ANNUAL REPORT
UNIVERSITY OF SOUTH ALABAMA
COLLEGE OF MEDICINE

October 1, 2009 through September 30, 2010
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FOREWORD

The Annual Report of the USA College of Medicine highlights the achievements of faculty, students, residents, and staff in teaching, research, patient care and community service during the 2009-10 academic year. A comprehensive self-study effort involving more than 140 members of the faculty, administrative staff, and others was completed prior to an LCME Accreditation Site Visit in October, 2010. Drs. Susan LeDoux, Margaret O’Brien and Mary Townsley are acknowledged for their yeoman effort in spear-heading this significant project. Despite significant budgetary cuts in our state appropriations and some reductions in practice income, we continue to strive to minimize the impact these financial deficits have on our educational program and other missions of the college. We were shocked and saddened by the sudden and unexpected death of our colleague Dr. Steven Teplick in December. Dr. Teplick had served with distinction as professor and chair of the department of radiology since February, 1995 and will be sorely missed. Dr. Jeff Brandon who has served for many years as vice-chair of the department was appointed acting chair. Dr. Kathy Porter resigned her position as chair of OB/GYN to pursue an alternative career in the military. Dr. Porter has worked tirelessly during her eight years as chair to strengthen the educational, clinical, and research programs within the department. Dr. Steven Varner was appointed acting chair of the department following Dr. Porter’s resignation in August, 2010. Our College received more than 40 million dollars in extramural funding, bolstered largely by a 14.5 million award from the NIH to Dr. David Wood and his faculty in the Department of Microbiology and Immunology for the construction of a BSL-3 Laboratory of Infectious Disease, and an 8 million grant from the National Center for Information Technology awarded to Dr. Dan Roach, the Director of Health Informatics in our Center for Strategic Health Innovation. These two grants are amongst the largest ever awarded at USA. Significant Goals for the 2010-11 year include consolidation of clinical out-patient practice sites, assessing the benefits of a new staffing model for hospital and health service foundation employees, better positioning the clinical enterprise to exploit regional, state and national health care reform initiatives, acquiring increased funding for primary care activities, and addressing how new residency restrictions and requirements imposed by the ACGME will impact our educational and clinical delivery programs. The challenges are formidable, but our will and desire to address them in a positive way remain strong.

Samuel J. Strada, Ph.D.
Dean
University of South Alabama
College of Medicine
2009-2010
Summary of Scholarly Activities
Department of Biochemistry & Molecular Biology

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


Gupte RS, Kurebayashi N, Gupta SA. Glucose-6-phosphate dehydrogenase interacts with Cav1.2 and regulates $[\text{Ca}^{2+}]_i$ in coronary artery smooth muscle. FASEB J 2010 Apr;24:1b549.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Barik S. Invited speaker. Lung-pathogen relationships: mechanisms of defense and survival. Cleveland State University; 2010 Mar 25; Cleveland, OH.

Gerthoffer W. Invited speaker. MicroRNAs in smooth muscle remodeling. Whitaker Cardiovascular Institute, Boston University; 2010 Feb 16; Boston, MA.


Honkanen R. Invited speaker. Studies into the antitumor activity of fostriecein and PP2A reveal a critical role for both PP2A and PP4 in the regulation of cell cycle progression. FASEB Summer Research Conferences; 2010 Jul 20; Steamboat, CO.

Rocic P. Invited speaker. p38 MAPK-dependent regulation of MMPs during coronary collateral growth. Experimental Biology 2010; 2010 Apr 25; Anaheim, CA.

V. NATIONAL PROFESSIONAL RECOGNITION

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

William T. Gerthoffer, 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; Associate Editor, Comprehensive Physiology, Respiratory Physiology; Chairman, American Thoracic Society, Planning Committee of the RSF Assembly; Reviewer NIH, LCMI study section (ad hoc), RC4 Grants.

Sachin A. Gupte, Editorial Board Member, American Journal of Physiology, Heart and Circulatory Physiology and Antioxidant & Redox Signaling; Guest Editor, Antioxidant & Redox Signaling.

Richard E. Honkanen, FASEB Summer Research Conference, Protein Phosphatases, invited speaker, Named co-organizer for the 2012 meeting; Review Group Panel Member, NIH ZRG1 BST-J51 NIH Roadmap Initiative (Assay Development for High Throughput Molecular Screening); Editorial Board Member, The Open Enzyme Inhibition Journal.

Petra Rocic, Editorial Board Member, American Journal of Physiology: Heart and Circulatory Physiology; Editorial Board Member, Microcirculation; Peer-Review Group, American Heart Association, National.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The department has undergone significant changes in personnel in the past year. 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. Dr. Lane will continue in a limited role as a lecturer in Medical Biochemistry. Another senior faculty member, Dr. Sailen Barik, has relocated to Cleveland State University to direct the Center for Gene Regulation in Health and Disease. Dr. Barik served as a productive, highly regarded virologist and educator for many years. His contribution to the department research enterprise has been substantial and he will be missed. Turnover of existing personnel has been balanced in the past three years by successful searches to fill
four vacant faculty positions. The most recent recruit, Dr. Lawrence LeClaire, will join the faculty in 2011, coming from the Department of Cell and Tissue Biology, UCSF. He brings expertise in protein biochemistry with emphasis on the actin cytoskeleton. A new postdoctoral fellow, Dr. Sachindra Joshi, joined the Gerthoffer lab where he conducts research on the role of miRNAs in smooth muscle differentiation. Dr. Joshi completed his doctoral work at Bowling Green State University in 2009 where he studied proteins that regulate estrogen response elements.

Education activities in the department are focused on updating the medical biochemistry course and expanding the scope and role of the department in graduate education. Medical Biochemistry is in transition to a format more consistent with current trends in medical education. Key changes include more case-based approaches, self-directed study of clinical problems and use of the student-response system for in-class assessment of student learning. In addition to our role in undergraduate medical education the faculty all contribute to multiple IDL and departmental graduate courses. Two senior graduate students, Joel Andrews and Samer Swedan, graduated in 2010. Dr. Andrews is a postdoctoral fellow at the Mitchell Cancer Institute and Dr. Swedan is an Assistant Professor of Medical Laboratory Sciences, at the College of Applied Medical Sciences, Jordan University of Science and Technology. Five second year graduate students and two first year students are training with department faculty members (Gerthoffer, Gupte, Rocic, Cioffi).

Teaching faculty also contribute to a summer biochemistry course in phase II of the DREAM program which is directed by Dr. Gerthoffer. The program targets disadvantaged undergraduate students interested in a medical career. Drs. Cioffi, Gerthoffer, Gupte, Honkanen, and Rocic contributed lectures. The department also contributes to biomedical science education by hosting freshman and sophomore medical students and USA undergraduates in the College of Medicine, UCUR and Center for Healthy Communities summer research programs.

The level of research activity and research funding remains robust. The junior faculty all manage active labs funded by NIH grants. The senior faculty R. Honkanen (Protein phosphatase-5) and W. Gerthoffer (small heat shock proteins) continue to be supported by NIH grants. Dr. Rocic succeeded in obtaining two supplements through ARRA funding of NIH programs, one for support of a graduate student, Ms Tracy Dodd. In addition, new grant applications from every faculty member have either been submitted, or are in development. The number of research awards has increased from 13 funded projects in 2008-2009 to 17 in 2009-2010. The faculty publication rate and impact is similar to the previous year, and is appropriate for a small size department. A high level of scholarly activity is evidenced by 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 continued growth in the scope and impact of scholarly activity in the near future.
1. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


Robson M, Stevens TC, Ochoa CD, Barry CF, Sayner S, Stevens T, Wu S. Pseudomonas aeruginosa increases cytosolic calcium in pulmonary microvascular endothelial cells, putatively important for P-selectin upregulation and neutrophil recruitment into the alveolus. Am J Respir Crit Care Med 2010 May;181:A2666. Available from: http://ajrccm.atsjournals.org/cgi/reprint/181/1_MeetingAbstracts/A2666


III. PUBLISHED BOOKS


IV. INVITED PRESENTATIONS

LeDoux SP. Invited speaker. Targeting of DNA repair proteins to the mitochondria effects a phenotypic change. Society for Free Radical Biology and Medicine; 2009 Nov 20; San Francisco CA.

LeDoux SP. Invited speaker. Targeting of DNA repair proteins to the mitochondria. Mitochondria Research School; 2010 Jun 29; Aarhus, Denmark.

Lin W. Invited speaker. Endoplasmic reticulum stress in disorders of oligodendrocytes. Genmed Seminar Series, Research Center for Genetic Medicine, Children's National Medical Center; 2010 Mar 18; Washington DC.


Rachek L. Invited speaker. Overexpression of hOGG1 in mitochondria prevents from palmitate induced mitochondrial dysfunction and inhibition of insulin signaling in rat L6 skeletal muscle cells. American Diabetes Association 70th Annual Meeting; 2010 Jun 28; Orlando, FL.

Sayner S. Invited speaker. Targets of subplasma membrane versus cytosolic adenylyl cyclase activity demonstrate the bidirectional nature of the cAMP diffusion barricade that maintains pulmonary endothelial barrier integrity. American Thoracic Society International Conference; 2010 May 16; New Orleans, LA.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Mikhail Alexeyev served as grant reviewer for the Italian Ministry of Health. He also served as a reviewer for Aging Cell, Mitochondrion, Biology of the Cell, The International Journal of Biochemistry & Cell Biology, Human Molecular Genetics, Journal of Scientific Research; Journal of Zhejiang University.

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. Steve Kayes served as a Member of the Business Advisory Committee in the American Society of Parasitologists; served as a Moderator for the Bionet Parasitology Listserv at the University of Indiana; served as a Member of the Board for the Alabama Department of Rehabilitation Services; served as a reviewer for two grant applications for Gorgas Scholarships.

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; served as 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, American Journal of Respiratory and Critical Care Medicine, Annals of Neurology, Human Mutation.

Dr. Lyudmila Rachek served as a peer reviewer for Diabetes UK, Welcome Trust DBT India Alliance.

Dr. Sarah Savner served as an ad hoc reviewer for AJP Lung; served as Chair for the Poster Discussion Session at the American Thoracic Society International Conference. Abstract from American Thoracic Society International Conference selected for the Assembly on Pulmonary Circulation Highlighted Abstract Award.

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 five distinguished scientists to meet with members in the Department and to present seminars on their research. Dr. John Corbett from the University of Alabama Birmingham presented a seminar titled “How Does Nitric Oxide Kill Beta Cells?” on October 15, 2009. Dr. Richard Loeser from Wake Forest University presented a seminar titled “Redox Regulation of IGF-1 and Integrin Signaling in Chondrocytes” on November 5, 2009. Dr. Clayton Mathews from the University of Florida presented a seminar titled “A Little Dissipation is a Good Thing: The Suppressor of Superoxide Production Locus” on January 14, 2010. Dr. Tak Yee Aw from Louisiana State University presented a seminar titled “Mitochondrial Redox Status and Cell Survival” on March 25, 2010. Dr. Gerald Shulman from Yale presented a seminar titled “Unraveling the Cellular Mechanism of Insulin Resistance: Implications for Obesity, Type 2 Diabetes and Lipodystrophy” on April 15, 2010.
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 were over the 70th percentile. For second year medical students, the Department played a leading role in presenting the Neuroscience course. The class average on the Neuroscience mini board was over the 90th percentile for the third straight year. Clearly, this has become one of the top Neuroscience courses in the country. Also, remedial courses in Gross Anatomy were presented for medical students in the summer. This course was successful in helping specific students, predominantly from other schools, overcome their deficiencies. Faculty members from our 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. 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, Neuroanatomy for Physical Therapy Students, Histology for Biomedical Sciences students, and Anatomy and Physiology for Biomedical Science. Also, an Anatomy Laboratory was presented for Nursing Students. Finally, 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 750 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 added one new faculty member last year, Dr. Xiangming Zha, a Neuroscientist, who completed postdoctoral work at the University of Iowa.
2009-2010
Summary of Scholarly Activities
Department of Comparative Medicine

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


Lin W, Lin Y. Interferon-gamma inhibits central nervous system myelination through both STAT1-dependent and STAT1-independent pathways. J Neurosci Res 2010; Sep;88(12):2569-77.


II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Gibson SV. Invited speaker. What's your diagnosis? MidSouth AALAS Spring Meeting; 2010 Apr 30; Birmingham, AL.

Lin W. Invited speaker. Endoplasmic reticulum stress in disorders of oligodendrocytes. Genmed Seminar Series, Research Center for Genetic Medicine, Childrens National Medical Center; 2010 Mar 18; Washington, DC.

