculty.

Dr. Michael Linder was honored by the Family Medicine graduating residents as “Clinical Teacher of the Year.”

Dr. Allen Perkins served as a reactor panelist at the 2009 annual meeting of the Association of Departments of Family Medicine in New Orleans supporting the integration of mental health in Family Medicine in the Alabama setting. He also served as a mentor for the Alabama-Mississippi Practice Enhancement Forum held in Tupelo in February and was a panel participant on the topic of “Teaching in a Community Setting” at the State Offices of Rural Health, Rural Health Policy (Region B) annual meeting in August.

Dr. Allen Perkins has been invited to serve as Guest Editor by Elsevier Publishing for an upcoming issue of Primary Care: Clinics in Office Practice on the topic of Rheumatology: A Survival Guide for the Primary Care Physician.
Dr. Frank deGruy, a former chair of the Department of Family Medicine who currently chairs the Department of Family Medicine at the University of Colorado Health Sciences Center, returned to the department from September 23-25 as Pfizer/AAFP Foundation Visiting Professor and served as mentor for the integration of mental health as part of the patient centered medical home. The major objective of this program was to begin educating family physicians and others in the Mobile community regarding transitioning their practices into “medical homes.” The Department’s educational curricula and community affiliations were explored within the context of the concepts of a Mental Health – Primary Care Medical Home.
2008-2009
Summary of Scholarly Activities
Department of Internal Medicine

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS

Abe K, Ito M, Koubsky K, Tayler MS, Gerthoffer WT, Fagan KA, McMurtry IF, Oka M. Imatinib mesylate (Gleevec) is a potent acute pulmonary vasodilator in rats. Am J Respir Crit Care Med 2009 Apr 1;179(Meeting Abstracts):A6251.


Barry CJ, Cioffi D, Stevens T. The Isoc channel is a critical determinant of inter-endothelial cell gap formation. FASEB J 2009 Apr;23:964.7.


Cioffi DL, Stevens T. Orai1 interacts with the endogenous endothelial Isoc channel both constitutively and dynamically. FASEB J 2009 Apr;23:964.11.


Sayner SL, Prasain N, Balczon R, Stevens T. Membrane and soluble adenyl cyclases generate discrete cAMP pools which discriminate between cytoskeletal binding proteins to regulate endothelial barrier. FASEB J 2009 Apr; 23:965.16.

Sayner SL, Stevens T, Cooper DMF. Selective targeting of cAMP signaling components and adhesion molecules to caveolin-enriched fractions of pulmonary microvascular endothelial cells. FASEB J 2009 Apr; 23:815.3.

Sayner SL, Stevens T. Pulmonary microvascular endothelial cells expresses an endogenous bicarbonate-sensitive adenyl cyclase that controls cytosolic cAMP. Am J Respir Crit Care Med 2009 Apr 1;179:A2328.


Viator RJ, Fouty BW. Aortic endothelial cells transport more glucose than pulmonary endothelial cells in vitro. FASEB J 2009 Apr;23:865.11. Available from: http://www.fasebj.org/content/vol23/1_Meeting Abstracts/


Xin W, Liu Y, Cohen MV, Downey JM, Rich TC. Regulation of basal cAMP levels in rabbit cardiomyocytes. FASEB J 2009 Apr;23:582.2.


Zhu B, Xu YC, Stevens T. FGF21-determined angiogenic phenotype of pulmonary endothelial cells. FASEB J 2009 Apr;23:965.3.

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Alvarez D. Invited speaker. NAP1-L1 determines the progenitor status of pulmonary endothelium. Experimental Biology International Meeting; 2009 Apr 18-22; New Orleans, LA.

Alvarez D. Invited speaker. On the hunt for restoring the pulmonary vascular barrier during ALI. Pulmonary Conference, University of Chicago; 2008 Nov 17; Chicago, IL.

Blair-Elortegui J. Invited speaker. Project on physician health habits. Southern Society of General Internal Medicine Meeting; 2009 Feb 13; New Orleans, LA.

Broughton W. Invited speaker. Narcolepsy: stumbling toward truth and the lowdown on central sleep apnea and hypopnea. ASRC Alabama/Florida Spring Fling; 2009 Mar 23; Perdido Beach, AL.


Cohen MV. Invited speaker. Mechanism of ischemic post conditioning. Heart Protection: Myocardial Protection from Bench to Clinical Application; 2009 May 31; Amman, Jordan.

Crook ED. Invited speaker. Look to Nephrology for solutions to our health system dilemma. Rutsky and Rostand Lecture, University of Alabama Birmingham; 2009 Jun 4; Birmingham, AL.

DiPalma JA. Invited speaker. Colonoscopy cleansing regimens. GI Conference, Baylor University; 2008 Dec 16; Dallas, TX.

DiPalma JA. Invited speaker. Poop cleanser. Colon case presentations. Walter Reed GI Symposium; 2009 Mar 20; McLean, VA.

Fagan KA. Invited speaker. Diagnosis and treatment of pulmonary arterial hypertension. Medical Grand Rounds - UAB Montgomery Baptist Hospital; 2009 Jan 22; Montgomery, AL.


Fagan KA. Invited speaker. Rho/rho-kinase inhibitors: novel approach in pulmonary arterial hypertension. Cardiology Grand Rounds UAB Cardiology Division Department of Medicine; 2009 Feb 18; Birmingham, AL.


Green WK. Invited Speaker. HIV update. Alabama Medicaid CE program; 2008 Oct 7; Mobile, AL.

Haynes J Jr. Invited speaker. Pulmonary/cardiac complications. NHLBI/NIH Sickle Cell Disease Workshop: Clinical Priorities and Clinical Trials; 2008 Oct 22; Bethesda, MD.

Haynes J Jr. Invited speaker. Adult care health services challenges. Sickle Cell Counselor Education and Certification Program. Sickle Cell Association of Alabama; 2008 Dec 3; Mobile, AL.

Herrera JL. Invited speaker. Screening, diagnosis and treatment of chronic Hepatitis C. Tallassee Community Hospital Staff Meeting; 2009 Apr 1; Tallassee, AL.

Herrera JL. Invited speaker. New trends in chronic HCV. Quarterly Gut Club Meeting, Covington Gastroenterologists; 2009 Apr 21; Covington, LA.

Kumar M. Invited speaker. Wall-eyed to the left: benign intracranial hypertension, pathophysiology and treatment. Southern Society of General Internal Medicine Meeting; 2009 Feb 13; New Orleans, LA.

McMurtry J. Invited speaker. Rarefaction. ATS Workshop on Angiogenesis in the Post-Natal Pulmonary Circulation: Fact or Fiction; 2009 May 16; San Diego, CA.

Townsley M. Invited speaker. TRPV4 and endothelial dysfunction in acute lung injury. GlaxoSmithKline; 2009 Jan 12; King of Prussia, PA.

Townsley M. Invited speaker. Ca$^{2+}$ entry via $\alpha_{1G}$ and TRPV4 channels differentially regulates alveolar capillary endothelium. Featured Topic on Pulmonary Ion Channels, Experimental Biology; 2009 Apr 21; New Orleans, LA.
Townsley M. Invited speaker. TRPV4 – a potential participant in the etiology of acute lung injury. Respiratory Initiative Seminar, Michigan State University; 2008 Oct 3; Lansing, MI.

Townsley M. Invited speaker. Transient receptor potential channels and regulation of lung endothelial permeability. Research Infrastructure in Minority Institutions Seminar Series, Alabama State University; 2008 Oct 21; Montgomery, AL.

Vande Waa JA. Invited Speaker. Foodborne illnesses. Alabama Society of Physician Assistants CME Conference; 2009 Mar 20; Fort Walton Beach, FL.

Vande Waa JA. Invited Speaker. Recommended adult immunization schedule. IM-Geriatric Seminar; Baptist Hospital in cooperation with Florida State University Medical School; 2009 Feb 19; Pensacola, FL.

Warner BA. Invited speaker. Case studies in diabetes. AOMA 19th Annual Emerald Coast Conference; 2009 Jul 19; San Destin, FL.

V. NATIONAL PROFESSIONAL RECOGNITION

Ronald C. Allison served in the following capacity: Member for the American Thoracic Society, Committee for Accreditation of Respiratory Care (CoARC) (national accrediting organization for Respiratory Care training programs), 2008 – present.

Diego F. Alvarez served in the following capacities: Trainee Representative, Steering Committee, Respiratory Section-American Physiological Society, Web Site Coordinator, Pulmonary Circulation Assembly-American Thoracic Society, Program Committee member, Pulmonary Circulation Assembly-American Thoracic Society, Planning Committee member, Pulmonary Circulation Assembly-American Thoracic Society, Program Committee member, Respiratory Section-American Physiological Society, Nominating Committee member, Respiratory Section-American Physiological Society, Peer reviewer for manuscripts submitted to American Journal of Physiology-Lung Cellular and Molecular Physiology, Microvascular Research, Translational Research, American Journal of Respiratory Cell and Molecular Biology, American Journal of Respiratory and Critical Care Medicine, American Thoracic Society Poster Discussion Session - Chair: The pulmonary vasculature in acute lung injury (Spring 2009).

Judy Blair-Elortegui served in the following capacities: Workshop reviewer. Southern Society of General Internal Medicine, Poster reviewer. Southern Society of General Internal Medicine.
Michael V. Cohen served in the following capacities: Editorial Board: Basic Research in Cardiology, American Heart Association study section: Region 4 Cardiac biology/regulation 2008 October, American Heart Association study section: Region 2 Cardiac Biology/regulation 2009 April.

Errol D. Crook served in the following capacities: Special emphasis panel, NCMHD, RIMI (P-20), Ad Hoc Grant Reviews RCMI Translational Research Network (RTRN) Small Grants Program, 2009, Manuscripts Reviewer for American Journal of the Medical Sciences, Journal of Investigative Medicine, Ethnicity and Disease, American Journal of Managed Care, Postgraduate Medicine, American Journal of Medicine, Diabetes Care, Medical Science Monitor, British Medical Journal and British Journal of Pharmacology 2007-2009.


Johnson Haynes Jr. served in the following capacities: “Madison Who’s Who Among Executives and Professionals” (2008-2009), University of South Alabama Distinguished Alumni and Service Award (2009), Keynote speaker May 5, 2009, “Tribute to Excellence” for Mobile County Public School Teachers Reception and Dinner.


Clara V. Massey served in the following capacities: Reaccreditation of the non-invasive cardiovascular laboratory, Alabama Primary Health Care Association – Wellness Panel for Cardiovascular Disease, Listed in “Best Doctors in America.”

Bassam Omar served as Manuscript Reviewer: Medical Education Online.

Troy Stevens served in the following capacities: Associate Editor, American Journal Physiology, Associate Editor, Microvascular Research, Editor, Experimental Biology Medicine, Study Section Chair, AHA Southeastern Region, Ad Hoc Reviewer, NIH, P30 Awards, Ad Hoc Reviewer, NIH, Challenge Grant Awards, Ad Hoc Reviewer, NIH, P01 Application, Natarajan, Long Range Planning Committee Chair, Pulmonary Circulation Assembly, ATS.

Mary L. Townsley served in the following capacities: Assistant Dean and Director, COM Office of Faculty Affairs; Director, Training Programs, Center for Lung Biology; Member, American Physiological Society, Fellow of the American Heart Association; NIH: Member, NHLBI T32 Study Section; ad Hoc review for special emphasis panel and RIBT; American Heart Association: Chair, Region IV Peer Review Steering Committee, Greater Southeast Affiliate Research Committee; Council on Cardiopulmonary, Perioperative and Critical Care (Past Chair: 2007-2009); Editorial Board of Microvascular Research. Reviewer: American Journal of Physiology, American Journal of Respiratory and Critical Care Medicine, Basic Research in Cardiology, Circulation Research, Journal of Pharmacology and Experimental Therapeutics, Bentham Scientific Publishers, Free Radicals in Biology and Medicine; Organizing Committee, 2008 Grover Conference.

Christina Voelkel served in the following capacities: Recipient of Band of Regional Leaders Workgroup Outreach Grant Program Award. Southern Society of General Internal Medicine, Abstract and poster reviewer. Southern Society of General Internal Medicine, Facilitator for Plenary session. Southern Society of General Internal Medicine.

Barry A. Warner listed in “America’s Top Physicians” by Consumers Research Council of America.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Education

The department has continued to receive excellent evaluations from medical students and residents for its educational activities. For over 10 consecutive years the Internal Medicine Clerkship has been recognized as the best clerkship for third year medical students. The Class of 2009 again honored the department with this award. Several of the departmental faculty was recognized with the red sash award for their educational efforts. Within the department Dr. T. J. Hundley was honored by the internal medicine house staff with the John Bass Award for Best Teacher.

Clearly, the department continues to meet its educational mission and is being recognized by its chief customer, the pupils, for success for this endeavor. Dr. John Bass has retired but continues to teach students and residents in conferences and on the wards. His dedication to medical education is a clear example of the department’s commitment to its primary mission.

Scholarly Efforts

The department has continued to be productive in scholarly achievements, particularly in the area of publications. Again, the Divisions of Gastroenterology, and Pulmonary and Critical Care had particularly successful years in this area. Collaborations of the latter division with the Center of Lung Biology remain fruitful. The department continues to have activity in the clinical investigation. The majority of these endeavors are pharmaceutically sponsored initiatives and many involve fellows as co-investigators. The residents have been active in scholarly activity primarily through case reports and presentations at regional meetings.

Service

The department continues to deliver excellent clinical service. In general, clinical activities have remained stable across the department. In addition to the University Hospitals, we continue our clinical activities at Infirmary West Hospital and the Mobile Infirmary Medical Center and began a collaboration on gastroenterology with Providence Hospital in the summer of 2009.

Departmental faculty continue to serve on editorial boards, as journal reviewers, on advisory boards and on grant review panels. Our faculty contribute to the Greater Mobile Community through individual service within organizations (faith-based, not for profit, disease oriented) and individual initiatives.
2008-2009
Summary of Scholarly Activities
Department of Medical Genetics

I. PUBLISHED JOURNAL ARTICLES AND BOOKS CHAPTERS

II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

37
IV. INVITED PRESENTATIONS


V. NATIONAL PROFESSIONAL RECOGNITION

Tian-Jian Chen, Ph.D., Editorial Board of Applied Immunohistochemistry and Molecular Morphology.

H. H. Hobart, Ph.D., Reviewer of American Journal of Medical Genetics.

W. Wertelecki, M.D., International Coordinator, OMNI-Net Ukraine; Associate Editor, Journal of Pediatrics and Neonatology; Member of the Academy of Sciences of Ukraine.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The COM II Medical Genetics Course continues to be upgraded, in particular by web-based supplemental materials. These materials were tested in 2009 and will become an integral part of the 2010 course. Also, each student had the task to review information on our IBIS website (http://www.ibis-birthdefects.org) on specific topics and produce recommendations. The 2009 testing of this approach warrants this strategy and materials to be expanded and formally incorporated into the 2010 course core curriculum. The 2009 course evaluation by the students again showed that the class rated the course as “very good” or “excellent.” USMLE Step 1 2009 scores in Genetics were again among the highest. For the 2010 course, we will further emphasize clinical scenarios that demonstrate practical applications of fundamental epigenetic concepts (genetics-teratology).

Regarding Clinical activities, these continue to provide opportunities for training medical and nursing students as well as residents (Pediatrics, Medicine and Pathology). Pediatric residents are offered a rotation to present topics on disabilities and genetic disorders during Pediatric Morning Rounds (most residents elect to participate, the rotation has earned high marks). Nursing students from the University of South Alabama, Troy University, and Wallace College also rotate through our clinics in Mobile and Montgomery.
Following the reconstruction of the space for Medical Genetics Laboratory and Clinic plus the acquisition of an up-to-date microscopic electronic Imaging System, the volume of services has rapidly risen. In the clinic, more than 800 patient-families have received comprehensive assessment and counseling. The Laboratory volume rose from 726 (January-July 2008) to 1329 (January-July 2009). Concurrently, service charges since October 2008 have risen monthly and the revenues for the last four months exceeded budget. Since November 2008, the Cytogenetics Laboratory is led by a new Director (Dr. H. Hobart). Steps are being taken to qualify the Laboratories for admission to the Children's Oncology Group Laboratory Network (COG), an important resource for the USA Pediatrics Hematology/Oncology team in terms of access to the latest treatments for leukemia and related disorders. Dr. Hobart supervised rotations by four Pathology residents. The new electronic imaging system facilitates onscreen analyses contributes to an enhanced accuracy and rapidity of reporting. The Diagnostic Molecular Genetics Laboratory expanded the array of diagnostic tests – microarray CGH analyses to define intellectual deficits and for prenatal diagnosis have significantly expanded the scope of applications. Research activities continue to be focused on causes of mental retardation. The Cytogenetic and Molecular Laboratories jointly have expanded the testing panels for Oncology to address the needs to categorize CLL, Lymphoma, and Myeloma, including the MDS/AML panel. The Laboratories underwent an inspection following which they were recertified by CLIA and CAP.

The Alabama Population Birth Defects Surveillance Program has been suspended for lack of extramural funding. Analysis of Alabama population cumulative data indentified malformation rates in some areas of the State that require further study. The first comprehensive analysis of population-based data in Chernobyl-impacted areas of Ukraine was completed. The analyses indicate higher than expected Neural Tube Defects rates, a cluster of conjoined twins and probably higher rates of microcephaly and microphthalmia in radiation-impacted regions. In addition, an NIH funded consortium of US Universities (University of California San Diego and U.C. Davis, New York SUNY, Indiana U., and Emory U.) has been conducting investigations of the impact of alcohol on the unborn in Northwest Ukraine. Impending prospective studies will focus on risk factors such as low dose ionizing radiation, alcohol consumption and folate deficiency impacts on human development.
I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


Audia JP. Characterization of two *Rickettsia prowazekii* phospholipase A homologues that exhibit interesting activation profiles. American Society for Rickettsiology 23rd Meeting; 2009 Aug 18; Hilton Head Island, SC. Abstract no. 133.


Lackey AM, Wood DO. Elucidation of the interactions between the host autophagic response and the intracellular pathogen *Rickettsia prowazekii*. American Society for Rickettsiology 23rd Meeting; 2009 Aug 18; Hilton Head Island, SC. Abstract no. 114.


III. PUBLISHED BOOKS


IV. INVITED PRESENTATIONS

Barrington RA. Invited speaker. Complexities of murine lupus as revealed by RasGRP1-deficiency. 20 years of Success Doing Science Together Conference Loyola University; 2009 May 29; Chicago, IL.
Foster JW. Invited speaker. When protons attack: how pathogenic and commensal strains of *E. coli* survive gastric acidity. Special Seminar University of South Florida; 2009 Feb 27; Tampa Bay, FL.

Winkler HH. Invited speaker. Rickettsial phospholipase A2. DMP Seminar Series Kansas State University; 2008 Oct 16; Manhattan, KS.

Wood DO. Invited speaker. Presentation on ASM membership as chair of the ASM membership committee. Association of Medical School Microbiology and Immunology Chairs Meeting; 2009 Jan 21; Ixtapa, Mexico.

V. NATIONAL PROFESSIONAL RECOGNITION

**Dr. Paul J. Brett** is ad hoc Reviewer for the journals of *Microbiology, Cellular Immunology, Infection and Immunity, Clinical and Vaccine Immunology, Applied and Environmental Microbiology,* and *Journal of Clinical Microbiology.* He also served as ad hoc grant reviewer for the Defense Threat Reduction Agency (DTRA) Chemical and Biological Defense Program, and the American Heart Association (AHA).

**Dr. Joseph W. Brewer** served as a reviewer for the National Science Foundation Graduate Research Fellowship Program: Microbiology and Cell Biology Panel. He served as a peer reviewer of grant proposals for the American Heart Association, Region 4, Spring Immunology and Virology Review Committee and as an ad hoc reviewer for the Austrian Science Fund, START Award Program. **Dr. Brewer** served as an ad hoc reviewer for scientific journals including *Science, Proceedings of the National Academy of Sciences, U.S.A.*, *Journal of Cell Science, PLoS One,* and the *Journal of Cellular Biochemistry.*

**Dr. Mary N. Burtnick** served as ad hoc reviewer for the Defense Threat Reduction Agency (DTRA), joint Science and Technology Office for Chemical and Biological Defense (JSTO-CBD) Program, and as ad hoc reviewer for *Protein Expression & Purification.*

**Dr. John W. Foster** was Subsection Editor for *Escherichia coli, Salmonella Cellular and Molecular Biology,* ASM Press. He is on the editorial advisory board for the journal *Molecular Microbiology* and is a reviewer for *The Journal of Bacteriology, Trends in Microbiology,* and *Molecular Microbiology.*

**Dr. Robert N. Lausch** is Special Reviewer, Visual Science A Study Section, NEI; Member Panel of Primary Reviewers, Journal of Immunology; ad hoc Reviewer: *Investigative Ophthalmology and Visual Science, Experimental Eye Research* and *Journal of Leukocyte Biology.*
Dr. John E. Oakes is Primary Reviewer for Journal of Immunology, and ad hoc Reviewer for Investigative Ophthalmology and Visual Sciences.

Dr. David O. Wood is Chair, American Society for Microbiology Membership Committee, a member of the ASM Committee on Ethics. He also serves as an ad hoc reviewer for Journal of Bacteriology, Journal of Applied and Environmental Microbiology, and Infection and Immunity.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Dr. David Wood during his third year as Chair along with Drs. Strada, Audia, Brett, and Burtnick submitted a grant requesting funding for replacement of the Laboratory of Molecular Biology Building. Renovation of departmental research and office space on the second floor of the Medical Science Building continues with the start of the final phase. These renovations include removal of asbestos which has deterred work in certain areas in the past. Funds were obtained to purchase a state-of-the-art fluorescence activated cell sorter for the BSL3 laboratories at the LMB building.

As a department we continued to place a strong emphasis on teaching both medical and graduate students. This includes using electronic testing for the Medical Microbiology and Immunology course MIC 211/MIC 530. All of the Faculty participated in the Medical Microbiology course and in the IDL interdisciplinary courses. Dr. Oakes served as Course Director for Medical Microbiology, and Dr. Audia served as Course Director for the 2008-2009 IDL courses. Dr. Oakes was Course Director for the Microbiology section of the DREAM program. The Department continued to conduct a hands-on medical microbiology laboratory directed by Dr. Foster. Drs. Audia, Barrington, and Brewer each sponsored a medical student during the Summer Medical Student Research Program. Dr. Barrington’s medical student, Amber Bartlett, was a recipient of the best oral presentation award. Dr. Wood sponsored an undergraduate summer student as part of the UCUR program.

The Department continues several active research programs that remain a major focus of faculty activities. These include research on the obligate intracellular bacterium, Rickettsia prowazekii, by Drs. Audia, Winkler, and Wood, herpes virus ocular immunobiology studies conducted in the laboratories of Drs. Lausch and Oakes, studies on the unfolded protein response by Dr. Brewer, and research on the physiology and genetics of enteric pathogens by Dr. John Foster. Drs. Rohrer and Barsoum, continue to investigate the role of a unique oncofetal immunogen (OFA).

Dr. Joseph W. Brewer, Associate Professor, has completed his second year at USA and was awarded tenure. He worked to assess departmental needs for shared equipment. He was active on several College of Medicine committees, serving as Vice-Chair of the Institutional Animal Care and Use Committee, Chair of the Medical Student Research Committee, and as member of the Biomedical Library Committee and the COM Research Forum Committee.
Dr. Brewer hosted 8th grade science students from Faith Academy for a Future Scientists and Clinicians laboratory tour and talk, February 18, 2009.

Dr. Foster mentored two USA Biology Department students, Josh Lynch, an undergraduate studying the effect of tRNA modification gene MnmE on E. coli phenotype arrays and a graduate student, Matthew Eveland, studying regulation of E. coli gadE gene in salmonella. Dr. Foster also mentored visiting master’s student Charlotte Michaux from Laboratoire de Microbiologie de l'Environnement, University of Caen, Caen, France studying the effect of tRNA modification on E.coli acid resistance. Dr. Foster’s book Microbiology, An Evolving Science was featured on the iPhone 2009 commercial.

Drs. Barsoum and Rohrer continued their work, funded by Quantum Immunologics Inc. entitled: “A phase I vaccine study with autologous dendritic cells loaded with OFA/iLRP in patients with metastatic breast cancer” with an approved budget of $500,000 for the 2008 - 2009 funding period. The screening of breast cancer patients for B- and T-cell responses to oncofetal antigen using ELISA and Elispot assays has been initiated.

Two faculty papers, Dr. Brewer’s paper entitled, “ATF6alpha induces XBPI-independent expansion of the endoplasmic reticulum” and Dr. Wood’s paper entitled, “Directed mutagenesis of the Rickettsia prowazekii pilD gene encoding phospholipase D” were chosen by journal editors as Editor’s highlight papers for the issue.

The Department hosted the Lausch Symposium honoring Dr. Robert N. Lausch’s years of service and contribution to science. Guest speakers were Hao Cheng, M.D., Ph.D., Harper University Hospital, Detroit Medical Center, Detroit, MI, Ying-Hsiu Su, Ph.D., Associate Professor, Drexel University College of Medicine, Philadelphia, PA, Herman F. Staats, Ph.D., Professor, Duke University School of Medicine, Durham, NC, Shun-Hua Chen, PhD., Associate Professor, National Cheng-kung University, School of Medicine, Taiwan, Terrence Tumpey, Ph.D., Senior Microbiologist and Team Leader - Influenza Pathogenesis, Centers for Disease Control and Prevention, Atlanta, GA and Mary Ritchie, Ph.D., Bioterrorism Laboratory Program Advisor, Florida Department of Health Bureau of Laboratories, Jacksonville, Florida.

The Department also hosted four scientists for the Distinguished Scientist Seminar Series. Dr. Audia presented a seminar entitled “The wonderful world of Rickettsia prowazekii: what obligate intracellular bacteria can teach us about physiology and reductive evolution." Dr. Jim Collawan (University of Alabama at Birmingham) presented a seminar entitled “Chemical chaperones and low temperature effects on DeltaF508 CFTR surface stability in human airway epithelial cells.” Dr. James E. Samuel (Texas A & M Health Science Center) presented a seminar entitled “Coxiella burnetii: A stealth pathogen as revealed by in vivo, in vitro and comparative genomic studies.” Dr. Guy H. Palmer (Washington State University) presented a seminar entitled “Superinfection as a driver of genetic change in highly antigenically variant pathogens.”
2008-2009
Summary of Scholarly Activities
Department of Neurology

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


Naritoku DK, Faingold CL. Development of a therapeutics curriculum to enhance knowledge of fourth-year medical students about clinical uses and adverse effects of drugs. Teach Learn Med 2009 Apr-Jun;21(2)148-52.

II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Bassam B. Invited speaker. Genetics of peripheral neuropathies. Southern Clinical Neurological Society (SCNS) 36th Annual Meeting; 2009 Jan 21; Duck Key, FL.

Bassam B. Invited speaker. The floppy infant. Southern Clinical Neurological Society (SCNS) 36th Annual Meeting; 2009 Jan 21; Duck Key, FL.

Naritoku D. Invited speaker. Epilepsy in adults. Southern Illinois University Department of Neurology Grand Rounds; 2009 Jul 21; Springfield, IL.
V. NATIONAL PROFESSIONAL RECOGNITION

Bassam A. Bassam served as Workshop Faculty at the 31st Annual Course and Workshop at the American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM), 2008 Annual Meeting; 2008 Sep 18, Providence, RI, and Workshop Faculty for the Uncommon Sensory Conduction Study at the International SFEMG and Quantitative EMG Conference; 2009 May 7, Venice, Italy, and a national examiner of the American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM) Annual Board Examination 2009 Apr 4; Chicago, IL.

Paul Maertens served as editor and member of the Editorial Board of the Journal of Neuroimaging, and member of the Examination Committee of the Society of Neuroimaging, and a member of the Membership Committee of the American Epilepsy Society.

Dean K. Naritoku served as reviewer of Stroke, Ad hoc reviewer of Brain Research, Clinical Neuropharmacology, Epilepsia, Experimental Neurology, Life Science, Molecular Brain Research, Neurology and Neuropharmacology.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Neurology is currently in an active rebuilding phase. It successfully recruited a new Chair (Dr. Naritoku), who began in November, 2008. The majority of effort for FY09 was in rebuilding clinical and academic infrastructure, and reorganizing key academic units. During this time, clinical neurophysiology studies were improved, and tertiary clinics in Epilepsy, Movement Disorders and Parkinson’s Disease were established. Several formal coursework were developed for residency training, which are crucial to maintaining full accreditation. The Department has improved patient access to clinics, with reduced waiting time, despite loss of faculty. The Department also successfully recruited a translational scientist (Dr. Oliver Darbin) who will develop multidisciplinary research programs spanning the clinical and basic neurosciences.

With the generous gift of Mrs. Adams, the Department will open a new dysautonomia laboratory and evaluation program; and inaugurate the endowed Adams Visiting Professorship and Lecture. The new equipment will enable us to provide advanced evaluation of patients with neuropathy and dysautonomia and will also provide an important tool for research. We anticipate recruitment of 2-3 full-time faculty during the next fiscal year in key areas, including epilepsy, stroke, and movement disorders. Plans are currently in place for opening an epilepsy monitoring unit and neurology critical care area at USA Medical Center, in conjunction with the Department of Neurosurgery.
2008-2009
Summary of Scholarly Activities
Department of Neurosurgery

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS

II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

**Martino AM.** Invited speaker. CSF shunts. Gulf Coast Therapy; 2008 Oct 14; Mobile, AL.

**Martino AM.** Invited speaker. Metastatic compression fractures of the spine. Mobile Area Oncology Nurses; 2009 Apr 14; Mobile, AL.

**Martino AM.** Invited speaker. Neurosurgical management of metastatic brain tumors. Springhill Memorial Hospital CME Program; 2009 May 11; Mobile, AL.

**Martino AM.** Invited speaker. Adult and pediatric hydrocephalus. D. McMillan Hospital Grand Rounds; 2009 Jun 2; Brewton, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Neurological Surgery has had continued success with its electronic health record which allows web based patient registration. Patient feedback has been very positive concerning this feature. The neurosurgical clinic has experienced an increase in referrals. The department continues to sponsor a weekly conference at USAMC which serves as an excellent collaborative effort with neurology and neuroradiology. The faculty continues to participate in medical education in the College of Medicine, giving lectures in Neuroanatomy, Neuropathology, Neurophysiology and lectures for third-year medical students rotating on the surgical clerkship. The rotation of general surgery residents and neurology residents on the neurosurgical service continues to be a main, ongoing teaching function.
The neurosurgery department has begun offering several new operative procedures for patients with spine problems. Dr. Quindlen has been performing X-Stop interspinous decompression for lumbar stenosis which has proved helpful to many patients and involves less surgery than the traditional surgery. Dr. Martino has pioneered AxiaLIF at USAMC which is a presacral surgery for patients with lower disc problems.

Dr. Rusyniak carried out the first brain mapping procedure for epilepsy at USA Children's and Women's Hospital. This was followed by a seizure focus ablation which improved the child's seizures.
2008-2009
Summary of Scholarly Activities
Department of Obstetrics and Gynecology

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


Olatinwo MO, Porter K, Mulekar M, Brooks N, Ringold F, Armistead C. Irregular menstrual cycle is a reliable marker of adverse reproductive health outcome. 57th Annual Clinical Meeting of the American College of Obstetrics and Gynecology (ACOG) 2009 May 2-4; Chicago, IL. Abstract no. 24 (May 4).


Rizk B. Factors predicting ovarian hyperstimulation syndrome. 8th Annual Meeting of Mediterranean Society for Reproductive Medicine 2009 May 9; Florence, Italy. Abstract no. 6.


Vincent AJ, Porter KB, Mulekar M, Armistead C, Brooks N, Ringold F. Relationship between percentage of desired weight loss and rate of pregnancy complications. 57th Annual Clinical Meeting of the American College of Obstetrics and Gynecology (ACOG) 2009 May 2-6; Chicago, IL. Abstract no. 54 (May 5).

III. PUBLISHED BOOKS


IV. INVITED PRESENTATIONS

Baker S. Invited speaker. Prescription addiction in pregnancy - alternative choice methodone. 18th Annual OB/GYN Continuing Medical Education Conference; 2009 Apr 2-3; Mobile, AL.

Baker S. Invited speaker. Ultrasound's role in preterm labor. 2nd Annual Women's Imaging Conference; 2009 May 2; Mobile, AL.

Brooks N. Invited speaker. The irritated bladder. 18th Annual OB/GYN CME Conference; 2009 Apr 2-3; Mobile, AL.

Brown R. Invited speaker. Gynecology ultrasound. 2nd Annual Women's Imaging Conference; 2009 May 2; Mobile, AL.


Finan MA. Invited speaker. Debate pro vs. con: robotic surgery in general gynecology. The Alabama American College of Obstetricians and Gynecologists (ACOG) Annual Meeting; 2009 Apr 23-26; Destin, FL.

Finan MA. Invited speaker. Simulation lab to train residents in robotic hysterectomy techniques. The Annual Clinical Meeting of the American College of Obstetrics and Gynecology; 2009 May 2-6; Chicago, IL.

Finan MA. Invited speaker. Update in robotic surgery. 18th Annual OB/GYN Continuing Medical Education Conference; 2009 Apr 2-3; Mobile, AL.