Scammell JG. Invited speaker. New models: research opportunities unique to neotropical primates - glucocorticoid resistance. Workshop on Neotropical Primates in Biomedical Research, National Institute of Health; 2010 Sep 23; Bethesda, MD.

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. 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 Theriogenology. Dr. Schuler is a recipient of a 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. Dr. Gibson was invited to coauthor a chapter on bacterial and mycotic diseases for the ACLAM book series on non-human primates in biomedical research.

Dr. Wensheng Lin, joint appointee with the Department of Cell Biology and Neuroscience, served as a reviewer for Laboratory Investigation, Expert Review of Neurotherapeutics, American Journal of Respiratory and Critical Care Medicine, Annals of Neurology, and Human Mutation.

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. The department continues to upgrade and maximize the use of facilities with the goal of enhancing research capabilities for the benefit of investigators throughout the university. The department supports the operation of the Vevo high resolution ultrasound imaging system from VisualSonics, the hypoxia core for the development of pulmonary hypertensive rodents, and the Pseudomonas delivery core. In addition, the department now provides histology services. Drs. Schuler and Gibson have been active consultants in the design of the animal facilities in the new Laboratory of Infectious Diseases.

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 seminars from: Dr. Frank Bartol, Alumni Professor and Associate Dean for Research and Graduate Studies in the Auburn University College of Veterinary Medicine "Maternal Lactocrine Programming of Neonatal Development: Implications for Fertility and Health"; Dr. Guy Caldwell, Blackmon-Moody Outstanding Professor in the
University of Alabama Department of Biological Sciences "Traversing a Wormhole in Combat Parkinson's Disease"; and Dr. Kim Caldwell, Blackmon-Moody Outstanding Professor in the University of Alabama Department of Biological Sciences "Worming Out Causes and Cures for Human Movement Disorders."
2009-2010  
Summary of Scholarly Activities  
Department of Emergency Medicine

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


Costello MW. Remember that all that wheezes is not necessarily asthma (or chronic pulmonary disease). In: Mattu A, Chanmugam AS, Swadron SP, Tibbles C, Woolridge D, editors. Avoiding common errors in the emergency department. Lippincott, Williams & Wilkins; 2010. Chapter 294. p. 693-6.


II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Pettijohn F. Invited speaker. Cardiology review of common problems for Aviation Medical Examiner. Federal Aviation Administration; 2009 Nov 21; Seattle, WA.
Pettyjohn F. Invited speaker. Cardiology case review. Cardiology Panel, Federal Aviation Administration; 2010 Jan 21-22; Oklahoma City, OK.

Rivers T. Invited speaker. Trauma triage...picking priorities. Alabama Gulf EMS System; 2010 Sep 10; Gulf Shores, AL.

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; Vice President, Medical Association State of Alabama; 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 Painline, 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); 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
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Emergency Medicine emphasizes excellence in Clinical Emergency Medicine, education of the housestaff and medical students, and the ongoing academic development of 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 remains a high priority. 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 core Faculty 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. 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. Michael Sternberg, 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, Housestaff, 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. continues as Director for the Emergency Medicine Residency Program development; participation by faculty in ACEP Medical Director courses is a priority.
CLINICAL FACILITIES: During the 2009-2010 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 Departmental offices are on the 10th floor of the University of South Alabama Medical Center. These facilities include advanced audiovisual capabilities, 35mm and digital photographic laboratory, powerpoint slide development and presentation production areas, and a 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 radiology. The ED has updated computer and viewing screens for teleradiology which provides the same resolution as the Department of Radiology. A telemedicine capability in the Emergency Medicine Conference Room facilitates educational conferences by national and international experts and Medicine and Surgery 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 fifteenth year of operation. The primary clinical site is 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 anti-hypertensive agent trials, dyslipidemic treatment trials, and combined hypertension with diabetes trials. This clinical research provides a unique opportunity, clinical support, and an educational location for the Department of Emergency Medicine.
2009-2010
Summary of Scholarly Activities
Department of Family Medicine

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Duffy RL. Invited speaker. Implementing an electronic health record: lessons learned. Medical Group Management Association Quarterly Meeting; 2010 Jun 17; Mobile, AL.

Linder M. Invited speaker. Sudden collapse in an athlete. 19th Annual Meeting of the American Medical Society for Sports Medicine; 2010 Apr 20; Cancun, Mexico.

Molokhia E. Invited speaker. Marketing of infant formula – how the M.D. office is in the mix. 19th Annual Continuing Education Conference in Obstetrics and Gynecology; 2010 Apr 8; Mobile, AL.

Molokhia E. Invited speaker. Breastfeeding: motivating healthier choices. 2nd Region IV Breastfeeding Task Force Conference; 2010 Aug 27; Mobile, AL.

Perkins A. Invited speaker. Sleepy women – an evidence based approach. 19th Annual Continuing Education Conference in Obstetrics and Gynecology; 2010 Apr 9; Mobile, AL.
Perkins A. Invited speaker. Converting the community medicine residency rotation into community outreach for the patient centered medical home. Society of Teachers of Family Medicine Annual Meeting; 2010 Apr 26; Vancouver, BC, Canada.


Perkins A. Invited speaker. How to read x-rays. Alabama Academy of Family Physicians; 2010 Jun 26; Destin, FL.

V. NATIONAL PROFESSIONAL RECOGNITION

El hab 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.

Allen Perkins continues to serve as President of the Alabama Rural Health Association and on the Board of the Alabama Academy of Family Physicians and the Alabama Academic Family Medicine Council. He is a member of the Program Committee and Patient Centered Primary Care Ad Hoc Sub-committee of the Association of Departments of Family Medicine. Dr. Perkins served as a peer reviewer for the Family Medicine Computer-Assisted Simulations for Educating Students (fm Cases) virtual patient case: 2. 55-year-old male for annual exam – Mr. Reynolds in 2009-2010, contributing to medical education on a national level. He participated in a panel discussion on “Changing Expectations: Moving Beyond Traditional Primary Care Towards Integrated Community Care” at the Alabama Primary Health Care Association Annual Conference and Trade Show in September.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Dr. Christine Bogar joined the faculty in June at the rank of Assistant Professor and Director of Behavioral Medicine, succeeding Dr. Martha Adams who retired after twelve years of service to the Department. Dr. Bogar directs behavioral medicine training for medical students and Family Medicine residents which includes teaching and clinical practice, and co-counseling with learners.

Dr. Jennifer Bellone also joined the faculty in August at the rank of Adjunct Assistant Professor. She holds an Assistant Professorship with the Auburn University Harrison School of Pharmacy and has the responsibility for coordinating clinical experiences for Auburn University Pharm.D. students at the USA Hospitals and Family Medicine Center.

Dr. Lamar Duffy spearheaded implementation of the NextGen Electronic Health Record for the Health Sciences Foundation with the initial stage of implementation successfully completed in the Department of Family Medicine.
Dr. Michael Linder assumed the position of Residency Director in July. He also directs the Primary Care Sports Medicine Fellowship which graduated its second Fellow in June.

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

Dr. Allen Perkins served as Elsevier Publishing Guest Editor for a forthcoming issue of *Primary Care: Clinics in Office Practice* on the topic of Rheumatology: A Survival Guide for the Primary Care Physician. He has a blog named “Training Family Doctors” which relates to health policy that is visited by an average of 464 visitors per year.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


Rutecki GW. “Give me children or I’ll die!” Is it time to consider the uterus as a non-vital organ transplant? Ethics Med 2009 Oct;25(3):177-86.


II. PUBLISHED ABSTRACTS


Jian MY, Thorneloe K, Townsley MJ. Effect of GSK1016790A, a potent TRPV4 agonist, on lung endothelial permeability. FASEB J 2010;24:797.5


Methner C, Cohen MV, Downey JM, Krieg T. Both A$_2$a and A$_2$b adenosine receptors are necessary to reduce infarct size at reperfusion in mouse hearts. J Mol Cell Cardiol 2010 May 16;48(Suppl):S159-60. Abstract no. P-3-25-5.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Broughton W. Invited speaker. Central sleep apnea: 57 flavors, many treatments and one physiology. Southern Sleep Society 32nd Annual Meeting; 2010 Apr 16; Austin, TX.

Broughton W. Invited speaker. Fatal familial insomnia, science fiction and mad cows: a prion story. Southern Sleep Society 32nd Annual Meeting; 2010 Apr 17; Austin, TX.

Broughton W. Invited speaker. Insomnia, Ice-9 and mad cows: a prion story. Alabama and Florida Societies for Respiratory Care-Spring Meeting; 2010 Mar 15; Orange Beach, AL.

Broughton W. Invited speaker. Restless legs syndrome. Alabama and Florida Societies for Respiratory Care-Spring Meeting; 2010 Mar 15; Orange Beach, AL.

Broughton W. Invited speaker. Fatal familial insomnia, science fiction and mad cows: a prion story. USA College of Medicine Alumni Association Annual Meeting; 2010 Jun 4; Orange Beach, AL.

Cohen MV. Invited speaker. The biology and mechanisms of ischemic preconditioning. Unofficial satellite symposium of 2009 American Heart Association Scientific Sessions; 2009 Nov 15; Orlando, FL.

Cohen MV. Invited speaker. Suppressed radical production by intracellular A2b adenosine receptors in rabbit cardiomyocytes. XXth World Congress International Society for Heart Research; 2010 May 13; Kyoto, Japan.

Cohen MV. Invited speaker. Cardioprotective A2b adenosine receptors are localized to mitochondria rather than the sarcolemma. XXth World Congress International Society for Heart Research; 2010 May 14; Kyoto, Japan.

Cohen MV. Invited speaker. Both A2a and A2b adenosine receptors are necessary to reduce infarct size at reperfusion in mouse hearts. XXth World Congress International Society for Heart Research; 2010 May 16; Kyoto, Japan.

Culpepper RM. Invited speaker. ACE inhibitors, ARB’s or both. Annual Scientific Session, Alabama Chapter, American College of Physicians; 2010 May 29; Orange Beach, AL.

Culpepper RM. Invited speaker. Hypertension control in the southeast. Consortium for Southeastern Hypertension Control CME Program, “Achieving Cardiovascular Risk Factor Control”; 2010 Jul 17; Mobile, AL.


DiPalma JA. Invited speaker. Irritable bowel syndrome. 2010 Feb 19; Germantown, TN.

DiPalma JA. Invited speaker. Gastroenterology journal club, hot topics speaker training meeting. Takeda Pharmaceuticals; 2010 Mar 4; Dallas, TX.

DiPalma JA. Invited speaker. Gastroenterology journal club, hot topics speaker training meeting. Takeda Pharmaceuticals; 2010 Mar 25; Ft. Lauderdale, FL.

DiPalma JA. Invited speaker. Use of biologic therapy in inflammatory bowel disease. 2010 Apr 16; Covington, LA.


Fagan KA. Invited speaker. Clinical research in pulmonary hypertension. NHLBI-ORDR Workshop on Strategic Planning Sessions in Pulmonary Vascular Disease; 2010 Mar 9; Bethesda, MD.

Fagan KA. Invited speaker. Pulmonary hypertension in Group II. American Thoracic Society Meeting, Post-graduate Course; 2010 May 14; New Orleans, LA.

Fagan KA. Invited speaker. Cough in adults. Alabama Chapter of the American College of Physicians Annual Meeting; 2010 May 28; Perdido Beach, AL.


Fagan KA. Invited speaker. Basic research in pulmonary hypertension. Pulmonary Hypertension Association International Conference; 2010 Jun 26; Santa Ana, CA.

Fagan KA. Invited speaker. Pulmonary hypertension: diagnosis and treatment. Medical Grand Rounds, Medical Center of Central Georgia; 2010 Sep 8; Macon, GA.

Fouty B. Invited speaker. Blood transfusions and MICU. Alabama Society of Physician Assistants; 2010 Feb 19; Birmingham, AL.

Gillespie MN. Invited speaker. Bending and breaking the DNA code: implications for transcriptional regulation. Davis Cardiovascular Research Institute; 2010 Jun 22-23; Columbus, OH.


Green WK. Invited speaker. Antibiotic update. Singing River Health System 10th Annual Clinical Update; 2010 Mar 27; Destin, FL.


Haynes J. Invited speaker. Primary care provider guide to preventative care in adults with sickle cell disease. 10th Annual Sickle Cell Regional Conference; 2010 Apr 24; Mobile, AL.

Herrera JL. Invited speaker. Hepatitis B infection: why we care and how to treat. American College of Gastroenterology 74th Annual Postgraduate Course; 2009 Oct 25; San Diego, CA.

Herrera JL. Invited speaker. 2009 Liver meeting update. Gastroenterology Grand Awards, Medical University of South Carolina; 2009 Dec 8; Charleston, SC.

Howell DL. Invited speaker. Food allergies driving you nuts? USA Med School Café, Christ United Methodist Church; 2010 Jan 19; Mobile, AL.

Howell DL. Invited speaker. Food allergy: the detection and management of a growing epidemic. Alabama Chapter, AAP Spring Meeting and Pediatric Update; 2010 Apr 18; Sandestin, FL.

Howell DL. Invited speaker. Anaphylaxis: killer allergy. Alabama Chapter, AAP Annual Meeting & Fall Pediatric Update Meeting; 2010 Sep 26; Birmingham, AL.

Massey CM. Invited speaker. Go red for women. USA Center for Healthy Communities; 2010 Feb 20; Mobile, AL.

Massey CM. Invited speaker. From our heart to yours. Women’s Best Heart Truth Community Seminar; 2010 Feb 24; Mobile, AL.

Massey CM. Invited speaker. Heart disease in women. Health & Wellness Session; Mount Hebron Church; 2010 Mar 24; Prichard, AL.
McMurtry IF. Invited speaker. S1P4 receptor mediates S1P-induced vasoconstriction in normotensive and hypertensive rat lungs. Victoria Johnson Center for Pulmonary Obstructive Disease Research, Virginia Commonwealth University; 2009 Oct 12; Richmond, VA.

McMurtry IF. Invited speaker. Elaboration on a rat model of severe PAH. NHLBI-ORDR Workshop on Strategic Planning Sessions in Pulmonary Vascular Disease; 2010 Mar 9; Bethesda, MD.

Oka M. Invited speaker. What is the plexiform lesion? Department of Respiratory Medicine, Toho University School of Medicine; 2009 Dec 14; Tokyo, Japan.

Oka M. Invited speaker. Can hemodynamic unloading reverse vascular remodeling in severe PAH? Department of Respiratory Medicine, Juntendo University School of Medicine; 2009 Dec 18; Tokyo, Japan.

Oka M. Invited speaker. The homing peptide CAR as a tool for selective drug delivery to the hypertensive pulmonary artery. Strategic Planning for Pulmonary Vascular Disease Research Workshop sponsored by NIH-HLBI; 2010 Mar 9; Bethesda MD.


Rutecki GW. Invited speaker. Staging chronic kidney disease. Gulf Shores Veteran’s Administration Consortium Grand Rounds; 2010 Mar 11; Biloxi, MS.

Rutecki GW. Invited speaker. From urban myth to unfortunate reality. Mayo Clinic Market Forces and Organ Transplantation Visiting Professor & Grand Rounds; 2010 Apr 1; Jacksonville, FL.

Rutecki GW. Invited speaker. From urban myth to unfortunate reality. University of Florida Market Forces and Organ Transplantation Grand Rounds; 2010 Apr 2; Jacksonville, FL.

Rutecki GW. Invited speaker. Fluids & electrolytes (severe metabolic alkalemia, hypertension, & potassium depletion in a 54 y.o. man). The Ohio State University Renal Fellows’ Conference; 2010 May 14; Columbus, OH.

Rutecki GW. Invited speaker. From urban myth to unfortunate reality. Gulf Shores Veteran’s Administration Consortium Market Forces and Organ Transplantation Grand Rounds; 2010 Jun 10; Biloxi, MS.
Rutecki GW. Invited speaker. A hypertension sermon: 3 points. Mobile Infirmary Hospital Grand Rounds; 2010 Jun 15; Mobile, AL.

Rutecki GW. Invited speaker. Teaching a modular graduate class in bioethics as adjunct professor of bioethics, entitled “Medicine & the new healthcare paradigm.” Trinity International University; 2010 Jul 12-15; Deerfield, IL.

Stevens T. Invited speaker. Lung endothelial heterogeneity: lesson learned through the systematic study of calcium channels. Harvard Medical School, Center for Vascular Biology, Beth Israel Deaconess Medical Center; 2010 Feb 9-12; Boston, MA.

Stevens T. Invited speaker. Lung endothelial heterogeneity: lesson learned through the systematic study of calcium channels. Emory Medical School, Center for Endothelial Cell Biology; 2010 Mar 2; Atlanta, GA.

Stevens T. Invited speaker. Lung endothelial heterogeneity: lessons learned through the systematic study of calcium channels. Medical College of Georgia, Center for Vascular Biology; 2010 Apr 19; Augusta, GA.

Stevens T. Invited speaker. Point counter-point: soluble adenylyl cyclases disrupt the endothelial cell barrier. Experimental Biology; 2010 Apr 24-28; Anaheim, CA.

Townesley MI. Invited speaker. Grant writing/intramural peer review. Alabama Research Symposium, 2010 Apr 29; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION


Barney B. Beaver: Advisory Board: Boston Scientific Corporation.
Eduardo G. Calderon served in the following capacities: Member of the Infectious Disease Fellowship Committee and the Pharmaceuticals and Therapeutics Committee at USA Medical Center, Director of the Tuberculosis Clinic at the Mobile County Health Department, Member of the Tuberculosis Medical Advisory Council for the State of Alabama Department of Public Health. Dr. Calderon continues his research on Vitamin D replacement in burn patients.

Michael V. Cohen: Editorial Board, Basic Research in Cardiology; American Heart Association study section: Cardiac Biology/BCT3 2010 Apr.

Errol D. Crook served in the following capacities: Editorial boards: Journal of Investigative Medicine, The American Journal of the Medical Sciences (Associate Editor), Special Emphasis Panel, NCMHD Centers of Excellence Program (P-20).


William T. Gerthoffer: Co-Chair, Poster discussion, "The interplay of lung inflammation, lung remodeling, and lung function" American Thoracic Society Annual Meeting, New Orleans, LA; American Journal of Physiology, Cell Physiology, Editorial Board; American Journal of Physiology, Lung Cell and Molecular, Editorial Board; Cell Health and Cytoskeleton, Editorial Board; American Thoracic Society, Chairman; Planning Committee of the RSF Assembly National Institutes of Health; LCMI study section, RC4 Grants, Reviewer; Comprehensive Physiology, Respiratory Physiology, Associate Editor.

Mark N. Gillespie: Co-inventor (with Dr. Glenn Wilson) on mitochondrially targeted fusion protein constructs for use in treating oxidant-mediated diseases; 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, SIR/STTR study section; Ad hoc member of National Institutes of Health study sections (1), Special Emphasis Panel (2); American Lung; Association Research Peer Review panel; Manuscript reviewer, American Journal of Physiology; Manuscript reviewer, Lung Cell and Molecular Physiology; Manuscript reviewer, International Journal of Biochemistry and Cell Biology; Manuscript reviewer, Free Radicals in Biology and Medicine; Manuscript reviewer, FASEB Journal; Manuscript reviewer, Vision Research; Chairman, Pulmonary Circulation Assembly, American Thoracic Society.


Jorge Herrera serves as reviewer for the Liver Section of the Digestive Disease Week and the Annual Meeting of the American Association of Liver Disease; Editorial Board for Nature Clinical Practice Gastroenterology and Hepatology as well as the Journal of Gastroenterology and Hepatology; reviewer for the American Journal of
William Kevin Green served in the following capacities: Medical Director of the Infection Control and Employee Health for the University of South Alabama Hospital System, Chairperson of the Institutional Review Board, the Infection Control Committee and the Infection Prevention and Review Committee, Chairperson of Mobile Infirmary Medical Center's Infection Control Committee, Joint Associate Professor of the Department of Physician Assistant Studies, Member of the Infectious Disease Fellowship Committee, the Performance Improvement Council at USA Medical Center and at USA Children's and Women's Hospital, the Medical Executive Committee at USA Medical Center and at Mobile Infirmary West, the Critical Care Committee, the Resident Mentoring Program, the Financial Conflict of Interest/Conflict of Commitment Committee, Mobile Infirmary Medical Executive Committee and the Society for Healthcare Epidemiology of America's Guidelines Committee, Participating Judge, Annual Hiram W. Mendenhall, M.D. Memorial Resident Research Day. Dr. Green also serves on the Board of Directors at South Alabama CARES.

Terry J. Hundley, Jr. served as an Associate Activities Director, Alabama Chapter of the American College of Physicians; Associate Counselor, Alpha Omega Alpha Beta Chapter; Board Member, American College of Physicians MKSAP for Students Editorial Board; Judge, Associates Poster Competition, Alabama Chapter American College of Physicians; Judge, Poster Competition, Southern Regional Section of the Society of General Internal Medicine; Medical Student Representative, Governor's Council of the Alabama Chapter of the American College of Physicians.

Ivan F. McMurtry: Editor, American Physiological Society, Comprehensive Physiology Journal; Member, Biology Reports' Faculty of 1000 for the Cardiovascular and Respiratory Pharmacology Section; Member at large, leadership committee of American Heart Association, Council on Cardiopulmonary, Perioperative, and Critical Care; Editor (along with M. Gillespie, T. Stevens, and W. Wagner, Jr.) - American Physiology Society's new online journal Comprehensive Physiology: Topic on Pulmonary Circulation and non-Respiratory Functions; International Associate Editor, Circulation Journal; Manuscript reviewer, American Journal of Physiology, Lung Cell Molecular Physiology (Star Reviewer); Manuscript reviewer, American Journal of Physiology, Heart & Circulation; Manuscript reviewer, American Journal of Respiratory and Critical Care Medicine; Manuscript reviewer, American Journal of Respiratory, Cell Mol Biology; Manuscript reviewer, British Journal Pharmacology; Manuscript reviewer, Cardiovascular Research; Manuscript reviewer, Chest; Manuscript reviewer, Circulation Journal; Manuscript reviewer, CRC Critical Reviews in Therapeutic Drug Carrier.
Systems; Manuscript reviewer, Journal of Applied Physiology; Manuscript reviewer, Journal of Comparative Physiology; Manuscript reviewer, Nature Medicine; Manuscript reviewer, Nature Reviews Cardiology; participated in review of NIH PPG grant applications from S Black et al., Medical College of Georgia (2009 Oct 9).


Troy Stevens: Associate Editor, American Journal of Physiology – Lung; Editor, Experimental Biology and Medicine; Strategic plan for lung vascular research. Moderator for: NHLBI-ORDR Workshop, Topic: Blood Transfusions in Clinical Medicine; 2010 Feb 2; Bethesda, MD; SEP Reviewer, PO1 Application for University of Illinois; Long Range Planning Committee Chair, Pulmonary Circulation Assembly, American Thoracic Society; External Advisor, Medical College of Georgia PPG Application, P.I. Black.

Mary L. Townsley: Member, NHLBI NITM Study Section; Chair, United Peer Review Steering Committee; Member, National Peer Review Task Force; Member, Research Committee Greater Southeast Affiliate; Editorial Board, Microvascular Research; Editorial Board, Pulmonary Circulation; Editorial Board, Frontiers in Physiology; Editorial Board, Vascular Physiology; Reviewer, American Journal of Physiology; Reviewer, American Journal of Respiratory and Critical Care Medicine; Reviewer, Circulation Research; Reviewer, Environmental Health Perspectives; Fellow, Cardiovascular Section, American Physiological Society; Fellow of the American Heart Association.

Shannon Tyler served in the following capacities: Member of the Infectious Disease Fellowship Committee, the American Medical Association, the Medical Society of Mobile County, the Infectious Disease Society of America and the Medical Association of the State of Alabama.

John Vande Waa served in the following capacities: Director of the Division of Infectious Diseases, Associate Professor of Internal Medicine, Program Director of the Infectious Disease Fellowship Program, Joint Associate Professor of the Department of Physician Assistant Studies, Chairperson of the Pharmaceuticals and Therapeutics Committee, the Resident Education Committee and the Infectious Disease Fellowship Committee, Member of the Graduate Medical Education Committee, the Infection Control Committee, the P.A. Admissions Committee for Physician Assistant Studies, the Clinical Skills Examination Curriculum Subgroup Committee, the Resident Mentoring Program, the LCME Governance and Administration Subcommittee, the American Society of Tropical Medicine and Hygiene, the Infectious Disease Society of America and the American Federation for Medical Research. Dr. Vande Waa served as Director of the Basic Science Course for the University and instructor for the Med Microbiology core course to sophomore medical students.
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 2010 again honored the department with this award. Several of the departmental faculty were recognized with the red sash award for their educational efforts. Clearly, the department continues to meet its educational mission and is being recognized by its chief customer, the pupils, for success for this endeavor.

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 arena. Collaborations of the latter division with the Center of Lung Biology remain fruitful. 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 despite a decrease in faculty size. In addition to the University Hospitals we continue our clinical activities at Infirmary West Hospital and the Mobile Infirmary Medical Center.