LaFleur JK. Invited speaker. Vaginal delivery - the lost art. 18th Annual OB/GYN Continuing Medical Education Conference; 2009 Apr 2-3; Mobile, AL.

Olatinwo MO. Invited speaker. PCOS. 18th Annual OB/GYN Continuing Medical Education Conference; 2009 Apr 2-3; Mobile, AL.

Porter KB. Invited speaker. Issues of viability - the obstetric perspective. 18th Annual OB/GYN Continuing Medical Education Conference; 2009 Apr 2-3; Mobile, AL.

Porter KB. Invited speaker. Sonography of the fetal brain. 2nd Annual Women's Imaging Conference; 2009 May 2; Mobile, AL.

Porter KB. Invited speaker. 1st vs. 2nd trimester screens with ultrasound. 2nd Annual Women's Imaging Conference; 2009 May 2; Mobile, AL.

Rizk B. Invited speaker. Assisted reproduction technology. Springhill College; 2008 Nov 3; Mobile, AL.

Rizk B. Invited speaker. Endometriosis and infertility. New Concepts in Women's Health 2009; University of Miami Miller Scholl of Medicine, Department of Obstetrics and Gynecology; 2009 Feb 19-21; Coconut Grove, Miami, FL.


Rizk B. Invited speaker. Ovarian hyperstimulation syndrome. New Concepts in Women's Health 2009; University of Miami Miller School of Medicine, Department of Obstetrics and Gynecology; 2009 Feb 19-21; Coconut Grove, Miami, FL.


Rizk B. Invited speaker. Myomectomy - preserving the uterus. 18th Annual OB/GYN Continuing Medical Education Conference; 2009 Apr 2-3; Mobile, AL.

Rizk B. Invited speaker. Factors predicting ovarian hyperstimulation syndrome. 8th Annual Meeting of Mediterranean Society for Reproductive Medicine; 2009 May 7-9; Florence, Italy.

Rizk B. Invited speaker. Do we need laparoscopy to diagnose endometriosis? 14th Annual International Conference of the Egyptian Fertility and Sterility Society; 2009 Sep 24-25; Cairo, Egypt.

Rizk B. Invited speaker. Prediction and prevention of ovarian hyperstimulation syndrome. 14th Annual International Conference of the Egyptian Fertility and Sterility Society; 2009 Sep 24-25; Cairo, Egypt.

Rocconi RP. Invited speaker. Gynecology cancers: diagnosis, treatment and risk assessment. Occupational Health Nurses Association; 2009 Apr 14; Mobile, AL.

Sherman C. Invited speaker. Uterine ablations: conserving the uterus. 18th Annual OB/GYN Continuing Medical Education Conference; 2009 Apr 2-3; Mobile, AL.

Taylor S. Invited speaker. Recurrent pregnancy loss. 18th Annual OB/GYN Continuing Medical Education Conference; 2009 Apr 2-3; Mobile, AL.

Varner S. Invited speaker. The Lichen diseases. 18th Annual OB/GYN CME Conference; 2009 Apr 2-3; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Kathy B. Porter is a National Board Examiner for the American Board of Obstetrics and Gynecology. Dr. Porter has been a reviewer for the American Journal of Obstetrics and Gynecology and Obstetrics and Gynecology.

Dr. Botros Rizk is a member of the Scientific Advisory Committee of the Mediterranean Society for Reproductive Medicine. He has been invited guest speaker for MSRM, Egyptian Fertility Society, McGill International Symposium and Pre-congress Course for the Royal College of Obstetricians and Gynecologists.

He has been an Ad hoc reviewer for 13 years to the Journals of Fertility and Sterility, Human Reproduction, Molecular Human Reproduction, Middle East Fertility Society, Reproductive Biomedicine Online, American Journal of Obstetrics and Gynecology and is on the Editorial Board of the Middle East Fertility Society Journal Publication.

Dr. Michael Finan and Dr. Rod Rocconi were awarded Honorable Mention for a film "Simulation Lab to Train Residents in Robotic Hysterectomy Techniques" which they presented at the May, 2009, Annual Clinical Meeting of the American College of Obstetrics and Gynecology, in Chicago. Dr. Finan was appointed a police surgeon by the Mobile Police Department ant the Sheriff's Department.

Dr. Moshood Olatinwo received the Travel Award in May, 2009 from the Southeast Fetal Alcohol Spectrum Disorder Regional Training Center, Meharry Medical College, Nashville, TN for the Train the Trainer Workshop.

Dr. Rodney Rocconi was honored to be selected to serve on the 14 member council of the Society of Gynecologic Oncologist (SGO), a council comprised of members from the nation's largest and most elite cancer centers.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department's Annual CME program was held at the Mobile Convention Center this academic year. It was our 15th Annual Conference in Obstetrics and Gynecology. The meeting was widely supported and attended by physicians, nurse practitioners, nurse midwives and nurses from a large geographic area.

On May 2nd, 2009 the Department sponsored the 2nd Annual Women’s Imaging Conference, which attracted ultrasonographers from three states.

Dr. Susan L. Baker is part time faculty and focuses on clinical care. She is working on substance abuse issues with pregnant women.

Dr. Frankie Bodie serves as generalist and is the director of the Center for Women's Health, and coordinates the faculty call schedule.

Dr. Nicole Brooks is a general OB/GYN specializing in urogynecology. She serves as the Assistant Residency Program Director. Dr. Brooks is a member of the OB/GYN Committee at USACW, she serves as Chair of the Regional Perinatal Advisory Committee and she is a member of the Alabama State Perinatal Advisory Committee. Dr. Brooks became a Fellow of the American College of Obstetrics and Gynecology (ACOG) this year.

Dr. Michael Finan has a dual appointment with the Department of OB/GYN and the Mitchell Cancer Center. He is Chief of Gynecologic Oncology for the OB/GYN Department. Dr. Finan established the Gynecologic Oncology Research Endowment through the USA Mitchell Cancer Institute along with Dr. Rod Rocconi and Dr. Eddie Reed. Dr. Finan was voted “Outstanding Clinic Teacher by the COM Senior Class, and was awarded the Red Sash to wear at their graduation in May 2009.

Dr. Walter Hogan functions as a part time clinical faculty member and focuses on clinical care and the Colpo clinic for resident teaching. Dr. Hogan coordinates the Department of OB/GYN Grand Rounds.

Dr. John LaFleur serves as generalist and functions as the assistant clerkship director. Dr. LaFleur serves on the Executive Committee and is Chairman of the OB/GYN Committee at USACW. Dr. LaFleur was awarded the Red Sash, by the COM Class of 2009.

Dr. Moshood Olatinwo serves as a generalist and is involved in research.

Dr. Sheri Owens serves as a generalist, and continues as Clerkship Director for the department.
Dr. Kathy B. Porter serves as Chair of the Alabama State Perinatal Committee and is a committee member for the Fetal Infant Mortality Review for Mobile County and the Alabama Baby Coalition. She is a reviewer for Obstetrics and Gynecology, the American Journal of Obstetrics and Gynecology and the American Journal of Kidney Disease. Dr. Porter is a member of the Department Education Committee, she is Director of the Ultrasound unit, which is AIUM and ICAEL accredited. She serves on USACW Medical Executive Committee, and Performance Improvement Committee, USAMC Medical Executive Committee, and the CME Committee for the University.

Dr. Botros Rizk is a member of Department of OB/GYN Laboratory QA Committee, Chairman 1999-Present, Medical and Scientific Director of the University of South Alabama IVF Program, Chairman of the American Society for Reproductive Medicine International Membership Committee.

Dr. Rodney Rocconi has a dual appointment with OB/GYN and the Mitchell Cancer Center. He teaches the residents GYN Oncology. OB/GYN Residents spend a total of six months working with Doctors Rocconi and Finan during their 4 year residency. Dr. Rocconi was awarded the Abraham A. Mitchell Clinical Cancer Research Scholar, recognizing a $1 million dollar gift from local philanthropist Abraham Mitchell.

This award allows Dr. Rocconi the ability to have a gynecologic cancer-focused lab to perform basic science research. Dr. Rocconi, Dr. Finan and other volunteers established the annual "GO Run" an annual race to support research and awareness in the area of gynecologic cancers.

Dr. Craig Sherman serves as the Program Director and as Medical Director for the Women’s Center. He received the Red Sash award from COM Class of 2009. Dr. Sherman is Chair of the Medical Executive Committee of USACW. He also serves on the following USACW committees, OB/GYN Performance Improvement, Pediatrics and Neonatology, and Radiology. He serves on the USA Hospital Credentials Committee and the Combined Medical Executive Committee, and the Advisory Committee, Alabama Section, ACOG.

Dr. Sherri Taylor serves as a generalist and sees high risk patients in the HR Intermediate Clinic.

Dr. Steven Varner continues in his capacity as Director of the Division of Gynecology and maintains the Vulvar clinic.
I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


Frerichs T, Grishko V, Mates A, Pearsall AW. Hyaluronic acid effects upon mitochondrial function and apoptosis following oxidative stress in human chondrocytes. 58th Annual Meeting of the Alabama Orthopaedic Society; 2009 Apr 23-26; Point Clear, AL. p. 30.

Handwerger A, Ballard B, Madanagopal S. Supracondylar femur fracture biomechanical study. 58th Annual Meeting of the Alabama Orthopaedic Society; 2009 Apr 23-26; Point Clear, AL. p. 28.


Pearsall AW, Madanagopal S, Jacob J. High tibial osteotomy for Varus Gonarthrosis results from early term follow-up. 58th Annual Meeting of the Alabama Orthopaedic Society; 2009 Apr 23-26; Point Clear, AL. p. 33.

Smith D, Perry MD. Surgical management of os trigonum fracture: a case study. 58th Annual Meeting of the Alabama Orthopaedic Society; 2009 April 23-26; Point Clear, AL. p. 21.

Wilson L, Alonso JE. Fixation of rib fractures in octogenarian chest trauma patients may be beneficial in decreasing morbidity and mortality. 58th Annual Meeting of the Alabama Orthopaedic Society; 2009 Apr 23-26; Point Clear, AL. p. 24.

Wittersheim D, Alonso JE. New perspectives on diagnostic imaging in orthopaedic trauma. 58th Annual Meeting of the Alabama Orthopaedic Society; 2009 Apr 23-26; Point Clear, AL. p. 27.

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Alonso J. Invited speaker. An orthopaedic course. AO North America Southeast Regional Fracture Summit; 2008 Dec 5-7; Charleston, SC.

Alonso J. Invited speaker. VAC - current level of evidence, clinical observations and insights. American Academy of Orthopaedic Surgery Annual Meeting; 2009 Feb 28; Las Vegas, NV.

Alonso J. Invited speaker. The baby boomers tsunami, are we ready? Southeastern Orthopaedic Foot Club 20th Annual Meeting; 2009 Apr 23; Point Clear, AL.
Alonso J. Invited speaker. Locking plates, small foot prints. 58th Annual Meeting of the Alabama Orthopaedic Society; 2009 Apr 25; Point Clear, AL.

Alonso J. Invited speaker. Surviving the trauma call in level II and level III trauma centers. 58th Annual Meeting of the Alabama Orthopaedic Society; 2009 Apr 25; Point Clear, AL.

Alonso J. Invited speaker. Contemporary approach to open fractures. AO North America Podiatric Advanced Course; 2009 May 14-17; Denver, CO.

Alonso J. Invited speaker. Polytrauma. AO North America Podiatric Advanced Course; 2009 May 14-17; Denver, CO.

Madanagopal S. Invited speaker. Femoral neck and proximal femur: plate vs nail vs. arthroplasty. 58th Annual Meeting of the Alabama Orthopaedic Society; 2009 Apr 23-26; Point Clear, AL.

Meyer F. Invited speaker. American Academy of Orthopaedic Surgeons Meeting; 2009 Feb 25-28; Las Vegas, NV.

Meyer F. Invited speaker. Elbow fractures, non-unions in the geriatric patient. AO North America Trauma Conference (Arbeitsgemeinschaft für Osteosynthesefragen-Swiss); 2009 June 5-6; Miami, FL.


Perry M. Invited speaker. Amputations of the foot and ankle. UT Southwestern Dallas Short Course; 2008 Oct 23; Dallas, TX.

Perry M. Invited speaker. Running injuries in the weekend athlete. Flying Physicians Association Dixie Chapter Fall Meeting; 2008 Oct 17; Point Clear, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Jorge E. Alonso, Chairman. AO North America Pelvic and Acetabular Fracture Management Course; 2009 April 30 – May 3; Birmingham, AL; Course chairman. AO North America AO Management of the Geriatric Fracture Patient for Orthopaedic Surgeons, Geriatricians and Hospitalists; 2009 June 5-6; Miami Beach, FL.


VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Orthopaedic Surgery continues to be engaged both clinically and academically. In the last year there have been four published manuscripts in nationally recognized journals, and three published abstracts. In addition, there have been 29 presentations at regional and national meetings. A number of our faculty received national recognition including Jorge Alonso who is Chairman of the AO North America pelvic and acetabular fracture management course and Chairman of the geriatric fracture course for orthopaedic surgeons. Valentina Grishko has been the recipient of Excellence in Research Award from the International Cartilage Repair Society. Dr. Grishko has served as an invited review for the European Journal of Pharmacology, invited reviewer of Arthritis and Rheumatism, invited reviewer of Free Radical Biology and Medicine, invited reviewer of Osteoarthritis and Cartilage, and invited reviewer of Tohoku Journal of Experimental Medicine. Dr. Frederick Meyer has recently become President of the Clinical Orthopaedic Society and is a reviewer for the Journal of Bone and Joint Surgery - the most prestigious journal in orthopaedics. He is chairman of the Governance Committee of the Council of Orthopaedic Residency Directors, course chairman of the Clinical Orthopaedic Society’s national meeting. Dr. Meyer is a member of the Board of Directors of the Clinical Orthopaedic Society and served as a syllabus editor for the American Academy of Orthopaedic Surgeons for their Orthopaedic Surgeons Practice Management Symposium and Practice Management Committee meetings. Dr. Pearsall is currently President of the Alabama Orthopaedic Society. Dr. Mark Perry was the course chairman of the Southeastern Orthopaedic Foot Club, American Academy of Orthopaedic Surgeons representative for Capitol Hill Day in Washington, is serving as a member of the AAOS Bylaws Committee, AAOS Resolutions Committee, and an AAOS board examiner. The Department of Orthopaedic Surgery now has three residents in PGY IV, III, II and I years, all our residents have passed their written boards. This year we graduated Dr. Rebel Huffman and Dr. Joseph Randall. Dr. Huffman is currently doing a hand fellowship in Oklahoma City and Dr. Randall has gone into practice in Montgomery, Alabama.
2008-2009
Summary of Scholarly Activities
Department of Pathology

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Tucker JA. Invited speaker. Optimizing part B income and expenses. Association of Pathology Chairs Annual Meeting; 2009 Jul 15-17; Seattle, WA.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Allan Tucker was elected chair of the Graduate Medical Education Committee of the Association of Pathology Chairs for a three year term, which includes serving on the executive council of that organization. He was selected for the finance committee of the International Academy of Pathology, and he was also selected for the finance committee of the U.S. and Canadian Academy of Pathology and serves on its abstract review board and as an ambassador. He is treasurer for the Society for Ultrastructural Pathology and chair of the pathologist-in-training award committee. He continues to serve on the Electron Microscopy Ad Hoc Review Group of the Veterans Affairs Administration, and is treasurer of the History of Pathology Society. He is an alternate member of the American Medical Association Resource-Based Relative Value Scale Update Committee (RUC).
He is a member of the Economic Affairs Committee of the College of American Pathologists, and chairs the advisory committee on practice management for the Association of Directors of Anatomic and Surgical Pathology. He is also a board member of the American Registry of Pathology. He is an associate editor for Ultrastructural Pathology, and an editorial board member of Annals of Clinical and Laboratory Science and the Southern Medical Journal.

Dr. Elizabeth Manci served as Secretary/Treasurer and as a member of the Board of Censors for the Mobile County Medical Society. She continues collaboration with Dr. Barry Collier on study of platelets and a murine model of sickle cell disease at Rockefeller University in New York and with Dr. Louis Hsu on study of a murine model of acute of test syndrome at the Heart, Lung, and Blood Institute at the National Institutes of Health at Bethesda. She is also collaborating with Dr. David Irwin at Emory University on the study of lung disease in patients with Sickle Cell disease.

Dr. Gary Carnahan is an inspector for the College of American Pathologists, and was a team leader for an inspection at Lake City Medical Center in Lake City, Florida. He is also an assessor for the American Association of Blood Banks, and conducted inspections in Englewood, New Jersey and Prince Freddick, Maryland.

Dr. Carole Boudreaux was the principal investigator on a clinical trial assessing a Pap test preservative for molecular pathology studies in the cytology division, which she led to successful completion. This is one of the first clinical trials in the department.

Dr. Andrea Kahn was elected to membership in the Association of Directors of Anatomic and Surgical Pathology. She was also elected as a trustee of the History of Pathology Society. She is a member of the International Union Against Cancer Global Cancer Control Community.

Dr. Elliot Carter serves as associate counselor for the South Medical Association and on the Board of Censors for the Mobile County Medical Society.

Dr. Jacek Polski serves as an editorial board member on the Annals of Clinical and Laboratory Science.

Mr. Michael Titford serves on the safety committee of the National Society of Histotechnology.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Dr. Jeff Sosnowski and Dr. Beth Rutland ran the second year pathology course this past year, and the course continues to be highly successful. At skit night, the course was again selected as the best basic science course, which would have been for the time that Dr. Elliot Carter directed the course. The fourth year rotations continue to be very well subscribed, and the electron microscopy rotation was selected as the best fourth year rotation. Dr. Sosnowski served as the neuroscience course director this past year, and the students in the course scored an outstanding 98th percentile on the miniboards.

Unfortunately, Dr. Beth Rutland’s husband received an exceptional job opportunity in Dothan, Alabama, and we lost her from the faculty. Dr. Judy King, whose primary appointment was in pharmacology but who spent a 25 percent effort in pathology, primarily in cytopathology, also left for a job opportunity in West Virginia. The department has continued with a reduced number of faculty. Dr. Sosnowski is now leading the second year course by himself, and has implemented use of the available clicker system and bonus quizzes to enhance attendance. Dr. Kahn continues in her role as director of surgical pathology, and has actually expanded the clinical offerings, including adding in-situ hybridization for Her2 amplification. Dr. Carter continues his role as director of the clinical laboratory at USAMC with his usual diligence, and has also assumed the directorship of the Mitchell Cancer Institute Pathology laboratory. The department is very fortunate to have Dr. LeRoy Riddick continue to participate in the autopsy service, providing expert input and outstanding teaching for the residents. Mr. Michael Titford continues in his varied roles, including the placental service and ably maintaining the laboratory functions for the second year course. While most of her time is occupied by her role as associate dean, Dr. Maggi O’Brien continues an active role in the department, including surgical and autopsy pathology. Dr. Holly Hobart has a dual appointment in pathology and medical genetics and continues to focus on improvements of the cytogenetics laboratory.

Dr. Carole Boudreaux has continued not only the directorship of cytopathology, but the busy task of residency program director. Following the site visit by a representative of the ACGME, the Pathology Residency Review Committee of the ACGME granted the program a full four year accreditation with no significant deficiencies identified.

Dr. Elizabeth Manci continues her active role in pediatric pathology at Children’s and Women’s Hospital and is well recognized for her conscientious service. Dr. Carnahan, the only board certified transfusion medicine physician in the area, is not only the director of the laboratory at Children’s and Women’s Hospital, but is also the overall director of all transfusion medicine, coagulation, and chemistry for the institution, and directs the LifeSouth Community Blood Bank Coastal Division in Mobile.
The department’s work with Gulf Regional Pathologists (the Mobile Infirmary pathology group) continues to go well, with split duties at Infirmary West. In addition to his busy duties at USA, Dr. Polski performs a very active role at Mobile Infirmary, reviewing a number of hematopathology cases and serving as director of flow cytometry there. The Mobile Infirmary group’s expertise in dermatopathology serves to enhance the residency training experience, and the resident rotation at Mobile Infirmary has been highly successful.

The department continues its long, successful relationship with the Alabama Department of Forensic Sciences, with Dr. John Krowlikowski and Dr. Gene Hart in forensics both on the clinical faculty. The department also welcomes an outstanding new forensic pathologist, Dr. Stacie Turner, who comes to us from Nashville.

To try to optimize service and financial efficiency, the institution outsourced its outpatient clinical laboratory work to LabCorp. Dr. Allan Tucker is serving as the LabCorp medical director at SHAC, and the department will look for mutually beneficial opportunities to work with LabCorp.

The department has episodically provided surgical pathology coverage for the Biloxi Veterans Affairs Hospital. The department is delighted to have just learned that it has been awarded a one year contract to continue this work, and looks forward to working even more closely with the VA.

Two residents completed the program this year. Dr. Suzanne Martin embarked on a surgical pathology fellowship at Washington University in St. Louis. Dr. Allison Hunt began a forensic pathology fellowship at Miami-Dade County. The department enjoyed a highly successful recruiting year, with three new residents joining the department: Dr. Blythe Bowman from the University of Arkansas, Dr. Kalli Faulkner from Kansas City University of Medicine and Biosciences College of Osteopathic Medicine, and Dr. Oscar Roncal from the University of Texas-Galveston.

Four faculty members received the red sash award from the medical students this year for outstanding teaching: Dr. Elliot Carter, Dr. Maggi O’Brien, Dr. Jeff Sosnowski, and Dr. Allan Tucker. This year, the Betsy D. Bennett award for outstanding teaching in the second year small group by a resident was awarded to Dr. Sree Ravula.

The faculty recognition award for excellence in residency teaching was presented to Dr. John Lazarchick, one of the Mobile Infirmary pathologists. Ms. Carolyn Pitt in transcription received the award from the house staff as the outstanding staff member contributing to their educational experience. The graduating student receiving the William A. Gardner, Jr., pathology award was Hope Richard.
I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


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III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Bhowmick SK. Invited speaker. Gigantism in a child due to pituitary macroadenoma. Annual Pediatric Endocrine Society Meeting; 2008 Oct 5; Williamsburg, VA.

Bhowmick SK. Invited speaker. Pediatric endocrinology in review. Pediatric Endocrine section. Pediatrics Board Review, Louisiana State University School of Medicine; 2009 Aug 4-8; New Orleans, LA.

Bonfante E. Invited speaker. Pediatric IBD patient population and clinical care at the University of South Alabama. PIBD Trailblazer Annual Meeting; 2008 Oct 24; Chicago, IL.

Clement LT. Invited speaker. Limitations of spirometry in children. Asthma Educators Meeting; 2009 Aug 1; New Orleans, LA.

Clement LT. Invited speaker. Barriers that hinder achieving and maintaining asthma control in children. Asthma Educators Meeting; 2009 Aug 1; New Orleans, LA.

Connelly R. Invited speaker. Making learning fun for all: working with your learners’ differences. Pediatric Academic Societies Annual Meeting; 2009 May 2; Baltimore, MD.

Connelly R. Invited speaker. Unlocking the library barrier: keys to effective communication. Pediatric Academic Societies Annual Meeting; 2009 May 5; Baltimore, MD.
Estrada B. Invited speaker. Bacterial infections in children I; and bacterial infections in children II. Pediatrics Board Review, Louisiana State University School of Medicine; 2009 Aug 3; New Orleans, LA.

Eyal FG. Invited speaker. Issues of viability – the neonatal perspective. Eighteenth Annual Continuing Education Conference in Obstetrics and Gynecology; 2009 Apr 2; Mobile, AL.

Imran H. Invited speaker. Management of sickle cell disease in children. Sickle Cell Disease Association of America, Mobile Chapter – Education and Counselor Certification Course; 2009 Jun 24; Mobile, AL.

Mancao M. Invited speaker. Novartis vaccines. Novartis US Physicians Meningococcal Advisory Board; 2008 Dec 5; Atlanta, GA.

Martinko T. Invited speaker. Adolescent ethics and the law. Alabama Chapter, American Academy of Pediatrics Annual Meeting and Fall Update; 2009 Sep 20; Birmingham, AL.

Preud’Homme D. Invited speaker. GI potpourri. Concurrent seminar. AAP Practical Pediatrics CME Course Planning Group; 2009 Apr 2-4; Providence, RI.

Rao A. Invited speaker. Pathophysiology and clinical manifestations of sickle cell disease. Sickle Cell Disease Association of America Education and Certification Course; 2008 Dec 1; Mobile, AL.

Rao A. Invited speaker. Pathophysiology and clinical manifestations of sickle cell disease. Sickle Cell Disease Association of America Education and Certification Course; 2009 Jun 22; Mobile, AL.


Swingle H. Invited speaker. Autism and immunizations. USA Med School Café; 2009 Aug 16; Mobile, AL.

Trimm F. Invited speaker. Academic advancement for associate program directors. Association of Pediatric Program Directors 13th Annual Fall Meeting; 2009 Sep 20; Arlington, VA.

Trimm F. Invited speaker. Academic advancement for categorical and fellowship program directors. Association of Pediatric Program Directors 13th Annual Fall Meeting; 2009 Sep 20; Arlington, VA.
Trimm F. Invited speaker. Academic advancement for program directors. Association of Pediatric Program Directors 13th Annual Fall Meeting; 2009 Sep 20; Arlington, VA.

Trimm F. Invited speaker. Effective strategies for teaching learners of differing levels in a small group setting. Pediatric Educational Excellence Across the Continuum Conference. 2009 Sep 11; Arlington, VA.

Trimm F. Invited speaker. Challenges faced by pediatric residents in identifying and referring children with developmental delays. Alabama Chapter-AAP Open Forum on Accessing Developmental Services; 2009 Jan 24, Mobile, AL.

Trimm F. Invited speaker. "I have this child...": a case study "how-to" and best practice examples. Alabama Chapter-AAP Open Forum on Accessing Developmental Services; 2009 Jan 24, Mobile, AL.


Wilson F. Invited speaker. Sickle cell disease; and Overview of thalassemia. Novartis Pharmaceuticals Training Session; 2008 Oct 8; Morristown, NJ.

Wilson F. Invited speaker. Update on new therapies. Medical Society Sickle Cell Disease; 2008 Oct 28; Mobile, AL.

Wilson F. Invited speaker. Laboratory policy and procedures for hemoglobinopathy testing. Sickle Cell Disease Association of America, Mobile Chapter, Teleconference presentation to the seven community based organizations in the state of Alabama; 2008 Nov 13; Mobile, AL.

Wilson F. Invited speaker. History of sickle cell disease. Sickle Cell Disease Association of America, Mobile Chapter – Education and Counselor Certification Course; 2008 Dec 1; Mobile, AL.

Wilson F. Invited speaker. Introduction to genetics; and Thalassemia: diagnosis, pathophysiology and management. Sickle Cell Disease Association of America, Mobile Chapter – Education and Counselor Certification Course; 2008 Dec 3; Mobile, AL.

Wilson F. Invited speaker. Thalassemia: diagnosis, pathophysiology and management. Sickle Cell Disease Association of America, Mobile Chapter – Education and Counselor Certification Course; 2008 Dec 3; Mobile, AL.
Wilson F. Invited speaker. Compliance, the world’s other drug problem. Novartis Pharmaceuticals National Meeting; 2009 Jan 13; San Diego, CA.

Wilson F. Invited speaker. Sickle cell disease; and overview of thalassemia. Novartis Pharmaceuticals Training Session; 2009 Mar 4; Morristown, NJ.

Wilson F. Invited speaker. Overview of thalassemia. Novartis Pharmaceuticals Training Session; 2009 Mar 4; Morristown, NJ.

Wilson F. Invited speaker. Sickle cell disease; and Transfusional iron overload. State University of New York; Kings County Hospital; 2009 Mar 5; Brooklyn, NY.

Wilson F. Invited speaker. Transfusional iron overload. State University of New York; Kings County Hospital; 2009 Mar 5; Brooklyn, NY.

Wilson F. Invited speaker. Transfusional iron overload. Maimonides Medical Center; 2009 Mar 5; Brooklyn, NY.

Wilson F. Invited speaker. Stem cell transplantation in sickle cell disease – pros and cons. Practical Issues IX Bringing Hope to Healthcare in Sickle Cell Disease; 2009 Apr 25; Mobile, AL.

Wilson F. Invited speaker. History of sickle cell disease. Sickle Cell Disease Association of America, Mobile Chapter – Education and Counselor Certification Course; 2009 Jun 22; Mobile, AL.

Wilson F. Invited speaker. History of sickle cell disease; Introduction to genetics; and Thalassemia: diagnosis, pathophysiology and management. Sickle Cell Disease Association of America, Mobile Chapter – Education and Counselor Certification Course; 2009 Jun 24; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

John Benjamin received the NIH Young Investigator Travel Award for the 2009 Perinatal Research Society Meeting in New Paltz, New York in September.


Judy Blair was promoted to Associate Professor in the departments of Internal Medicine and Pediatrics. She served as a judge for poster presentations, and as a workshop reviewer at the 2009 Southern Society of General Internal Medicine Annual Meeting in New Orleans, LA.
She continues to serve as a member of the State of Alabama Obesity Task Force (Alabama Department of Public Health). She also serves on the Ronald McDonald House of Mobile, Board of Directors, Chair of Medical Affairs Committee.

**Allison Chung** serves as Chair-Elect on the American College of Clinical Pharmacy (ACCP) Pediatric Practice and Research Network (PRN); and Education and Training (PRN). She also serves on the American Society of Health-System Pharmacists (ASHP); Pharmacists Association of Mobile County (PAMC); American Association of Colleges of Pharmacy (AACP); Pediatric Pharmacy Advocacy Group (PPAG); Alabama Society of Health-System Pharmacists; American College of Clinical Pharmacy (ACCP). Dr. Chung also serves as a Reviewer for the *Journal of Pediatric Pharmacology and Therapeutics, and Pharmacotherapy*.

**Loran Clement** served on the Alabama Medicaid “Together for Quality” Task Force. He also serves as the asthma expert for the Asthma Pilot Project, Chapter Quality Network initiative of the American Academy of Pediatrics, Alabama Chapter.

**Rosina Connelly** serves as a Reviewer for *Pediatrics*. She also served as PAS-Sponsored Workshop Co-Leader for “Making learning fun for all: working with your learners’ differences” and “Unlocking the literacy barrier: keys to effective communication” at the 2009 Pediatric Academic Societies Annual Meeting in Baltimore, MD.

**LaDonna Crews** serves as Chair, Adolescent Medicine Committee of the Alabama Chapter, American Academy of Pediatrics.

**Karen Crissinger** is a Reviewer for the *Journal of Pediatric Gastroenterology and Nutrition*, and *American Journal of Physiology*.

**Benjamin Estrada** was elected as a council member to the Southern Society for Pediatric Research. He serves as the Institutional Representative and as Judge for Clinical Young Investigator Research Award of the Southern Society for Pediatric Research. He is a member of the Scientific Advisory Council of the Society for Clinical Pediatrics. He serves as alternate institution representative and member of the curriculum task force of the Committee on Medical Student Education in Pediatrics (COMSEP). He also serves on the Editorial Boards of *Pediatric Infectious Diseases Forum* and *Infections in Medicine*. He is a Reviewer for *Clinical Pediatrics, Infection Control and Hospital Epidemiology, and Infections in Medicine*.

**Charles Hamm** is a Reviewer for *Clinical Pediatrics*, and continues to serve on the State Perinatal Advisory Committee. He is the Institutional Representative to the Vermont Oxford Neonatal Network.
Hamayunj Imran was selected to be a 2009 Hyundai Hope on Wheels Scholar.

Mary Mancao served on the Alabama Department of Public Health Sexually Transmitted Disease Medical Advisory Council.

Thomas Martinko served as SIG Leader at the 2009 Society for Adolescent Medicine Annual Meeting in Los Angeles, CA and spoke on “Alcohol/tobacco and other drugs of abuse.”

Daniel Preud’Homme serves as Co-Chair of the Council on School Health, Alabama Chapter, American Academy of Pediatrics.

Aarati Rao was selected to be a 2009 Hyundai Hope on Wheels Scholar.

Kenneth Rettig served as a Reviewer for Clinical Pediatrics.

Katherine Savells serves as President of the Mobile Pediatric Society.

Hanes M. Swingle is a Reviewer for the Journal of Developmental-Behavioral Pediatrics, and the Pediatric Academic Society Annual Meeting. He served as Chair of the Early Diagnosis and Screening subcommittee of the Alabama Autism Task Force. He serves as a member of the Region IV Perinatal Advisory Committee and the Alabama Baby Coalition. He serves on the Autism Providers Network. He also serves on the Advisory Board for Learning Tree, Inc. and the Board of Directors of Chrysalis Academy.

R. Franklin Trimm serves on the Accreditation Council for Graduate Medical Education (ACGME) Pediatric Residency Review Committee. He represented the American Academy of Pediatrics, presenting testimony to the ACGME Congress on Resident Duty Hours in Chicago, June 11-12, 2009. He serves as Co-Director for the AAP PediaLink Resident Center (National website for resident completion of ACGME required Individualized Learning Plan [ILP]). He is Chair of the Education Committee of the Society of Developmental-Behavioral Pediatrics (SDBP), and he is a member of the SDBP Program Planning Committee. He served as Co-Editor for the American Academy of Pediatrics Developmental-Behavioral Pediatrics Self-Assessment. He was a member of the DB PREP 2008 Planning Committee, and serves as the DB PREP 2010 Planning Committee Chairperson. He is a member of the AAP Committee on Pediatric Education. He continues to serve as a Faculty Member, Pediatric Academic Societies Educational Scholars Program, and he is again a member of the Project Team for revision of the Ambulatory Pediatric Association’s Educational Guidelines for Residency Training in General Pediatrics. He serves on the Advisory Committee, dbpeds.org, a website aimed at professionals interested in child development and behavior, especially in the medical setting that is sponsored by the American Academy of Pediatrics, Section on Developmental-Behavioral Pediatrics and The Commonwealth Fund of NYC. He serves on the AAP PREP Advisory Group.
Dr. Trimm conducted a peer reviewed, selected workshop entitled “Preparing learner remediation plans: are you the next design star?” at the 2009 Pediatric Academic Societies Annual Meeting in Baltimore, MD. He continues to serve as a Reviewer for the Journal of Developmental & Behavioral Pediatrics.

Felicia Wilson continues to serve on the Alabama State Sickle Cell Disease Oversight & Regulatory Commission and as Co-Chair of the Education Committee. She also served as a member of the State of Alabama Newborn Screening Advisory Committee; Co-Chair of Hemoglobinopathy Subcommittee; and as Chair of the National Advisory Committee for Hemoglobinopathy Trait Education and Counselor Certification.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Pediatrics welcomed a number of new faculty members in 2009. Drs. Jessica Kirk and Suzanne Stuckey joined the Division of General Pediatrics; Drs. Cristina Gavrilita and Muayyad Tailoune joined the Division of Pediatric Critical Care Medicine; Dr. Roberto Gordillo accepted a position in the Division of Pediatric Nephrology; Dr. Druhan Howell accepted a position in the Division of Allergy/Immunology. Dr. Stephanie Anderson accepted a position in Developmental-Behavioral Pediatrics.

The following Pediatric Faculty members were recognized by the COM students as Distinguished Faculty at the 2009 Honors Convocation: Drs. Judy Blair-Elortegui, Lloyd Scott Clements, LaDonna Crews, Benjamin Estrada, Aarati Rao and Felicia Wilson. The fifteenth recipient of the Hollis J. Wiseman Award for Excellence in Pediatrics during the Pediatric Clerkship was Kristin D. Flowers.

Thirteen of the graduating medical students chose residencies in pediatrics or combined Medicine-Pediatrics. Of the pediatric residents completing residency this year, three entered private practice, four entered fellowship training, and one joined the Department as Chief Resident. Both graduating Medicine-Pediatrics residents entered private practice. On July 1, 2009, nine first-year residents entered the pediatric residency program, and two first-year residents entered the combined Medicine-Pediatrics residency program. Drs. Jessica Kirk and Suzanne Stuckey completed their duties as Pediatric Chief Resident, and Dr. April Ross was named Chief Resident for the coming year.

The 2009 Children’s Miracle Network was very successful and raised more than $1 million in support, a record amount, to benefit the USA Children’s and Women’s Hospital.

The scholarly activity of the Department of Pediatrics during the past year was productive. There were 32 original articles or book chapters and 22 abstracts published by faculty members of the department.
Clinical operations of the Department of Pediatrics continued to grow during the past year. Ambulatory visits exceeded 42,000, an increase of 10% over the previous year. Activities of the in-patient services at the USA Children’s and Women’s Hospital remained robust.

Programs comprising the Center for Chronic Diseases in Children have also expanded. These programs are devoted to designing and implementing new approaches for delivering comprehensive healthcare to children who suffer from chronic health disorders such as diabetes, obesity, autism, HIV/AIDS, and sickle cell disease.

The USA Breathmobile, a novel school-based community outreach program for children with asthma, completed its third year. Over 700 children with asthma have been evaluated and treated at 30 elementary, middle, or high schools in this region. Our program is a partner in a national network for the study and development of improved asthma treatment practices.

Major goals for the coming year include: 1) Ongoing development of electronic patient management applications that integrate patient care activities, clinical data collection, patient education, and, most importantly, that improve health outcomes; 2) Establish a comprehensive Asthma Disease Management Program that will coordinate the clinical and educational functions of all USA in-patient and out-patient pediatric care sites; and 3) Enhance the regional role and national prominence of the USA Department of Pediatrics as an advocate and resource for efforts that champion the best interests of children. The department will continue to seek productive alliances with others in the community who are dedicated to this goal.


II. PUBLISHED ABSTRACTS

Abe K, Ito K, Koubsky K, Tayler MS, Gerthoffer WT, Fagan KA, McMurtry IF, Oka M. Imatinib mesylate (Gleevec) is a potent acute pulmonary vasodilator in rats. Am J Respir Crit Care Med 2009 Apr 1;179:A6251.


Baker JT, Moore T. CD40 activation is angioproliferative in pulmonary microvascular endothelial cells. FASEB J 2009 Apr;23:771.7.

Barry CJ, Cioffi D, Stevens T. The \( I_{soc} \) channel is a critical determinant of interendothelial cell gap formation. FASEB J 2009;23:964.7.


Cioffi DL, Stevens T. Orai1 interacts with the endogenous endothelial \( I_{soc} \) channel both constitutively and dynamically. FASEB J 2009;23:964.11.


Pastukh V, Bardwell GC, Wilson GL, Gillespie MN. The transcriptional co-activator function of ref-1/Apel is important for binding of HIF1 to the hypoxia response element of the VEGF promoter in hypoxic pulmonary artery endothelial cells. Am J Respir Crit Care Med 2009 Apr;179:A1878.


Rich TC, Britain AL, Zhu B, Henesey MB. Molecular mechanisms underlying transient cGMP signals. FASEB J 2009 Apr;23:888.3.

Sayner SL, Prasain N, Balczon R, Stevens T. Membrane and soluble adenylyl cyclases generate discrete cAMP pools which discriminate between cytoskeletal binding proteins to regulate endothelial barrier. FASEB J 2009 Apr;23:965.16.

Sayner SL, Stevens T. Pulmonary microvascular endothelial cells express an endogenous bicarbonate-sensitive adenylyl cyclase that controls cytosolic cAMP. Am J Respir Crit Care Med 2009 Apr 1;179:A2328

Sayner SL, Stevens T, Cooper DMF. Selective targeting of cAMP signaling components and adhesion molecules to caveolin-enriched fractions of pulmonary microvascular endothelial cells. FASEB J 2009 Apr;23:815.3.


Vayttaden SJ, Friedman J, Tran TM, Rich TC, Dessauer CW, Clark RB. Quantitative modeling of GRK-mediated β2AR regulation. Gordon Conference on Phosphorylation and G-Protein Mediated Signaling; 2009 Jun 7-12; University of New England, Biddeford, ME.

Xin W, Liu Y, Cohen MV, Downey JM, Rich TC. Regulation of basal cAMP levels in rabbit cardiomyocytes. FASEB J 2009 Apr;23:582.2.


Zhu B, Xu YC, Stevens T. FGF21 determined angiogenic phenotypes in pulmonary endothelial cells. FASEB J 2009 Apr;23:965.3.

III. PUBLISHED BOOKS


IV. INVITED PRESENTATIONS

Alvarez DF. Invited speaker. On the hunt for restoring the pulmonary vascular barrier during ALI. Pulmonary Conference; University of Chicago; 2008 Nov 17; Chicago, IL.

Alvarez DF. Invited speaker. NAP1-L1 determines the progenitor status of pulmonary endothelium. Experimental Biology International Meeting; 2009 Apr 18-22; New Orleans, LA.


Gillespie MN. Invited speaker. Bending and breaking the DNA code: implications for transcriptional regulation. Department of Pharmacology, College of Medicine, University of Pittsburgh; 2008 Oct 12; Pittsburgh, PA.
McMurtry IF. Invited speaker. Rarefaction. ATS Workshop on Angiogenesis in the Post-Natal Pulmonary Circulation: Fact or Fiction; 2009 May 16; San Diego, CA.

Olson JW. Invited speaker. Human idiopathic pulmonary arterial hypertension (IPAH) and polyamines. Gordon Research Conference – Polyamines; 2009 Jun 21-26; Biddeford, ME.

Schaffer SW. Invited speaker. Mitochondrial DNA damage: a cause of oxidative stress and apoptosis. University of Warsaw; 2008 Oct 1; Warsaw, Poland.


Schaffer SW. Invited speaker. Afterload pressure: a determinant of ischemia-reperfusion injury. World Congress of Academy of Cardiovascular Sciences; 2009 Jun 15-20; Copenhagen, Denmark.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Diego Alvarez served as Trainee Representative, Steering Committee, Respiratory Section-American Physiological Society; Web Site Coordinator, Pulmonary Circulation Assembly-American Thoracic Society; Program Committee member, Pulmonary Circulation Assembly-American Thoracic Society. Planning Committee member; Pulmonary Circulation Assembly-American Thoracic Society; Program Committee member, Respiratory Section-American Physiological Society; Nominating Committee member, Respiratory Section-American Physiological Society; Peer reviewer for manuscripts submitted to American Journal of Physiology-Lung Cellular and Molecular Physiology, Microvascular Research, Translational Research, American Journal of Respiratory and Critical Care Medicine; and American Thoracic Society Poster Discussion Session – Chair: The pulmonary vasculatory in acute lung injury (Spring 2009).

Dr. Natalie Bauer served as an invited reviewer for manuscripts submitted to the American Journal of Physiology, Lung Cell, and Molecular Physiology. She also received academic honors recognizing scholarly work from Sigma Xi, Scientific Research Society.

Dr. Judy Creighton served as a manuscript reviewer for the American Physiological Society.
Dr. Mark N. Gillespie was elected to chair the American Thoracic Society's Assembly on Pulmonary Circulation at the ATS International Conference in May 2009. He also served on the Editorial Board, American Journal of Physiology, Lung Cell and Molecular Physiology; Editorial Board, American Journal of Respiratory Cell and Molecular Biology, Program, Leadership, and Long Range Planning Committees, American Thoracic Society; Ad hoc member, SBIR/STTR study section; Ad hoc member of NIH study sections (1), Special Emphasis Panel (1); member, NIH study section for K99/R00 grants; American Lung Association Research Peer Review Panel; and manuscript reviewer for all major journals relevant to his field of research.

Dr. Ivan McMurry served as member, Biology Reports' Faculty of 1000 for the Cardiovascular and Respiratory Pharmacology Section; member at-large of the Leadership Committee of AHA Council on Cardiopulmonary, Perioperative, and Critical Care; Editor (along with M. Gillespie, T. Stevens, and W. Wagner) of American Physiology Society's new online journal entitled Comprehensive Physiology: Topic on Pulmonary Circulation and Non-Respiratory Functions; reviewed manuscripts for American Journal Pharmacology Lung Cell Molecular Physiology, American Journal of Pharmacology Health and Circulation, American Journal of Respiratory Critical Care Medicine, American Journal Respiratory Cell Molecular Biology, British Journal of Pharmacology, Cardiovascular Respiratory, Free Radical Biology Medicine, Journal of Applied Physiology, and Nature Medicine; participated in online review of NIH RO1 grant applications from LIRR and RIBT member conflict, served as chairman of the special emphasis panel (2008 Sep 23-24); co-chaired ATS poster discussion session (D105) on Pulmonary Vasoreactivity; reviewed biomedical grants for Welcome Trust and National Research Agency of France.

Dr. Jack Olson served on the Executive Committee – Cardiovascular Medical Research and Education Fund (CMREF).

Dr. Thomas Rich served as Ad hoc reviewer, American Journal of Physiology – Lung; Ad hoc reviewer, Journal of Biology and Chemistry – Lung; Ad hoc reviewer, PLoS – Computational Biology; Ad hoc reviewer, Chemistry Biology; reviewer, American Heart Association Electrophysiology Research Section; reviewer, National Institutes of Health Challenge Grants Panel 19.

Dr. Stephen W. Schaffer served as Amino Acids, Section editor; Molecular and Cellular Biochemistry, Associate Editor, American Section of International Academy of Cardiovascular Sciences, Executive Secretary; and served on the American Recovery and Reinvestment Act Extramural Research Facilities Improvement Program, National Institutes of Health Study section, Sep 2009. Dr. Schaffer received the Norman Alpert Established Investigator Award from the International Academy of Cardiovascular Scientists, 2009 Jun.
Dr. Troy Stevens served as Associate Editor, American Journal of Physiology; Associate Editor, Microvascular Research; Editor, Experimental Biological Medicine; Study Section Chair, AHA Southeastern Region; Ad Hoc Reviewer, NIH, P30 Awards, Ad Hoc Reviewer, NIH, Challenge Grant Awards, Ad Hoc Reviewer, NIH, P01 Application, Natarajan; Long Range Planning Committee Chair, Pulmonary Circulation Assembly, American Thoracic Society.


Dr. Songwei Wu served as an Ad hoc reviewer for the American Journal of Physiology.

Dr. Bing Zhu served as a member of the American Association for Cancer Research; the American Physiology Society; and reviewer for the Medical Science Monitor.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department hosted visits from several scientists who participated in the Distinguished Scientist Seminar Series: Dr. Michael Tamkun, Professor, Department of Biomedical Sciences, Colorado State University, spoke on “Kv2.1 Membrane Corals: Novel Regulators of K⁺ Channel Localization and Function;”

Dr. Evan Dale Abel, Professor, Departments of Medicine and Biochemistry, University of Utah, spoke on “Insulin and Growth Factor Signaling in the Heart and Vasculature;” Dr. James M. Downey, Professor, Department of Physiology, College of Medicine, University of South Alabama, spoke on “Protecting the Infarcting Heart with A2b Agonists;” and Dr. Enrico Avvedimento, Professor, Department of Biology and Molecular Pathology, Medical School, University of “Federico II”, Naples, Italy spoke on “DNA Oxidation Drives Estrogen-Induced Transcription: A Paradigm or a Specific Estrogen Story?” Dr. Gillespie hosted Dr. John Szarek who made a special presentation entitled, “Using Human Patient Simulators to Enhance Basic Science.” Dr. Stephen Schaffer hosted 3 scientists from Thailand from June 24, through July 24, 2009: Dr. Thanphon Srimuang, Dr. Atcharapon Thaeomor, and Dr. Supaporn Kulthinee.
I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


Dey NB, Busch JL, Francis SH, Corbin JD, Lincoln TM. Cyclic GMP specifically suppresses Type-1alpha cGMP-dependent protein kinase expression by ubiquitination. Cell Signal 2009 Jun;21(6):859-66.


II. PUBLISHED ABSTRACTS


Dey NB, Lincoln TM. Involvement of c-Cbl a ring finger E3 ubiquitin ligase on cyclic GMP-dependent protein kinase ubiquitination and degradation. FASEB J 2009;23:848.4.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Cohen MV. Invited speaker. Mechanism of ischemic postconditioning. 2nd International Conference Myocardial Protection - From bench to clinical application; 2009 May 2-5; Amman, Jordan.

Downey JM. Invited speaker. Role of cGMP in cardioprotection. Beijing Joint Conference on Physiological Societies; 2009 Oct 20-22; Beijing, China.


Downey JM. Invited speaker. Novel signaling insights from pre- and post-conditioning. UCLA Symposium: Systems approaches to cardiac biology and medicine; 2009 Feb 5; Los Angeles, CA.

Downey JM. Invited speaker. Why do we still not have cardioprotective drugs? 73th Annual Scientific Meeting Japanese Circulation Society; 2009 Mar 20-22; Osaka, Japan.

Downey JM. Invited speaker. Will ischemic preconditioning finally give us a cardioprotective drug? 2nd International Conference Myocardial Protection - From bench to clinical application; 2009 May 2-5; Amman, Jordan.

Downey JM. Invited speaker. The role of cGMP and PKG in cardioprotection. 4th International Conference on cGMP: Generators, Effectors, and Therapeutic Implications; 2009 Jun 19-21; Regensburg, Germany.
Lincoln TM. Invited speaker. Cyclic GMP-dependent protein kinase and vascular smooth muscle cell phenotype. University of Rochester Aab Cardiovascular Research Institute; 2009 May 13; Rochester, NY.


Taylor MS. Invited speaker. New insights in vascular myoendothelial signaling. 5th Gulf Coast Physiological Social Annual Meeting; 2009 Apr 17-18; New Orleans, LA.

Townsley MJ. Invited speaker. Pulmonary circulation and pulmonary edema. Michigan State University; 2008 Oct 2; East Lansing, MI.

Townsley MJ. Invited speaker. TRPV4 - a potential participant in the etiology of acute lung injury. Respiratory Initiative Seminar. Michigan State University; 2009 Oct 3; East Lansing, MI.

Townsley MJ. Invited speaker. Transient receptor potential channels and regulation of lung endothelial permeability. Research Infrastructure in Minority Institutions Seminar Series. Alabama State University; 2009 Oct 21; Montgomery, AL.

Townsley MJ. Invited speaker. TRPV4 and endothelial dysfunction in acute lung injury. GlaxoSmithKline; 2009 Jan 12; King of Prussia, PA.

Townsley MJ. Invited speaker. Ca$^{2+}$ entry via α1G and TRPV4 channels differentially regulates alveolar capillary endothelium. Featured Topic on Pulmonary Ion Channels, Experimental Biology '09; 2009 Apr 21; New Orleans, LA.

Yang J. Invited speaker. Constitutive activation of AMPK-alpha1 in liver prevents high-fat diet-induced obesity in mice. 4th Metabolic Diseases World Summit; 2008 Nov 6-7; Boston, MA.

Yang J. Invited speaker. Regulation of hepatic lipogenic gene expression by AMPK. Department of Nutrition, University of Tennessee at Knoxville; 2008 Nov 18-19; Knoxville, TN.
Yang J. Invited speaker. Suppression of SREBP-1c transcription by AMPK. Department of Biological Sciences, University of Calgary; 2009 Jan 20; Calgary, Alberta, Canada.


Yang J. Invited speaker. Hepatic lipid metabolism and type 2 diabetes. Diabetes/Metabolism Group, National Institute of Diabetes, Digestive and Kidney Diseases (NIDDK); 2009 Jul 14; Bethesda, MD.

V. NATIONAL PROFESSIONAL RECOGNITION


Michael V. Cohen: Editorial Board of *Basic Research in Cardiology*.

James M. Downey: Editorial board member for *Circulation Research, Journal of Molecular and Cellular Cardiology, Basic Research in Cardiology*. Co-organizer of Adenosine Symposium held in conjunction with American Heart Association Scientific Sessions.

Thomas M. Lincoln: Served on as Editorial Board Member for *Journal of Biological Chemistry, Molecular Pharmacology, and Journal of Vascular Research*; reviewer for approximately 20 other journals. He also serves as a special reviewer for the NHLBI on Program Project Proposals and Institutional Training Proposals.


Mark S. Taylor: Reviewer: *American Journal of Physiology (Heart and Circulatory Physiology); Journal of Biological Chemistry; Brazilian Journal of Medical and Biological Research*. 95
Mary L. Townsley: NIH: Member, NHLBI T32 Study Section; ad Hoc review for special emphasis panel and RIBT; American Heart Association; Chair, Region IV Peer Review Steering Committee, Greater Southeast Affiliate Research Committee; Council on Cardiopulmonary, Perioperative and Critical Care (Past Chair: 2007-2009); Editorial Board of Microvascular Research; Reviewer: American Journal of Physiology, American Journal of Respiratory and Critical Care Medicine, Basic Research in Cardiology, Circulation Research, Journal of Pharmacology and Experimental Therapeutics, Bentham Scientific Publishers, Free Radicals in Biology and Medicine; Organizing Committee, 2008 Grover Conference.


VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Physiology saw an increase in overall extramural funding for the 2008-2009 year. A new two-year grant from the National Institutes of Health (NIH) was awarded to Dr. James Parker. Drs. Michael Cohen, James Downey, and Mary Townsley received major awards provided by pharmaceutical companies. In total, the Department of Physiology has over $2.8 million in extramurally funded awards for the past year at a time when extramural resources have been scarce and highly competitive.

Faculty in the Department of Physiology maintained high visibility in the national and international scientific community. Several faculty members (Drs. Downey, Lincoln, Taylor, Townsley, and Yang) presented external seminars and invited symposium talks at scientific meetings. Dr. Mary Townsley chaired national committees for the American Heart Association. Drs. Cohen, Downey, Lincoln and Townsley all serve on the Editorial Boards of several scientific journals.

Graduate student training activity continues this year with five Basic Medical Sciences (BMS) graduate students training in the Department of Physiology (Kiana Bradley, Michael Francis, Tray Hamil, Patricia Villalta, and Rebecca Torres). In addition, Departmental faculty sponsored Summer Medical Student Research students funded by the American Heart Association and Summer Undergraduate Research participants.

Teaching activities continue to be a high priority in the Department of Physiology. Dr. Townsley continued her role as course director for "Statistics and Experimental Design in Biomedical Research" and Effective Scientific Writing” while Dr. Mark Taylor directed "Literature Reports" for first-year students. Dr. Weber organized a new graduate course "Research in Progress in Smooth Muscle/Vascular Biology.”
Physiology faculty continue to be actively involved in the Fundamentals of Basic Medical Sciences course offered in the first year. Dr. Mary Townsley continues to serve as the Principal Investigator on the NIH-funded Institutional Training Grant in Lung Biology. With regard to medical student teaching, Dr. Lincoln served as course director this past year. Dr. Cohen continues to lead the case study/small group learning experience in Medical Physiology while Drs. Cohen, Downey, Parker and Weber conduct the Medical Physiology Laboratories.
I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Penaskovic K. Invited speaker. Physicians’ relationships with pharmaceutical industry. Mobile Bay Psychiatric Society; 2009 Jul 30; Mobile, AL.

Simkin DR. Invited speaker. ADHD and learning disorders. ADHD and Associated Conditions Conference University West Florida Center for Applied Psychology and Florida Psychological Association; 2009 Feb 27; Pensacola, FL.

Simkin DR. Invited speaker. Neurobiology of addiction from a developmental perspective. Mobile Psychiatric Society Meeting; 2009 Jan 21; Mobile, AL.

Youssef N. Invited speaker. Case reports. Psychopharmacology jam session. Bipolar disorder and ADHA: solving clinical challenges, improving patient care; American Academy of Clinical Psychiatrists Meeting; 2009 Feb 3; Chicago, IL.

Youssef N. Invited speaker. Does acute treatment with sedatives/hypnotics for anxiety in depressed patients affect suicide risk? Department of Psychiatry Vanderbilt University; 2009 Jan 12; Nashville, TN.

V. NATIONAL PROFESSIONAL RECOGNITION

Farah Khan, Adeel Rabbani, and Nagy Youssef passed Board in Psychosomatic Medicine, American Board of Psychiatry and Neurology, May 2009.

Kenan Penaskovic is now board certified in psychiatry having passed part two in April 2009.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Psychiatry’s integration with AltaPointe to provide quality patient care and education training for our residents and students continues to work extremely well. Dr. Parker has been appointed Vice Chair of the Department overseeing the educational program as well as the clinical operations of AltaPointe. Dr. Simkin continues as the Director of Resident Education, and Kenan Penaskovic has been appointed the Director of Medical Student Education.
Significant improvements in the quality of the educational experience for both residents and students have occurred over the past year. The residency program continues with its expansion to four residents per year. We have placed on hold the proposal to initiate a child psychiatry fellowship due the limitation on the number of child psychiatrists to provide the required educational experience.

The Department has set as one of its goals the need to increase its scholarly activity and clinical research. Additional projects for 2009-10 will include the greater integration of primary care services into psychiatric settings linking the Department of Family Medicine closer together with the Department of Psychiatry.
I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

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IV. INVITED PRESENTATIONS

**Brogdon BG.** Invited Speaker. Child abuse or something else? The Southern Radiological Conference; 2009 Jan 23; Point Clear, AL.

**Brogdon BG.** Invited speaker. Death and disability due to delayed airbag deployment. The Southern Radiological Conference; 2009 Jan 24; Point Clear, AL.

**Brogdon BG.** Invited speaker. Historical perspectives on forensic imaging. American Academy of Forensic Sciences; 2009 Feb 16; Denver, CO.

**Brogdon BG.** Invited speaker. Fingering a murderer: a successful anthropological and radiological collaboration. American Academy of Forensic Sciences; 2009 Feb 16; Denver, CO.

**Brogdon BG.** Invited speaker. Death and disability due to delayed airbag deployment. American Academy of Forensic Sciences; 2009 Feb 19; Denver, CO.

**Brogdon BG.** Invited speaker. Necroradiology comes alive! American Roentgen Ray Society; 2009 Apr 26; Boston, MA.

**Brogdon BG.** Invited speaker. Who are we? Where have we come from & where are we going? Forensic radiology: past, present future. The International Association of Forensic Radiographers; 2009 Sep 12; Manchester, United Kingdom.

**Greiner FG.** Invited speaker. MRI correlation of the fetal brain. The 2nd Annual Women’s Imaging Conference; 2009 May 02; Mobile, AL.

**Herbert DE.** Invited speaker. The new biology for medicine and Bernard’s dilemma. Eighth International Conference on Dose, Time and Fractionation in Radiation Oncology; 2009; Sep 13-15; Madison, WI.

**Khullar S.** Invited speaker. Imaging Injection and Inflammation: Role of Nuclear Medicine. The Southern Radiological Conference; 2009 Jan 25; Point Clear, AL.

**Steffler BA.** Invited speaker. Uterine fibroid embolization. USA Annual OB/GYN Meeting; 2009 Apr 2; Mobile, AL.

**Steffler BA.** Invited speaker. Hepatic chemo-embolization. TriState Radiology Meeting 2009 May 23; New Orleans, LA.

**Steffler BA.** Invited speaker. Pain relief though interventional radiology. Mobile Area Physical Therapy Organization; 2009 Sep 15; Mobile, AL.
V. NATIONAL PROFESSIONAL RECOGNITION

Byron G. Brogdon serves on the Editorial Board of the Journal of Forensic Science; Member of the Advisory Board of Virtopsy Foundation, Berne, Switzerland; Chairman, Research Committee, Forensic Sciences Foundation; referee for Skeletal Radiology. He is a member of Board of Trustees, Forensic Sciences Foundation. Dr. Brogdon serves as member of the National Institute of Justice/ Forensic Science Foundation Research Grant Committee. There is a film panel named in the honor of Dr. Brogdon at The Southern Radiological Conference annual meeting and the Brogdon Panel is an annual event at the meeting of the American Alliance of Academic Chief Residents in Radiology. In addition to Dr. Brogdon’s accomplishments for this past year, he was the featured speaker at The International Association of Forensic Radiographers in Manchester, GB. Dr. Brogdon serves as the Chairman of the Research Committee of the Forensic Sciences Foundation. He has contributed expert testimony to numerous civil and criminal cases across the United States. He reviews manuscripts and abstracts for the Journal of Forensic Sciences and Forensic Science International. He is Patron of the International Association of Forensic Radiographers.

Dr. Donald E. Herbert completed his 2nd 3-year term (2006-2009) as a member of the Advisory Committee to The Statistical Research Center of The American Institute of Physics. He continues to serve as an Associate Editor of the Journal Medical Physics. He served as a moderator of Session IV Dose, Volume Effect and Modeling at the Eighth International Conference on Dose, Time and Fractionation in Radiation Oncology held in Madison, WI. Dr. Herbert along with two other physicists founded this series of international conferences in 1984.

Brad A. Steffler serves on the Economics Committee/Work Group of The Society of Interventional Radiology. He serves as the Carrier Advisory Committee representative in Alabama for Interventional Radiology for the Society of Interventional Radiology. Dr. Steffler has been appointed an Associate Member of The Mitchell Cancer Institute.

Steven K. Teplick is a manuscript reviewer for Radiographics, Journal of Vascular and Interventional Radiology, Journal of Radiology, Journal of Gastrointestinal Endoscopy, Journal of the Society of Cardiovascular and Interventional Radiology, Radiology, Southern Medical Journal, America Journal of Gastroenterology, and Journal Digestive Diseases and Sciences, Editorial Board for Southern Medical Journal and Online Journal of Digestive Health. He is a Board examiner for the American Board of Radiology and a Fellow of American College of Radiology. He is a member of the Educational Research Council for Radiological Society. Dr. Teplick is a Board member of the Joint Review Committee on Education in Radiologic Technology (JRCERT). Dr. Teplick is president of the Alabama Academy of Radiology, and also serves as a Councilor to the ACR as well as several ACR committees.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Dr. Byron G. Brogdon conducts two to three Orthopedic conferences as well as two to three Interesting Case conferences per month for the Radiology Residents although he’s at Distinguished Emeritus Professor status with the University. He serves as a consultant for cases within the University. Dr. Brogdon finished work on the 2nd Edition to his book *Forensic Radiology* due to be released Spring 2010.

Dr. Donald Herbert has been invited to prepare another chapter on Modern Statistical Modeling for the monograph; Advances in Medical Physics 2012. Dr. Herbert continues to revise and expand his series of lectures on medical statistics: Models in Medicine. He is also working on a monograph, *An Introduction to the Strange and Violent World of Nonlinear Dynamics*, and a series of tutorial papers on: Systems Biology: A New Biology for Medicine and An Introduction to Evidence-based Statistics: Bernard’s Dilemma, ‘1 Stein’s Paradox and Bayes’ Theorem. Dr. Herbert continues to provide statistical consultations to USA COM faculty as his time permits.

Dr. Samuel A. McQuiston serves as the Director of Courses for COM Students interested in Radiology as a profession and as a part of their electives. Dr. McQuiston provides CME lectures on Thoracic Radiology and he also reviews cases of interest to residents. Dr. McQuiston gave 1st Year Orientation to 2009 incoming Radiology Residents. Dr McQuiston served as a member of USAMC Professional Improvement Committee. Dr. McQuiston serves as a member on the Curriculum Committee (CUR) and the Continuing Medical Education Committee (CME), as well as a member of the Radiology Residency Review Committee.

Dr. Yasmeen A. Qureshi serves as a member of the Resident Interview/Selection Committee for the Department of Radiology. She also as a member on the Trauma/Burn Q/A Committee for the University. Dr. Qureshi gives CME lectures on Mammography. Dr. Qureshi continues to promote Breast MRI Service. Dr. Qureshi is also involved in Women’s Imaging and programs including U/S guided and MRI guided breast biopsies. To add, she continues to be involved in INTACT Biopsy device for breast masses treated non-operatively. She serves on the Biomedical Environment and Diversity Committee for the University.

Dr. Brad A. Steffler continues to serve as the Chief of Intervetional Radiology. Dr. Steffler performed the first Hepatic Yttrium 90 embolization of Hepatocellular carcinoma in Alabama with Dr. Raymond Wynn. He introduced, to USAMC, new method of Hepatic chemo-embolization of liver tumors: Precision Trans-Arterial Chemo-Embollization using LC Beads, which carry anti cancer, drugs for slow elution in the liver. [The beads are “loaded” with a chemotherapeutic agent (Doxorubicin in the case of HCC) and placed with high precision via the particular hepatic artery branch(es) feeding the tumor(s) and deliver essentially NO drug outside of the liver.}
Dr. Steffler has set up a fiducial placement program for Cyberknife therapy in partnership
with Dr. Steven Sawrie of MCI. This will be the only Cyberknife in Alabama and will be
located at the Mitchell Cancer Institute. Dr. Steffler has contributed major part of a
chapter on diagnosis (radiographic part) in Musculoskeletal textbook for Physical
Therapy students, which being compiled and edited by Dr. Dennis Fell, Chairman of the
Physical Therapy Department. Dr. Steffler is in the process of setting up Cryo-ablation
program for local control, palliation and pain relief of tumors that are not operable or
treatable by surgery, chemotherapy and/or radiofrequency ablation. He’s also in the
beginning stages of developing a Microwave Ablation program for superseding Radio-
Frequency ablation for certain tumors. Dr. Steffler is in the beginning stages of getting
IRB application and approval of submission of LC Bead precision chemo-embolization
cases to the national registry. He is the only non-member (of the Mitchell Cancer
Institute) physician to attend weekly chart rounds at the Mitchell Cancer Institute, every
Wednesday morning, in order to collaborate in cancer diagnosis, therapy and palliation.
2008-2009
Summary of Scholarly Activities
Department of Surgery

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Ellis CN Jr. Invited speaker. Bioprosthetics for pelvic floor diseases. Southern California Chapter, American College of Surgeons; 2009 Jan 16-18; Santa Barbara, CA.

Ellis CN Jr. Invited speaker. What’s new in colon and rectal surgery. Southern California Chapter, American College of Surgeons; 2009 Jan 16-18; Santa Barbara, CA.

Ellis CN Jr. Invited speaker. Bioprosthetics in pelvic floor diseases. Cleveland Clinic; 2009 Jan 22-23; Cleveland, OH.

Ellis CN Jr. Invited speaker. Management of parastomal hernias. Cleveland Clinic; 2009 Jan 22-23; Cleveland, OH.

Ellis CN Jr. Invited speaker. Sphincter preserving management of anal fistulas. Cleveland Clinic; 2009 Jan 22-23; Cleveland, OH.


Gandy RE. Invited Speaker. Rural surgery. Medical Student Section Meeting, Clinical Congress, American College of Surgeons; 2008 Oct 11-17; San Francisco, CA.

Gonzalez RP. Invited speaker. Clinical examination in complement with CT scan: an effective method for identification of cervical spine injury. Eastern Association for the Surgery of Trauma; 2009 Jan 13-17; Lake Buena Vista, FL.

Gonzalez RP. Invited speaker. Static relocation of ambulance services in a rural area can improve EMS response time to motor vehicle crashes. American Association for the Surgery of Trauma, Grand Wailea Resort; 2009 Sep 24-27; Maui, HI.