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.
2009-2010
Summary of Scholarly Activities
Department of Microbiology and Immunology

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPERS, AND PATENTS


II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Audia JP. Invited speaker. The kid in the candy store: what can an obligate intracellular bacterium teach us about metabolism and reductive evolution? Center for Biopreparedness and Infectious Disease, The Medical College of Wisconsin; 2009 Nov 13; Milwaukee, WI.

Brett PJ. Invited speaker. Interactions of *Burkholderia pseudomallei* with murine macrophages. Ninety-Fifth Annual ASM Southeastern Branch Conference; 2009 Nov 6; Savannah, GA.
Brett PI. Invited speaker. Interactions of *Burkholderia mallei* with murine macrophages. University of Georgia; 2010 Apr 28; Athens, GA.

Burtnick MN. Invited speaker. The VirAG regulon plays a critical role in the intracellular lifestyle of *Burkholderia mallei*. Ninety-Fifth Annual ASM Southeastern Branch Conference; 2009 Nov 7; Savannah, GA.


Foster JW. Invited speaker. *E. coli* acid resistance: what’s a tRNA modification enzyme doing in my regulatory soup? Society for General Microbiology, University of Nottingham; 2010 Sep 6; Nottingham, England.

Wood DO. Invited speaker. *Rickettsia prowazekii*: exploring obligate intracellular growth gene by gene. Department of Pathobiological Sciences, School of Veterinary Medicine, Louisiana State University; 2010 Apr 15; Baton Rouge, LA.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Jonathon P. Audia is Review Editor for *Frontiers in Cellular and Infection Microbiology*.

Dr. Robert A. Barrington is Review Editor for *Frontiers in B Cell Biology* and Ad hoc reviewer for the *Journal of Immunology* and *European Journal of Immunology*.

Dr. Paul J. Brett is ad hoc Reviewer for the journals of *Molecular Microbiology, Infection and Immunity, Journal of Bacteriology, 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. Brett is a subject matter expert for National Biodefense Analysis and Countermeasures Center-Department of Homeland Security Bioterrorism Threat Risk Assessment review. Review panel member for Joint Science and Technology Office for Chemical and Biological Defense, Basic and Supporting Sciences Division, Medical Basic Research Capability Area for fiscal year 2010 science review. Review panel member for Joint Science and Technology Office for Chemical and Biological Defense, Basic and Supporting Sciences Division, Medical Basic Research Capability Area, for fiscal year 2009 science review.

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 for Fall and Spring cycle and as an ad hoc reviewer for National Science Foundation.

Dr. Mary N. Burtnick served as ad hoc reviewer for BMC Microbiology, the Defense Threat Reduction Agency (DTRA), joint Science and Technology Office for Chemical and Biological Defense Basic and Supporting Sciences Division (JSTO-CBD) Program, and Medical Basic Research (MBR) Capability Areas for fiscal year 2009 and 2010 science review. Dr. Burtnick is a subject matter expert to the National Biodefense Analysis and Countermeasure Center-Homeland Security Bioterrorism Risk Assessment Review.

Dr. John W. Foster served as a reviewer for the Journal of Bacteriology, Molecular Microbiology, Journal of Molecular Biology, Applied and Environmental Microbiology, and FEMS Microbiology. He also served as Subsection Editor for Escherichia coli/Salmonella Cellular and Molecular Biology, ASM Press.

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 and a member of the ASM Committee on Ethics. He also serves on the editorial board of Infection and Immunity. Dr. Wood is a member of the Association of Microbiology and Immunology chairs. He is an ad hoc reviewer for Journal of Bacteriology and the Journal of Applied and Environmental Microbiology.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Two Microbiology and Immunology students received their Ph.D. degree this year. Dr. Jessica Lynn Jones completed her graduate work with Dr. Foster in the department on October 13, 2009. Dr. Jones is working as a Microbiologist with the USFDA Gulf Coast Seafood Laboratory, Dauphin Island, Alabama. Dr. Kyla Marie Frohlich completed her graduate work with Dr. Audia in the department on October 27, 2009. Dr. Frohlich is currently a Post Doctoral Fellow at Louisiana State University Health Sciences Center in the Department of Microbiology, Immunology and Parasitology.

Drs. David Wood, Audia, Brett, and Burtnick submitted a proposal for an ARRA C06 grant. The grant was awarded in January and provides $14,506,327 for the construction of a 25,800 square foot building to replace the Laboratory of Molecular Biology Building. The schematic phase of the C06 – Laboratory of Infectious Diseases (LID) project is completed and is currently in the design phase. Renovation of departmental research and office space on the second floor of the Medical Science Building was also completed this year.

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The Department’s active research programs remain a major focus of faculty activities. These include research on the obligate intracellular bacterium, *Rickettsia prowazekii*, by Drs. Audia, Winkler, and Wood, studies on the unfolded protein response by Dr. Brewer, and research on the physiology and genetics of enteric pathogens by Dr. John Foster. Dr. Brewer was awarded tenure this year.

Dr. Barrington continues to focus on examining the environmental and genetic components regulating B cell fate while Dr. Brett and Dr. Burnick continue their investigations of the molecular mechanisms by which *Burkholderia pseudomallei* and *Burkholderia mallei* subvert host innate immune disease. Dr. Rohrer continues to investigate the role of a unique oncofetal immunogen (OFA).

The department is committed to excellence in teaching. All faculty members participate in the Medical Microbiology and Immunology course MIC 211/MIC 530 as well as in the interdisciplinary graduate courses IDL 580 and IDL 581. Several faculty and students also participate in the DREAM program. The department continues to conduct a hands-on medical microbiology laboratory directed by Dr. Foster and is, in addition to standard lectures, incorporating case studies and correlations presented by our clinical colleagues. The laboratory component of Medical Microbiology and Immunology exposes the students to wet lab unknowns and small group interactions. “Clickers” were incorporated into lectures by several of the Faculty. It is anticipated that this will expand.

The Department hosted two scientists for the Distinguished Scientist Seminar Series who presented outstanding seminars and met with the departmental faculty and students. Dr. John F. Kearney, from the University of Alabama at Birmingham, Department of Microbiology, Division of Developmental and Clinical Immunology presented a seminar entitled “Determination of the Primary B cell Repertoire and Disease Associations.” Dr. David DeShazer a microbiologist from the Bacteriology Division, U.S. Army Medical Research Institute of Infectious Diseases presented a seminar entitled “Type VI secretion systems in the category B select agent *Burkholderia pseudomallei.”

Dr. Barrington sponsored medical student Austin Fox and with Dr. Brewer co-sponsored medical student Nick Bates as part of the Summer Medical Student Research Program. Dr. Barrington and Dr. Brewer also sponsored undergraduate summer student Paige Perry as part of the UCUR program.

Dr. Wood, Dr. Brewer, and Dr. Barrington, participated in an *ad hoc* committee assembled by the Dean to make recommendations regarding the purchase of new flow cytometry equipment and the formation of an expanded flow cytometry core facility for the COM.

Dr. Barrington, Dr. Brewer, Dr. Lin, and Dr. Cioffi formed the Host Defense and Human Disease Research Group.
The main objective of this group is to foster an interdisciplinary approach to understanding how host defense mechanisms affect human disease.

As an effort to encourage future scientists and clinicians, Dr. Brewer and Dr. Barrington hosted 8th grade science students from Faith Academy for a Future Scientists and Clinicians laboratory tour and talk, February 18, 2010.

Dr. Foster was an external examiner in the Swarthmore College Honors program and the External Reviewer for Tao Dong, Ph.D. Candidate, McMaster University, Hamilton, Ontario, Canada, March 2010. Dr. Foster presented at Surgery Grand Rounds, USA Medical Center. Dec. 18 2009 a seminar, “Pathogenesis of intestinal and extraintestinal Escherichia coli infections." He is also completing the 2nd edition of his textbook Microbiology: an Evolving Science (Coauthored by Joan Slonczewski) and has started work on a new microbiology textbook designed for allied health science students. His work on the acid resistance of enteric pathogens continues with new focus into the virulence plasmid of Shigella and continued investigations of E. coli pathovars.

Dr. Rohrer in his role as one of the lead scientists in the OFA clinical trial prepares vaccine for the FDA-approved trial that is testing the safety and efficacy of oncofetal antigen-loaded, autologous, mature monocyte-derived dendritic cell vaccine for immunotherapy of metastatic breast cancer.

Dr. John E. Oakes served as course director for the Medical Microbiology and Immunology, Advanced Virology, Advanced Immunology, and the DREAM program. Dr. Oakes will retire January 1, 2011 after 32 years at the University of South Alabama.

Dr. Herbert H. Winkler, Louise Lenore Locke Distinguished Professor of Microbiology and Immunology will retire September 30th after 32 years at the University of South Alabama.
2009-2010
Summary of Scholarly Activities
Department of Neurology

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Naritoku D. Invited speaker. New developments in epilepsy. The Epilepsy Foundation of Alabama; 2009 Nov 12; Mobile, AL.

Naritoku D. Invited speaker. Parkinson’s disease/MPTP treated primates research collaboration with UAB; 2010 Jan 13; Birmingham, AL.

Naritoku D. Invited speaker. EEG-common mistakes and errors (and how to avoid them). Wake Forest University 12th Pediatric Epilepsy Symposium; 2010 Feb 26; Asheville, NC.

Naritoku D. Invited speaker. Genetics of epilepsy. UAB Epilepsy Group; 2010 Apr 7; Birmingham, AL.

Naritoku D. Invited speaker. Case sessions. Residents Epilepsy Education Program Mini-Fellowship, Wake Forest University; 2010 Jun 2; Winston-Salem, NC.

Naritoku D. Invited speaker. Case sessions. Residents Epilepsy Education Program Mini-Fellowship, Wake Forest University; 2010 Jun 3; Winston-Salem, NC.

Naritoku D. Invited speaker. Clinical use of AEDs. Residents Epilepsy Education Program Mini-Fellowship, Wake Forest University; 2010 Jun 3; Winston-Salem, NC.
Naritoku D. Invited speaker. Experimental models of epilepsy. Residents Epilepsy Education Program Mini-Fellowship, Wake Forest University; 2010 Jun 3; Winston-Salem, NC.

Naritoku D. Invited speaker. Generic antiepileptic drugs. Residents Epilepsy Education Program Mini-Fellowship, Wake Forest University; 2010 Jun 3; Winston-Salem, NC.

Naritoku D. Invited speaker. Epilepsy in the elderly. Residents Epilepsy Education Program Mini-Fellowship, Wake Forest University; 2010 Jun 4; Winston-Salem, NC.

Naritoku D. Invited speaker. Genetics of epilepsy. Residents Epilepsy Education Program Mini-Fellowship, Wake Forest University; 2010 Jun 4; Winston-Salem, NC.

Naritoku D. Invited speaker. Navigating the alumni website. Residents Epilepsy Education Program Mini-Fellowship, Wake Forest University; 2010 Jun 4; Winston-Salem, NC.

Naritoku D. Invited speaker. Challenges of Parkinson’s disease. Med School Café Lecture Series; 2010 Jun 16; Mobile, AL.

Naritoku D. Invited speaker. Case presentations. Advances in Epilepsy (CME Program), Wake Forest University; 2010 Jul 23; Winston-Salem, NC.

Naritoku D. Invited speaker. Case presentations. Advances in Epilepsy (CME Program), Wake Forest University; 2010 Jul 24; Winston-Salem, NC.

Naritoku D. Invited speaker. Clinical use of AEDs. Advances in Epilepsy (CME Program), Wake Forest University; 2010 Jul 24; Winston-Salem, NC.

Naritoku D. Invited speaker. Experimental models of epilepsy. Advances in Epilepsy (CME Program), Wake Forest University; 2010 Jul 24; Winston-Salem, NC.

Naritoku D. Invited speaker. Genetics of epilepsy. Advances in Epilepsy (CME Program), Wake Forest University; 2010 Jul 24; Winston-Salem, NC.

Naritoku D. Invited speaker. Epilepsy in the elderly. Advances in Epilepsy (CME Program), Wake Forest University; 2010 Jul 25; Winston-Salem, NC.

Naritoku D. Invited speaker. Epilepsy in the multiply handicapped. Advances in Epilepsy (CME Program), Wake Forest University; 2010 Jul 25; Winston-Salem, NC.
V. NATIONAL PROFESSIONAL RECOGNITION

Bassam A. Bassam served as American Association of Neuromuscular and Electrodagnostic Medicine (AANEM) Workshop committee chairperson, Scientific Annual Program Coordination committee member, and neuromuscular Update Course committee member; served as American Board of Electrodiagnostic Medicine (ABE) national board examiner and Examination Committee member (ABEM) national board examiner; and served as American Academy of Neurology (AAN) Guidelines Reviewers member.