Hodge JS. Invited speaker. Importance of organ donation. Black Nurses Sorority, Providence Hospital, DePaul Auditorium; 2009 May 2; Mobile, AL.

Hollands CM. Invited speaker. Review of advanced skill requirements. First and Second Year Pediatric Surgery Fellows MIS Course; 2009 Apr 22-26; New York, NY.

Howard D. Invited speaker. Incidence of surgical site infections (ssi) post colorectal resections without pre-operative mechanical or antibiotic bowel preparation. Southeastern Surgical Congress; 2009 Feb 9; Atlanta, GA.

Luterman A. Invited speaker. Advances in burn treatment. Department of Surgery, State University of New York-Syracuse; 2008 Jan 23; Syracuse, NY.

Rodning CB. Invited speaker. Surgical profession. Reception, Chief Residents, Department of Surgery, College of Medicine and Medical Center, University of South Alabama, Convention Center; 2009 Jun 21; Mobile, AL.
V. NATIONAL PROFESSIONAL RECOGNITION

D. Lynn Dyess is a Member of the Breast Disease Committee for the National Surgical Adjuvant Breast & Bowel Project (NSABP). She also serves as a member of the American College of Surgeons – State Chair for the Commission on Cancer; the Alabama District 2 Committee on Applicants; and as a Board Member of the Alabama Chapter.

C. Neal Ellis, Jr. serves on the following committees: American Society of Colon and Rectal Surgeons, and Chair of the Program Committee; Vice-Chair of the Quality Assessment and Safety Committee, Chair of the Subcommittee for Pelvic Floor Diseases, and a Member of the Standards Committee; Member of the American Society of Colon and Rectal Surgeons Research Foundation, Research Committee, and Board of Trustees; Society of Gastrointestinal and Endoscopic Surgeons, Flexible Endoscopy Committee, Fundamentals of Endoscopic Surgery Committee; American College of Gastroenterology Patient Care Committee; International Society for Laparoscopic Colon and Rectal Surgery, Executive Council and Secretary-Treasurer; and Collaborative Group of the Americas for Inherited Colorectal Cancer Standards Committee and President-Elect. He serves as a Reviewer for the following journals: Diseases of the Colon and Rectum; Journal of Surgical Education, Lancet, World Journal of Surgery, and Saudi Medical Journal.

Roy E. Gandy serves on the Editorial Board of the Journal of Surgical Education.

Curtis N. Harris serves on the Finance Committee of the American Society of Maxillofacial Surgeons.

Juvonda S. Hodge received the Organ Donation Medal of Honor for the University of South Alabama Medical Center from the Alabama Organ Center at the National Congress & Awards Ceremony; 2008 Oct 22-25; Nashville, TN.

Celeste M. Hollands serves as an ad hoc Reviewer for the European Journal of Pediatric Gastroenterology; on the Editorial Board of the Journal of Advanced Laparoendoscopic & Advanced Surgical Techniques; and as a Member of the Association for Surgical Education Board of Directors. She serves on the following committees: Chair, Association for Surgical Education Faculty Development Committee; Council Member, Association of Women Surgeons, and Chair, Faculty Development Committee; Executive Council of the American College of Surgeons Medical Student Committee; AAP Section on Surgery Publication Committee; SAGES Pediatric Liaison Committee; International Pediatric Endosurgery Group (IPEG) Co-Chair, Standards & Safety Committee, Publication Committee, Emerging Technology Committee, and Development Committee.
Arnold Luterman is the Assistant Dean for Graduate Medical Education and Chairman of the Graduate Medical Education Committee, and serves as the Designated Institutional Official in liaison with the Accreditation Council for Graduate Medical Education of the American Medical Association. He serves on the Editorial Board of the following journals: American Surgeon, Journal of Surgical Education, New Directions in Critical Care Nursing, Journal of Burn Care and Research, and the Journal of Burns. He serves on the Clinical Studies Subcommittee of the Shriners Hospitals for Children Research Advisory Committee; on the Advanced Burn Life Support Committee of the American Burn Association; and as an Invited Reviewer for the Journal of Trauma and the Journal of the American College of Surgeons.

Charles B. Rodning serves as a Member of the Board of Directors, Mobile (Eichold-Heustis) Medical Museum; a Physician Member of the American College of Surgeons Oncology Group; Vice-President and Secretary-Treasurer of the Medical Society of Mobile County Board of Censors, and Mobile Medical Endowment Trust; a Member and President of the Board of Directors, Department of Public Health, County of Mobile; a Member of the Mobile County Medical Reserve Corps, Department of Health and Human Services; President-Elect, Secretary-Treasurer, and Councilor of the Alabama Chapter, American College of Surgeons; and as a Member of the Association for Surgical Education. He is recertified in General Surgery by the American Board of Surgery, Inc. He was a recipient of the Physicians’ Recognition Award from the American Medical Association.

Frederick M. Silver serves on the Alabama 3 Disaster Medical Systems Team (DMAT).

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Surgery continues to mature. Despite the evolving medical economic environment, the heightened morale and enthusiasm of the department portends an optimistic outlook and bright future. The core value system of this Department - a commitment to surgical education and training, service to the community in which we reside, and research in relationship to the art and science of medicine and surgery - remains foremost in our objectives and planning.

The Department of Surgery has appointed a new professor and chairman, William O. Richards, M.D., F.A.C.S. Dr. Richards possesses exceptional expertise in relationship to advanced laparoscopic and endoscopic technology, foregut pathology, portal hypertension, and magnetometry.

We are also very enthused that Daniel A. Beals, M.D., F.A.C.S., will rejoin the Division of Pediatric Surgery as Associate Professor; that Paul A. Rider, M.D., F.A.C.S., will return to his alma mater as Assistant Professor, Division of Gastrointestinal Surgery as a Colorectal Surgical Specialist; and that Patrick L. Bosarge, M.D., F.A.C.S., will rejoin the Division of Traumatology and Surgical Critical Care, having completed a Fellowship in that discipline in San Diego, California.
Gregory J. Jurkovich, M.D., F.A.C.S., Professor, Department of Surgery, School of Medicine, University of Washington; and Chief, Trauma Service, Harborview Medical Center, Seattle Washington; graciously served as the William A. L. Mitchell Endowed Lecturer in Traumatology and Surgical Critical Care. He is a pre-eminent authority in relationship to those topics and holds prominent national leadership roles as President of the American Association for the Surgery of Trauma and as President of the Committee on Trauma/American College of Surgeons.

Frederick L. Greene, M.D., F.A.C.S., Professor, Chairman, and Program Director, Department of Surgery, Carolinas Medical Center, Charlotte, North Carolina; and Clinical Professor, Department of Surgery, University of North Carolina, Chapel Hill, North Carolina; served superbly as the Emmett B. Frazer M.D., F.A.C.S./Milton M. Leigh, M.D., F.A.C.S. Memorial Lecturer. He is an exceptional authority in relationship to surgical oncology. He serves as Chairman of the American Joint Committee on Cancer (AJCC)/American College of Surgeons and Vice-Chairman of the TMN Staging Core Group of the International Union Against Cancer. He is the Senior Editor of the Seventh Edition of the AJCC Cancer Staging Manual.

Several faculty members were recipients of the Red Sash Award from the Graduating Class 2009 in recognition of their teaching excellence, including: Drs. Gandy, Hodge, Luterman, and Rodning. Dr. Gandy was also recognized as the Gold Humanism Honor Society Awardee for 2009 and as the Best Teacher of the Year Awardee/Department of Surgery (2008-2009).
2008-2009
Summary of Scholarly Activities
Biomedical Library

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Burnham J, Fell D. Invited speaker. Web 2.0 tools in clinical practice and PT education: keeping current, sharing information and marketing. Alabama Chapter American Physical Therapy Association Fall Conference; 2009 Aug 22; Birmingham, AL.


Rossini B, Staggs G. Invited speakers. Introduction to health information literacy. Alabama Occupational Therapy Association Spring Conference; 2009 Apr 4; Birmingham, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Robert Britton is the Continuing Education Chair for the Alabama Health Libraries Association (ALHeLA)

Judy Burnham serves on the Medical Library Association (MLA) Board, and as MLA Section Council Chair. She is Chair of the Southern Chapter/Medical Library Association (SC/MLA) Nominating Committee and Chair of the SC/MLA Strategic Planning Committee. She also serves as a Research Mentor for that group. Judy is a Distinguished member of the Academy of Health Information Professionals (AHIP.)

Clista Clanton serves on the MLA Credentialing Committee and served on the MLA Research Section Annual Meeting Program Planning Ad Hoc Committee. She served as a member of the SC/MLA Honors and Awards Committee and as a member of the ALHeLA Nominating Committee. Clista is a Senior member of AHIP.
Trey Lemley received the 2009 EBSCO/MLA Annual Meeting Grant that provided funding to attend the meeting. He serves as a member of the MLA Scholarship Jury and is President-Elect/Chair Program Committee for the ALHeLA. He is a member of the Network of Alabama Academic Libraries (NAAL) Continuing Education Committee.

Jie Li served on the MLA Membership Committee, and was a MLA Section Council representative for the International Cooperation Section (MLA/ICS). She also serves as Chair of the MLA/ICS Health Sciences Library Partnership Committee. She is a member of the National Network of Libraries of Medicine/Southeastern Atlantic Region (NNLM/SEA) Disaster Preparedness Committee member. She served on the SC/MLA Research Committee. She is the Coordinator of the Alabama Health Libraries Association (ALHeLA) State-wide Emergency Preparedness Plan. Jie is a Distinguished member of AHIP.

Justin Robertson serves on the Editorial Board of the Journal of Electronic Resources in Medical Libraries. Justin serves as the Co-Web Editor for SC/MLA and for ALHeLA and on the Executive Committee for each. Justin is on the Board of Trustees for the Fairhope Public Library and is on the Technology Committee of the National Network of Libraries of Medicine/Southeastern Atlantic Region. Justin is a Senior member of AHIP.

Beverly Rossini was selected as the 2009 recipient of the Reference and User Services Association’s STARS/Atlas Systems Mentoring Award. This Award, administered by the Sharing and Transforming Access to Resources Section (STARS) of the Reference and User Services Association (RUSA), provided financial assistance to attend ALA’s Annual Conference. She has been given a two year appointment to the STARS Education and Training Committee for the RUSA division of the American Libraries Association (ALA). STARS is a professional association comprised of interlibrary loan librarians. She also received a subcontract from the NNLM/SEA to exhibit at the Alabama Public Health Association annual meeting.

Geneva Staggs is Chair of the SC/MLA Bylaws Committee and serves on the ALHeLA Bylaws Committee. She also served on the Alabama Public Library Service LSTA Advisory Council. Geneva received a subcontract to exhibit at the Alabama Occupational Therapy Association annual meeting. Geneva is a Distinguished member of AHIP.

Andrea Wright serves as the Co-Web Editor for SC/MLA and for the ALHeLA and on the Executive Committee for each. She is on the SC/MLA Research Committee and serves as Member-at-Large for the ALHeLA.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Services

A new web page was developed this year. The goal was to have fewer clicks and to use less library terminology. A web blog is being used to communicate announcements about Biomedical Library services and resources to users.

Two librarians continue to attend hospital committee meetings as part of the Clinical Librarian program. In addition, one of the librarians rounds with the Departments of Internal Medicine and the Department of Pediatrics, providing medical information when needed. This librarian also attends the Graduate Medical Education meetings to provide needed information.

A Disaster Preparedness and Service Continuity Plan was completed for the Biomedical Library. This reference will be used to provide guidance for recovery from a disaster and to continue to provide service following a disaster. Additionally, the Emergency Plan was revised and classes held on emergency situations. Plans are also under development to deal with possible scenarios during a flu pandemic.

A transition to a common photocopy card for the University Library, Biomedical Library and Baldwin County campus library was completed this year. This will allow students to use the same copy card regardless of location.

Facility

The Medical Center Library moved to the 3rd floor of the USAMC and was renamed the Health Information Resource Center. In addition to professional materials, it also has a consumer health collection, both in print and via an electronic kiosk. New furniture was included in the move. Many months of planning went into making the move smooth. The older, bound journals will be stored in the basement of the library. These journals have not yet been moved from the old library location in the Mastin Building.

Renovations were completed for the group and individual study rooms as well as the Study/Conference Room at the Campus location. Additionally teleconferencing capability was added to the Study/Conference Room.

A new phone system and new camera system were installed in the Baugh Biomedical Library.

Photographs, loaned from Mike Carmichael, have been hung at both the Baugh site and at the HIRC site.
Outreach

National Medical Librarians Month October 2008 was observed by taking the library to our users. Tables were set up at the College of Nursing/SHAC, College of Allied Health Professions/SHAC, USAMC, C&W and the MSB lobby. During National Library Week in April 2008, a project to collect books for C&W patients, headed up by a BL librarian, resulted in over 900 items collected.

The BL received the Empowering Health Ministry Leaders award from the National Network of Libraries of Medicine/Southeastern Atlantic Region. Health ministry leaders from ten African-American congregations in the 36603, 36610 and 36617 zip codes will be invited to form an association for communication and support. The funding of over $26,000 will provide the resources needed equipment and training geared toward improving the health of the congregation. The BL will also participate in the Nurse Managed Clinic project, being developed by the College of Nursing.

A Facebook page was developed for the Biomedical Library, http://www.facebook.com/pages/Mobile-AL/University-of-South-Alabama-Biomedical-Library/75004888342?ref=ts.

Librarians worked with the DREAM, Step-Up, STARS and STRIPES students during the summer. Overall goals of the BL involvement with these programs were to help the students improve their library and research skills.

The Biomedical Library along with the Expolreum and the Med School Café hosted the NLM Frankenstein exhibit April 27-June 21. Because the exhibit was too tall to be housed at the Biomedical Library, it was displayed at the Exploreum. Two Med School Café sessions were held in conjunction with the exhibit.

A BL librarian, along with University Library librarians participated in an in-service for Baldwin County teachers and in a presentation for the Baldwin County USA Campus Joint Social Networking Task Force.

Resources

New resources added this year include Clinical Evidence, Springer journals package (760 health science titles), OVID LWW journal package (327 titles), OVID LWW books (364 books), Mary Ann Leibert journal package (65 titles), Evidence Matters (as part of the Joanna Briggs Institute package.) Several federated search engines were reviewed this year to find a tool for search the BL e-book collections, resulting in the addition of WebFeat.

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2008-2009
Summary of Activities
USA Center for Lung Biology

General Operations

The CLB’s mission is to provide state-of-the-art scientific development in lung biology that advances the understanding of human health and disease, to improve patient care, and to serve as the foundation for outstanding graduate, post-graduate, and fellowship training. More than 30 faculty members from various departments within the College of Medicine are actively participating in a strong collaborative research environment, a research seminar series and journal club, and graduate, postdoctoral and fellowship training.

The CLB launched its inaugural biannual Newsletter in September of 2009. Collaborative research recently published by Drs. Songwei Wu and Mary Townsley were highlighted in the Newsletter. In addition, articles summarizing the CLB training grant and Division of Pulmonary and Critical Care Medicine clinical activities were included. Examples of our Percipio program and the “Did You Know…” series were included. This Newsletter will be submitted to our academic colleagues throughout the country as a way to illustrate exciting research and academic opportunities in the Center.

Our administrative office is located in the Medical Sciences Building in Room 3340 on the main University campus. Ms. Jennifer Collins and Ms. Charlene Jordan serve as support staff for the CLB and are responsible for clerical duties for the administrative office and research laboratories.

Detailed information about the CLB is available with a click on our homepage (http://www.usouthal.edu/clb). The web page is interactive and contains a variety of information including faculty and student bibliographies, recent publications, and information regarding scientific and training programs. Our annual report is available through Ms. Charlene Jordan (414-8045) at the CLB office.

Research Activities

The CLB was well represented at national and international scientific meetings with a number of faculty, postdoctoral fellows, and graduate students presenting their work at multiple forums, including the American Heart Association, Federation of American Societies for Experimental Biology, American Physiology Society, and the International American Thoracic Society.

The CLB hosted one Distinguished Scientist Seminar. Our guest, Dr. Jeffrey Whitsett, is Chief, Section of Neonatology, Perinatal, and Pulmonary Biology at Cincinnati Children’s Hospital Medical Center, and is an elected member to the Institute of Medicine of the U.S. National Academy of Science. Dr. Whitsett’s presentation was entitled The Transcriptional Network Regulating Goblet Cell Differentiation and Mucous Hyperproduction.
Our Critical Care Conference series in conjunction with the Pulmonary Division hosted two speakers. This conference focuses on translational research and acute lung injury, and is held monthly on Fridays at 2:15 pm. Dr. Mark Moss, a Rogers Mitchell Professor of Medicine at the University of Colorado Health Sciences Center presented *Neuromuscular Weakness in Critically Ill Patients: Diagnosis and Treatment*. Dr. Wayne Mintzer, Professor and Director of the Division of Physiology at Johns Hopkins University Bloomberg School of Public Health presented *Airway Smooth Muscle: The Appendix of the Lung*.

**Extramural Funding**

In the past year, CLB principal investigators have submitted 51 grant applications to the American Heart Association (AHA), National Institutes of Health (NIH), Defense Advanced Research Projects Agency (DARPA) and other foundations. To date, ten of these applications were awarded generating over $4.3 million in new revenue over the next five years. This represents a 23% success rate in grant submission for this fiscal year.

The Center received three awards from the American Heart Association, Southeast Affiliate. Dr. Brian Fouty received a Grant in Aid award and two of our graduate students, David Clark and Salina Gairhe, received predoctoral fellowships. Four awards were received from NIH. Drs. Mark Gillespie and Thomas Rich received research awards. Two supplements were received for the Program Project Grant. Drs. Troy Stevens and Mary Townsley received an administrative supplement to support summer research fellows, and Dr. Songwei Wu received a research supplemental for Project 3 of the program. Dr. Ivan McMurtry received a DARPA award through a subcontract with the University of Colorado. Dr. Thomas Rich received a Collaborative Research Trials award through GlaxoSmithKline’s Respiratory Medicine Development Center. Two additional grants were awarded by NIH from our previous fiscal year submissions. Dr. James Parker received a research grant and Dr. Mary Townsley received a competitive renewal on the institutional T32 training grant that provides support for predoctoral students in the graduate program in Basic Medical Sciences.

**Recruitment Activities**

An objective of the CLB is to enhance clinical, translational, and basic research in the pulmonary sciences. As part of this initiative, the Center is recruiting research scientists at all academic ranks and across disciplines. The CLB welcomed two new recruits to the program this year. Dr. Sarah Sayner was appointed Assistant Professor in the Department of Cell Biology and Neuroscience, and Dr. Donna Cioffi was appointed Assistant Professor in the Department of Biochemistry and Molecular Biology. Drs. Sayner and Cioffi possess expertise in lung endothelial cell biology, with research efforts that focus on the cellular basis of acute lung injury.
Education

The CLB provides a vibrant collaborative research environment forming an outstanding framework for training in lung biology and related areas, and offers training opportunities for students and fellows at any academic stage. This past summer, the CLB accepted four students for the Summer Undergraduate Research Fellowship (SURF) program. Students participating in the program and sponsors respectively were Shruti Agarwal, University of South Alabama (Dr. Mary Townsley), Hunter Hale, University of Alabama (Dr. Mark Gillespie), Matthew Robson, Alabama School of Math and Science (Drs. Troy Stevens, Songwei Wu, and Sarah Sayner), and Trevor Stevens, Spanish Fort High School (Drs. Troy Stevens, Songwei Wu, and Sarah Sayner).

CLB faculty played an active role in the 36th Annual Medical Student Research Day sponsoring six summer medical students and two master students. Students participating in the program and sponsors respectively were Drew Uhrig (Dr. Richard Honkanen), Carlton Smith (Dr. Natalie Bauer), Caitlin Gordon (Dr. Sailen Barik), Ryan Gentry (Dr. Glenn Wilson), Richard Gurich, Jr. (Dr. Mikhail Alexeyev), Jason Prater (Drs. Sarah Gebb and Glenn Wilson), Eugene Crever (Dr. Ivan McMurtry), and Casey Jones (Drs. Mark Taylor, Thomas Rich and Ivan McMurtry).

Student training in CLB is interdisciplinary. As part of this concept CLB faculty, clinical fellows, post-docs, graduate students and technicians participate in weekly seminars. CLB holds a research-in-progress seminar on Tuesdays (11-12:00 pm). Papers are reviewed and utilized to transition into the presenter’s own area of investigation. Up to date research results and future directions are discussed. CLB co-sponsors a research seminar series with the Division of Pulmonary and Critical Care Medicine on Fridays (2:00-3:00 pm). Presentations rotate between Case Conference, Critical Care Conference, Basic Science Reports, and Research Conference. Research Conference is held in the Pharmacology Conference Room (MSB 3360) whereas other Conferences are held in the Eichold Room at the USA Medical Center.

Dr. Thomas Rich organized a Special Topics course on Optical Imaging Techniques (IDL 650) for the spring semester. Dr. Rich invited two guests to participate in this course. Dr. Claudette St. Croix, Assistant Professor, Department of Environmental and Occupational Health at University of Pittsburgh lectured on Confocal Microscopy. Dr. Mary Dickinson, Associate Professor, Department of Molecular Physiology and Biophysics at Baylor College of Medicine lectured on Two Photon Microscopy.

Three graduate students in the CLB training program received special recognition. David Clark and Salina Gairhe received Predoctoral Fellowship awards from the American Heart Association, Southeast Affiliate. David’s project is entitled Regulation of Hypoxic Gene Expression by G-Quadruplex Structures and is sponsored by Dr. Mark Gillespie, Professor and Chair of Pharmacology. Salina’s project is entitled Myoendothelial Gap Junction Signaling Regulates Pulmonary Vascular Smooth Muscle Cell Phenotypes, and is sponsored by Dr. Ivan McMurtry, Professor of Pharmacology.
Ryan Viator received a travel award from the American Society for Biochemistry and Molecular Biology to present at the Experimental Biology meeting in New Orleans. Ryan's poster presentation was entitled *Aortic Endothelial Cells Transport more Glucose than Pulmonary Artery Endothelial cells.* Dr. Brian Fouty, Associate Professor of Internal Medicine serves as Major Advisor.

The NIH-funded T32 training grant on "Cell Signaling and Lung Pathobiology", directed by Dr. Mary Townsley, was renewed for a second 5-year period. In this second cycle, the T32 will continue to support 6 predoctoral trainees per year, along with 4 short-term summer research trainees. Summer trainees will be drawn from those COM medical students or USA engineering master's students applying for summer research positions in the CLB. A summary of outcomes for doctoral trainees in the CLB is noted in the table below.

<table>
<thead>
<tr>
<th>Summary of Outcomes in the PhD program: 2004-present</th>
<th>T32 Trainees</th>
<th>Trainees with CLB Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total trainees enrolled</td>
<td>15</td>
<td>43</td>
</tr>
<tr>
<td>US citizen/permanent resident</td>
<td>15</td>
<td>34</td>
</tr>
<tr>
<td>Under-represented minorities</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Individual extramural fellowships</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Trainees completing PhD</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>PhDs active in academia and/or research careers</td>
<td>3</td>
<td>16</td>
</tr>
</tbody>
</table>

**Art in Science**

PERCIPION™-The Art in Science Program was developed by the CLB to increase community awareness about ongoing biomedical research performed at USA. The Art in Science program provides an opportunity for research scientists to present aesthetic aspects of their data to the public. The primary purpose of the program is best defined by its title, PERCIPION, which means "to learn through the senses." The Art in Science program participated in the Med School Café lecture series sponsored by USA Physicians Group.
2008-2009
Summary of Activities
Center for Healthy Communities

Introduction
The USA Board of Trustees established the Center for Healthy Communities September 4, 2004 to help the University better address the needs of underserved residents in the Gulf Coast Region. The Center has enjoyed continued growth and development during its existence and has achieved local, regional and national recognition as an effective vehicle by promoting education, research and public service for targeted communities.

Providing community education, research, public service and health activities to help eliminate health disparities, foster access to health care for underserved populations, enhance the capacity of individuals to better participate in decision making about their health and build healthy communities continue to be the Center's primary objectives. Continued funding through the National Institutes of Health Center for Minority Health and Health Disparities Center of Excellence (formerly EXPORT) program has facilitated the efforts of the Center in addressing these objectives. In addition, The Center has continued funding from the Robert Wood Johnson Foundation and local and regional contracts.

In August 2008, Harvey White, Ph.D. founding director of the The Center, left the University and the Directorship of The Center. Dr. Errol Crook took on the role of interim director. Dr. Crook previously served as Co-Director and continues as PI of the Center of Excellence grant, therefore, he has a full understanding of the The Center’s functions. However, with the loss of Dr. White the community development and non-profit management activities of The Center have not been continued.

The primary activities of the Center are under the umbrella of the Center of Excellence Grant. The bulk of the Center’s community outreach programs are now funded by the grant. The Center has enjoyed funding for several other research projects. In this report we have included a summary of Activities for the last year of the Center of Excellence Grant and brief summaries of other research projects taken on the by research core.

Center of Excellence Grant
Title: Broad-based collaborative on minority health and health disparities
Grant #: 1P20 MD002314

OVERALL SUMMARY

A.) Objectives
The overall goal of the University of South Alabama Center for Healthy Communities (CHC) Center of Excellence is to utilize a broad-based collaborative and multidisciplinary effort to address health disparities within the University of South Alabama (USA) service area. To achieve this goal, we continue to nurture the partnerships created with many organizations and individuals during the planning grant phase and first year of our Center of Excellence (P-20)
grant. In addition we continue to establish additional partnerships with a specific focus on building a dynamic group of community health advocates. In year two of the P-20 grant we have focused on establishing sustainable programs and relationships within our service area. We continue to take an approach based on community based participatory research principles. We encourage our partners to direct our efforts with regards to prioritization of resources and interventions, identification of health disparities within our communities, and strategies for securing additional funds to support the Center’s work. We are proud that many new initiatives have been started during this second grant year, many with the leadership of our partners.

B.) Studies and Results
Details of the activities of the Administrative, Community Engagement, Mentoring and Training, and Research cores will be outlined in detail in the individual reports of each core (see below). However, we would like to highlight other accomplishments here.

The administrative core has strengthened its relationship with the institution’s business and grant offices. We now have quarterly meetings with leaders of the University of South Alabama College of Medicine’s business and grants offices to review the administration of our programs. In these meetings we have been able to solve many dilemmas with regard to personnel issues, pilot grants, and other new initiatives that do not fit neatly into previous categories known to our business offices. The spirit of cooperation is great and all have the success of the Center of Excellence as the primary objective. We continue our Core leaders meetings and they have evolved from dealing with day-to-day administrative issues, to discussions on the science of our approaches and exciting new initiatives that will address our objectives. In these meetings we have started to share findings from our work and have been able to build stronger bridges between cores. The internal advisory committee has met and all members have been strong advocates as well as advisors.

The community engagement core has been successful in growing the number and diversity of our community health advocates (CHAs). The core has implemented CHA initiated projects where CHAs put together the proposal of activities and we act as facilitators. A Passport for CHAs has been developed where CHAs get their passport “stamped” for activities that improve their skills as a health advocate or when they perform exemplary tasks as an health advocate. The core has been successful in securing many such activities for our CHAs and the response has been great. The Regional Health Disparities Symposium was a success in the summer of 2009. The format was changed so that participants, current and potential CHAs, made work plans to address issues around five major themes. We are moving forward on a long-standing partnership with an organization to provide computerized medical records (web-based) to the predominantly African American faith-based community. The pipeline programs of the community engagement core continue with the successful recruitment and retention of junior high and high school students. We have expanded the schools from which we recruit students and have channeled many of these students into Youth CHAs.

We have also expanded our pipeline programs through a partnership with the College of Education. In this partnership we co-sponsor a program for 3rd through 5th grade students to enhance math, science and reading skills.
The Research Training and Mentoring Core has identified investigators to act as research mentors for the summer of 2009. We will be providing rising college sophomores, who were part of our pipeline programs while in high school, with research opportunities this summer, illustrating the partnerships between cores.

The Research and Administrative Cores facilitated progress of research projects. Lead and co-investigators of our research projects have presented updates of their work at Health Disparities Research Group (HDRG) meetings and they are active members of the HDRG. The HDRG has continued its momentum and has partnered with the community engagement core to initiate a project within one of our communities of focus to enhance familiarity with clinical research while providing that community the resources needed to implement an environmental survey. This partnership allowed for the submission of a proposal in response to the recent ARRA challenge grants. The research core has established continuous monitoring of all research programs and core leadership meetings with research project PIs quarterly. Finally, the core announced our internal call for proposals for additional pilot projects to be started in year 3. Our past efforts to encourage research in health disparities and recent meetings with University deans and department chairs were fruitful and we received 24 letters of intent. Full proposal were due the first week of May 2009 and methods have been put in place for quick review of grants and notification of grantees. It was our plan that new projects be started in July 2009, the beginning of the third year of the grant.

C.) Significance
Our efforts continue to increase the community’s knowledge and interest about health disparities. In this year we have seen our CHAs develop their own initiatives and implement them with our assistance. This type of grassroots efforts is what is ultimately necessary to win the fight against health disparities. Our partners now see that there is considerable opportunity to reduce and/or eliminate health disparities in the Greater Mobile area. The university, government, business, healthcare and broader community are all energized to work toward elimination of these disparities, and our center is clearly recognized as part of the community allowing us to better serve our constituents.

D.) Plans
Plans for each core will be outlined in each individual report. Major initiatives for this year are listed:

a) We will continue to grow our CHA program. Many of our CHA leadership council have come to us from their church’s health ministries, therefore, we will continue to support heightened awareness for health disparities among our faith based institutions. We look forward to evaluating the impact of web-based support for health ministries and personalized health records.

b) We expect to enhance our information dissemination regarding health issues by a variety of mechanisms – enhanced website usefulness, newsletter.

c) We will implement new pilot research projects that will hopefully grow into larger funded initiatives.
d) The students in the academic pipeline will be encouraged to remain disciplined and
dedicated students and all available resources will be used to foster their development.
We will continue to support and grow this group in their efforts as Youth CHAs.

e) We will identify new opportunities for members of HDRG to collaborate in scientific and
outreach efforts to reduce health disparities.

Publications:

Bruce MA, Beech BM, Sims M, Brown TN, Wyatt SB, Taylor HA, Williams DR, Crook E.
Apr; 57(4):583-9.

Crook ED, Bryan NB, Hanks R, Slagle ML, Morris CG, Ross MC, Torres HM, Williams RC,
Voelkel C, Walker S, Arrieta ML. A review of interventions to reduce health disparities in

Crook ED, Hundley TJ. Is the grass greener? From health statistics to policy decisions. Lancet

Landry JB, Crook ED, Solomon MA. African American women’s perceptions of health and
exercise behavior: a qualitative investigation. In: Ileweng NT, Parsons EB, editors. Female

Reports from Individual Cores

Administrative Core

A.) Objectives
The aims of the Administrative Core are as follows:

1) To facilitate the achievement of objectives in all other cores (research, community
   engagement, research education and training) via support of their activities.
2) To foster established and develop new key relationships within and external to the
   University of South Alabama to expand the Center of Excellence’s effectiveness in
   addressing its overall objective.

B.) Results
With regards to the first objective we have established the necessary accounts within the
university business system to facilitate oversight of grant resources. In year 2 of the grant we
were able to get all pilot projects implemented. We now have quarterly meetings with
representatives of the University’s and College of Medicine’s business office, grants and
contracts administration office, and human resources to review administrative issues with the
Center of Excellence grant. It has been extremely valuable for all parties to sit in one room and
work through issues that are specific to a complex program of this type. All entities within the
University are focused on the success of the Center for Healthy Communities and the execution
of its Center of Excellence grant program.
We continue to have core leader meetings regularly. These meetings have evolved from dealing with day-to-day management issues of the grant to examining and thinking through new initiatives. These discussions have resulted in new partnerships between the community engagement and research cores. These new initiatives are expected to result in new funding opportunities in the future.

We have formed our internal advisory board. The chair of this committee is Troy Stevens, PhD, Professor of Pharmacology and Director of the University of South Alabama’s Center for Lung Biology. Other members of the committee come from the Colleges of Allied Health, Nursing, Art and Sciences and Education. This diverse group is made up of deans and associate deans who have identified members of their faculty who will benefit from collaboration with us. In addition, they have directed us to persons and opportunities that have enhanced our programs.

A big reason for the robust response to our call for research proposals (see research core) was the efforts of the internal advisory board. Meetings of the full board will be biannually, however, we have meetings with individual members of the group more often.

As to the second objective, we continue to develop partnerships within the university and over the Greater Northern Gulf Coast region that are essential to our mission. We continue to focus on sustaining the relationships that are established. As mentioned above, this is a challenge for us as the number of partners has grown. We use personal meetings, our newsletter, our website, and collaborative projects to sustain these relationships. Most of these efforts will be outlined in the individual core reports.

We do want to highlight a partnership with the University’s Sickle Cell Center. We used our funds for the support of health disparities and support the Sickle Cell Center’s annual conference. We supported the keynote speaker, James Eckman, MD, PhD, Director of the Sickle Cell Center at Emory and Grady Hospital who spoke on health disparities in Sickle Cell Disease. In addition we supported the travel of J. Hoxi Jones, an accomplished patient advocate with sickle cell disease. We were able to support the attendance of many of our CHAs at the meeting. This was a wonderful experience for them to see and experience health advocacy in action.

Community Engagement Core

A.) Objectives

The objectives of the community engagement core are as follows:

1) To improve health of the populations at high risk for health disparities via dissemination of health information and community based health advocacy;
2) To develop a new generation of healthcare providers and healthcare researchers who will focus on issues underlying health disparities;
3) To provide evidence of the effectiveness of strategies for community engagement in order to understand both process and outcome in building a community based outreach program.
B.) Studies and Results

Objective 1: Our major interventions to achieve this goal are to expand a community health advocate program designed to empower community members to become leaders in addressing their communities’ health issues and to expand our health information dissemination efforts. In addition we continued our annual Regional Health Disparities Symposium but changed the format significantly in accord with feedback from prior meetings.

Community Health Advocate (CHA) Program

Our CHA program has continued to develop. We now have 40 active adult CHAs and 33 active youth CHAs. We have established an Advisory Board for the CHAs. The Advisory Board is built on a stakeholder model and includes 14 individuals. Each stakeholder on the CHA advisory board is a member or leader of a community organization that is expected to provide several other CHAs in the future. The members are diverse in interests and expertise.

In keeping with community based participatory research principles we have our CHAs identify health initiatives that deserve priority. In response we identify training opportunities in these areas. A “Passport” has been developed where CHAs earn “stamps” with completion of activities that enhance their health IQ. The areas of priority include methods to address physical activity, obesity, cardiovascular disease, diabetes, hypertension, women’s health, and stress. Speakers and trainers in standardized programs were identified and several trainings have occurred. In some cases we have used the train the trainer method and our CHAs have become certified trainers for established programs on physical activity, obesity and nutrition. This allows the CHAs to use their unique skills to train other CHAs and members of the community in these areas. We have been fortunate to recruit a number of highly motivated, dedicated and intelligent people to this effort.

The Body Works and New Leaf programs are examples of established programs that focus on physical activity, diet/nutrition and obesity where our CHAs became certified as trainers. We have scheduled additional sessions of these programs over the next 2 – 3 months so that more CHAs may become certified. We have found that these types of programs are highly valued by our group and potential CHAs. Therefore, we have identified other such programs to offer. As mentioned above, we are taking advantage of the expertise of our CHAs and developed CHA directed programs. CHAs put together their own program and make a request for support for materials, printing, space or other necessities to our program. This program enhances the skills of the individual CHA as a health advocate, teacher, and locator of resources through granting mechanisms. We look forward to having many more such CHA initiated programs in year 3 of the grant.

Many of the CHAs have come to the program as representatives of their respective church’s health ministries. We have been fortunate to collaborate with a group from Cleveland, Ohio that focuses on enhancing the health of the African American faith-based community. Universal Patient Record Information System (UPRIS) is a web-based platform that provides health
information of importance to the African American community. They allow churches to have a home page and, importantly, for church members to have a personal site for their personal health information. Our partnership with UPRIS was strengthened after Hurricane Katrina when so many members of health disparate populations were displaced without access to their health information. Since then UPRIS has been expanded greatly as a resource for health information as well as a resource to electronically store personal health information. We will provide this resource to 5 of the churches represented by our CHAs starting in June 2009 through the end of the grant. Evaluation of how this resource is used by the respective church ministries (there is a suggested agenda for health ministries on the site) and by individual members will be ongoing with feedback provided to UPRIS for updates.

**Regional Health Disparities Symposium (RHDS)**

In July 2008, we held our third Regional Health Disparities Symposium. In keeping with the feedback from our first 2 symposia we held a series of workshops where our CHAs (established and new recruits) developed work plans focused in five topic areas. This approach was developed in response to the evaluations from our previous meetings indicating the desire to pull multiple groups together and work toward solutions to the health disparities in our area.

The topics addressed were as follows: violence in the African American community, the women as healthcare CEO in the family, how public policy affects community health, the connection between environmentally safe and fair housing and health, and nutrition and physical activity.

Our CHAs were consulted on program planning and selection of topics. University faculty and CHAs partnered as facilitators of workshops. A summary and workplan was developed that serves as a blueprint for many of the activities of the CHAs and Center of Excellence staff. Approximately 200 people attended the 2008 RHDS.

Planning for the 2009 RHDS is moving along well. We are moving a step further and plan a series of smaller, more focused events that address issues of concern in our most challenged communities. We will outline accomplishments of CHAs in addressing the tasks set up in 2008 and will encourage development of another workplan for the next year. We will evaluate the effectiveness of the approaches we took in 2008 and 2009 and share our findings with others involved in grassroots efforts to address health disparities.

**Objective 2:** Our major intervention for this objective is the continuance and expansion of our pipeline programs for school age children. We have continued our pipeline programs for high school *(Students Training for Academic Reinforcement in the Sciences, STARS)* and junior high school students *(Special Training to Raise Interest and Prepare for Entry into the Sciences, STRIPES)*.

The Academic Pipeline programs are designed to provide access to educational opportunities as well as prepare students for careers in the Health professions. The students must maintain a 3.0 grade points average, must plan to attend college, and have the ability to commit to the program in its entirety (over three summers). The program is aimed at younger potential scientists:
Special Training to Raise Interest and Prepare for Entry into the Sciences (STRIPES) targets rising junior high school students who are then promoted to STARS rising seniors. Student Training for Academic Reinforcement in the Sciences (STARS) – [Shadowing, STEP-UP, and Youth CHA’s] targets rising seniors and STARS graduates. Both programs have recruited students from 2 inner-city predominantly African American schools, John L. Leflore Magnet High School and Mattie T. Blount. In 2008, C.F. Vigor high school, another urban predominantly African American high school was added to the recruitment list.

STARS – 2009 Summer Enrichment program (June 23 – August 1, 2009)
Total amount of participants – 9 Students (rising 11th graders)
The program consisted of 6 weeks, 2 weeks per subject course in: Advanced Algebra/Trigonometry, Anatomy/Physiology, English & Writing/Computer Skills, Research (RHDS, Family Health Tree and prominent diseases), and weekly guest speakers

STARS – 2009 STARS Shadowing program (June 23 – August 1, 2009)
Total amount of participants – 5 Students (rising 12th graders)

The STARS Shadowing Program allows for students to shadow health care professionals. This program provided our students with an opportunity to receive invaluable learning experiences, exposure to health care practices, and medical research experience. The program provides STARS students’ exposure to and interaction with distinguished local and national health professionals and an opportunity to become part of a network of future young scholars and leaders in science and medicine.

The Shadowing Program is a six-week paid internship, based on the students’ professional interest. The students are partnered with varies distinguished local health professionals who are interested in mentoring. Throughout their intern the students are required to maintain a journal of their experience. STARS Shadowing students had experiences in Clinical Speech Language Pathology, OB/GYN, Hematology / Oncology, Family Medicine, Pediatrics / Adolescent Medicine and Sports Medicine.

STARS – 2009 STEP-UP program (June 9 – August 1, 2009)
Total amount of participants – 5 Students

The Short-Term Education Program for Underrepresented Persons (STEP-UP) is created by the Office of Minority Health Research Coordination (OMHRC) in the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The STEP-UP Program is designed to provide short-term research education for high school students from racial and ethnic minority or disadvantaged backgrounds to expose them to research in areas of diabetes, endocrinology, metabolism, nutrition, obesity, digestive, liver, urologic, kidney, and hematologic diseases. We were fortunate to have 4 or our STARS students supported by this program. We supported a 5th student in the program.

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The STEP-UP Program provided support for eight consecutive weeks of basic or clinical research education and training during the summer provided by Center of Excellence faculty. The program culminated at the end of the summer with a Scientific Session and Summer Research Presentations held at the campus of the National Institutes of Health (NIH) in Bethesda, Maryland on August 12-16, 2008. The students presented their research to an audience of their peers, mentors, and scientific experts, in addition to enjoying other exciting events such as touring NIH and the Nation’s Capitol. Having students in STEP-UP has allowed us to leverage our resources and increase the offering of the pipeline programs to other students. There are 2 students who have been selected for STEP-UP for 2009, again from our STARS students.

**STRIPES - 2009 Summer Enrichment program (July 7 - August 1, 2009)**
Total amount of participants – 11 Students (Rising 10th graders)

The program consisted of 4 weeks, 1 week per subject course in: Geometry, Chemistry, English & Writing, Communication/Critical Thought/Computer Skills, Research (Family Health Tree and prominent diseases) and Weekly guest speakers. The participants were rising 10th graders with varied interest across the medical field. Their GPAs ranged from 3.2 to 4.0 and they represented the 3 schools mentioned above.

In addition to the programs mentioned above we have Saturday Academies for STARS students to facilitate retention, enhance academic skills and enhance life skills. Saturday Academies are once a month during the school year. They have guest speakers from a variety of backgrounds, get information for standardized test preparation, and review study skills. College preparation is reviewed including admissions, scholarship awareness and applications and financial aid. Tutoring is also offered during the school year with a focus on math, science and language portions of their high school curriculum.

We have encouraged our pipeline students to become Youth Community Health Advocates. To promote civic responsibility, participants were guided in discussions about their role in community health advocacy. Facilitators helped the participants develop a project around the issues identified at the Regional Health Disparities Symposium. The implementation of the project will be held on May 30, 2009 at Dumas Wesley Community Center. One of the areas in which they have decided to focus is community violence. In addition they participated in several community service events.

**New Pipeline Initiatives**

We have partnered with Dr. Andre Green, Assistant Professor in the University of South Alabama College of Education to enhance our pipeline programs. Dr. Green’s area of scholarly focus is the enhancement of science and math education and accomplishment among underprivileged and African American youth. He bases his interventions on mentorship as a method to enhance the educational experience. He has established a summer program that focuses on 3rd through 5th graders from the same neighborhoods as our STARS and STRIPES students. His program is a 4 – 6 week session during the weekday mornings over the summer. His program provided a method for us to identify students earlier and bring them into our
pipeline before they are lost. We are providing financial support for his program for 2009 to offset some of the losses incurred from state funding sources due to the economic downturn. In addition, we are planning to assist Dr. Green and his teachers with instruction and the development of a health curriculum.

Objective 3: Our evaluation plan for the Outreach Core is both formative and summative. As part of the formative evaluation, we are looking at the process of engagement for CHAs. We have conducted interviews with CHAs to understand their motivation and barriers to being a CHA. We have started discussions with our CHA leadership council regarding the approach to take to evaluate the effectiveness of this strategy. We have continued our expandable database to record such indicators as: meeting attendance, training event participation, information delivery, and health education activities in the community. We expect that more formal evaluation of the effects on overall health of the community and the health IQ of the community will intensify in year 3 of the grant. Our major activities thus far have been to educate our CHAs of our obligation to evaluate our efforts and of the importance of the evaluative process to direct future efforts. Our concern for evaluation fatigue was outlined above so we have been cautious in our evaluative efforts thus far.

Research Education and Training Core

A.) Objectives
The specific aim of the research education/training core is to address the disparity in the number of African Americans and other underrepresented minority biomedical researchers.

B.) Results
The Career Pathway for Minority Scientists (CPMS) program has been the main focus of this core. CPMS has the objective to advance the careers of underrepresented minorities in basic science and clinical research through effective mentoring strategies. The program introduces doctoral students, post-doctoral fellows, and junior faculty to grant writing and review, developing a research portfolio and research plan, promotion and tenure issues, developing a relationship with mentor, and issues faced in job negotiation. We have a mock study section using actual NIH submitted grants led by Dr. Mary Townley, Professor of Physiology and Assistant Dean for Faculty Affairs, USA College of Medicine.

We also include University of South Alabama junior faculty that focus on health disparities research regardless of their ethnicity. We will continue the same strategy this year and into the future as we think that it is most important to have trained, sensitive researchers focusing on this area regardless of their ethnicity. Solicitation for fellows has been most successful by referrals from past fellows, all of whom found this program to be quite valuable. We expect to have the next CPMS session in the fall of 2009.

Other activities to achieve this objective are tied to the pipeline programs of the community engagement core. We have been fortunate to have students from our pipeline program accepted into an NIDDK based national program to foster interest in medical research among underrepresented minority high school students (STEP-UP).
These students (n = 4) were involved in research programs within the research and community engagement core during the summer of 2008 (see community engagement core results). For 2009 we have had 2 students selected and they will be placed with investigators within the university working in health disparity interest areas such as cancer and sickle cell disease. It is our hope that we will be able to continue their exposure to research once they are in college via the undergraduate research experience. For the summer of 2009 we have 5 undergraduate students who were once in our secondary pipeline program who will be placed in research opportunities. These students are completing their freshman year of college and have successfully competed for these positions. Mentors have been identified and a basic research curriculum will be reviewed with the students. We see this experience as providing a bridge between our secondary school pipeline programs and other established programs for pre-health, particularly, pre-medical, students already established on campus.

Research Core

A.) Objective
The overall goal of the Research Core is to Provide Academic and Logistical Support to Promote Multidisciplinary Research in Minority Health and Health Disparities at USA. The Specific Aims to address this goal are as follows:

1) To promote the generation of data from hypothesis driven, multidisciplinary research projects focused on issues of importance to the health of African Americans and low-income groups.
2) To expand the cohort of investigators conducting innovative health disparities related research through several mechanisms.
3) To critically review health disparities related research conducted in the U.S. so that appropriate research questions can be formulated to impact the health of our community.

B.) Studies and Results
The major programs of the research core are hypothesis driven, investigator initiated research, the Health Disparities Research Group (HDRG), and invigoration of research interest in health We strive for a community based participatory research model whenever possible. We will discuss our progress to date in the three main areas outlined above.

Health Disparities Research Group

The HDRG is an assembly of university faculty and community members who gather to discuss health disparities research and determine local strategies to address the problem. Members come from all 3 colleges in the health science division, business, education, and arts and sciences. We have successfully continued this effort and have been able to grow interest in the group’s activities. An example of the group’s activities is outlined below. In addition several members of the group acted as facilitators and were participants in the 2009 Regional Health Disparities Symposium discussed above (see community engagement core).
A collaborative effort of the HDRG and the Bay Area Women’s Coalition, an advocacy group from one of our target neighborhoods, has started during this grant year. The collaboration developed with a proposal in answer to a RFP from NIH asking for mechanisms to enhance interest in clinical and translational research among underrepresented groups. Our proposals were based on an underlying hypothesis that underrepresented groups would be more likely to embrace medical research if they understood it better. We felt the best way to understand medical research was to be empowered with knowledge of how it is conducted, knowledge of how to review the literature on a topic, and knowledge of how to formulate a research question. In our proposals we utilized HDRG members to achieve these tasks and to actually take the community participants through the conduction of a clinical study. The Bay Area Women’s Coalition identified environmental hazards / exposure (especially post Katrina) and respiratory illness as an area of priority. While that particular proposal was not funded, there was strong commitment to the project from the members of HDRG, so strong that we have been able to make a commitment to our community partners to do some of the work proposed. A similar RFP was among the ARRA challenge grants and an updated and improved proposal has been submitted with HDRG and Bay Area Women’s Coalition in partnership.

Invigoration of Research Interest in Health Disparities

We have set several processes in place to achieve this goal. First and foremost is the development of successful research projects that have impact. The funding of the Center of Excellence with the P-20 grant significantly increased interest in health disparities research across the university. The PI and core director have been asked to meet with several deans and department chairs to discuss opportunities in health disparities research in general and collaborative opportunities with our center specifically.

Secondly, we look to identify credible research projects in health disparities and facilitate their completion. This is done by facilitating the implementation of the research project that were proposed as part of the initial application as well as encouraging newly developed work via internal RFP mechanisms. With regards to the former we have been able to set up appropriate accounts for research projects proposed to commence with the beginning of the grant. The individual updates of the projects are outlined below. Investigators have presented at HDRG meetings so that all of our partners are aware of their work and could look for ways to collaborate. In these sessions several ideas are shared that ultimately strengthen projects. We initiated a request for proposals in February 2009. Selected proposals will be slated to start in July 2009 (beginning of grant year 3). We received 24 letters of intent and expect full proposals by May 3, 2009. We have used LOI’s to determine how many and what type of reviewers we will need. We will select proposals based on their scientific merit, extent to which they address health disparities of focus to our center, and potential for development into research programs that will garner additional funding. A project with Drs. Gerthoffer and Massey as PI’s that truly links basic and clinical science in the area of cardiovascular disease was selected from this competitive group of proposals.
Thirdly, we will bring distinguished health disparities researchers to our campus to interact with our research partners and staff. The HDRG faculty have identified several researchers to be invited to the institution over the next 3 years. As mentioned above, we have supported such investigators in partnership with the Sickle Cell Center and its annual conference in April 2009.

Finally, the research core monitors grant opportunities for our collaborators and us. We work to bring together investigators to answer RFPs from several organizations. We provide local data on health disparities to investigators preparing proposals. Over this year we have assisted several members of the College of Nursing with data for their proposals. In addition, we have evaluated several future options where we may pursue additional funding.

Critical Review of Health Disparities Literature

The HDRG reviewed the literature on interventions to reduce health disparities in cardiovascular disease in African Americans. A comprehensive, methodical review of such literature between 1996 and 2006 inclusive was performed. The results of this group effort were put into manuscript form and that manuscript has been accepted for publication in Ethnicity and Disease. This journal was chosen as it had published the most articles that met our criteria. In summary we found few interventions that were targeted at health disparities reduction in African Americans were actually done (so called 3rd generation research). Of those that were, those that had the most impact used community based participatory research principles and focused on behavior change. The HDRG is assessing the opportunity to perform a similar project in another area of priority to our constituents. Of interest, the Robert Wood Johnson Foundation funded a similar project that looked at many of the areas where we originally intended to focus. With their comprehensive effort we will look to other areas such as violence for possible review.

Individual Research Projects

The research projects of the Research Core include one full research proposal on five pilot projects. Individual reports of these projects follow.

Full Research Proposal

A. Specific Aims
Breast cancer (BC) affects African-American women at a lower frequency than white women, yet progression of the tumor and mortality from the disease is higher in the minority population highlighting a major health disparity in the United States (US). We reasoned that variation in the biology of tumors played a critically important role in disease outcome than had previously been fully appreciated in the general population and in African-American versus Caucasians women with BC. To this end, we begun studying cell adhesion molecules tethered at sites of cell-cell contact with the notion that such molecules are involved at critical stages in the transformation of normal epithelial cells into malignant tumors. We discovered that activated leukocyte cell adhesion molecule (ALCAM/CD166), a member of the immunoglobulin super family localizes to sites of intercellular junctions in various epithelial tissues. We then discovered for the first time that primary BC tumors expressed significantly lower levels of ALCAM mRNA compared
to normal breast tissue. Our findings have since been reproduced by two independent investigators, each demonstrating that loss of ALCAM function, either due to reduced expression, or mis-location of the protein inside BC tumors is a bad prognostic indicator (Ofori-Acquah and King, 2008). Collectively, these studies suggested loss of ALCAM function contributed to the aggressive BC phenotype such as the type commonly found in African-American women. To investigate this idea required advancing our understanding of ALCAM gene regulation and identifying specific molecules involved in this process. The ALCAM promoter was therefore cloned into a luciferase reporter gene and this system was used to identify multiple DNA-protein binding sites in the ALCAM promoter. Further studies identified a protein phosphatase called PP5 as a potential negative regulator of ALCAM gene expression. Based on these findings we proposed the OVERALL HYPOTHESIS that “Loss of Function of ALCAM Causes an Aggressive Tumor Phenotype in Breast Cancer that may contribute to Poor Survival in African-American Women”. This overall hypothesis is being tested in three specific Aims:

1. ALCAM gene expression is suppressed in breast cancer
2. PP5 promotes breast cancer tumor growth, in part by, suppressing ALCAM expression
3. Loss of function of ALCAM contributes to aggressive tumor biology in African-American women with breast cancer

B. Studies and Results

Specific Aim 1: In the current year, we have made major progress in several of the experiments originally proposed for this aim. To understand how the ALCAM gene is regulated in breast cancer tumors, we have completed experiments to measure the amount of ALCAM mRNA in twenty breast cancer tumor cell lines. These experiments were performed using quantitative RT-PCR techniques. Our results revealed at least four major categories of ALCAM expression, high, medium, low and undetectable in breast cancer tumor cell lines. These findings were confirmed at the protein level by western blot analysis. Next, we determined whether the level of ALCAM expression in these cells was related to the activity of the ALCAM promoter in these various cell lines using ALCAM-promoter fragments truncated at -2500, -2000, -1500 and -1000 and linked to the luciferase reporter gene. We found that the level of ALCAM mRNA and protein in the panel of breast cancer tumor cells studied was not related to the activity of the ALCAM promoter highlighting epigenetic mechanisms as likely determinants of the ALCAM level in breast cancer tumors. Indeed, we have confirmed this idea in experiments aimed at identifying methylated CpG islands in the ALCAM promoter. We discovered that the only cell line MDA-MB-435, which completely lacks ALCAM expression is methylated at virtually all CpG islands in the proximal ALCAM promoter. To test directly whether DNA methylation is responsible for silencing ALCAM expression in this cell line, cultures of MDA-MDB-435 were treated with a concentration range (0-20 µM) of 2-deoxy 5-azacytidine. Our results showed that this hypomethylating drug dose-dependently increased ALCAM mRNA level. These results for the first time identify methylation of the ALCAM promoter as a basis for reducing ALCAM expression in breast cancer tumors, proving a rationale to investigate this idea in primary breast cancer tumors in the coming year.

Specific Aim 2: To explore the expression pattern of ALCAM and PP5 at different stage of breast cancer immunohistochemical stainings of PP5, HIF-1 and ALCAM were performed on tissue microarray slides, each of which contains 212 breast cancer specimens, 40 normal breast
specimens and 36 controls. The estrogen receptor (ER), progesterone receptor (PR) and HER2/neu status, along with the tumor type, grade, nodal involvement, distant metastases, and TNM stage were obtained from the history information supplied for each case. Correlations of the expression patterns were analyzed using Pearson’s correlation coefficients. While PP5 staining showed positive correlation with ductal carcinoma in situ (DCIS), invasive ductal carcinoma (IDC) and IDC with metastases at the time of diagnosis, the staining of HIF-1 and ALCAM revealed a trend but did not produce a statistically significant association with tumor types and stages. However, bivariate correlation analysis revealed step-wise switches in the expression patterns of these biomarkers along tumor progress. In DCIS, ER and PR strongly correlated (p<0.001). This correlation weakened in IDC groups while the reverse correlation between ER and HER2/neu became significant (p=0.009). Correlations between HIF-1 and ALCAM were also observed in IDC with or without positive nodes (p=0.040 and p=0.002, respectively). In the IDC with metastases group, PP5 staining correlated with HIF-1 (p=0.025). Hierarchical cluster analysis of the expression patterns in the triple-negative tumors revealed that most of the IDC with distant metastasis fell into a cluster that coexpressed PP5 and HIF-1. Given the heterogeneous nature of breast cancer, a consistent pattern of expression profile may be difficult to identify.

However, results from this study suggest that changes in the expression pattern as the tumor evolves may indicate activation or inactivation of key signaling pathways that promote or suppress tumor progress. In the next year we will continue with the studies, essentially as outlined in the original proposal.

**Specific Aim 3:** We have collected formalin fixed paraffin embedded (FFPE) breast tissues from 100 cases of breast cancer among African American (AA) women. We are in the processing of collecting a similar number of FFPE samples from Caucasian women. We are planning to collect a total of 200 cases of AA and 150 whites as outlined in the original proposal. Once the demographic and clinical details of these cases have been recorded in a secured database, we will be working evaluating ALCAM expression, and looking for methylation patterns along the ALCAM promoter as outlined in the original proposal.

**Pilot Projects**

**Pilot 1**

**Title:** A Family Based Approach for the Treatment of Childhood Obesity

**Investigators:** Judy V. Blair-Elortegui, MD, Daniel Preud’Homme, MD

**Objectives**

As the obesity epidemic worsens pediatric obesity also grows at rapid rates. The mainstay of pediatric obesity management (prevention and therapy) involves diet and lifestyle changes such as limiting television viewing and increasing physical activity. Children are dependant on their family unit to be able to achieve any of the recommendations. Low socioeconomic status seems to be a strong circumstantial factor and studies have identified higher than national rates of obesity in the children in that group. Parents of lower socioeconomic status also have significant barriers to accessing healthcare for themselves and therefore may not be aware of their obesity...
status or its related co-morbidities. We have hypothesized that children will do better in managing their weight when the whole family is involved. Parents will also benefit from weight management as well as detection of silent co-morbidities such as hypertension or diabetes mellitus. The following specific aims are developed to address this hypothesis:

1) To determine if a family oriented approach to childhood obesity will be more effective in achieving weight loss or weight maintenance than the traditional child focused approach.
2) To determine if a family oriented approach to childhood obesity will lead to the detection of previously undiagnosed, asymptomatic obesity related co-morbidities in the parents of obese children.
3) To determine if parents of obese children effectively lose weight in a family oriented approach.

Results and Studies
In the first year of the grant we have had considerable success in establishing our family based approach to addressing childhood obesity. The Pediatric Healthy Life Center has been established at the University of South Alabama Children’s and Women’s Hospital. The PIs of this project run that center and have established the protocols for the project.
Several referrals have been made and data on co-morbidities among the children and their families has been gathered. We have found that a high percentage of family members (parents, grandparents) have hypertension, diabetes or hyperlipidemia, and, in many cases they are unaware of the presence of these diagnoses.

Significance: The family based approach will allow for more comprehensive behavior modification within families. Children’s behavior is learned so effective strategies have to be focused on those teaching children their lifestyle behaviors. We have established our center as regional referral source for these processes.

Plan: For year 2 of the grant we will continue to enroll families into our protocols. With more follow-up we will be able to determine short-term effects on weight gain/loss and control of co-morbid conditions. Follow-up of families having completed the program will provide valuable feedback regarding a culturally based approach.

Pilot 2
Title: Ethical Dilemmas as Tools to Improve Communication Skills With and Trust from the Minority Community
Principal Investigator: Errol D. Crook, MD
Co Investigators: Dan Taylor, PhD, Margaret O’Brien, MD, JD

Objectives
Americans from ethnic minority groups have poorer outcomes from several treatable and preventable conditions. It is not surprising that many ethnic minorities do not have trust in the healthcare system. This becomes more of a problem for academic medical centers or other safety net healthcare providers where long-term patient-provider relationships are difficult to establish. In many instances the initial patient-provider encounter is at a time when a very difficult decision, such as those at the end of life, has to be made. We hypothesize that community
mistrust, cultural competence, and provider communication skills can be improved via a community directed development and implementation of an education tool for healthcare providers. The overall goal of this project is to enhance the communication skills of providers with patients at high risk for health disparities and to improve the trust of this community in their healthcare system.

Specific Aims: The specific aims are as follows: a) to enhance cultural competence and trust by determining opinions and emotions of a community at high risk for health disparities around medical cases with ethical dilemmas; b) to enhance communication skills and cultural competence with patients from communities at high risk for health disparities; c) to develop, implement, and evaluate an educational tool for internal medicine and general surgery residents focused on enhanced communication skills, cultural competence, and building trust in the face of ethical dilemmas.

Results: Case files from the University of South Alabama Medical Center’s Ethic Committee have been reviewed and cases identified. We have begun the process of preparing these cases to focus groups representative of our community. The written material will be written at a 7th grade literacy level and limited to one page. We will review these cases with members of the Community Health Advocate leadership council for assistance with cultural and communication issues. Subsequently we will develop the outline for the facilitated focus groups that should start near the middle of grant year 3. We have delayed in implementing this study to minimize study fatigue among community health advocates (see comments in community engagement core). We will follow the recommendations of the community engagement core leadership as to when we should start focus groups. There are minimal resources committed specifically to this pilot so budgetary issues are not a concern at this point.

Pilot 3
The Impact of Labor Market Status/Labor Force on Access Health Care Access and Utilization among Low-Income Minority Families in Mobile, Alabama
Investigator: Kenneth Hudson, PhD

Objectives: The primary mechanism for access to health care in the United States is employer provided health insurance. Since the 1970s, the American labor market has become increasingly characterized by labor market dualism, the polarization between good jobs with high wages and benefits (primary labor market jobs) and low wage jobs without benefits (secondary labor market jobs). The labor market is also increasingly characterized by jobs that combine primary and secondary characteristics (intermediary labor market jobs). This increase in labor market dualism has resulted in an increase in the number of Americans without employer provided health insurance. This segment of the population includes many people who are employed and their families. In this project we hypothesize that individuals and families that do not participate in employer provided health plans, and that rely on public health care resources, have less than optimal utilization of available health care. In this project we will examine how a family’s labor market structure (the combination of primary, intermediary, and secondary jobs within each family) affects their access to health care and the family’s utilization of health care services.
Specific Aims:
1) To determine the frequency of access to employer provided healthcare in a minority, low income, and urban population.
2) To determine the public healthcare resources available to families.
3) Do changes in labor force status affect access to and utilization of employer provided healthcare.

Studies and Results: We have been successful in continuing data collection in our cluster sample. Households have been selected from high poverty, high minority concentration census tracts. In the first stage of the sampling process blocks are randomly selected within the designated census tracts. In the second stage, locally available GIS information is used to identify and number housing units within the blocks. Housing units are then randomly selected from each block and the address for each housing unit is extracted from the GIS information. Members of the research team are contacting these households, first by letter, and then with a follow up visit. Data has been collected in 30 families. The interviews are semi-structured and entail the construction of an employment life calendar for each member of the family. These calendars enumerate the employment history of each adult household member and the job quality characteristics of each job the subject has held and/or currently holds. The information collected in the interviews fall within four broad rubrics: a) Demographic information on each member of the household; b) Collect current and retrospective LF/LM data on each member of the household age 16 and older; c) Knowledge and utilization of local health care resources; d) Identification of barriers to utilization of local health care resources. We have also begun to collect stories from our interviewees. As we sit and conduct interviews we get valuable life stories and anecdotes that we have recognized as valuable tools to illustrate important issues in community based participatory research, poverty and survival, and health care consumption among health disparate populations.

Plans: We intend to collect complete family labor and medical histories on 60 households in wave 1 of the study. We expect to complete this by end of year 2. Data collected and analyzed in the wave 1 of will provide the basis for a longitudinal follow up study of 60 households to be conducted in Year 3 and 4 of the study. Individual and households participating in wave 1 will be contacted and invited to participate in wave 2 of the study. New household members (that have joined previous households) and new households that include study participants from wave 1 will be invited to participate wave 2 of the study. Information collected in wave 1 will be collected from first time participants in wave 2.

Pilot 4
Title: Community-Based Asthma Intervention Consortium
Investigators: Loran Clement, MD (Professor and Chairman of Pediatrics)

Objectives: During the last thirty years, the prevalence and morbidity of asthma has dramatically increased in the United States. Research efforts to characterize this epidemic have shown that the impact of this chronic respiratory disease is disproportionately high among urban dwellers, lower socioeconomic groups, ethnic minorities, and children (1). The inability of contemporary systems and practices to reduce asthma morbidity has stimulated efforts to develop novel
interventions that improve the health of children with asthma. A wide variety of disparate strategies have been tested (1). Although these models differ in rationale and approach, several general observations can be made. First, asthma education programs directed at healthcare providers have not translated into significant changes in the quality of asthma care for the disadvantaged. Conversely, almost any intervention that educates patients about the importance of controller medication use and provides serial assessments of disease activity improves health status. One intervention that has shown great promise is the Breathmobile program. This novel school-based outreach program integrates validated strategies for case identification, continuity of care, a structured healthcare encounter, patient tracking, and high levels of patient participation in a "real world" setting. The Breathmobile is a mobile clinic that is staffed and equipped so a multi-disciplinary team can provide highly specialized care in an efficient, economical fashion to asthma patients.

Hypothesis: Asthma can be identified and disease control can be achieved and maintained in urban children participating in an integrated community-based disease management network. We propose to develop and refine a mobile clinic program that is suitable for use in a medium-sized urban area that will identify and treat pediatric patients with undiagnosed or poorly controlled asthma who would otherwise escape detection.

Specific Aims:

1) Develop and validate an asthma assessment instrument that can be used both for case identification as well as a point-in-time measurement instrument for detecting uncontrolled (persistent) asthma with a high sensitivity and specificity.

2) Develop a community-based disease management network that integrates the resources of an academic medical center, a public school system, civic groups, and concerned volunteer individuals.

Studies and Results: We have now conducted 3 full school years of BreatheMobile school based visits. Parents have been involved and data has been collected according to our protocols. We are now conducting our initial statistical analysis of data including: primary measure, a clinical construct of asthma control, is based on the goals of asthma therapy outlined in the NHLBI Guidelines (4), program effectiveness using serial outcome data, which will include: 1) the time to achieve control of asthma; 2) maintenance of asthma control (as the proportion of visits that patients remain in control after they first achieve control; 3) the demographic, treatment, and care-delivery factors characteristic of patients with difficult to control asthma (asthma controlled at less than 50% of visits after control first achieved).