Paul Maertens served as editor and member of the Editorial Board of the Journal of Neuroimaging; served as member of the Examination Committee of the Society of Neuroimaging (question design and evaluation for Neurosonology Exam); served as secretary and board member for the Southern Pediatric Neurology Society; served as a member of the Membership Committee of the American Epilepsy Society; served as member of the Program Committee for the American Society of Neuroimaging.

Dean K. Naritoku was selected by peers to be included in the Best Doctors in America® 2009-2010 database; served on the Board of the American Board of Clinical Pharmacology; and served on the Editorial Board of Neurology Research.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Neurology has continued its foundation building for future growth. Most notable was recruitment of Dr. Juan Ochoa, who is an associate professor of Neurology. Dr. Ochoa has vast experience in epilepsy management and in particular, searchable epilepsy evaluations. He will assume the directorship of our in-patient epilepsy monitoring unit. Dr. Ochoa also has assumed the residency director position. He has considerable experience in medical education and has added several innovative approaches to education including web-based curriculum for the residents.

The Department of Neurology has identified and sourced key equipment for the new epilepsy monitoring unit at the University of South Alabama Medical Center. The equipment currently under acquisition features the ability to perform high-density recordings as well as state of the art source localization by which signals can be projected onto brain images such as MRI for more accurate localization of seizure foci. It is anticipated that this four bed unit will be running within the next six months.

With the acquisition of the new neurophysiology equipment, the department will be able to perform specialized brain monitoring protocols for critical care patients. This should augment our ability to take care of critically ill patients within our medical ICU.
The department EMG Laboratory equipment was updated to encompass advanced as well as standard electro diagnostic studies. Our Autonomic Laboratory is now providing autonomic testing for both clinical services and research projects.

The Department of Neurology has been building its research productivity. The department has phase I pharmacological study capability and has taken on two phase I studies over the last year. Dr. Olivier Darbin, our translational research faculty member, has initiated several projects of high promise and has submitted several grant applications for funding.

The department is working to strengthen ties with our clinical faculty. Dr. Dean Naritoku met with each adjunct faculty and encouraged continued active participation in our residency and clerkship programs as well as our grand rounds program. The response has been very favorable.

The department has implemented the Eran and N.Q. Adams Endowed Scholarship Award. The first recipient, Mrs. Tyler Gaston, is currently a 4th year medical student at USA and plans to enter neurology as a career. She will be working with our faculty member, Dr. Olivier Darbin, on a project involving diabetes associated dysautonomia.

The department anticipates the addition of two or three faculty over the next year which will include important sub-specialties of movement disorders, stroke and epilepsy. We are also actively recruiting an interventional neurologist who will be able to form state of the art treatments for acute stroke and other brain disorders.
2009-2010
Summary of Scholarly Activities
Department of Neurosurgery

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Martino A. Invited speaker. Indications for craniotomy in traumatic brain injury. USA Trauma Symposium; 2010 Jan 25; Mobile, AL.

Martino A. Invited speaker. Traumatic brain injury. Biloxi Regional Medical Center; 2010 Mar 12; Biloxi, MS.

Martino A. Invited speaker. Spinal cord injury. Biloxi Regional Medical Center; 2010 Mar 12; Biloxi, MS.


V. NATIONAL PROFESSIONAL RECOGNITION

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Neurological Surgery has over the past academic year continued its participation in collaboration with the USA Mitchell Cancer Institute. This is been carried out by holding neuro-oncology clinics at the Mitchell Cancer Institute every other week. In addition, Dr. Martino continues to use the Cyberknife at the Mitchell Cancer Institute for the treatment of the wide range of conditions including metastatic cerebral tumors, trigeminal neuralgia and primary brain tumors. His active participation culminated in the first oncology meeting offered to practicing physicians by the staff of the Mitchell Cancer
Institute. 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 neurological service continues to be a main, ongoing teaching function.

Dr. Anthony Martino served as Co-Course Director for the Oncology Outlook Conference held at the Marriot Point Clear on April 23-24, 2010.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS

Abuzeid M, Abed S, Salem W, Joseph S, Ashraf M, Rizk B. The effectiveness of 6% hydroxyethyl starch solution in reducing the incidence of severe hyperstimulation syndrome in polycystic ovarian disease patients: a prospective cohort clinical trial. 20th World Congress on Fertility and Sterility; 2010 Sep 12-16; Munich, Germany. Abstract no. A-209-0002-00583.


Meng E, Taylor BA, Shevde L, Rocconi R. Telomerase activity corresponds to the level of aggressiveness of ovarian cancer stem cells and are a potential site of targeted therapy. AACR Annual Meeting 2010 Apr 17-21; Washington, DC. Abstract no. 3334.


Ozair S, Porter KB, Mulekar M, Armistead C. Health effects of cellular phone and other wireless device use in pregnant and non-pregnant women. Society of Maternal Fetal Medicine 30th Scientific Meeting 2010 Feb 1-6; Chicago, IL.


Silver S, Finan M, Rocconi R. A comprehensive method to train residents in robotic hysterectomy techniques. Association of Professors of Gynecology and Obstetrics and the Council on Resident Education in Obstetrics and Gynecology Annual Meeting 2010 Mar 5; Orlando, FL.

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Baker S. Invited speaker. HIV update. 19th Annual OB/GYN CME Conference; 2010 Apr 8; Mobile, AL.

Brooks N. Invited speaker. Pediatric and adolescent GYN issues. 19th Annual OB/GYN CME Conference; 2010 Apr 8; Mobile, AL.

Finan M. Invited speaker. Simulation lab to train residents in robotic hysterectomy techniques. American College of Surgeons Annual Clinical Meeting; 2009 May 9; Chicago, IL.
Finan M. Invited speaker. Simulation lab to train residents in robotic hysterectomy techniques. American College of Surgeons Annual Clinical Meeting; 2009 Oct 14; Chicago, IL.

Finan M. Invited speaker. A comprehensive method to train residents in robotic hysterectomy techniques. Society of Pelvic Surgeons 60th Annual Meeting; 2010 Sep 15; Durham, NC.

Kennedy R. Invited speaker. BTL risks/benefits. 19th Annual OB/GYN CME Conference; 2010 Apr 9; Mobile, AL.

LaFleur J. Invited speaker. Sex, sin and suffering. 19th Annual OB/GYN CME Conference; 2010 Apr 8; Mobile, AL.

Owens S. Invited speaker. Update on contraception. 19th Annual OB/GYN CME Conference; 2010 Apr 9; Mobile, AL.

Porter K. Invited speaker. OB traumas and emergencies. 19th Annual OB/GYN CME Conference; 2010 Apr 9; Mobile, AL.


Rizk B. Invited speaker. Endometriosis: ultrasonography and proteomics. The Mediterranean Society for Reproductive Medicine, updates in infertility; 2010 Mar 25; Tel Aviv, Israel.

Rizk B. Invited speaker. Endometriosis and ART. The Mediterranean Society for Reproductive Medicine, updates in infertility ART; 2010 Mar 25; Tel Aviv, Israel.
Rizk B. Invited speaker. Future of ART. 19th Annual OB/GYN CME Conference; 2010 Apr 9; Mobile, AL.

Rocconi R. Invited speaker. Simulation lab to train residents in robotic hysterectomy techniques. American College of Surgeons Annual Clinical Meeting; 2009 Oct 12; Chicago, IL.

Rocconi R. Invited speaker. Uterine masses. 19th Annual OB/GYN CME Conference; 2010 Apr 8; Mobile, AL.

Sherman C. Invited speaker. The effect of simulation on resident confidence. APGO/CREOG Annual Meeting, 2010 Mar 4; Orlando, FL.

Taylor S. Invited speaker. Lupus and pregnancy. 19th Annual OB/GYN CME Conference; 2010 Apr 8; Mobile, AL.

Varner S. Invited speaker. Bacterial vaginosis. 19th Annual OB/GYN CME Conference; 2010 Apr 9; 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 has been elected as Associate editor for the Fertility and Sterility Egyptian Journal, as well as, Editor-in-Chief for Recent Advances in Reproductive Medicine. He has completed his two term as chairman for the American Society for Reproductive Medicine International Membership Committee. The clinical and research cooperation and development between the University of South Alabama Assisted Reproduction Program headed by Dr. Rizk and the Cleveland Clinic Center for Reproductive Medicine has been very productive clinically and academically. The internship clerkship will be a great opportunity for the University of South Alabama students that are planning to go to medical school. The Cleveland Clinic Center for Reproductive Medicine is currently accredited by the University of South Alabama. Dr. Rizk is a member of the Scientific Advisory Committee of the Mediterranean Society for Reproductive Medicine. He has been an 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. Rodney Rocconi received the National Faculty Award for Excellence in Resident Education from the Council on Resident Education in Obstetrics and Gynecology (CREOG). He received a Research Grant from the Gynecologic Cancer Foundation (GCF); Sherri's From a Whisper to a Roar/Women's Motorcycle Foundation Ovarian Cancer Research Award; APGO/CREOG Annual Meeting 3rd place poster Award. He continues as a Candidate member for the Society of Gynecologic Oncologists (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 19th 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.

Dr. Susan L. Baker is Division Head of Maternal Fetal Medicine. She focuses on clinical care of high risk obstetrics. 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 Chair 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. 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. 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 Clinical Clerkship Director. Dr. LaFleur serves on the Education Committee for OBGYN, the Executive Committee, OB/GYN Committee at USACW and the Health Services QI Committee. Dr. LaFleur was awarded the Red Sash by the 4th year COM Class, the APGO Teaching Award and the Medical Student Teaching Award.

Dr. Sheri Owens serves as a generalist and continues as Clerkship Director for the department.
Dr. Owens was awarded the Red Sash by the 4th year COM Class. She serves on the Mobile County Board of Censors, and the Mobile Medical Museum Board of Directors.

Dr. Kathy B. Porter, during the time of this annual report, served as Chair of the Department. She was Chair of the Alabama State Perinatal Committee and 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. In August 2010, Dr. Porter resigned from her position as chair of the Department of Obstetrics and Gynecology.

Dr. Botros Rizk is a member of the 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. Ad hoc reviewer for 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.

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 four year residency. Dr. Rocconi continues to perform basic science research in his gynecologic cancer-focused lab. Dr. Rocconi was beneficial in the establishment of the "GO Run" an annual race which supports research and awareness in the area of gynecologic cancers. He received the Alabama Launchpad Business plan competition second place award, and he was recognized at the USA Medical Student Honors Convocation with a Red Sash award by the Medical Education to the Class of 2010.

Dr. Robert Stauffer joined the department in June of this year as an Associate Professor. He focus is on care of the high risk ob patient.

Dr. Craig Sherman serves as the Program Director and as Medical Director for the Women’s Center. 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, the Advisory Committee, Special Care Committee, Information Management Committee, Alabama Section, ACOG.
Dr. Sherri Taylor left the department in July to pursue a fellowship in Maternal Fetal Medicine at University of California-Davis, Sacramento, California.

Dr. Steven Varner became the Interim Chair on April 9, 2010, when Dr. Porter was called to duty by the US Army. He continues in his capacity as Director of the Division of Gynecology and maintains the Vulvar clinic. Dr. Varner is a member of the Department Education Committee. He serves on the Performance Improvement Committee, and the OB/GYN Committee, and the Medical Executive Committee.
2009-2010
Summary of Scholarly Activities
Department of Orthopaedic Surgery

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


Grishko V, Pearsall AW, Wilson GL. Local anesthetics exposure leads to mitochondrial oxidative stress and oxidative damage in human chondrocytes. International Cartilage Repair Society Annual Meeting; 2010 Sep 28; Barcelona, Spain. Abstract no. 17.4.2.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Alonso JE. Invited speaker. AO North America Caribbean trauma update: tips and tricks for orthopaedic surgeons, an orthopaedic course; 2010 Feb 4; Cancun, Mexico.

Alonso JE. Invited speaker. Closing the loop in pelvis and acetabular trauma. University of Missouri Grand Rounds Lecture; 2010 Sep 15; Columbia, MO.

Alonso JE. Invited speaker. Surviving the night. 9th Annual South East Trauma Symposium; 2010 Aug 5; Destin, FL.

Alonso JE. Invited speaker. Fragility fractures – the coming tsunami. 9th Annual South East Trauma Symposium; 2010 Aug 5; Destin, FL.

Alonso JE. Invited speaker. Case presentations and discussions. 9th Annual South East Trauma Symposium; 2010 Aug 8; Destin, FL.

Grishko V. Invited speaker. Local anesthetics exposure leads to mitochondrial oxidative stress and oxidative damage in human chondrocytes. International Cartilage Repair Society Annual Meeting; 2010 Sep 28; Barcelona, Spain.