Plan: In year 3 of the grant we will continue statistical analysis. Our data will be examined with that of other sites with similar projects. We will continue to explore the use of community health advocates, as described elsewhere in this grant application, as well as school site-specific volunteers who will "adopt" each participating school and perform some of the clerical support duties (phone reminders, survey collection, etc.). Careful attention will be given to defining the processes that result in the successful recruitment and training of community volunteers. Moreover, we are optimistic that additional external funding can be obtained given the multi-site nature of this program and its unique school-based approach.
Pilot 5
Title: A network approach to facilitating continuity of care for chronic diseases in the aftermath of a natural disaster
PI: Martha Arrieta, MD, MPH, PhD

Objective: Disaster preparations usually focus on the provision of shelter for vulnerable individuals, and/or evacuation planning and support. However, in the aftermath of Katrina, the need to provide for continuity of care for populations whose health was already compromised became painfully evident. Uninsured and underinsured individuals, many of them African American, rely on the federally supported primary care infrastructure for health needs in general, and the management of chronic diseases in particular. We hypothesize that a strategy to provide for continuity of care for patients with chronic diseases in the aftermath of a disaster will need to rely heavily on the community health centers that constitute the area’s safety net. Moreover, such strategy will require the development/strengthening of avenues and processes for communication between the distinct federally funded organizations that serve specific geographic units in the Gulf Coast. Additionally, mechanisms should be in place to facilitate the flow of patients across organizations.

Finally, links between community health centers, other health care institutions (hospitals, pharmacies) and community based organizations are a critical component in the provision of continuity of care, especially in the event of a disaster. Therefore, our network approach to preparing for and providing care to patients with chronic diseases in the wake of a disaster.

Objectives
We propose to build the capacity of the primary care infrastructure in the Gulf Coast by fostering the development of a network of primary care providers that would function seamlessly across the Mississippi – Alabama - Florida state boundaries, to provide continuity of care to patients with chronic diseases affected by a disaster.

The present proposal aims at facilitating a structured dialogue among community health centers, hospitals, commercial and not-for-profit pharmacies, and community based organizations in order to: a) identify the critical chronic disease management needs in the immediate aftermath of a natural disaster, both from the provider and the patient perspectives, b) identify the elements of a community based network that would be ready to cover such needs, and c) define the resources required to make such a network functional. We will focus on the management of major chronic diseases and of HIV/AIDS.

Studies and Results: We have had considerable success in these endeavors in year 1 of the grant. Building from the projects early studies we have been able to publish as monograph outlining the findings of the key informants and advisory panel during the first wave of the studies. This monograph was distributed to key decision makers in Mississippi and Alabama to enhance the development of policies that will facilitate better response to disasters among the health care infrastructure. We have and continue to prepare other manuscripts from this information (two in submission, one in preparation).
Plans: In year 2 we will focus on defining the resources needed to sustain the critical components defined in (3) above; including ways to track patients and facilitate continuity of care. We will extend our efforts to neighboring Gulf Coast counties to the east of Mobile in Alabama (Baldwin) and Florida. These counties were not able to be included in the first wave of studies, but have unique of their own due to geography and demographics. We will also start surveys and potentially focus groups of key policy makers for disaster preparedness to evaluate the effect of our efforts (media releases, distribution of monograph, papers, etc). This will facilitate determining the best methods to effect policy change. Finally, we will foster the integration of the network across state boundaries, and its sustainability, by establishing an Advisory Board composed of a subset of each of the Advisory Panels formed for the project. Such Advisory Board will include representatives from health care institutions and community based organizations in each of the systems included, representing the southern half of Mississippi, and the Gulf Coast counties of Alabama and the Florida Panhandle.

Other Center Activities

Research Activities
The Center for Healthy Communities Research Division has had a very active and productive year. We report on the activities of three major initiatives that are in addition to the Center of Excellence Grant.

Tele-monitoring of blood glucose in type 2 diabetes
This project is funded by the Robert Wood Johnson Foundation Finding Answers Program and is done in collaboration with the Mobile County Healthy Department (Eichold, PI). In this project we test the hypothesis that real-time feedback for blood sugars via tele-monitoring will improve control of diabetes among health disparate populations. Recruitment has been a challenge but it is proceeding with over 130 subjects enrolled. Our site was selected for a presentation at the national meeting discussing the challenges of enrollment and retention in challenging populations. We have employed several strategies to enhance recruitment and retention over the last year and are expecting to complete enrollment in November 2009.

GAP Analysis in Educational and Social Services
The research core partnered with the Junior League of Greater Mobile, the United Way, and the Mobile County Board of Education Foundation in conducting a gap analysis of educational and social services in the area. The analysis was carried out using a key informant model with structured surveys and interviews. The data from this analysis will be used by each of the partnering organizations to establish their future directions.

Tele-health and Mental Health
The research core used funding through a subcontract with Morehouse School of Medicine to explore the utility of tele-health in the provision of mental health services. Altapointe partnered in the effort that grew from our past collaborative experiences with Morehouse on reducing health disparities after disasters (eg: Hurricane Katrina).
Outreach Activities

Civic Engagement & Community Support
The civic engagement and community support activities were primarily focused on supporting community initiatives, youth programs and volunteerism. The following projects were undertaken in 2008/09:

Trinity Gardens Beautification Campaign - The Center for Healthy Communities partnered with the Bay Area Women’s Coalition to implement a community beautification campaign in Trinity Gardens. The Center’s staff and their families, students from the University of South Alabama, high school students, and individuals from the targeted community conducted a series of litter cleanup, grass mowing, house painting and community awareness activities. The goal was to not only help the community remove materials that were aesthetically displeasing and health hazards but also to encourage residents to continue the initiative beyond this volunteer effort organized by the Center.

Discovery and Quest - The Discovery and Quest program is for 3rd through 8th grade students from underserved communities to encourage excellence and an interest in health professions. The program consists of classroom activities, art projects, and field trips to help expose students to options and opportunities for self-improvement and better career choices.

Summary Center of Healthy Communities Activities
The 2008-09 year has been a productive year for the University of South Alabama Center for Healthy Communities. The Center of Excellence Grant is now well-established and successfully addressing many of its objectives. We continue to be a point of contact for investigators interested in addressing questions in health disparities. Our community and university partners continue to grow in number and commitment to our shared missions. We continue to look for additional resources to support our mission, primarily through research grant proposals, and we continue to have success in these endeavors. We have contributed to the body of knowledge regarding health disparities through presentations and publications. The Center has also successfully implemented a leadership transition.
2008-2009
Summary of Scholarly Activities
Center for Strategic Health Innovation

I. PUBLISHED JOURNAL ARTICLES AND BOOK CHAPTERS

II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Taylor CT. Invited speaker. On the road to health 3.0. Internet Innovation Alliance National Broadband Strategy Symposium; 2009 Jun 17; Washington, DC.

Taylor CT. Invited speaker. Responding to the psychosocial needs of medical responders during and after a disaster. 4th Annual Chemical, Biological, Radiological and Nuclear Conference; 2009 Feb 6; Miami, FL.

Taylor CT. Invited speaker. The future trends of health information technology. Business Software Alliance Executive Roundtable; 2008 Nov 18; Miami, FL.

Taylor CT. Invited speaker. Xtreme collaboration hub. Crisis Camp DC Ignite Session at the World Bank; 2009 Jun 12; Washington, DC.

Taylor CT. Invited speaker. Xtreme collaboration hub. Office of Rural Health Policy Region B Annual Meeting; 2009 Aug 6; Mobile, AL.

Wallace DL. Invited speaker. Alabama incident management system. American Meteorological Society Forum on Hospital Preparedness; 2009 Apr 2; Washington, DC.

Wallace DL. Invited speaker. 360 degrees of awareness – healthcare planning, response and recovery in a disaster. 2008 Caribbean All-Hazards Conference; 2008 Dec 16; Montego Bay, Jamaica.

V. NATIONAL PROFESSIONAL RECOGNITION

Taylor CT. Facilitator. Case study of sustainability. Office for the Advancement of Telehealth Annual Grantee Workshop; 2009 Apr 25; Las Vegas, NV.

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Taylor CT. Facilitator. Envisioning a sustainable future. Office for the Advancement of Telehealth Annual Grantee Workshop; 2009 Apr 25; Las Vegas, NV.


VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRAMS

The Center for Strategic Health Innovation (CSHI) enjoyed another successful year in our two major focus areas: health technology development and deployment, and disaster preparedness and response training. Most notably, the Realtime Medical Electronic Data Exchange (RMEDETM), our patient-centric health record and claims management system, continued growth in 2008-2009. Through our efforts, total patient records managed remained constant at 1.1 million in 2008-2009, and total patients participating in our in-home monitoring project grew from approximately 300 to over 500, representing a 67% increase from last year. In addition to these successes, CSHI continued to serve as a key player in State disaster preparedness and response. We extended our outreach by presenting our Advanced Regional Response Training not only in the Advanced Regional Response Training Center (ARRTC) in Mobile and but also in twenty-nine ARRTC Road Shows at hospitals throughout the state. We trained 1,074 public health, hospital, nursing home, EMA, emergency responders and nursing home staff, a 91% increase over the number of attendees in the prior year. We continue to link more than 774 healthcare, public health and emergency response facilities using Alabama Incident Management System (AIMS), our web-based surge capacity management tool.

Technology Development and Deployment: CSHI continually endeavors to use emerging health technologies to improve the quality, cost, care, and access to healthcare within our state and beyond. One of the keys to our success is Realtime Medical Electronic Data Exchange (RMEDETM), a secure web-based life-state management system including in-home monitoring of patients with chronic disease and an interventional informatics reporting system. In 2008-2009, CSHI continued its critical partnership with the Alabama Medicaid Patient 1st program and the Alabama Department of Public Health, for the delivery of in-home monitoring of patients using RMEDETM. In this program, patients suffering from chronic illnesses such as diabetes, congestive heart failure, and hypertension are monitored for significant changes by using an innovative Interactive Voice Response (IVR) system.
Patients are instructed to dial-in their key physiological parameters, and an ADPH Life Care Nurse is assigned to monitor the results and submit reports to the patient’s provider. Currently, over 500 patients are actively transmitting home monitoring information into RMEDE™, representing a 67% percent increase in participation from last year. Preliminary data shows a reduction in the number of Patient 1st emergency department visits, which translates to improved quality and decreased costs. CSHI also partnered with Alabama Medicaid on the Together For Quality (TFQ) Initiative to provide informatics specialty services, risk stratification, and reporting for the Medicaid patients suffering from asthma and diabetes in Alabama. To date, CSHI has produced quality metrics on over 500,000 Medicaid patients in Alabama, and over 70,000 Medicaid patients with asthma and diabetes.

In a collaborative effort with The Mobile County Health Department, a grantee in the Robert Wood Johnson Foundation grant, “Finding Answers: Disparities Research for Change,” CSHI’s RMEDE™ was utilized to implement and evaluate a blood glucose tele-monitoring intervention. Currently, 65 patients measure their blood glucose level with glucometers and input their blood glucose values via telephone into RMEDE™. If a glucose value is out of range, RMEDE™ sends an automatic alert to the patient’s nurse for follow-up. The goal of the Finding Answers project is “to identify and evaluate interventions which are effective in eliminating racial and ethnic health care disparities in local communities, and which can be replicated and sustained throughout the United States.”

CSHI also partnered with U.S. Care Management on their Experience Health initiatives in New York, Colorado, North Dakota, Nebraska and Florida. Using RMEDE™ CSHI provided innovative informatics solutions including identification of patients with chronic disease, predictive modeling and risk stratification of those patients. In addition, CSHI produced regular reports of program outcomes for U.S. Care Management that were customized for each state. To date, CSHI has analyzed data on more than 800,000 Medicaid patients from New York, Colorado, North Dakota, Nebraska and Florida.

Another successful technology developed in-house by CSHI is the Alabama Incident Management System (AIMS). AIMS is management information software designed to capture Hospital Emergency Incident Command System (HEICS) reported surge data, or information regarding the real-time status of a hospital’s ability to triage, treat, and transfer victims of a disaster in a timely manner. Critical data such as available beds, supplies, staffing, and equipment is entered into a database at each participating healthcare facility and then transmitted and displayed at the local or regional Emergency Operations Centers (EOC) for use making emergent decisions. CSHI boasts at total of 774 users including: 17 Community Health Centers, 11 EMA facilities, 316 EMS providers, 1 EMS EOC facility, 12 ADPH EOC facilities, 5 Evacuee Shelters, 131 Hospitals, 25 Medical Needs Shelters, and 256 Nursing Homes. Under contract with the Alabama Department of Public Health Center for Emergency Preparedness (ADPH CEP), CSHI upgraded AIMS to include a reorganization of the system architecture; developed and demonstrated the auto-population (exchange) of data from a hospital bed-tracking
V. NATIONAL PROFESSIONAL RECOGNITION

Johnson Haynes Jr., listed in “America’s Top Doctors” by Ltd. Castle Connolly Medical, Castle Connolly Medical, All editions.


Carl Taylor. Facilitator. Case study of sustainability. Office for the Advancement of Telehealth Annual Grantee Workshop; 2009 Apr 25; Las Vegas, NV.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRAMS

Johnson Haynes, Jr., Received University of South Alabama “Distinguished Alumni and Service Award” (2009).

General Operations: Dr. Johnson Haynes, Jr. continues as Director of the USA Comprehensive Sickle Cell Center. Despite cuts in state funding, the USA Comprehensive Sickle Cell Center continues to improve the delivery of clinical and educational services to individuals affected with sickle cell disease, family members of affected individuals, and health care providers.

Research: The Center most recently received approval of funding from Novartis Pharmaceuticals to study the “Incidence of Secondary Iron Overload in Adults with Sickle Cell Disease Following Chronic, Intermittent Red Blood Cell Transfusions.” In addition, Dr. Haynes is working with Drs. Anas Elkheder and Mohammed Al-Ali (fellows in the Pulmonary Division) and Dr. Karen Fagan on pilot studies investigating airflow obstruction in adults with sickle cell disease and pulmonary hypertension and the assessment of pulmonary hypertension in patients with sickle cell disease.

Clinical Operations: The 2008-2009 academic year marks the close of the 11th year that the Adult Sickle Cell Clinic has operated as a subspecialty clinic. The primary objectives of this clinic are (1) to be a resource for practicing physicians in the University and private community; and (2) to serve as a positive educational experience for primary care residents in the Departments of Medicine and Family Medicine at the University of South Alabama. The clinic is staffed by Dr. Johnson Haynes Jr.; Ms. Ardie Pack-Mabien, Nurse Practitioner; Ms. Stephanie Durggin, R.N.; and Ms. Adrienne Petite, Case Manager. Both Internal Medicine and Family Medicine residents continue to rotate on a monthly basis through the outpatient Adult Sickle Cell Clinic. The Adult Sickle Cell Clinic continues to serve the greater Mobile area in addition to a continuous influx of patients from surrounding areas. Ms. Pack-Mabien and Ms. Durggin continue to support the pediatric outpatient clinical operations and serve as liaisons when transitioning patients from pediatric to the adult services. Drs. Felicia Wilson, Aarati Rao and Hamayun Imran are the physicians caring for patients in the Pediatric Sickle Cell Outpatient Clinic.

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An adult hematologist and urologist to support the adult operations remains lacking and there is no proposed solution to this deficit of overall clinical operations currently in sight.

**Education:** The Center faculty continues to provide a broad series of lectures throughout the academic and private medical community and continues to support the Educator/Counselor Certification Program which took place 3 times this academic year at the Sickle Cell Disease Association of America, Mobile Chapter. On April 25, 2009 the Center hosted its’ ninth conference on “Practical Issues in Sickle Cell Disease IX: “Bringing Hope to Healthcare in Sickle Cell Disease.” Dr. James Eckman, Professor in the Department of Hematology and Medical Oncology at Emory Winship Cancer Institute and Director of the Georgia Comprehensive Sickle Cell Center, Grady Health System in Atlanta delivered the Cecil Parker Lectureship. Dr. Eckman spoke on, “Health Disparities in Sickle Cell Disease.” Other speakers were Ms. Hoxi Jones who spoke on, “You – In Charge”, Ms. Kathy Hall who spoke on, “Alabama Medicaid - A Program on the Move”, and Dr. Felicia Wilson who spoke on “Stem Cell Transplantation in Sickle Cell Disease – Pros and Cons”. The nursing staff continues to provide a series of lectures to the nursing community within the University of South Alabama and private hospitals in the Mobile community and surrounding counties. As we go forward, we plan to continue the clinical operations with the same vigor and integrity as we have in current years. We will continue to seek the grant support necessary to continue all clinical and research activities as well as continue requesting the necessary financial support currently being made available by the University of South Alabama College of Medicine.

**Other Activities:** Dr. Haynes’ continues to serve as a Sickle Cell Oversight Regulatory Commissioner. Dr. Haynes also serves on several national committees. He currently serves on the Data and Safety Monitoring Board for the Clinical Trials Consortium, National Institutes of Health and the American Thoracic Society Membership Committee. Dr. Felicia Wilson also serves on the Sickle Cell Oversight and Regulatory Commission for the State of Alabama. The Center’s newsletter, “Sickle Cell Today”, was distributed across the State of Alabama to clients, client’s families, administrators, community sickle cell foundations, and legislators in March and September, 2009.
2008-2009
Summary of Activities
Office of Development and Alumni Relations

The Executive Board of Directors for the Medical Alumni Association meets four times a year. President Dr. Thomas B. Montgomery ’81 serves with the following physicians: Dr. Oscar Almeida ’85, Dr. William Blaylock ’89, Dr. Lamar Duffy ’84, Dr. Gregory Cotter ’80, Dr. Cynthia Donnell, Dr. Diana Hashimi ’90, Dr. Russell Hudgens ’87, Dr. Wanda Kirkpatrick ’78, Dr. Amy Morris ’93, Dr. Kit Outlaw ’92, Dr. Jill Ringold ’01, Dr. David Ross ’79, Dr. Christopher Semple ’85, Dr. John Todd ’88, Dr. Stacey Wing ’96. The total number of medical graduates for the COM is 2,051. This number does not include Ph.D. graduates or housestaff.

Scholarship development and recognition of academic achievement continues to be a focus for the organization. Ten $2,000 freshman scholarships were awarded this academic period. Student recipients were nominated for the Christian L. Grinaker Memorial Scholarship, the Clyde G. “Sid” Huggins Scholarship, and the Denzil Lester Sockwell Memorial Scholarship. The Medical Alumni Leadership Award was presented to Andrew Hodges by vote of the senior class in recognition of outstanding service.

The Annual Medical Alumni Weekend was held June 6-8 at the Perdido Beach Resort. Six reunion classes participated: 1978, 1983, 1988, 1993, 1998, and 2003. Four hours of Continuing Medical Education programs were presented by: Dr. Karen Fagan, Division of Pulmonary and Critical Care Medicine, “Cough in Adults”; Dr. Forrest Ringold ’97, Surgical Associates of Mobile, “Update on Bariatric Procedures”; Dr. Dean Naritoku, Chairman of the Department of Neurology, “Identification of Seizure Types and Loss of Consciousness”; and Dr. Amy Morris ’93, The Center for Dermatology, “Garden Variety Dermatology.” Dr. R. Lamar Duffy, USA Family Medicine, gave a noncredit presentation “A Funny Thing Happened on the Way to a Marathon.” Dr. Wanda Kirkpatrick, recently retired professor of Internal Medicine, received the Medical Alumni Distinguished Service Award for her contributions in medical education. Dr. Samuel Strada, Dean of the College of Medicine, gave an update on current developments in the school and Mr. Travis Grantham, Director of Medical Development and Alumni Relations, spoke about ways to give back to the College of Medicine. Dr. Tom Montgomery presented a $10,000 check to Dr. Strada for the Medical Alumni Scholarship Endowment.

Major expenses for this year included completion of a two-year financial commitment ($40,000) for the Clinical Surgical Skills Laboratory and collaboration with the Dean on refurbishing the Medical Student Lounge in the MSB.

The association sponsored or donated to the following student events/organizations: White Coat Ceremony, freshman and junior orientations, BMSO Student Organization, the Caduceus Ball, Review of Systems, Senior Skit Night, the COM Gumbo Chili Showdown to benefit the Regan Robinson-Young Memorial Scholarship, AMASS, and various student projects.
The Medical Alumni Office also established a page on Facebook for networking opportunities for our graduates (including current medical students) and a monthly E-newsletter to communicate the latest COM and MAA information. The office maintains the database for Alpha Omega Alpha Honor Medical Society with the responsibility of organizing meetings, directing the membership dues program, and assisting with the spring induction banquet. Dr. Faith Fitzgerald, USC Davis Medical School, was the Alabama Beta Chapter Visiting Professor.

The Medical Alumni Association has one revenue source for program funding: the Annual Membership Assessment and Fund Drive. Annual membership is $50 and lifetime membership is available for $500. A total of 412 alumni participated in the Annual Fund Drive and $58,837 was raised. This amount was approximately $8,000 less than the previous year.

The Dr. John B. Bass, Jr. Endowment Fund for Internal Medicine was established in 2007 as a joint effort of the USA Medical Alumni Association and the USA Office of Medical Development to recognize and honor one of the College of Medicine’s most dedicated and effective teachers. When Dr. Bass came to Mobile in 1974, he was among the first of the COM full-time clinical faculty members. Over the course of 35 years, he has participated in the teaching of every medical student in the COM. His gift for explaining the most complex clinical concepts in a concise and understandable manner is unparalleled. In addition to teaching students, Dr. Bass shares his knowledge and wisdom with interns, residents, fellows, and junior faculty members, serving as a mentor for many young physicians.

If you would like to contribute to the Dr. John B. Bass, Jr. Endowment Fund for Internal Medicine or make any type gift to the College of Medicine, please contact Travis Grantham at (251) 461-1775 or e-mail tgrantham@usouthal.edu.
## 2008-2009 SCHOLARSHIP RECIPIENTS
Medical Alumni Division

<table>
<thead>
<tr>
<th>Name</th>
<th>County/ State</th>
<th>Undergraduate School</th>
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<tbody>
<tr>
<td><strong>Clyde “Sid” Huggins Scholarship</strong></td>
<td></td>
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</tr>
<tr>
<td>Kate Brown</td>
<td>Jefferson, AL</td>
<td>Dartmouth College</td>
</tr>
<tr>
<td>Marie W. Pittman</td>
<td>Warren, MS</td>
<td>Alcorn State</td>
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<tr>
<td><strong>Lester Sockwell Memorial Scholarship</strong></td>
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<tr>
<td>Amber K. Brown</td>
<td>Lucedale, MS</td>
<td>Samford University</td>
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<tr>
<td><strong>Christian L. Grinaker Memorial Scholarship</strong></td>
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<tr>
<td>Andrew D. Hodges</td>
<td>Madison, AL</td>
<td>UA Huntsville</td>
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**USA Medical Alumni Association Scholarships – freshmen - Class of 2012**

<table>
<thead>
<tr>
<th>Name</th>
<th>County/ State</th>
<th>Undergraduate School</th>
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<tbody>
<tr>
<td>Shannon Burgess</td>
<td>Madison, AL</td>
<td>UA Huntsville</td>
</tr>
<tr>
<td>Ashleigh Butts</td>
<td>Washington, AL</td>
<td>University of South Alabama</td>
</tr>
<tr>
<td>Clare Carney</td>
<td>Mobile, AL</td>
<td>University of South Alabama</td>
</tr>
<tr>
<td>Diana Dang</td>
<td>Madison, AL</td>
<td>University of South Alabama</td>
</tr>
<tr>
<td>Molly Del Santo</td>
<td>Mobile, AL</td>
<td>University of South Alabama</td>
</tr>
<tr>
<td>Elizabeth Donahue</td>
<td>Mobile, AL</td>
<td>Auburn</td>
</tr>
<tr>
<td>Sara Beth Hill</td>
<td>Madison, AL</td>
<td>University of Alabama</td>
</tr>
<tr>
<td>John Taylor Jones</td>
<td>Jefferson, AL</td>
<td>Auburn</td>
</tr>
<tr>
<td>Patrick Kinnebrew</td>
<td>Lee, AL</td>
<td>University of South Alabama</td>
</tr>
<tr>
<td>Sara Katherine Long</td>
<td>Florence, AL</td>
<td>University of South Alabama</td>
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**USA Medical Alumni Leadership Award (note: not a scholarship – elected by vote of graduating class):**

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Andrew D. Hodges</td>
<td>Madison, AL</td>
<td>UA Huntsville</td>
</tr>
</tbody>
</table>
UNIVERSITY OF SOUTH ALABAMA
COLLEGE OF MEDICINE
NUMBER OF GRADUATES BY CLASS

| Class of 1976 | 20 |
| Class of 1977 | 62 |
| Class of 1978 | 56 |
| Class of 1979 | 59 |
| Class of 1980 | 56 |
| Class of 1981 | 67 |
| Class of 1982 | 61 |
| Class of 1983 | 71 |
| Class of 1984 | 65 |
| Class of 1985 | 61 |
| Class of 1986 | 67 |
| Class of 1987 | 64 |
| Class of 1988 | 62 |
| Class of 1989 | 50 |
| Class of 1990 | 59 |
| Class of 1991 | 63 |
| Class of 1992 | 51 |
| Class of 1993 | 65 |
| Class of 1994 | 69 |
| Class of 1995 | 59 |
| Class of 1996 | 63 |
| Class of 1997 | 66 |
| Class of 1998 | 63 |
| Class of 1999 | 59 |
| Class of 2000 | 59 |
| Class of 2001 | 65 |
| Class of 2002 | 60 |
| Class of 2003 | 59 |
| Class of 2004 | 60 |
| Class of 2005 | 59 |
| Class of 2006 | 60 |
| Class of 2007 | 64 |
| Class of 2008 | 65 |
| Class of 2009 | 63 |

Total: 2052*

*Total includes thirty-nine deceased alumni
2008-2009
OFFICE OF STUDENT AFFAIRS

The Office of Student Affairs is responsible for all educational programs in the College of Medicine from admission through graduation from medical school. These activities encompass the areas of Admissions, Student and Academic Affairs, and Continuing Medical Education and are primarily overseen by the Associate Dean of Student Affairs. An Assistant Dean of Curriculum oversees curriculum and an Assistant Dean of Graduate Medical Education oversees the residency programs. Two additional Assistant Deans participate in academic and career counseling.

Activities of the Office of Student Affairs are accomplished through offices in the Medical Sciences Building, Central Services and Administration Building, and Mastin Building.

Student Affairs

Orientation for incoming freshmen, organized by a committee of sophomore students in good academic standing, was held in early August. The 74 Freshman students attended two and a half days of structured activities which included introductory talks or presentations from the COM administration, Biomedical Library staff, and various student organizations, a course in CPR and a book and instrument sale. For the first time ever, clinical faculty participated in a small group exercise on Professionalism during Orientation in which students discussed the meaning and relevance of terms like "altruism" and "respect" and then reported back to the class as a whole. Dr. Ronald Franks, Vice President of Health Sciences moderated. Events included dinners at faculty homes on Thursday night and a variety of optional recreational activities on Friday.

The Offices of Student Affairs were ably staffed by Ms. Kimberlee Nodine (MSB) and Ms. Karen Braswell (Mastin). The College of Medicine Registrar, Rhonda Smith, the financial aid officer, Sharon Bull, and the Student Affairs business manager, Connie Land, saw a steady stream of students in their offices all year long. Ms. Emily Alford joined the Student Affairs staff and helped manage the newly designed summer DREAM program which is the successor to the BEAR program. Dr. Hattie Myles, Assistant Dean for Education Enrichment, spearheaded the redesign of that program.

Match Day festivities were held at the USA Brookley Magnolia Ballroom on March 19, 2009. Envelopes were distributed a few moments before 11 a.m., and at the stroke of 11, a bell was rung and the students simultaneously opened their envelopes. Students were called to the stage in a random order to announce their matches and "pin the map." The class of 2009 scored matches as far flung as Vermont and Washington State. The festivities and subsequent reception were sponsored by the Medical Association of the State of Alabama.

Honors Convocation for the College of Medicine was held on Friday evening May 8, 2009 in the Mitchell Center on Campus. The class-selected faculty speaker was Dr. Errol Crook, chair of Internal Medicine, and the class speaker was Andrew Hodges, class president. Awards for academic achievement were announced and 63 students were hooded by their designated hooders.
Dr. Ronald Franks administered the Hippocratic Oath. An informal on-site reception followed the ceremony. Graduation was held at 2 p.m. the following day.

Junior Orientation was held in the Mastin Building on the USAMC Campus on May 11, 2009. The Mastin office of Student Affairs organized the program which included advice from faculty and students on how to succeed in the Junior year. Additional presentations were made by staff from Medical Records, Risk Management, Infection Control, Quality Assurance, the Biomedical Library, and Hospital Safety and Security. In addition, the students were recertified in Basic Life Support.

The eighth annual White Coat Ceremony, sponsored again this year by the Medical Alumni Association, was held on Saturday, June 27, 2009, in the Mitchell Center. Rising third-year students and their families were welcomed by Dr. Margaret O’Brien for the Office of Student Affairs and Dr. Tom Montgomery for the Medical Alumni Association. Dr. Samuel Strada, Dean of the College of Medicine, spoke a few words of welcome then Dr. John Bass of the Department of Internal Medicine gave a short inspirational talk. Dr. Ronald Franks and Dr. Bass then presented the students with a white coat and a lapel pin (courtesy of the USACOM Alumni Association and the Arnold P. Gold Foundation for Humanism in Medicine, respectively). Dr. Margaret O’Brien administered the USA "Medical Student Oath." The president of the class, Grant Zarzour, also addressed the assembly and expressly thanked Rhonda Smith for all she had done for his class. The newly selected members of the USA chapter of the Gold Humanism in Medicine Honor Society were recognized and received their pins. The formal program was followed by an on-site reception. The events were well attended and received good reviews from all who came.
Student Affairs supports a tutoring program which pays upperclassman and/or graduate students to tutor Freshman and Sophomore students who request assistance. In 2008-2009, two (2) tutors provided 141.5 hours of tutoring to eighteen (18) students in Physiology, Neuroscience, Pharmacology, Histology, Biochemistry, Gross Anatomy, and Developmental. The number of visiting medical students who participated in Senior elective courses at USACOM in 2008-2009 is outlined below:

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<tr>
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<tr>
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<td>9</td>
<td>6</td>
<td>9</td>
<td>10</td>
<td>8</td>
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<tr>
<td>From Osteopathic Schools</td>
<td>9</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>From Foreign Schools</td>
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<td>4</td>
<td>4</td>
<td>11</td>
<td>7</td>
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Completed Paperwork, but Cancelled Visit

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Departments in which Electives were taken

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<tr>
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### Months Electives Taken

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<td>American</td>
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<td>Foreign</td>
<td>American</td>
<td>Foreign</td>
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Letters of evaluation (Dean’s Letters) were written for each of the 63 seniors who graduated in May, 2008. Students applied to 1884 residency programs through the AAMC Electronic Residency Application Service (ERAS).

Fifty-eight (58) of the sixty-three (63) students matched for residency positions. Fifty-nine (59) of the May graduates used the NRMP as their primary means of obtaining residency. Three (3) graduates used the Military Match. Five (5) students secured a residency training position in the “scramble” that followed the match.

<table>
<thead>
<tr>
<th></th>
<th>Number of Graduates</th>
<th>Match Utilized</th>
<th>Initially Failed to Match in NRMP</th>
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<td></td>
<td></td>
<td>NRMP</td>
<td>Non-NRMP*</td>
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<tr>
<td>2005</td>
<td>60</td>
<td>50</td>
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</tr>
<tr>
<td>2006</td>
<td>61</td>
<td>55</td>
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</tr>
<tr>
<td>2007</td>
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<td>2008</td>
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<td>61</td>
<td>4</td>
</tr>
<tr>
<td>2009</td>
<td>63</td>
<td>59</td>
<td>4</td>
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### University of South Alabama Seniors
#### Residencies Received by Discipline

<table>
<thead>
<tr>
<th>PRIMARY CARE:</th>
<th>Class of 2005</th>
<th>Class of 2006</th>
<th>Class of 2007</th>
<th>Class of 2008</th>
<th>Class of 2009</th>
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<tbody>
<tr>
<td>Internal Medicine</td>
<td>15</td>
<td>25%</td>
<td>11</td>
<td>18%</td>
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</tr>
<tr>
<td>Family Medicine</td>
<td>2</td>
<td>3%</td>
<td>4</td>
<td>7%</td>
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<tr>
<td>Pediatrics</td>
<td>6</td>
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<tr>
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<tr>
<td>Med/Peds</td>
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<td>4</td>
<td>7%</td>
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<tr>
<td>Neurological Surgery</td>
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<td>OB/Gyn</td>
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<td>Otolaryngology (ENT)</td>
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### University of South Alabama Seniors
#### Residencies Received by State

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<th>Year</th>
<th>Alabama</th>
<th>USA Hospitals (Mobile)</th>
<th>Out-of-State</th>
<th>Number of Different States</th>
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<td>46%</td>
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<td>2009</td>
<td>16</td>
<td>25%</td>
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Sixty-three seniors received the Doctor of Medicine degree at Commencement on May 9, 2009. On the evening of May 8, the College held its thirty-fourth Honors Convocation, which took place in the Mitchell Center. Dr. Errol Crook addressed the class and Andrew Hodges responded for the graduates. Prior to hooding the graduates, the following awards were presented:

Dean’s Award ............................................ John David Adams, Jr.

Outstanding Student in the Anatomical Sciences ......................................... John David Adams, Jr.

Charles M. Baugh Award in Biochemistry .................................................... Jason Douglas Brazelton
                                                                                   Jennifer Cannon Sykora

Medical Assurance Award ............................................................................. Julia McMath Stewart

Leonard Tow Humanism in Medicine Award ................................................... Megha Kumudchandra Shah
                                                                                   Errol Crook, M.D.

SNMA Leadership Award ............................................................................... Marie Charlene Winston Pittman

Community Service Award ............................................................................ Sarah Elizabeth Swyers Parker

Lewis Anderson Medical Student Achievement Award .................................... Ryan Christopher Palmer

Obstetrics/Gynecology Award ......................................................................... Nicolette Paolaungthong Holliday

William A. Gardner, Jr. Pathology Award ...................................................... Hope Theresa Richard

Merck Award ................................................................................................. Brett Agee Parker
                                                                                   Marat Yanavitski

Samuel Eichold Award ................................................................................... Jennifer Cannon Sykora

Hollis J. Wiseman Award for Excellence in Pediatrics ................................... Kristin Diane Flowers

Pharmacology Achievement Award ................................................................. Sharon Marie Bush

John W. Donald Memorial Award in Surgery .................................................. Sarah Elizabeth Swyers Parker

Medical Alumni Leadership Award .................................................................. Andrew Douglas Hodges

Charles W. Urschel Achievement Award in Physiology ................................. Cynthia Marie Ketcham Downes
                                                                                   Brett Agee Parker

Excellence in Emergency Medicine Award .................................................... Andrew David Housholder
CURRICULUM COMMITTEE

The 2008-2009 Curriculum Committee was chaired by Dr. Abu Al-Mehdi, Department of Pharmacology. The subcommittees focused on the following issues.

The first subcommittee focused on content monitoring. The charge to this subcommittee was to determine if course content meets the USMLE exam content and analyze where students fall short. The first recommendation from this subcommittee was to create a subcommittee comprised of PhD and MD faculty to be charged with creating a question bank for use in the Basic Sciences courses. The second recommendation was to consider blended testing across subjects. The third recommendation was to mandate reviews of mini-boards and line-item analysis. The fourth recommendation from this subcommittee was to require pre- and post-test reviews.

The second subcommittee was charged with identifying ways to enhance clinical correlations in the basic sciences. One of the recommendations of this subcommittee was to make more use of Case Files books and other databases for creation of clinical problem solving type questions for each basic science subject. This committee identified numerous on-line resources in addition to several case files books that are now available in the Biomedical Library. The second recommendation was that clinicians voluntarily assign themselves to individual basic science departments to help with incorporating clinically relevant topics in syllabi. The third recommendation was to increase the usage of clinical-type textbooks in teaching.

The third subcommittee focused on incorporating simulation in the curriculum. The recommendations from this subcommittee were that the most appropriate basic science courses to target are Pharmacology, Physiology and Introduction to Clinical Medicine. In the basic science courses it is anticipated that simulation will be used to reinforce basic concepts. It was also recommended that there is increased usage in clinical rotations. The needs for future growth are an inventory of available equipment, training of Course Directors/Clerkship Directors on simulation implementation and curriculum design, and protection of Clerkship Directors’ time for conducting simulations.

In addition to the subcommittee work the committee reviewed each of the first year courses. The LCME course content document was used to aid in standardizing the presentations. Particular interest was given to innovative changes in the courses.

During this academic year, three new fourth year electives were approved. They included an Inpatient Cardiology Elective, a Gynecology Elective, and a Gynecologic Oncology Surgical Subspecialty Elective.
EXECUTIVE COMMITTEE OF STUDENT ASSEMBLY

As set forth in the Student Handbook, the Student Assembly addressed issues affecting student life. The Officers for 2008-09 were Sarah Walker - President, Sharon Bush - Vice President, and Catherine Manolakis – Secretary/Treasurer. The Faculty Advisors were Dr. Judy Blair-Elortegui, Internal Medicine/Pediatrics and Dr. Elliott Carter, Pathology.

ISSUES ADDRESSED BY THE STUDENT ASSEMBLY

1) Student Health Insurance. Historically, the Student Assembly negotiated with and selected a policy for medical students and Allied Health students. Because of the young age and relative good health of most students, the rates have been very reasonable in the past. The College of Medicine policy for 2008-2009 required that it is mandatory for students to have the Student Assembly selected policy unless they are currently covered through a policy held by parents or a spouse. The Student Assembly did meet with representatives of Alabama Administrators and selected a policy for the 2009-2010 academic year with no rate increase. For students who allowed their policies to lapse, the Student Assembly voted to permit them to buy individual Blue Cross Blue Shield policies.

2) The first ever Gumbo Chili Cookoff, organized by members of the sophomore class, was held in late February to rave reviews. The cookoff raised in excess of $14,000 for the Regan Robinson Scholarship fund.

3) Skit night was held at the Temple in downtown Mobile in March, 2009; it was supported financially by the Student Assembly and was well attended.

4) Members of the senior class on the AIMS Council redesigned a mentoring system for upperclassmen to assist freshmen and sophomores. The new system will hopefully be implemented in 2009-2010.

5) Senior student, Nayana Kamath, undertook publication of the 2009 yearbook. The problems with the 2008 yearbook and its delay in publication were noted and student volunteers were working on missing pages.
### OFFICE OF FINANCIAL AID

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<td>$7,476,092</td>
<td>$8,732,001</td>
<td>$8,800,872</td>
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<td>244</td>
<td>252</td>
<td>267</td>
<td>250</td>
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<td><strong>Loans</strong></td>
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<td>Graduate Unsubsidized</td>
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<td>$7,608,830</td>
<td>$7,406,706</td>
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<td><strong>Scholarships</strong></td>
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<tr>
<td>University Sponsored</td>
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<td>493,272</td>
<td>545,506</td>
<td>517,640</td>
<td>500,529</td>
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<tr>
<td>Outside Sponsored</td>
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<td>481,251</td>
<td>305,514</td>
<td>580,790</td>
<td>427,982</td>
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<td>Military – Army</td>
<td>38,395</td>
<td>27,423</td>
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<td>Military – Navy</td>
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<td>27,557</td>
<td>72,917</td>
<td>64,377</td>
<td>36,429</td>
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<td>Military - Air Force</td>
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<td>96,988</td>
<td>144,795</td>
<td>146,501</td>
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<td>40,000</td>
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<tr>
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<td>39,858</td>
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<td><strong>Total Scholarships</strong></td>
<td>$1,103,119</td>
<td>$1,171,491</td>
<td>$1,123,171</td>
<td>$1,394,166</td>
<td>$1,261,058</td>
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<tr>
<td><strong>Average Indebtedness of a Graduating Senior</strong></td>
<td>$90,416</td>
<td>$98,952</td>
<td>$126,116</td>
<td>$137,418</td>
<td>$130,890</td>
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</table>

An Emergency Loan Fund is available to medical students. Loans of up to $500 may be obtained by students through a fund administered by the Office of Student Affairs and Medical Education for a period of up to 60 days for the purpose of alleviating an unanticipated financial need. There is no interest charged. During the period August 1, 2008, through July 31, 2009, eight (8) emergency loans were approved for a total amount of $3,800.00. During that period, ten (10) payments totaling $4,600.00 were paid back into the loan account.
Diversity, Recruitment, and Enrichment for Admission into Medicine (D.R.E.A.M.)
The summer of 2009 marked the twenty-third (23rd) year of the summer recruitment and
enrichment program at the USA College of Medicine. Over that period of time, the program has
served a total of 241 students.

Some changes have taken place in the program this year. It acquired a new name, the Diversity,
Recruitment, and Enrichment for Admission into Medicine (D.R.E.A.M.) Program. Also, due to
recent University budget challenges, the number of student participants in the program has been
reduced to seven (7), the original number accepted with the program first began in 1986.

The change from B.E.A.R. to D.R.E.A.M. marks the end of a period during which there was a
state mandate to create more diversity within our college and toward a new focus of helping
educationally and economically disadvantaged students realize their dreams of becoming
physicians. The envisioned expectation is that these students will return to their underserved
communities to serve and help eliminate health disparities.

Phase I
The composition of the 2009 class of incoming D.R.E.A.M. students was similar to the 22
previous years of B.E.A.R. The Phase I class had a total of seven students representing four (4)
institutions:

Auburn......................................................... 2
Mississippi University for Women..................... 1
Stillman......................................................... 2
University of South Alabama........................... 2

Six (6) of the seven students are Alabama residents, one (1) is a resident of Jackson, Mississippi.
There were four (4) females and three (3) males in this class. The grade point averages of Phase
I entering students ranged from 3.42 to 4.0, and ACT scores ranged from 17 to 27. To date, a
total of 241 students have participated in this program.

Phase II
All of the students who participated in Phase I of the program in the summer of 2008 were
successful and returned in 2009 for Phase II. The Phase II students represent seven (7) different
institutions:

Alabama A&M ................................................. 3
Salem College.............................................. 1
Texas Christian............................................. 1
Tuskegee................................................... 5
University of Alabama, Birmingham.................. 1
University of Alabama, Huntsville................... 1
University of Notre Dame............................... 1

Ten (10) of the thirteen students are Alabama residents, one (1) is a resident of McKinney,
Texas; one (1) is a resident of St. Louis, Missouri; and one (1) is a resident of San Pablos,
California. Two of these latter three students attend Alabama institutions.
Admission
In August of 2009, three (3) males, former B.E.A.R. students, entered the University of South Alabama College of Medicine freshman class.

Other Recruitment
The Office of Educational Enrichment visited twelve (12) colleges and universities in 2008: Florida A&M University, Auburn University Montgomery, Auburn University, Jackson State University, Tougaloo College, University of Alabama, Stillman College, University of Alabama Birmingham, Alabama A&M University, and Alabama State University. In January of 2009, one recruitment trip was made to Xavier University and Dillard University in New Orleans.
OFFICE OF ADMISSIONS  
Annual Report for 2008-2009

Applicant Pool and Acceptance Data

The University Of South Alabama College Of Medicine participates in the American Medical College Application Service (AMCAS). The period for receiving applications to the College of Medicine for the class entering August 10, 2009, opened June 1 and closed November 15, 2008.

For the Class of 2013, one thousand two hundred ninety-eight (1298) applications were received. Four hundred ten (410) applications were received from Alabama residents, seven hundred eighty (780) applications from out of state U.S. citizens, and one hundred five (105) applications from citizens of foreign countries. The Admissions Committee interviewed a total of one hundred ninety-three (193) applicants of which one hundred eighty-three (183) were residents of Alabama. Of the applicants interviewed, one hundred forty-four (144) were offered admission to fill a class of seventy-four (74). Seventy (70) of the matriculating students are Alabama residents. Ten (10) offers of admission were made to black applicants; three (3) will matriculate. Three (3) of the matriculating black students are DREAM (Diversity Recruitment and Enrichment for Admission into Medicine) students. This year, our records indicate an increase in the number of applicants (1298 in '09 vs. 1209 in '08); there was an increase in Alabama applicants (410 in '09 vs. 396 in '08). Table I gives comparative data since 2006.

The 2009 entering class has an exceptional "mix" of academically well-qualified students who graduated from twenty-three (23) colleges and universities. However, 41% of this year's class is made up of students from four universities in the state.

Recruitment and Retention Efforts

1. Undergraduate visits and sophomore interviews were implemented by "teams" of faculty, administration, and medical students. The USACOM recruiting teams counseled over 400 premedical students at 11 colleges and universities.

2. The Director of Admissions served as the admissions counselor and advised prospective students on a daily basis. In addition, selected faculty members advised prospective applicants periodically.

3. Premedical visitation day programs were organized and conducted to provide prospective applicants with an opportunity to tour the College of Medicine facilities, learn about the application process, meet with medical students and faculty, and obtain information on financial aid, housing, and the community.

4. Informative health career related programs were organized and conducted for high school students, community organizations, and premedical special interest groups.

5. Special admissions reports and correspondence were produced and distributed monthly to in-state premedical advisors and selected out-of-state advisors.
6. A total of 16 Applicant Interview Day programs were conducted from September until mid-March. The interviewers, primarily College of Medicine basic science and clinical faculty, serve as members of the Committee on Admissions and/or ad hoc committee. These members interviewed 193 candidates; each candidate was interviewed by three committee members, giving a total of 579 interviews.

7. The following Admissions subcommittees were active in 2008-2009:
   Early Acceptance Program Subcommittee

**Early Acceptance Program**

In 1990, the College of Medicine and the University's Health Preprofessions Program established an Early Acceptance Program (EAP) for qualified high school graduates interested in a career in medicine. Candidates selected for this program must have a minimum high school GPA of 3.5 and an ACT score of 28 (or comparable SAT). Candidates selected for this program receive early acceptances from the University of South Alabama and the University of South Alabama College of Medicine. The students enter the Health Preprofessions Program at the University of South Alabama, and their curriculum will include the core requirements for their selected baccalaureate program and prerequisites for entering medical school. Students in this program must maintain a specific GPA during college, score a 27 on the MCAT, and meet all other requirements for entering medical school. Students participate in a variety of activities selected to provide a broad exposure to medical education. Students participating in this program are expected to enter the College of Medicine following completion of the baccalaureate degree.

In 2009, the EAP Subcommittee interviewed 45 applicants for the program and offered 20 acceptances.
<table>
<thead>
<tr>
<th>Residence:</th>
<th>Total Applicants</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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</thead>
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<td>1100</td>
<td>1209</td>
<td>1298</td>
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<tr>
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<td>599</td>
<td>664</td>
<td>780</td>
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<td>47</td>
<td>44</td>
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<td>102</td>
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<tr>
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<td>165</td>
<td>197</td>
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<tr>
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<td>77</td>
<td>79</td>
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<tr>
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<td>48</td>
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<td>53</td>
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<td>Total Applicants Interviewed</td>
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<td>218</td>
<td>193</td>
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<th>2008</th>
<th>2009</th>
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<td>90</td>
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<tr>
<td>Black (excludes BEARs)</td>
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<td>15</td>
<td>17</td>
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<td>Total Applicants Accepted</td>
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<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
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<td>62</td>
<td>78</td>
<td>65</td>
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<tr>
<td>Total Black</td>
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<td>Total Matriculants</td>
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<td>Average MCAT</td>
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<tr>
<td>Average GPA</td>
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<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>37</td>
<td>32</td>
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<td>Total Black</td>
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<td>Black BEAR Program</td>
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OFFICE OF CONTINUING MEDICAL EDUCATION

General:
Sharrie Cranford was named Director of Continuing Medical Education in the summer of 2008. Yolanda Mack was subsequently hired as the clerical support staff. Within the past year, the CME office coordinated CME programs provided by the clinical departments to physicians with 26 regularly scheduled series (Grand Rounds) for 810.75 CME credit hours and 13 unique activities, accounting for 60.75 CME credit hours.

With increased public and Congressional scrutiny on physician relationships with the pharmaceutical and medical device industries, the ACCME has increased emphasis on financial disclosures by physicians, conflicts of interest, and eliminating bias in CME content. Accordingly, the USA CME policies and procedures were modified over 2008-09 to increase transparency and eliminate commercial bias. Ms. Cranford designed numerous disclosure forms and program applications toward this end.

The USA CME program is currently accredited, but Ms. Cranford has directed efforts at obtaining accreditation “with commendation.” The most significant of these efforts included the creation of a functional CME website and increasing the number of simultaneous broadcasts of Grand Rounds activities to outlying hospitals, thus strengthening the CME-community Link.

Significant CME Achievements:
August 2008
• Revamped Policies and Procedures manual, improving policy on commercial support
• Attended annual benefits fair, showing CME’s role in the USA community

November 2008
• Addressed ACCME criteria with new CME Application
• Held Round Table discussion with hospital staff for potential CME activities
• Received approval for continued accreditation until renewal July 2011
• Created CME website allowing participants to view previously recorded Grand Rounds
• Worked closer with educational technologies to ensure better instructional design of CME activities
• Introduced Coordinator’s quarterly meeting
• Changed policy prohibiting joint sponsorship

March 2009
• Initiated verbal and written disclosure by all presenters
• Created scannable sign-in sheets
• Increased response rate by 50% of Annual Survey
• Integrated CME committee using interdisciplinary model
• Created first joint sponsorship with Mercy Medical
• Provided Activity Directors with assistance compiling local, state and national data resources
• Addressed the requirement of measurable outcomes through assistance of Quality Assurance
July 2009

- Created online CME for credit
- Initiated discussions of simulation into CME activities
- Launched payment for conferences using online registration and credit card payments
- Initiated RSS evaluation change, requiring evaluation from each participant to receive CME credit

CME Plans for 2009-2010:

1. Add more educational activities to the CME website.
2. Coordinate program development for continuing programs in areas of global interest such as medical ethics.
3. Develop novel non-survey based mechanisms for needs and gaps assessment.
4. Work with Quality Assurance to examine changes in patient outcomes attributable to CME activities.
5. Look to develop more jointly sponsored activities with providers such as the Mitchell Cancer Institute and the Veteran’s Administration Hospital.
6. Assess fee schedules for CME coordination.
OFFICE OF GRADUATE MEDICAL EDUCATION

The Office of Graduate Medical Education (GME) is responsible for the oversight of GME activities, policies, and procedures throughout the USA Hospitals and Clinics (USA).

The Graduate Medical Education Committee (GMEC) is the administrative body for graduate medical education, establishes policy and procedure and supervises all aspects of graduate medical education for the College of Medicine (COM). The Chairman of this committee is also the Designated Institutional Official (DIO) for the Accreditation Council of Graduate Medical Education (ACGME) at the University of South Alabama, and the Assistant Dean for Graduate Medical Education of the College of Medicine.

During the 2008-2009 academic year, USA sponsored 11 residency programs: Family Medicine, Internal Medicine, Medicine/Pediatrics, Neurology, OB/GYN, Orthopaedic Surgery, Pathology, Pediatrics, Psychiatry, Diagnostic Radiology Surgery and 7 subspecialty programs: Cardiovascular, Gastroenterology, Infectious Disease, Pulmonary Disease, Family Medicine: Sports Medicine; Orthopaedic Surgery: Sports Medicine, Child and Adolescent Psychiatry comprised of 240 residents and fellows.

The Vascular Neurology program submitted and received approval to voluntarily withdraw their program from accreditation by the ACGME. The Child and Adolescent Psychiatry fellowship program did not accept any applicants during the 2008-2009 academic year.

The University of South Alabama Hospitals underwent their ACGME’s Institutional Review Site Visit on January 12, 2009. The institution received the following result: 
Continued Accreditation through April 1, 2012.

A progress report was requested and has been submitted. A response from the Institutional Review Committee of the ACGME is expected after their next meeting scheduled in October, 2009.

The GME Committee (GMEC) welcomed new members:
Letch Kline, M.D., Chief, Surgical Services for the VA Gulf Coast Veterans Health Care Facility in Biloxi
Carolyn Drunkenmiller, Assistant Hospital Administrator at CWH
Lamar Duffy, M.D., Assistant Professor, Department of Family Medicine
Brian Fouty, M.D., Program Director, Division of Pulmonary and Critical Care Medicine
Bassam Omar, M.D., Ph.D., Program Director, Division of Cardiovascular Disease
William Richards, M.D., Chairman, Department of Surgery
Gregory Rutecki, M.D., Professor, Division of Nephrology and Alternate DIO for GME

New resident representatives appointed by their peers include:
Kari Bradham, D.O., Department of Pediatrics
Chuck Kirkland, M.D., Department of Family Medicine
Amy Woodward, M.D., Department of Internal Medicine
All programs of the University of South Alabama graduate medical education program are currently fully accredited and in good standing with the ACGME. The most recent reviews include:

a. The Medicine/Pediatrics residency program underwent review by their ACGME Review Committee in September, 2008.
   The program received Continued Accreditation through March, 2011.

b. The Department of Neurology’s residency program underwent review by their ACGME Review Committee in September, 2008.
   The program received Continued Accreditation through November, 2011.

c. The Department of Pathology’s residency program underwent review by their ACGME Review Committee in October, 2008.
   The program received Continued Accreditation through April, 2013.

d. The Departments of General Surgery and Orthopaedic Surgery and the Divisions of Infectious Disease and Gastroenterology all underwent review by their respective ACGME Review Committee’s (RC’s) in June, 2009.
   The accreditation status of these programs is pending the RC Letters of Notification.

The Department of Surgery received approval from their ACGME to add the VA Gulf Coast Veterans Health Care System in Biloxi, MS as a participating institution and delete Thomas Hospital. The Department of Surgery resubmitted a request to the ACGME indicating a need to add the VA as an integrated institution and not as a participant, beginning July 1, 2009.

The Department of Surgery submitted a letter requesting to add the University of Mississippi Medical Center as a major participating institution to fulfill the program’s requirement for a Transplant Rotation, beginning July 1, 2009.

The GMEC reviewed the results of the ACGME’s Resident Surveys for the Departments of Family Medicine, Internal Medicine, Med/Peds, Neurology, OB/GYN, Orthopaedic Surgery, Radiology, Pathology, Pediatrics, Psychiatry and Surgery. The following program Division’s were also reviewed: Pulmonary Disease and Critical Care Medicine, Gastroenterology and Cardiovascular Disease. As a result of the ACGME Resident Surveys, a new program was established to oversee and ensure residents receive the required information regarding certain issues mentioned in the survey. The GME Office (DIO and GME Specialist) have begun meeting with each program’s residents on a regularly scheduled basis. The purpose of this meeting is to discuss issues raised in the ACGME surveys (eg. duty hours, the function of the Institutional Ombudsman, resident participation on Committees, and the GME Policy and Procedure Manual) and solicit positive and negative feedback of the individual and overall graduate medical education programs.

The GME Office mailed 16,250 recruitment postcards to those students graduating from medical school in 2010.
The GMEC conducted Internal Reviews for the following programs during the 2008-2009 academic year:

a. Division of Gastroenterology (August, 2008)
b. Infectious Disease (August, 2008)
c. Cardiovascular Disease (November, 2008)
d. OB/GYN (February, 2009)
e. Pediatrics (May, 2009)
f. Radiology (May, 2009)
g. Orthopaedic Surgery: Sports Medicine (May, 2009)

The GMEC has developed a GME Curriculum website to assist in supporting the framework of the Accreditation Council for Graduate Medical Education’s (ACGME) general competencies. These resources are available to all the programs.

A GME Task Force was appointed to develop a Web Based Core Curriculum for the Graduate Medical Education Programs. Leading this task force is Susan LeDoux, Ph.D., Assistant Dean for Curriculum, College of Medicine. Other members appointed to the task force are: Franklin Trimm, M.D., Department of Pediatrics, Craig Sherman, M.D., Department of OB/GYN, Carole Boudreaux, M.D., Department of Pathology, Celeste Hollands, M.D., Department of Surgery, Chuck Kirkland, M.D., Resident, Department of Family Medicine, Daniel Dees, M.D., Resident, Department of Neurology. Consulting and assisting the task force are Dr. Joyce Guest, Office of Educational Technology and Services, and Ms. Clista Clanton, M.L.B., Biomedical Library.
2008-2009
Summary of Activities
Medical Student Summer Research Program

The Thirty-sixth Annual Medical Student Research Day was held on Friday, July 31, 2009 hosting approximately 100 attendees in the Medical Sciences Building auditorium. Twenty first and second-year medical students participated in research projects with basic science and clinical faculty in the College of Medicine during the summer. A weekly seminar series introduced students to important research related topics. The program aims to highlight the relation between scientific discoveries and their application in clinical medicine.

Dr. David B. Harrison, Professor of Medicine and Director of Cardiology at Emory University School of Medicine was the keynote speaker. Dr. Harrison’s seminar was entitled, “Inflammation, Adaptive, Immunity, and Hypertension.”

Culmination of the summer’s work was the presentation of six oral and fourteen poster presentations at the Annual Medical Student Research Day. Student presentations and their faculty sponsors were as follows:

**ORAL PRESENTATIONS**


**Drew Uhrig**, sophomore medical student. Failure of sister chromatid cohesion contributes to the anti-tumor effects of phosphatase inhibitors. Sponsored by Honkanen, Richard, Ph.D., Department of Biochemistry and Molecular Biology.


**Amber Bartlett**, freshman medical student. RASGRP1-dependent autoantibody production in murine lupus. Sponsored by Barrington, Robert, Ph.D, Department of Microbiology and Immunology.
POSTER PRESENTATIONS


Brian Fletcher, sophomore medical student. *Burkholderia Thaailandensis* type VI secretion mutants exhibit replication and act in motility defects in RAW 264.7 murine macrophages. Sponsored by Brett, Paul, Ph.D., and Burtnick, Mary, Ph.D., Department of Microbiology and Immunology.

Kandace Kichler, sophomore medical student. Liquid-based cytology in evaluation of breast masses. Sponsored by Dyess, Donna Lynn, M.D., and Boudreaux, Carole, M.D., Departments of Surgery and Pathology.

Sarah Beth Hill, sophomore medical student. Elucidating the role of GadE in the pathogenesis of *shigella flexneri* using a macrophage survival model. Sponsored by Audia, Jonathon, Ph.D., Department of Microbiology and Immunology.


Carlton A. Smith, sophomore medical student. Calcium regulation of inflammatory agonist-stimulated microparticle release from pulmonary microvascular endothelium. Sponsored by Bauer, Natalie, Ph.D., Department of Pharmacology, and Center for Lung Biology.

Caitlin Gordon, sophomore medical student. Role of respiratory syncytial virus-induced miR-124 in viral immunopathology. Sponsored by Barik, Sailen, Ph.D., Department of Biochemistry and Molecular Biology.

Casey McIntosh, sophomore medical student. Prospective factors leading to infection in the trauma patient. Sponsored by Dyess, Donna Lynn, M.D., and Gonzales, Richard, M.D., Department of Surgery.

Ryan Gentry, freshman medical student. The use of fusion proteins to protect insulin secreting beta cells from reactive nitrogen species. Sponsored by Wilson, Glenn, Ph.D., Department of Cell Biology and Neuroscience.

Richard Gurich, Jr., sophomore medical student. Relative contributions of nuclear and mitochondrial DNA damage to cytotoxic effects of alkylating agents. Sponsored by Alexeyev, Mikhail, Ph.D., Department of Cell Biology and Neuroscience.

Jason Fain, sophomore medical student. MiR-21 and its potential role in the development of pulmonary arterial hypertension. Sponsored by Gerthoffer, William, Ph.D., Department of Biochemistry and Molecular Biology.

Mary Margaret Howard, sophomore medical student. Effect of TRPV4 activation on permeability related macromolecules in mouse lung epithelium and macrophages. Sponsored by Parker, James, Ph.D., Department of Physiology.

Jason Prater, sophomore medical student. Hyperoxia-induced mitochondrial DNA damage and apoptosis in lung epithelial and endothelial cells. Sponsored by Gebb, Sarah, Ph.D., and Wilson, Glenn, Ph.D., Department of Cell Biology and Neuroscience.

The Clyde G. “Sid” Huggins Medical Student Research Awards were presented to Amber Bartlett, freshman medical student for best oral presentation entitled, “RASGRP1-dependent autoantibody production in murine lupus.” She was sponsored by Robert Barrington, Ph.D., Department of Microbiology and Immunology, and Luke Wiggins, sophomore medical student for best poster presentation entitled, “Role of matrix metalloproteinases in coronary collateral growth.” He was sponsored by Petra Rocic, Ph.D., Department of Biochemistry and Molecular Biology. Each winner was presented with a plaque of recognition and cash award. Both recipients are eligible to make their presentations at the 2009 Annual National Research Forum in Galveston, Texas.
Graduate Program in Basic Medical Sciences

Administration

Dr. Ronald Balczon completed his fourth year as Director of the Basic Medical Sciences Graduate Program.

Admissions

The Graduate Program Office coordinates the processing of applications to the program with University Admissions and/or International Student Services Offices. Upon receipt of the application, these offices notify the BMS Graduate Office. Test scores and transcripts are received through Admissions or the International Student Services Office. Narrative statements and letters of recommendation are received in the Graduate Office. Following receipt of all required documents, the Graduate Office reviews the file for accuracy, and then forwards it to the program’s Admissions Committee for review. The committee’s decision is communicated to the student for acceptance or decline of the offer to matriculate.

The Graduate Office hosted interviews in February, March, April, May, and July for applicants to the Fall 2009 class. A total of 18 students were interviewed (US=10; International=8). A summary for admissions is shown below.

<table>
<thead>
<tr>
<th>Admissions - BMS Graduate Program</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inquiries</td>
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</tr>
<tr>
<td>US</td>
<td>122</td>
</tr>
<tr>
<td>International</td>
<td>99</td>
</tr>
<tr>
<td>Applicants</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>20</td>
</tr>
<tr>
<td>International</td>
<td>27</td>
</tr>
<tr>
<td>Acceptances</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>10</td>
</tr>
<tr>
<td>International</td>
<td>5</td>
</tr>
<tr>
<td>Matriculants</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>9</td>
</tr>
<tr>
<td>International</td>
<td>2</td>
</tr>
<tr>
<td>Average GRE</td>
<td>1159</td>
</tr>
<tr>
<td>Average GPA</td>
<td>3.36</td>
</tr>
</tbody>
</table>

Recruitment Activities

1. Local presentations were made to USA’s Premedical Honors Society and Freshman Biomedical Sciences students.
2. Graduate program information was distributed at several local high schools. Graduate Office personnel hosted sessions in SCRUBS, regional science conferences, and attended the Alabama Academy of Science meeting. Dr. Balczon and Lanette Flagge attended the Alabama Connection graduate recruiting fair. Also, Dr. Balczon distributed program information and met with faculty colleagues at several regional colleges and universities. Lanette Flagge participated in a Graduate School and Professional Expo in North Louisiana and contacted faculty and posted program brochures at several institutions in Mississippi.
Curriculum

1. Work began on re-vamping the IDL 581 Fundamentals of Biomedical Sciences course.
2. The second COM Research Forum was held on November 21, 2008.

New Programs/Policies/Requirements

1. The BMS Graduate Program Office ensures graduation candidates comply with the requirement of having dissertation references reviewed for accuracy by Biomedical Library staff.
2. A course has been established for students to register for the Distinguished Scientist Seminar series in the Fall and Spring semesters.

BMSSO-Basic Medical Sciences Student Organization

The BMSSO hosted working lunch sessions for various academic, governmental and industry personnel to speak on topics, including CV development, applying for employment with NIH, CDC, etc. The organization also hosted the annual Charles Baugh “Dawg Day” and a holiday appreciation luncheon for BMS Graduate Faculty. Students raised funds for the American Heart Association’s “Heart Life.”

Extramural Support for Graduate Training

1. The NIH Predoctoral Institutional Training Grant on “Cell Signaling and Lung Pathobiology”, was renewed 2009-2014. This grant provides six students with stipend support.
2. Several BMS Graduate Program students received extramural grant awards from the American Heart Association and EPSCOR.

Graduates

Six students completed all requirements for the Ph.D. degree during the academic year (September 2008-August 2009). They are:

Lauren Amable
DISSERTATION TITLE: “Generation of a Knockout Mouse Model to Determine the In Vivo Function of Protein Phosphatase 5 (PP5)”
MAJOR PROFESSOR: Richard Honkanen, Ph.D.
DEPARTMENT: Biochemistry and Molecular Biology
CURRENT POSITION: Postdoctoral Fellow; Department of Biochemistry and Molecular Biology, University of South Alabama

Kathy Marie Bonness
DISSERTATION TITLE: “The Role of Serine/Threonine Protein Phosphatases in Mitosis”
MAJOR PROFESSOR: Richard Honkanen, Ph.D.
DEPARTMENT: Biochemistry and Molecular Biology
CURRENT POSITION: Postdoctoral Fellow; Department of Biochemistry and Molecular Biology, University of South Alabama
Christopher Alan Koczor  
**DISCUSSION TITLE:** “Modulating Mitochondrial DNA Base Excision Repair to Alter Cell Cycle Progression in Mammalian Cell Lines”  
**MAJOR PROFESSOR:** Susan LeDoux, Ph.D.  
**DEPARTMENT:** Cell Biology and Neuroscience  
**CURRENT POSITION:** Postdoctoral Fellow; Department of Pathology, Emory University School of Medicine

Natalia S. Middleton  
**DISCUSSION TITLE:** “Epigenetic Regulation of Hypoxia-Induced Gene Expression: Role of Histone Deacetylases”  
**MAJOR PROFESSOR:** Mark Gillespie, Ph.D.  
**DEPARTMENT:** Pharmacology  
**CURRENT POSITION:** Instructor, The Technical College of the LowCountry, South Carolina

Nutann Prasain  
**DISCUSSION TITLE:** “Soluble Adenyl cyclases Disassemble Microtubules and Disrupt the Pulmonary Endothelial Barrier”  
**MAJOR PROFESSOR:** Troy Stevens, Ph.D.  
**DEPARTMENT:** Pharmacology, CLB  
**CURRENT POSITION:** Postdoctoral Fellow; Department of Pediatrics, Weeks Center for Pediatric Research, Indiana University-Purdue University

Brad Michael Swiger  
**DISCUSSION TITLE:** “Vectorial Mitochondrial Movement and Cell Signaling in Hypoxia”  
**MAJOR PROFESSOR:** Mark Gillespie, Ph.D.  
**DEPARTMENT:** Pharmacology  
**CURRENT POSITION:** Assistant Professor, Department of Biology, University of Mobile

To date, 160 students have received a Ph.D. degree in Basic Medical Sciences, awarded by departments as follows:

- Biochemistry/Molecular Biology: 32
- Cell Biology/Neuroscience: 27
- Microbiology/Immunology: 36
- Pharmacology: 43
- Physiology: 22
Summary of Extramural Support

Funding for the 2008-2009 academic year includes $15,749,547 and $4,297,625 in awards administered through the Office of Sponsored Programs and the South Alabama Medical Science Foundation, respectively.