Meyer FN. Invited speaker. Systems-based practice. CORD Symposium, AAOS Annual Meeting; 2010 Mar 12; New Orleans, LA.


Meyer FN. Invited speaker. Distal radius fractures: tips and tricks. South East Trauma Symposium; 2010 Aug 7; Sandestin, FL.
Meyer FN. Invited speaker. Distal radius ORIF lab. South East Trauma Symposium; 2010 Aug 7; Sandestin, FL.

Meyer FN. Invited speaker. Scaphoid fractures. South East Trauma Symposium; 2010 Aug 7; Sandestin, FL.

Meyer FN. Invited speaker. DRUJ injury: diagnosis and treatment. South East Trauma Symposium; 2010 Aug 8; Sandestin, FL.


Perry M. Invited speaker. Foot and ankle amputations. Dallas Short Course Orthotics and Prosthetics; 2009 Oct 22; Dallas, TX.

Perry M. Invited speaker. Total ankle arthroplasty AOFAS position statement. 21st Annual Southeastern Orthopaedic Foot Club; 2010 May 13; Sandestin, FL.

V. NATIONAL PROFESSIONAL RECOGNITION

Jorge Alonso, M.D., AO North America – Chairman and Faculty Member; Riverside Military Academy Board of Trustees 2007-present.


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 three published manuscripts in nationally recognized journals, and seven published abstracts. In addition, there have been 10 presentations at regional and national meetings. A number of our faculty received national recognition including Jorge Alonso who is Chairman and faculty member of the AO North America and serves on the Riverside Military Academy Board of Trustees. Valentina Grishko has served as an invited reviewer for the Nature Reviews in Rheumatology, Nature, Osteoarthritis and Cartilage, Arthritis & Rheumatism, Free Radical Biology & Medicine, European Journal of Pharmacology, Tohoku Journal of Experimental Medicine, Japan, and Inflammation Research. Dr. Frederick Meyer is the President of the Clinical Orthopaedic Society. He is a member of the American Academy of Orthopaedic Surgeons Business Practice/Practice Management Committee. He is a reviewer for The Journal of Bone and Joint Surgery – the most prestigious journal in orthopaedics. He served as a panelist at the AAOS Practice Management Meeting held in New Orleans, LA, and he serves as Chairman of the AOA/CORD Education Committee. Dr. Albert Pearsall is a Past President of the Alabama Orthopaedic Society. He is also a council member on the Tissue Advisory Council, LifeLink Foundation, Inc. He serves on the Audit Committee of the Mid-American Orthopaedic Association, the Orthopaedic Sports Medicine Committee of the ISAKOS, the Publications Committee of the American Orthopaedic Society for Sports Medicine, the AOSSM Question Exam Committee, and the AAOS Evaluation Committee. Dr. Mark Perry was the course chairman of the Southeastern Orthopaedic Foot Club. He served on the editorial board of the patient information website, footeducation.com. He also served on the resolutions committee for the AAOS and was an oral boards examiner for the ABOS, and a session moderator at the Clinical Orthopaedic Society Meeting held in Point Clear, AL. The Department of Orthopaedic Surgery now has three residents in PGY V, PGY IV, III, II and I years. All of our residents have passed their written boards. This year we graduated Dr. Amanda Ivy and Dr. Zachary Scheer. Dr. Ivy has accepted a Sports Medicine Fellowship at Methodist Sports Medicine/The Orthopaedic Specialists in Indianapolis, Indiana. Dr. Scheer has accepted a Joint Arthroplasty Fellowship at the CORE Institute in Phoenix, Arizona.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

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IV. INVITED PRESENTATIONS

Chen TJ. Invited speaker. Mutation, mosaicism, X-inactivation and sequence variant: lessons from unusual molecular findings. International Conference on Genetic and Genomic Medicine; 2010 May 4; Academia Sinica, Taipei, Taiwan-ACGA.

Tucker JA. Invited speaker. Ultrastructural diagnosis of soft tissue tumors: avoiding pitfalls. United States and Canadian Academy of Pathology Annual Meeting; 2010 Mar 21; Washington, DC.

Tucker JA. Invited speaker. Building research in non-research-intensive departments: how to foster collaborative research. Association of Pathology Chairs Annual Meeting; 2010 Jul 14; Seattle, WA.

Tucker JA. Invited speaker. Resident training gap analysis workgroup report. Association of Pathology Chairs Annual Meeting; 2010 Jul 15; Seattle, WA.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Allan Tucker was program director for UltraPath VX, the biennial meeting of the Society for Ultrastructural Pathology which was held in Richmond, Virginia, with registrants from twelve different countries. He continues to serve as treasurer of that organization. He was also elected as treasurer of board of directors of the American Registry of Pathology, and continues to serve as secretary and treasurer of the History of Pathology Society. He was selected as an international councilor to the International Academy of Pathology, and selected as chair of the finance committee of that organization. For the College of American Pathologists, he serves on the economic affairs committee and as a representative (alternate member) to the AMA relative value scale update committee (RUC). He is also a member of the graduate medical education committee. He is on the executive council of the Association of Pathology Chairs and a member of its graduate medical education committee. He is a member of the training program committee of the Renal Pathology Society. He serves on the finance committee and abstract review board as well as serving as an ambassador for the United States and Canadian Academy of Pathology. He is a member of the electron microscopy ad hoc review group for the Veteran Affairs electron microscopy program. He continues service as associate editor for Ultrastructural Pathology and editorial board member of Annals of Clinical and Laboratory Science.

Dr. Elizabeth Manci served as vice president of the Board of Censors for the Mobile County Medical Society. She is involved in a number of extramural collaborations, including the study of angiogenesis in sickle cell disease with Dr. Ofori-Acquah Solomon at Emory, transgenic mouse models of inflammation-induced endothelial adhesion and of acute chest syndrome with Dr. Lewis Hsu at NIH, and a murine model of diet and sickle cell disease with Dr. Jacqueline Hibbert at Morehouse.
She is a peer reviewer for *Journal of Pediatric Pathology, Archives of Pathology, and Pediatric and Developmental Pathology*. She is the director of the Alabama Placental Registry. She is a member of the executive board for Camp Rappahope.

**Dr. Andrea Kahn** served as a trustee of History of Pathology Society. She is a member of the International Union Against Global Cancer Control Community. She is a College of American Pathologists’ laboratory inspector, and served as a team leader on an inspection of a laboratory in Pensacola, Florida.

**Dr. Gary Carnahan** is an inspector of the College of American Pathologists, and was a team leader for an inspection in Lake City, Florida. He is also an assessor for the American Association of Blood Banks, and performed inspections at Wake Forest University and at Mayo Clinic.

**Dr. Tian-Jian Chen** serves on the editorial board of *Applied Immunohistochemistry and Molecular Morphology* and is a member of the board of directors of the Association of Chinese Geneticists in America.

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

Mr. Michael Titford is on the editorial advisory board of *Journal of Histotechnology* and serves on the safety committee of the National Society of Histotechnology.

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

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

In part to promote molecular and cytogenetic testing, the university reorganized what had traditionally been the medical genetics department, moving those laboratories into the pathology department. Dr. Holly Hobart shifted from a joint appointment to a primary appointment in the department of pathology, and the department added Dr. Tian-Jian Chen and Dr. Yueying Wang, as well as ten additional individuals in that area. The department welcomes these skilled individuals and is excited at the opportunities to look to expand molecular and cytogenetic testing.

The department continues several successful external collaborations. The department’s work with Gulf Regional Pathologists (the Mobile Infirmary pathology group) continues to go very well including a highly successful residency experience there. The department also continues a long and successful relationship with the Alabama Department of Forensic Sciences. And the department is fortunate to be entering into the second year of a contract with the Biloxi Veterans Affairs Hospital for surgical pathology work.
Four residents completed the program this year. Dr. Javier Laurini embarked on a surgical pathology fellowship at Mayo Clinic. Dr. John Nelson began a cytopathology fellowship at the University of Arkansas. Dr. Kelly Mizell joined Vanderbilt for a surgical pathology fellowship. And Dr. Ken Whithaus undertook a surgical pathology fellowship at the University of Texas at San Antonio. The department enjoyed a highly successful recruiting year, with four new residents joining the department: Dr. Rocky Adams from Tufts University School of Medicine, Dr. Jennifer Corneal from the University of Louisville School of Medicine, Dr. Jennifer Guthrie from Mercer University School of Medicine, and Dr. Crystal Harris from the University of South Alabama College of Medicine.

Two faculty members received the red sash award from the medical school this year for outstanding teaching: Dr. Jeff Sosnowski and Dr. Allan Tucker. Dr. Sosnowski further received the award as best basic science professor. This year, the Betsy D. Bennett award for outstanding teaching in the second year small group by a resident was shared by Dr. Blythe Bowman and Dr. Sree Ravula. The faculty recognition award for excellence in residency teaching was presented to Dr. Gary Carnahan.

Mr. Michael Titford was also recognized by the housestaff for outstanding contributions to their educational experience. The graduating student receiving the William A. Gardner, Jr., pathology award was James Frost.
2009-2010
Summary of Scholarly Activities
Department of Pediatrics

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


Autry B, Weeks S, Adams ME, Chung AM, Karwa R. Evaluation of medication errors and outcomes with sliding scale insulin therapy. 44th Midyear Clinical Meeting and Exhibition; American Society of Health-System Pharmacists; 2009 Dec 7; Las Vegas, Nevada. Board 1-003


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Geiler R, Chung AM, Vidal RS, Falkos SF, Bonfante E. Impact of acid suppression therapy on oral iron supplementation in the pediatric ICU population. 44th Midyear Clinical Meeting and Exhibition; American Society of Health-System Pharmacists; 2009 Dec 7; Las Vegas, Nevada. Board 1-004.


Wagner J, Chung AM, Karwa R, Lorenz R. Prospective assessment of the incidence and effect of post-partum depression on women infected with human immunodeficiency virus. 44th Midyear Clinical Meeting and Exhibition; American Society of Health-System Pharmacists; 2009 Dec 7; Las Vegas, NV. Board 1-006.

Wilson E, Bodet CA, Karwa R, Chung AM, Durant CE. A prospective evaluation of vancomycin dosing and kinetics in an obese population. 44th Midyear Clinical Meeting and Exhibition; American Society of Health-System Pharmacists; 2009 Dec 8; Las Vegas, NV. Board 7-005.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Anderson S. Invited speaker. Talking realistically to parents. Early Intervention Council Meeting; 2010 Jun 9; Mobile, AL.

Benjamin JT. Invited speaker. Home apnea monitoring: role in management of the high risk infant. Alabama Baby Coalition 2nd Annual Continuing Education Infant Mortality Conference; 2010 Mar 19; Mobile, AL.


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Connelly R. Invited speaker. Breast feeding. Health Literacy Seminar; 2010 Sep 30; Mobile, AL.

Connelly R. Invited speaker. Health literacy. Health Literacy Seminar; 2010 Sep 30; Mobile, AL.

Estrada B. Invited speaker. Unusual presentation of pediatric infectious disease. Driscoll’s Children’s Hospital Pediatric Infectious Diseases Seminar; 2009 Nov 13; Corpus Christi, TX.

Estrada B. Invited speaker. Update: vaccine preventable diseases in patients with sickle cell disease. Sickle Cell Disease Practical Issues X - Casting the Net; 2010 Apr 24; Mobile, AL.

Eyal FG. Invited speaker. Use of hypothermia in the neonate. Thomas Hospital; 2010 Feb 26; Fairhope, AL.

Falkos S. Invited speaker. Seizures. Outreach Gulfport; 2009 Nov 24; Gulfport, MS.

Howell DL. Invited speaker. Food allergies driving you nuts? USA Med School Café, Christ United Methodist Church; 2010 Jan 19; Mobile, AL.

Howell DL. Invited speaker. Food allergy: the detection and management of a growing epidemic. Alabama Chapter, AAP Spring Meeting & Pediatric Update; 2010 Apr 18; Sandestin, FL.

Howell DL. Invited speaker. Anaphylaxis: killer allergy. Alabama Chapter, AAP 2010 Annual Meeting & Fall Pediatric Update Meeting; 2010 Sep 26; Birmingham, AL.

Imran H. Invited speaker. Management of sickle cell disease in children. Sickle Cell Counselor/Educator Certification Course, Sickle Cell Association of America, Mobile Chapter; 2009 Dec 10; Mobile, AL.
Imran H. Invited speaker. Splenic sequestration crisis: a dreadful complication of sickle cell disease. Sickle Cell Disease Practical Issues X - Casting the Net; 2010 Apr 24; Mobile, AL.

Kaulfers A. Invited speaker. Novel association of insig-2 polymorphism with LDL and cholesterol in children. Annual Pediatric Academic Societies’ Meeting; 2010 May 1; Vancouver, BC.