Extramural Funds
Totals for Recent Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
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<tbody>
<tr>
<td>1997</td>
<td>$14,981,699</td>
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<tr>
<td>1998</td>
<td>18,388,972</td>
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<td>1999</td>
<td>19,108,225</td>
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<td>2000</td>
<td>20,431,119</td>
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<td>2001</td>
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<td>2002</td>
<td>20,734,491</td>
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<td>2003</td>
<td>23,244,111</td>
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<td>2004</td>
<td>26,935,930</td>
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<tr>
<td>2005</td>
<td>40,065,869*</td>
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<tr>
<td>2006</td>
<td>31,904,662 **</td>
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<td>2007</td>
<td>20,222,905</td>
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<tr>
<td>2008</td>
<td>20,818,609</td>
</tr>
<tr>
<td>2009</td>
<td>20,047,172</td>
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</tbody>
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*Includes 19.6 million dollar MCI construction grant
**Includes 12 million dollar MCI construction grant
# EXTRAMURAL FUNDING
## (OCTOBER 1, 2008 – SEPTEMBER 30, 2009)

## BIOCHEMISTRY AND MOLECULAR BIOLOGY

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Agency</th>
<th>Project Title</th>
<th>Fiscal Year Funding</th>
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<tbody>
<tr>
<td>Sailen Barik</td>
<td>NIH 5 R01 AI059267-05</td>
<td>Mechanisms of RNA Virus-Host Interaction</td>
<td>$237,657</td>
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<tr>
<td>Sailen Barik</td>
<td>Alabama Epscor 090464</td>
<td>Mechanisms of Suppression of Host Interferon Response by the Nonstructural Proteins of Human RSV</td>
<td>25,000</td>
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<tr>
<td>Sailen Barik</td>
<td>Alabama Epscor 090465</td>
<td>Association of Host Organelles with the Intracellular Parasite Toxoplasma GONDI: Mechanisms and Significance</td>
<td>18,750</td>
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<tr>
<td>Sailen Barik</td>
<td>Amira</td>
<td>Amira Sponsored Research-Effects of a FLAP Synthesis Inhibitor on RSV-Induced Ocular Immunopathology</td>
<td>18,240</td>
</tr>
<tr>
<td>Donna Cloffi</td>
<td>NIH 4 R00 HL089361-02</td>
<td>Inactivation of Endothelial I\textsubscript{iso} Through Calcium-Phosphate Complexation</td>
<td>249,000</td>
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<tr>
<td>Sachin Gupte</td>
<td>NIH 5 R01 HL085352-03</td>
<td>Regulation of Vascular Smooth Muscle Calcium by NADPH Redox</td>
<td>421,559</td>
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<tr>
<td>Richard Honkanen</td>
<td>NIH 3 R01 CA060750-15S1</td>
<td>Mechanisms of Tumor Promotion and Carcinogenesis</td>
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<td></td>
<td>NIH 1 R03 MH08570201A1</td>
<td>High Throughput Screening for Inhibitors of SER/THR Protein Phosphatase 5</td>
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<td>PRINCIPAL INVESTIGATOR</td>
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<tr>
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</tr>
<tr>
<td>Petra Rocic</td>
<td>AHA 0630285N-02</td>
<td>Reactive Oxygen Species and Redox-Sensitive Signaling in Coronary Collateral Growth</td>
<td>$ 65,000</td>
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<tr>
<td>Petra Rocic &amp; William Gerthoffer</td>
<td>NIH 3 R01 HL093052-01S1</td>
<td>Regulation of Coronary Collateral Growth in the Metabolic Syndrome – Recovery Act Administrative Supplement</td>
<td>144,981</td>
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<tr>
<td>Petra Rocic &amp; William Gerthoffer</td>
<td>NIH 5 R01 HL093052-02</td>
<td>Regulation of Coronary Growth in the Metabolic Syndrome-Progress Report</td>
<td>324,094</td>
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<td><strong>Total</strong></td>
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<td><strong>$ 1,554,281</strong></td>
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<th>FISCAL YEAR FUNDING</th>
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<tbody>
<tr>
<td>Judy Burnham &amp; Beverly Rossini</td>
<td>NIH</td>
<td>Empowering Health Ministry Leaders</td>
<td>$ 26,767</td>
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<td><strong>Total</strong></td>
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<td><strong>$ 26,767</strong></td>
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<tr>
<td>Principal Investigator</td>
<td>Agency</td>
<td>Project Title</td>
<td>Fiscal Year Funding</td>
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<tr>
<td>------------------------</td>
<td>--------</td>
<td>--------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Mikhail Alexeyev</td>
<td>NIH 5 P01 HL066299-09</td>
<td>Program Project Grant Gene Delivery Core 3**</td>
<td>$167,186</td>
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<tr>
<td>Susan LeDoux</td>
<td>NIH 5 R01 ES005865-16</td>
<td>Repair of DNA Damage Induced By Environmental Agents</td>
<td>314,007</td>
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<tr>
<td>Wensheng Lin</td>
<td>Myelin Research Foundation</td>
<td>High Throughput Screen for Perk Activators</td>
<td>60,000</td>
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<tr>
<td>Wensheng Lin</td>
<td>NMSS TA 3026-A-1</td>
<td>The Role of the Perk-ELF2α Pathway in MS/EAE</td>
<td>137,500</td>
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<tr>
<td>Lyudmila Rachek &amp; Lewis Pannell</td>
<td>NIH 5 R01 DK73808-03</td>
<td>Proteins Alterations in Skeletal Muscle Cells with Improved MTDNA Repair</td>
<td>237,699</td>
</tr>
<tr>
<td>Glenn Wilson</td>
<td>NIH 2 R01 ES003456-23</td>
<td>Environmental Beta Cell Toxins-Mechanisms of Action</td>
<td>310,702</td>
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<tr>
<td>Glenn Wilson</td>
<td>NIH 3 R01 ES003456-23S1</td>
<td>Environmental Beta Cell Toxins-Mechanisms of Action</td>
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<td>$1,423,704</td>
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**Center for Lung Biology Program Project**
### CENTER FOR HEALTHY COMMUNITIES

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<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martha Arrieta &amp; Errol Crook</td>
<td>Robert Wood Johnson Foundation 08-070264-02</td>
<td>Real-Time Telemonitoring of Glucose</td>
<td>$ 45,446</td>
</tr>
<tr>
<td>Martha Arrieta &amp; Errol Crook</td>
<td>OMH 6MP CMP0610110104</td>
<td>Gulf Coast Telehealth Ethnography Project</td>
<td>88,052</td>
</tr>
<tr>
<td>Errol Crook</td>
<td>NIH 5 P20 MD002314-03</td>
<td>Broad-Based Research Collaboratives on Minority Health &amp; Health Disparities</td>
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<td><strong>Total</strong></td>
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### CENTER FOR STRATEGIC HEALTH INNOVATION

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<tr>
<th>PRINCIPAL INVESTIGATOR</th>
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<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
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</thead>
<tbody>
<tr>
<td>Carl Taylor</td>
<td>HRSA C80117304(CEP22QW9-09)  Alabama Incident Management System VII (AIMS VII)</td>
<td>$ 329,655</td>
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<tr>
<td>Carl Taylor</td>
<td>HRSA C80117303(CEP23QW9-09)  Advanced Regional Response Training Center-Level</td>
<td>339,040</td>
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<tr>
<td>Carl Taylor</td>
<td>HRSA C80117304(CEP24QW9-09)  Advanced Regional Response Training Center-Roadshow (ARRTC RS)</td>
<td>265,170</td>
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<tr>
<td>Carl Taylor</td>
<td>HRSA C80117305(CEP25QW9-09)  Advanced Regional Response Training Center-Region IV Cross Borders Surge Capacity Exercise (AARTC CB)</td>
<td>124,980</td>
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<tr>
<td>Carl Taylor</td>
<td>HRSA 1C76 HF16179-01-00CT    University of South Alabama Focused Health Care Research and Disaster Medical Training Initiatives</td>
<td>470,490</td>
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## CENTER FOR STRATEGIC HEALTH INNOVATION (cont’d)

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<th>PROJECT TITLE</th>
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</thead>
<tbody>
<tr>
<td>Carl Taylor</td>
<td>Alabama Hospital Association</td>
<td>Alabama Hospital Association Workshop</td>
<td>$ 34,964</td>
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## COM ADMINISTRATION

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<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
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</thead>
<tbody>
<tr>
<td>Samuel Strada</td>
<td>AHA 09PRE2260387</td>
<td>Advanced Cardiovascular Research for Medical Students</td>
<td>$ 13,500</td>
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<tr>
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<td>Total</td>
<td>$ 13,500</td>
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## COMPARATIVE MEDICINE

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<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michele Schuler</td>
<td>NIH 5 K01 RR021871-04</td>
<td>Stem Cell Derivation in Two Neotropical Primate Species</td>
<td>$ 122,850</td>
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<tr>
<td></td>
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<tr>
<td>PRINCIPAL INVESTIGATOR</td>
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<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>W. Scott McNair</td>
<td>Arete Therapeutics</td>
<td>A Randomized, Double-Blind, Placebo-Controlled, Dose-Ranging, Exploratory, 28-Day Study to Examine the Effects of AR9281 on Blood Pressure and Glucose Tolerance in Patients with Mild to Moderate Hypertension and Impaired Glucose Tolerance</td>
<td>$ 23,160</td>
</tr>
<tr>
<td>Frank Pettyjohn</td>
<td>AstraZeneca</td>
<td>A 12 Week Open-Label, Randomized, Parallel Group, Multicenter, Phase, IIIb Study to Compare the Efficacy And Safety of Rosuvastatin (CRESTOR) 10mg and 20mg in Combination with Ezetimibe 10mg (fixed dose combination) in Patients with Hypercholesterolaemia and Coronary Heart Disease (CHD) or a CHD Risk Equivalent, Atherosclerosis or a 10 ver CHD Risk &gt; 20%</td>
<td>3,585</td>
</tr>
<tr>
<td>Frank Pettyjohn</td>
<td>Novartis</td>
<td>A Multicenter, Randomized, Double-Blind, Parallel Design Trial to Evaluate the Blood Pressure Lowering Efficacy Comparing Moderate Versus Aggressive Treatment Regimen of Exforge in Patients Uncontrolled on ARB Monotherapy</td>
<td>8,043</td>
</tr>
<tr>
<td>Frank Pettyjohn</td>
<td>Daiichi Sankyo</td>
<td>A Randomized, Double-Blind, Parallel Group Study Evaluating the Efficacy and Safety of Co-Administration of a Triple Combination Therapy of Olmesartan Medoxomil, Amlodipine Besylate and Hydrochlorothiazide in Subjects with Hypertension</td>
<td>81,096</td>
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<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
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<tr>
<td>------------------------</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>Frank Pettyjohn</td>
<td>Novartis</td>
<td>An 8-Week, Prospective, Multicenter, Randomized, Double-Blind, Active Control, Parallel Group Study to Evaluate the Efficacy and Safety of Aliskiren HCTZ vs Ramipril in Obese Patients (BMI&gt;=30) with Stage 2 Hypertension</td>
<td>$ 19,156</td>
</tr>
<tr>
<td>Frank Pettyjohn</td>
<td>Novartis</td>
<td>An 8 Week, Randomized, Double-Blind, Parallel-Group, Multicenter, Active Controlled Study to Evaluate Anti-hypertensive Efficacy and Safety of Aliskiren Administered in Combination with Valsartan versus Valsartan Alone in Patients with Stage 2 Systolic Hypertension and Type 2 Diabetes Mellitus</td>
<td>4,749</td>
</tr>
<tr>
<td>Frank Pettyjohn</td>
<td>AstraZeneca</td>
<td>A Randomized, Double-Blind, Placebo-Controlled, Multicenter, Phase III Study of Rosuvastatin (Crestor) 20mg in the Primary Prevention of Cardiovascular Events Among Subjects with Low Levels of LDL-Cholesterol and Elevated Levels of C-Reactive Protein</td>
<td>5,475</td>
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**Total $ 145,264**
### FAMILY MEDICINE

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<tr>
<td>Carol Motley</td>
<td>HRSA 5 D56 HP05226-05-00</td>
<td>Training Medical Students for a Life of Science</td>
<td>$ 100,000</td>
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<tr>
<td>Allen Perkins</td>
<td>AFPRHB</td>
<td>Student Preceptorship Subsidy</td>
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<td>Allen Perkins</td>
<td>HUD 080412</td>
<td>Resident Opportunities and Supportive Services (ROSS)-Health Navigator</td>
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<td>Allen Perkins</td>
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<td>Allen Perkins</td>
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<td>A Student Curriculum in Family Medicine</td>
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### INTERNAL MEDICINE

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<tr>
<td>Diego Alvarez</td>
<td>AHA 0835134N-02</td>
<td>Infusion of Resident Endothelial Progenitors Promotes Repair of Microvascular</td>
<td>$ 77,000</td>
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<tr>
<td>Barney Beaver</td>
<td>Lilly Research Laboratories</td>
<td>A Comparison of Prasugrel and Clopidogrel in Acute Syndrome with Unstable Angina/Non-ST-Elevation Myocardial Infarction Who are Medically Managed-The TRILOGY ACS Study</td>
<td>7,400</td>
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<tr>
<td>Barney Beaver</td>
<td>Novartis</td>
<td>A 104-Week, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Multicenter Study to Evaluate the Efficacy of Aliskiren on the Progression of Atherosclerosis in Patients with Coronary Artery Disease When Added to Optimal Background Therapy</td>
<td>$ 2,500</td>
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<tr>
<td>Barbara Burckhardt</td>
<td>Roche</td>
<td>A Phase III, Double-Blind, Randomized Placebo-Controlled Study to Evaluate the Effects of RO4607381 on Cardiovascular (CV) Risk in Stable CHD Patients with a Documented Recent Acute Coronary Syndrome (ACS), Protocol No. NC20971</td>
<td>5,039</td>
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<tr>
<td>Michael Culpepper</td>
<td>Otsuka Maryland</td>
<td>A Phase 3, Multi-center, Double-Blind, Placebo-Controlled, Parallel-Arm Trial to Determine Long-Term Safety and Efficacy of Oral Tolvaptan Tablet Regimens in Adult Subjects with Autosomal Dominant Polycystic Kidney Disease</td>
<td>48,007</td>
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<tr>
<td>Michael Culpepper</td>
<td>Amgen</td>
<td>EVOLVE – Evaluation of Cinacalet HCI Therapy to Lower Cardiovascular Events</td>
<td>9,269</td>
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<tr>
<td>Michael Culpepper</td>
<td>Genetech</td>
<td>A Phase III, Open-Label, Study of Tenecteplase for Restoration of Function in Dysfunctional Hemodialysis Catheters</td>
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<td>Michael Culpepper</td>
<td>Shire Development</td>
<td>A Phase IV, Long Term, Observational Safety Study in End Stage Renal Disease Subjects Treated with Lanthanum Carbonate (Fosrenol)</td>
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<td>Michael Culpepper</td>
<td>Novo Nordisk</td>
<td>Efficacy and Safety of Norditropin in Adult Patients in Chronic Haemodialysis: A Randomized, Double-Blind, Parallel Group, Placebo-Controlled, Multicenter Trial</td>
<td>$5,697</td>
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<td>Michael Culpepper</td>
<td>Amgen</td>
<td>Randomized Trial to Evaluate the Efficacy and Safety of Cinacalcet Treatment in Combination with Low Dose Vitamin D for the Treatment of Subjects with Secondary Hyperparathyroidism (SHPT) Recently Initiating Hemodialysis</td>
<td>4,800</td>
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<td>Jack DiPalma</td>
<td>Takeda</td>
<td>Randomized, Placebo-Controlled Trial of Lubiprostone as a Preparation for Capsule Endoscopy</td>
<td>22,680</td>
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<tr>
<td>Karen Fagan</td>
<td>Actelion Pharmaceuticals</td>
<td>An Open-label, Multicenter Study Employing a Targeted 6-MWT Distance Threshold Approach to Guide Bosentan-Based Therapy and to Assess the Utility of MRI on Cardiac Remodeling</td>
<td>49,600</td>
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<td>Karen Fagan</td>
<td>Actelion Pharmaceuticals</td>
<td>A Phase IIIb, Multicenter, Open-Label of Patients with Pulmonary Arterial Hypertension Treated with Iloprost (Inhalation) Evaluating Safety and Inhalation Times When Converting from Power Disc-6 to Disc-15 with the I-Neb</td>
<td>4,544</td>
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<tr>
<td>Karen Fagan</td>
<td>Gilead Sciences</td>
<td>A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Multicenter, Dose-Ranging Study of Cicletanine in Subjects with Pulmonary Arterial Hypertension</td>
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<td>Brian Fouty</td>
<td>AHA 09GRNT2260914</td>
<td>Glucose 1 Transporter in Pulmonary Vascular Repair</td>
<td>$82,500</td>
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<tr>
<td>Jorge Herrera</td>
<td>Schering Plough</td>
<td>A Randomized, Multicenter, Double-Blinded Phase IV Study Comparing Safety and Efficacy of PEGASYS 180 ug plus Copegus 1000 (&lt;75kg) or 1200mg (&gt;75kg) to the Currently Approved Combination of PEGASYS 180 ug plus Copegus 800 mg in Interferon-naïve Patients with Chronic Hepatitis C Genotype 1 Virus Infection Co-infected With Human Immunodeficiency Virus (HIV-1), #NV18209</td>
<td>6,031</td>
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<tr>
<td>Jorge Herrera</td>
<td>Schering Plough</td>
<td>A Safety and Efficacy Study of SCH 503034 in Previously Untreated Subjects with Chronic Hepatitis C Infected with Genotype 1</td>
<td>14,480</td>
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<tr>
<td>Jorge Herrera</td>
<td>Schering Plough</td>
<td>A Phase 3 Safety and Efficacy Study of Boceprevir in Subjects with Chronic Hepatitis C Genotype 1 who Failed Prior Treatments with Peginterferon/Ribavirin</td>
<td>53,100</td>
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<tr>
<td>Jorge Herrera</td>
<td>Schering Plough</td>
<td>A Phase 3 Safety and Efficacy Study of Boceprevir in Previously Untreated Subjects with Chronic Hepatitis C Genotype I</td>
<td>110,808</td>
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<td>Jorge Herrera</td>
<td>Schering Plough</td>
<td>A Phase 3 Safety and Efficacy Study of Boceprevir in Combination with Peginterferon α-2a and Ribavirin in Subjects with Chronic Hepatitis C Genotype 1 Who Failed Prior Treatment with Peginterferon/Ribavirin</td>
<td>13,000</td>
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<tr>
<td>Jorge Herrera</td>
<td>Schering Plough</td>
<td>A Single-Arm Study to Provide Boceprevir Treatment in Subjects with Chronic Hepatitis C 1 Deemed Nonresponders to Peginterferon/Ribavirin in Previous Schering Plough Boceprevir Studies</td>
<td>$ 13,000</td>
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<tr>
<td>Clara Massey</td>
<td>Schering Plough</td>
<td>A Multicenter, Double-Blind, Randomized Study to Establish the Clinical Benefit and Safety of Vytorin versus Simvastatin Monotherapy in High-Risk Subjects Presenting with Acute Coronary Syndrome (IMPROVE IT)</td>
<td>$ 2,000</td>
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<tr>
<td>Clara Massey</td>
<td>Bristol Myers-Squibb</td>
<td>A Phase 3, Active (Warfarin) Controlled, Randomized, Double-Blind, Parallel Arm Study to Evaluate the Efficacy and Safety of Apixaban in Preventing Stroke and Systemic Embolism in Subjects with Nonvalvular Atrial Fibrillation</td>
<td>$ 15,496</td>
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<td>Masahiko Oka</td>
<td>AHA 0765477Z</td>
<td>Involvement of RHOA/RHO Kinases Signaling in Dehydroepiandrosterone’s Protective Effect Against PH</td>
<td>$ 66,000</td>
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<tr>
<td>Bassam Omar</td>
<td>Schering Plough</td>
<td>A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Safety and Efficacy of SCH 530348 in Addition to Standard of Care in Subjects with Acute Coronary Syndrome: Thrombin Receptor Antagonist for Clinical Event Reduction in Acute Coronary Syndrome</td>
<td>$ 40,200</td>
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<tr>
<td>Reynaldo Rodriguez</td>
<td>Braintree Laboratories</td>
<td>A Safety and Efficacy Evaluation of BLI850 versus HalflLytely and Bisacodyl Bowel Prep Kit as Bowel Cleansing Preparation in Adult Subjects</td>
<td>$ 16,000</td>
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**ORTHOPAEDIC SURGERY**

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<tr>
<td>Sudhakar Madanagopal</td>
<td>Howmedica Osteonics</td>
<td>Research Projects – (1) Supra-condylar Fracture Fixation – A Biomechanical Comparison Between Two Standard Types of Supracondylar Nail, (2) Evaluation of Intremedullary Nailing of Distal Femoral Fractures with the T2 Supracondylar Nail: A Retrospective Review, and (3) Supracondylar Fracture Fixation-A Biomechanical Comparison Between Locked and Nonlocked Plates</td>
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**Total** $ 8,700

**PATHOLOGY**

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<tr>
<td>Carole Boudreaux</td>
<td>Tripath Imaging</td>
<td>Intended Use Study of the SurePath Molecular Pap</td>
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**Total** $ 53,466
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<tr>
<td>Karen Crissinger</td>
<td>Centocor, Inc.</td>
<td>A Multicenter, Prospective, Long-term, Observational Registry of Pediatric Patients with Inflammatory Bowel Disease</td>
<td>$18,803</td>
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<tr>
<td>Fabien Eyal</td>
<td>NIH A07186(M09A10144)-01</td>
<td>Gene Targets for IVH</td>
<td>10,258</td>
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<tr>
<td>Fabien Eyal</td>
<td>Biosynexus</td>
<td>A Phase 2b/3, Multicenter, Randomized, Double-Blind, Placebo-Controlled Trial to Evaluate the Safety and Efficacy of Pagibaximab Injection in Very Low Birth Weight (VLBW) Neonates for the Prevention of Staphylococcal Sepsis</td>
<td>4,000</td>
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<td>Hamayan Imran &amp; Aarati Rao</td>
<td>Hyundai</td>
<td>Hope on Wheels Hyundai Pediatric Cancer Research Award</td>
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<tr>
<td>Mary Mancao</td>
<td>HRSA 5 H12HA23027-09-00</td>
<td>USA Family Specialty Clinic</td>
<td>327,451</td>
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<tr>
<td>Mary Mancao</td>
<td>ADPH RW- USAF-0910</td>
<td>USA Family Specialty Clinic Grant</td>
<td>75,635</td>
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<td>Mary Mancao</td>
<td>Novartis V&amp;D</td>
<td>A Phase 3b, Open-Label, Randomized, Parallel-Group, Multicenter Study to Evaluate the Safety of Novartis MenACWY Conjugate Vaccine when Administered with Routine Infant Vaccinations to Healthy Infants</td>
<td>6,100</td>
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<tr>
<td>Daniel Preud'homme &amp; Alisa Pettry</td>
<td>Obesity Society</td>
<td>Chewing Sugar Free Gum Decreases Hunger Complaints In-Between Meals in Obese Children</td>
<td>25,000</td>
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<tr>
<td>Kenneth Rettig</td>
<td>ADPH C90118102</td>
<td>Endocrinology Clinic for State Newborn Screening Program</td>
<td>$ 54,649</td>
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<tr>
<td>Lawrence Sindel</td>
<td>ADPH C90118101</td>
<td>Cystic Fibrosis Clinic for State Newborn Screening Program</td>
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<td>Lawrence Sindel</td>
<td>C002-09</td>
<td>Cystic Fibrosis Foundation Care Center</td>
<td>31,240</td>
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<tr>
<td>Felicia Wilson</td>
<td>ADPH C90118103</td>
<td>Comprehensive Sickle Cell Center for State Newborn Screening Program</td>
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### PHARMACOLOGY

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<tr>
<td>June Ayling</td>
<td>Alabama EPSCOR 090463</td>
<td>Protection by Folates Against UV-Induced DNA Damage</td>
<td>$ 25,000</td>
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<tr>
<td>Natalie Bauer</td>
<td>Parker B Francis 090012</td>
<td>Pulmonary Microvascular Endothelial Response to Acute Hypoxia: Changes in RHOA/RHO Kinase Signaling</td>
<td>50,000</td>
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<tr>
<td>Mark Gillespie &amp; Glenn Wilson</td>
<td>NIH 2 R01 HL058234-09</td>
<td>DNA Lesions &amp; Gene Expression in Hypoxic Lung Disease</td>
<td>370,000</td>
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<tr>
<td>Mark Gillespie &amp; Glenn Wilson</td>
<td>NIH 5 R01 HL073244-05</td>
<td>Lung Cell Genomic Threats from Physiological Signals Disease</td>
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<tr>
<td>Mark Gillespie &amp; Glenn Wilson</td>
<td>NIH 5 P01 HL066299-09</td>
<td>Mitochondrial DNA Integrity and Endothelial Cell Free Radical Stress – Project 2**</td>
<td>291,849</td>
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<tr>
<td>Mark Gillespie</td>
<td>AHA 09PRE2260551</td>
<td>Regulation of Hypoxic Gene Expression by G-Quadruplex Structures</td>
<td>21,770</td>
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<td>Ivan McMurtry &amp; Salina Gairhe</td>
<td>AHA 09PRE2250000</td>
<td>Endothelial Cell RHOA/RHO Kinase Signaling Regulates Vascular Smooth Muscle Cell Phenotype</td>
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<td>Jack Olson</td>
<td>CMREF04</td>
<td>Polyamines and Human Pulmonary Artery Hypertension</td>
<td>196,500</td>
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<tr>
<td>Thomas Rich &amp; Bing Zhu</td>
<td>NIH 1 R01 HL094455-01A1</td>
<td>cAMP Phosphodiesterase and Lung Endothelial Cell</td>
<td>418,690</td>
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<td>Thomas Rich</td>
<td>NIH 5 KO2 HL081463-06</td>
<td>Modeling β2 Receptor Activity in a Cellular Environment</td>
<td>100,197</td>
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<td>Troy Stevens &amp; Mark Gillespie</td>
<td>NIH 3 P01 JL066299-08S1</td>
<td>Lung Endothelial Cell Phenotypes</td>
<td>16,202</td>
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<tr>
<td>Troy Stevens &amp; Mikhail Alexeyev</td>
<td>NIH 5 R01 HL060024-12</td>
<td>Stored Operated Calcium Entry: Lung Endothelial Permeability</td>
<td>356,843</td>
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<td>Troy Stevens</td>
<td>NIH 5 P01 HL06629-09</td>
<td>Program Project Grant Administrative Core 1**</td>
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**Center for Lung Biology Program Project**
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<tr>
<td>Troy Stevens &amp; Judy Creighton</td>
<td>NIH 5 P01 HL066299-09</td>
<td>Program Project Tissue Culture Core 2**</td>
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<tr>
<td>Troy Stevens &amp; Ronald Balczon</td>
<td>NIH 5 P01 HL066299-09</td>
<td>cAMP Endothelial Cell Permeability</td>
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<td>Permeability-Project 1**</td>
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<td>Songwei Wu &amp; Troy Stevens</td>
<td>NIH 3 P01 HL06299-09S1</td>
<td>Type-T Calcium Channels and Vond Willebrand Factor Release-Project 3**</td>
<td>266,558</td>
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<tr>
<td>Bing Zhu</td>
<td>AHA 0865356E-02</td>
<td>PDE5 and Endothelial Cell Angiogenesis</td>
<td>66,000</td>
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**Center for Lung Biology Program Project**
# PHYSIOLOGY

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<tr>
<td>Stephen Ballard</td>
<td>Cystic Fibrosis Foundation</td>
<td>Mucociliary Clearance Consortium</td>
<td>$108,000</td>
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<tr>
<td>Stephen Ballard</td>
<td>NIH 5 R01 HL063302-09</td>
<td>Airway Submucosal Glands and Cystic Fibrosis Disease</td>
<td>276,869</td>
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<tr>
<td>Michael Cohen</td>
<td>Otuska Maryland Medicinal Labs</td>
<td>Evaluation of Bio-Efficacy of OMML’s Anti-GPVI</td>
<td>213,845</td>
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<tr>
<td>James Downey</td>
<td>NIH 5 R01 HL020648-29</td>
<td>Physical Factors and Coronary Flow</td>
<td>287,798</td>
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<tr>
<td>James Downey</td>
<td>Bayer Healthcare</td>
<td>Inhibition of Ischemic Injury by Activation of Soluble Guanylate Cyclase by BAY 58-2667 in Open-Chest Rabbits at Low Doses</td>
<td>12,487</td>
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<tr>
<td>James Downey</td>
<td>Bayer Healthcare</td>
<td>Inhibition of Ischemic Injury by Activation of A1 Receptors by a New A1 Receptor Agonist</td>
<td>18,475</td>
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<tr>
<td>Thomas Lincoln</td>
<td>NIH 5 R01 HL066164-09</td>
<td>cGMP-Dependent Protein Kinase (PKG) Expression</td>
<td>330,750</td>
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<td>Thomas Lincoln</td>
<td>NIH 5 R01 HL053426-13</td>
<td>Control of Vascular Smooth Muscle Cell Phenotype</td>
<td>242,261</td>
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<td>James Parker</td>
<td>NIH 1 R01 HL092992-01A1</td>
<td>TRPV4 Initiates Ventilator Induced Lung Injury</td>
<td>355,200</td>
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<tr>
<td>Mark Taylor</td>
<td>NIH 1 R01 HL085887-02</td>
<td>Coronary Artery Regulation by Small-Conductance Ca$^{2+}$-Activated K$^+$ Channels</td>
<td>257,250</td>
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**PHYSIOLOGY (cont’d)**

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<tr>
<td>Mary Townsley</td>
<td>NIH 2 T32 HL076125-06</td>
<td>Training in Cell Signaling and Lung Pathobiology*</td>
<td>$194,871</td>
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<tr>
<td>Mary Townsley</td>
<td>NIH 5 P01 HL06629906-09</td>
<td>TRPV4 in Regulation of Lung Endothelial Permeability Project 4**</td>
<td>272,487</td>
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<tr>
<td>Mary Townsley</td>
<td>GlaxoSmithKline</td>
<td>Research Collaboration Agreement-GSK-MPCEDD (TRPV4)</td>
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<td>David Weber</td>
<td>NIH 5 R01 HL084159-02</td>
<td>Reactive Oxygen Species Regulation of Vascular Smooth Muscle Cell Migration</td>
<td>311,797</td>
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<td>Jian Yang</td>
<td>AHA 0635341N-04</td>
<td>The Roles of AMPK in Lipid Metabolism in Living Animals</td>
<td>65,000</td>
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*Center for Lung Biology Training Grant
**Center for Lung Biology Program Project

Total $3,036,373
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<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
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<tbody>
<tr>
<td>C. Neal Ellis</td>
<td>Merck</td>
<td>The Incidence of Surgical Site Infection and Anastomotic Leakage Using Prophylactic Ertapenem Sodium for Elective Colorectal Resections Without Mechanical or Antibiotic Bowel Preparation</td>
<td>$3,500</td>
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<tr>
<td>C. Neil Ellis</td>
<td>Cook Biotech Inc.</td>
<td>Magnetic Resonance Imaging Study to Evaluate of Anal Fistulas Using a Porcine Intestine Submucosa Graft (Surgisis)</td>
<td>2,154</td>
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<td>C. Neil Ellis</td>
<td>Innocoll Technologies, Ltd.</td>
<td>A Randomized, Controlled Phase III Study of Gentamicin-Collagen Sponge (Collatamp G) in General Surgical Subjects at Higher Risk for Surgical Wound Infection</td>
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<td>C. Neil Ellis</td>
<td>LifeCell</td>
<td>A Prospective, Multicenter, Randomized, Controlled, Third Party Blinded Study of Strattice Fascial Inlay to Prevent Parastomal Hernia Formation in Patients Undergoing Surgery for Permanent Abdominal Wall Ostomies</td>
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<td>Moustafa Hassan</td>
<td>Cadence Pharmaceuticals</td>
<td>A Phase 3, Multicenter, Randomized, Evaluation Committee-Blinded Study to Assess the Efficacy of Topical Administration of Omiganan 1.0% Gel in Preventing Local Catheter Site Infections and Catheter Colonization in Patients Undergoing Central Venous Catherization</td>
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### SURGERY (cont’d)

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<tr>
<td>Arnold Luterman</td>
<td>Mylan Pharmaceuticals</td>
<td>Prospective Evaluation of the Effects of Topical Therapy with Sulfamyton for 5% Topical Solution on Autograft Healing in Subjects with Thermal Injuries Requiring Meshed Autografts: A Comparison to a Historical Control Group</td>
<td>$ 9,621</td>
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<td>Mario Magnone</td>
<td>Novartis</td>
<td>A Facilitated Access Program to Provide Everolimus (RAD) for Maintenance for Patients Completing Therapy in RAD Trials in Solid Organ Transplantation</td>
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<td>Velma Scantlebury</td>
<td>Novartis</td>
<td>A 24-Month, Multicenter, Randomized, Open Label Non-Inferiority Study of Efficacy and Safety Comparing Concentration – Controlled Cetrican in Two Doses (1.5 and 3.0mg/day starting doses) with Reduced Neoral versus 1.44mg Myfortic with Standard Dose Neoral in De Novo Renal Transplant Recipients</td>
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