Kirk J. Invited speaker. USA SCAN unit. Mobile Child Advocacy Center’s Lunch and Learn; 2010 Feb 11; Mobile, AL.


Martinez J. Invited speaker. Autism and the new genomics. USA Autism Interest Group; 2010 May 14; Mobile, AL.

Preud’Homme D. Invited speaker. Obesity and cardiovascular health. Springhill College, Department of Biology; 2009 Nov 11; Mobile, AL.

Preud’Homme D. Invited speaker. Atherosclerosis. Springhill College, Department of Biology; 2009 Nov 17; Mobile, AL.

Preud’Homme D. Invited speaker. Liver failure. Springhill College, Department of Biology; 2009 Nov 20; Mobile, AL.


Preud’Homme D. Invited speaker. Where is the BILI? AAP, Practical Pediatrics CME Course; 2010 May 27; Hilton Head Island, SC.


Preud’Homme D. Invited speaker. Protein allergy. AAP, Practical Pediatrics CME Course; 2010 May 28; Hilton Head Island, SC.

Preud’Homme D. Invited speaker. GER in infancy. AAP, Practical Pediatrics CME Course; 2010 May 29; Hilton Head Island, SC.
Preud'Homme D. Invited speaker. Childhood obesity. Mobile Infirmary Medical Center Continuing Education Nursing Seminar; 2010 Jun 7; Mobile, AL.

Rettig KR. Invited speaker. Growth hormone. Springhill College; 2009 Oct 9; Mobile, AL.

Swingle H. Participant in a public service video. Preparing to visit your healthcare provider. Produced by the UAB College of Public Health, as part of the Health Services Training Project; 2010 Apr 19; Birmingham, AL. Available from: www.youtube.com/UCPBirmingham

Trimm RF. Invited speaker. Developmental outcomes of late preterm birth. Pediatric Grand Rounds, SUNY Stony Brook; 2010 Mar 31; Stony Brook, NY.

Trimm RF. Invited speaker. Pediatric psychosocial issues. Pediatric Residency Conference, SUNY Stony Brook; 2010 Mar 31; Stony Brook, NY.

Wilson F. Invited speaker. Overview of sickle cell disease. Novartis Pharmaceuticals Phase II New Hire Training Session; 2009 Oct 14; Florham Park, NJ.


Wilson F. Invited speaker. Improving quality of care in sickle cell disease: the role of blood transfusion. Emory University Children’s at Egleston and the Aflac Cancer Center; 2009 Oct 28; Atlanta, GA.

Wilson F. Invited speaker. Iron overload management. Emory University Children’s at Egleston and the Aflac Cancer Center; 2009 Oct 28; Atlanta, GA.

Wilson F. Invited speaker. Improving quality of care in sickle cell disease: the role of blood transfusion. North Okaloosa Medical Center; 2009 Dec 2; Crestview, FL.

Wilson F. Invited speaker. Iron overload management. North Okaloosa Medical Center; 2009 Dec 2; Crestview, FL.

Wilson F. Invited speaker. Medical terminology. Sickle Cell Counselor/Educator Certification Course, Sickle Cell Association of America, Mobile Chapter; 2009 Dec 7; Mobile, AL.

Wilson F. Invited speaker. History of sickle cell disease. Sickle Cell Counselor/Educator Certification Course, Sickle Cell Association of America, Mobile Chapter; 2009 Dec 7; Mobile, AL.
Wilson F. Invited speaker. Introduction to genetics. Sickle Cell Counselor/Educator Certification Course, Sickle Cell Association of America, Mobile Chapter; 2009 Dec 9; Mobile, AL.

Wilson F. Invited speaker. Improving quality of care in sickle cell disease: the role of blood transfusion. Baptist Hospital Infusion Center; 2009 Dec 9; Montgomery, AL.

Wilson F. Invited speaker. Iron overload management. Baptist Hospital Infusion Center; 2009 Dec 9; Montgomery, AL.

Wilson F. Invited speaker. Treatment options for iron overload. AFLAC Cancer Center and Blood Disorders Service at Children’s Hospital at Scottish Rite; 2010 Jan 21; Atlanta, GA.

Wilson F. Invited speaker. Overview of sickle cell disease. Novartis Pharmaceuticals Phase II New Hire Training Meeting; 2010 Feb 15; Basking Ridge, NJ.


Wilson F. Invited speaker. Sickle cell disease and iron overload: transition to adulthood. University of Southern California Keck School of Medicine; 2010 Feb 26; Los Angeles, CA.

Wilson F. Invited speaker. Treatment options for iron overload. University of South Florida; 2010 Mar 10; Jacksonville, FL.

Wilson F. Invited speaker. Integrating treatment strategies & sharing best practices for patients with sickle cell disease. Oklahoma State University Health Sciences Center; 2010 Mar 25; Tulsa, OK.

Wilson F. Invited speaker. Integrating treatment strategies & sharing best practices for patients with sickle cell disease. University of Oklahoma; 2010 Mar 25; Oklahoma City, OK.

Wilson F. Invited speaker. Treatment options for iron overload. Columbus Regional Healthcare System, John B. Amos Cancer Center; 2010 Apr 1; Columbus, GA.

Wilson F. Invited speaker. Take control of your future: living with sickle cell disease. Be Sickle Smart Empowerment Day, Sickle Cell Associations from Oakland, San Francisco, Los Angeles and Sacramento; 2010 May 1; Los Angeles, CA.

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Wilson F. Invited speaker. Overview of sickle cell disease. Quintiles Transnational Corporation Clinical Nurse Educator Meeting; 2010 May 6; Parsippany, NJ.


Wilson F. Invited speaker. Take control of your future: living with sickle cell disease. Be Sickle Smart Empowerment Seminar, Sickle Cell Associations from Baton Rouge, New Orleans, Monroe/Shreveport, Lake Charles/Alexandria/Lafayette; 2010 Jun 4; Baton Rouge, LA.

Wilson F. Invited speaker. Pain management in sickle cell disease. Be Sickle Smart Empowerment Seminar, Sickle Cell Associations from Baton Rouge, New Orleans, Monroe/Shreveport, Lake Charles/Alexandria/Lafayette; 2010 Jun 4; Baton Rouge, LA.

V. NATIONAL PROFESSIONAL RECOGNITION

Stephanie Anderson serves on the Alabama Interagency Autism Coordinating Council (AIACC), Standards of Practice, Diagnostic Clinics Workgroup charged with drafting standards of practice for autism diagnostic clinics in the state of Alabama.

Samar Bhowmick is a reviewer for Clinical Pediatrics, Pediatrics, Journal of the Southern Medical Association, and Asian Journal of Andrology. He served on Group Sessions at the Pediatric Endocrinology in Review at the Pediatrics Board Review, Louisiana State University School of Medicine 25th Anniversary, August 11-14, 2010 in New Orleans, LA.

Judy Blair continues to serve as a member of the State of Alabama Obesity Task Force (Alabama Department of Public Health). She also served as a Workshop and an Abstract reviewer, as well as a Clinical Vignette Reviewer, Poster Session, for the Southern Society of General Internal Medicine Annual Meeting.

Allison Chung serves as Chair on the American College of Clinical Pharmacy (ACCP) Pediatric Practice and Research Network (PRN); and Education and Training (PRN). She continues to serve 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; and American College of Clinical Pharmacy (ACCP). Dr. Chung also serves as Associate Editor for Clinical Medicine: Pediatrics; and ASHP 2009 MCM Poster Abstract Reviewer.
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.

LaDonna Crews serves as a Board Member, American Academy of Pediatrics, Alabama Chapter Residency Program Representative.

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

Benjamin Estrada continues to serve as the Institutional Representative and as an elected council member to 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). Dr. Estrada is a Reviewer for *Clinical Pediatrics, Infectious Diseases in Clinical Practice, Infection Control and Hospital Epidemiology, Pediatric Infectious Diseases Journal, MedEdPortal*, and *Respiratory Research*.

Charles Hamm is a Reviewer for *Clinical Pediatrics*. He is the Institutional Representative to the Vermont Oxford Neonatal Network.

Jessica Kirk serves as the American Academy of Pediatrics (AAP) SOMSRFT District X Coordinator and Medical Home Subcommittee Chairperson. She serves as CATCH Facilitator for the State of Alabama, and as the AL Chapter Young Physician Co-Chairperson of the AAP. Dr. Kirk also serves on the AAP Council on Community Pediatrics and the SOYP Nominating Committee.

Mary Mancao serves on the Alabama Department of Public Health Sexually Transmitted Diseases Medical Advisory Council.

Thomas Martinko chairs the Adolescent Committee for the Alabama Chapter of the AAP. He is a member on the Drugs, Alcohol and Tobacco Committee for the Society for Adolescent Health and Medicine, and Physician for the Teen Transition Clinic at the Mobile Children’s Rehabilitation Service.

Keith Peevy serves on the Alabama Baby Coalition Task Force, Sub-Committee Task Force Community Action Team.

Anand Ponnambalam serves as a member of the Motility Committee of NASPGHAN.

Daniel Preud’Homme serves as Co-Chair of the Council on School Health, Alabama Chapter, American Academy of Pediatrics.
Kenneth Rettig serves as a Reviewer for *Clinical Pediatrics*.

Katherine Savells serves on the Alabama Chapter, American Academy of Pediatrics Breastfeeding Committee.

Hanes M. Swingle is a Reviewer for the *Journal of Developmental-Behavioral Pediatrics*, *the Maternal and Child Health Journal*, and *the Pediatric Academic Society Annual Meeting*. He serves as Chair of the Diagnostic Clinic Workgroup of the AIACC Standards of Practice Committee, which is drafting standards of practice for autism diagnostic clinics in Alabama. He serves as a member of the Region IV Perinatal Advisory Committee and the Alabama Baby Coalition, Autism Providers Network, and as a member of the Alabama Interagency Autism Coordinating Council (AIACC). Dr. Swingle 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 is the recipient of a 2010 AAP Pediatric Education Special Recognition Certificate. 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 is Chairperson of the DB PREP 2010 Planning Committee. He is a member of the AAP Committee on Pediatric Education (COPE). 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 as a Manuscript Reviewer for the *Journal of Developmental & Behavioral Pediatrics*, *Academic Pediatrics*, *Academic Medicine*, and *Journal of Graduate Medical Education*.

Rosa Vidal serves on the Ronald McDonald House Board of Directors.

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. She serves as Chair of the National Advisory Committee for Hemoglobinopathy Trait Education and Counselor Certification member of Subcommittee, Chair of Adolescent Follow-up.

She served this year as a webcast Sickle Cell Disease Expert Panelist. Dr. Wilson was selected as the White Coat Ceremony Speaker for the USA College of Medicine Class of 2012.
Michael Zayek is on the Regional IV Perinatal Advisory Council and the State Perinatal Advisory Committee. He serves as a Reviewer for *Clinical Pediatrics*.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Pediatrics welcomed new faculty members in 2010. Dr. April Ross joined the Division of General Pediatrics; Dr. Anne-Marie Kaufers joined the Division of Pediatric Endocrinology, and Dr. Abdul Hafeez Siddiqui accepted a position in Pediatric Hematology/Oncology to replace Dr. Aarati Rao. A new Division of Genetics, directed by Dr. José Martinez, was also established.

The following Pediatric Faculty members were recognized by the COM students as Distinguished Faculty at the 2010 Honors Convocation: Drs. Samar Bhowmick, Judy Blair-Elortegui, Loran Clement, Lloyd Scott Clements, LaDonna Crews, Benjamin Estrada, Grace Hundley, Ihab Jibran, Aarati Rao and Franklin Trimm. Special recognition was given to Dr. Mary Mancao, who was presented the Leonard Tow Humanism in Medicine Award at the Honors Convocation. The sixteenth recipient of the Hollis J. Wiseman Award for Excellence in Pediatrics during the Pediatric Clerkship was Jamie Brooke Caudill.

Twelve of the graduating medical students chose residencies in pediatrics or combined Medicine-Pediatrics. Of the pediatric residents completing residency this year, one entered private practice, five entered fellowship training, one entered a hospitalist program, and one joined the Department as Chief Resident. All three graduating Medicine-Pediatrics residents entered private practice. On July 1, 2010, nine first-year residents entered the pediatric residency program, and three first-year residents entered the combined Medicine-Pediatrics residency program.

Dr. April Ross completed her duties as Pediatric Chief Resident, and Dr. Jennifer Currie was named Chief Resident for the coming year.

The scholarly activity of the Department of Pediatrics during the past year was productive. There were 12 original articles or book chapters and 35 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 48,000, an increase of 10% over the previous year. Activities of the in-patient service, neonatal intensive care unit, and pediatric intensive care unit 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 asthma, 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 fourth year. Over 850 children with asthma have been evaluated and treated at 31 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 care practices.

Major goals for the coming year include: 1) Implementation of electronic patient management applications that integrate patient care activities, clinical data collection, patient education, and, most importantly, that improve health outcomes; 2) Adaptation of clinical and educational programs to meet new national medical education standards and mandates; 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.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


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II. PUBLISHED ABSTRACTS


Al-Mehdi AB, Patel M, Reed D. Electron transport chain-dependent oxygen consumption in metastatic breast cancer cells. AACR Meeting 2010 Apr 17-21; Washington, DC. Abstract no. 75.


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III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Gillespie MN. Invited speaker. Bending and breaking the DNA code: implications for transcriptional regulation. Davis Cardiovascular Research Institute; 2010 Jun 23; Columbus, OH.

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McMurtry IF. Invited speaker. S1P4 receptor mediates S1P-induced vasoconstriction in normotensive and hypertensive rat lungs. Victoria Johnson Center for Pulmonary Obstructive Disease Research, Virginia Commonwealth University; 2009 Oct 12; Richmond, VA.

McMurtry IF. Invited speaker. Elaboration on a rat model of severe PAH. NHLBI-ORDR Workshop on Strategic Planning Sessions in Pulmonary Vascular Disease; 2010 Mar 9; Bethesda, MD.

Rich T. Invited speaker. The contributions of localized phosphodiesterase activity in compartmentalizing cyclic nucleotide signals. University of Texas Health Sciences Center Department of Integrative Biology and Pharmacology; 2009 Dec 14; Houston, TX.


Ruchko MV. Invited speaker. Hypoxia-induced oxidative modifications in the D-loop region of the mitochondrial (Mt) genome may be linked to mtDNA replication and transcription in human pulmonary artery endothelial cells. American Thoracic Society International Conference; 2010 May 17; New Orleans, LA.

Schaffer SW. Invited speaker. Mitochondrial dysfunction in taurine deficient cardiomyocytes. 17th Annual International Taurine Meeting; 2009 Dec 15; Miami, FL.

Schaffer SW. Invited speaker. Role of taurine in cardiac and skeletal muscle: an overview. 17th Annual International Taurine Meeting; 2009 Dec 15; Miami, FL.

Schaffer SW. Invited speaker. Role of angiotensin II in pressure-mediated ischemia-reperfusion injury; 2010 Apr 17; Amman, Jordan.

Schaffer SW. Invited speaker. Cardiovascular pharmacology. Balamand University; 2010 Apr 14; Beirut, Lebanon.

Schaffer SW. Invited speaker. Role of angiotensin II and PI3-kinase/Akt signaling in pressure-mediated ischemia-reperfusion injury. Balamand University Medical School; 2010 Apr 15; Beirut, Lebanon.

Stevens T. Invited speaker. Strategic plan for lung vascular research. Blood Transfusions in Clinical Medicine, NHLBI-ORDR Workshop; 2010 Feb 2; Bethesda, MD.

Stevens T. Invited speaker. Lung endothelial heterogeneity: lesson learned through the systematic study of calcium channels. Harvard Medical School, Center for Vascular Biology, Beth Israel Deaconess Medical Center; 2010 Feb 10; Boston, MA.
Stevens T. Invited speaker. Lung endothelial heterogeneity: lessons learned through the systematic study of calcium channels. Emory Medical School, Center for Endothelial Cell Biology; 2010 Mar 2; Atlanta, GA.

Stevens T. Invited speaker. Lung endothelial heterogeneity: lessons learned through the systematic study of calcium channels. Medical College of Georgia, Center for Vascular Biology; 2010 Apr 19; Augusta, GA.

Stevens T. Invited speaker. Point counter-point: soluble adenylyl cyclases disrupt the endothelial cell barrier. Experimental Biology; 2010 Apr 25; Anaheim, CA.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Abu-Bakr Al-Mehdi served as a reviewer, Science Content Survey, 5th Comprehensive Review of the MCAT Exam (MR5).

Dr. Diego F. Alvarez is the website coordinator, Program and Planning Committee member, of the Pulmonary Circulation Assembly – American Thoracic Society; Program Committee member and Nominating Committee Chair of the Respiratory Section – American Physiological Society; member of The International Society for Stem Cell Research and Federation of American Societies for Experimental Biology; Abstract reviewer for the American Heart Association International Conference 2010 and the American Thoracic Society International Conference 2010; American Thoracic Society Mini Symposium Chair; Experimental Biology International Meeting – Symposium – Chair; peer reviewer for manuscripts submitted to the American Journal of Physiology – Lung Cellular and Molecular Physiology, Microvascular Research, Translational Research, American Journal of Respiratory Cell and Molecular Biology, and American Journal of Respiratory and Critical Care Medicine. He was appointed to the editorial board, American Journal of Physiology-Lung Cellular and Molecular Physiology.

Dr. June E. Ayling served as reviewer for the American Journal of Clinical Nutrition and Photochemistry and Photobiology.

Dr. Natalie Bauer served as an invited reviewer for manuscripts submitted to the American Journal of Physiology, Lung, Cell and Molecular Physiology and Comprehensive Physiology; new study section member of the American Lung Association. She received special recognition by Sigma Xi, the Scientific Research Society.

Dr. Michael Chinkers served as a reviewer, Journal of Molecular and Cellular Cardiology.
Dr. Eugene A. Cioffi served as a reviewer and co-editor, *Current Topics in Medicinal Chemistry* (Journal); reviewer, *Journal of Physical Chemistry*; reviewer, *Journal of Organic Chemistry; Synthesis* (Journal), *Synthetic Communications* (Journal), *Bioorganic and Medicinal Chemistry* (Journal), *Carbohydrate Research Journal, Journal of Labeled Compounds and Radiopharmaceuticals and Environmental Science and Technology* (Journal); grant reviewer, National Science Foundation (NSF) and National Institute of Health (NIH).

Dr. Mark N. Gillespie is a co-inventor (with Dr. Glenn Wilson) on mitochondrially targeted fusion protein constructs for use in treating oxidant-mediated diseases. He 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, SIR/STTR study section and NIH study sections (1), Special Emphasis Panel (2); American Lung Association Research Peer Review panel. Dr. Gillespie also served as a manuscript reviewer for all major journals relevant to his field of research; Chairman, Pulmonary Circulation Assembly, American Thoracic Society.

Dr. Ivan F. McMurry was a member of 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, Jr.) of American Physiology Society’s new online journal *Comprehensive Physiology*: Topic on Pulmonary Circulation and non-Respiratory Functions; International Associate Editor of *Circulation Journal*. He reviewed manuscripts for *American Journal of Physiology Lung Cellular Molecular Physiology* (Star Reviewer), *American Journal of Physiology Heart & Circulation, American Journal of Respiratory Critical Care Medicine, American Journal of Respiratory Cellular, Molecular Biology, British Journal of Pharmacology, Cardiovascular Research, Chest, Circulation Journal, CRC Critical Reviews in Therapeutic Drug Carrier Systems, Journal of Applied Physiology, Journal of Comparative Physiology, Nature Medicine, and Nature Rev Cardiology*. He also participated in review of NIH PPG grant application from S Black et al., Medical College of Georgia (2009 Oct 9).

Dr. Jack W. Olson served on the Executive Committee – Cardiovascular Medical Research and Education Fund (CMREF); ATS Meeting – Discussion Facilitator for Thematic Poster Session.

Dr. Thomas Rich is a member, AHA Electrophysiology 1 Study Section; Ad hoc reviewer for European Research Council, *American Journal of Physiology – Lung, Biophysical Journal and Chemistry and Biology.*
Dr. Stephen W. Schaffer served as a member of NIH Study Section on Mitochondria, Nov 5-6, 2009; Associate Editor, Molecular Cell Biochemistry; Section Editor, Amino Acids; Secretary, International Academy of Cardiovascular Sciences, American Section; and Editor, Special Edition, Journal of Biomedical Sciences.

Dr. Troy Stevens served as Associate Editor, American Journal of Physiology – Lung; Editor, Experimental Biology Medicine; SEP Reviewer, PO1 Application for University of Illinois; Long Range Planning Committee Chair, Pulmonary Circulation Assembly, ATS; External Advisor, Medical College of Georgia PPG Application, P.I. Black.

Dr. Wiltz W. Wagner, Jr. served on the Steering Committee, The Grover Conference; Program Committee, Assembly on Pulmonary Circulation, American Thoracic Society; Executive Committee, Pulmonary Circulation Assembly, American Thoracic Society; Planning Committee, Pulmonary Circulation Assembly, American Thoracic Society; and Board of Directors, Pulmonary Circulation Foundation.

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

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Pharmacology hosted visits from several scientists who participated in the Distinguished Scientist Seminar Series: Dr. Richard M. Weinshilboum, Mary Lou and John H. Dasburg Professor of Cancer Genomics, Director, Division of Clinical Pharmacology, Department of Molecular Pharmacology and Experimental Therapeutics, Mayo Medical School/Mayo Clinic, Rochester, Minnesota, presented a seminar entitled: “Pharmacogenomics: Science, Development, and Translation” on October 22, 2009. Dr. Edward Abraham, Professor and Chair, Department of Medicine, Spencer Chair in Medicine Science Leadership, University of Alabama at Birmingham, Birmingham, Alabama, presented a seminar entitled “Intersection Between Coagulation and Inflammation: The Secret Life of Coagulation Factors” on Thursday, December 10, 2009. Dr. Christopher M. Waters, Professor and Vice Chair, Department of Physiology, College of Medicine, University of Tennessee Health Science Center, Memphis, Tennessee, presented a seminar entitled “Mechanotransduction in Acute Lung Injury” on Thursday, March 4, 2010. Dr. Scott W. Ballinger, Associate Professor, Department of Pathology and Director, BioAnalytical Redox Biology Core, Diabetes Research Training Center, University of Alabama at Birmingham, presented a seminar entitled “The Mitochondrial Paradigm for Disease Susceptibility: Prehistoric Events Influencing Contemporary Disease Risk” on Thursday, April 22, 2010. Dr. Nicholas Morrell, Professor of Respiratory Medicine, Division of Respiratory Medicine, University of Cambridge, Addenbrooke’s Hospital, Cambridge, UK, presented a special seminar entitled “BMPR2 Mutations in the Pathobiology of PAH” on Wednesday, December 16, 2009.
Four students graduated from the Department of Pharmacology. Dr. Kevin M. Lowe’s defense was on May 25, 2010. His dissertation was entitled “Analysis of the Pathologic Impact of Site Specific Accumulations of Extravascular Pulmonary Fluid.” Dr. Troy Stevens served as his Major Professor. Dr. Lowe is a Hepato-pancreaticobiliary Surgery Fellow at Dallas Methodist Medical Center in Dallas, Texas. Dr. Ryan Viator’s defense was on April 21, 2010. His dissertation was entitled “Oxygen Tension Controls Glucose Uptake and Metabolism in Endothelial Cells.” Dr. Brian Fouty served as his Major Professor. Dr. Viator is completing a postdoctoral fellowship at LSU in New Orleans. Dr. Michelle Henesy’s defense was on October 2, 2009. The title of her dissertation was “Regulation of ANP-stimulated cGMP Signals in Murine Leydig Cells.” Dr. Thomas Rich served as her Major Professor. Dr. Henesy is Manager of Hospital Services for the American Red Cross in Birmingham, Alabama. Dr. Salina Gairhe’s defense was on September 23, 2010. The title of her dissertation was “Myoendothelial Gap Junctional Signaling Regulates Pulmonary Arterial Smooth Muscle Phenotype.” Dr. Ivan F. McMurtry served as her Major Professor.

Graduate Students: Glenda Parra-Bonilla was awarded a two-year American Heart Association Predoctoral Fellowship. Salina Gairhe received a travel award to attend the American Thoracic Society International Conference in New Orleans, May 14-19, 2010. She also received the Outstanding Graduate Student Award from International Student Services. Luai Hasour received a scholarship grant from the Alabama EPSCoR Graduate Research Scholars Program.

Four faculty members were promoted in the Department of Pharmacology. Drs. Abu-Bakr Al-Mehdi, Thomas Rich, and Songwei Wu were promoted to Associate Professor. Dr. Mykhaylo Ruchko was promoted to Assistant Professor. In regard to teaching and training, Dr. Abu-Bakr Al-Mehdi was appointed Curriculum Coordinator, Human Simulation and Integrated Case Studies for the College of Medicine. He continues to serve as course director for the Medical Pharmacology course.

A new Nikon A-1 Spectral Confocal Microscope was purchased for the College of Medicine. This instrument is capable of capturing high-quality confocal images of cells and molecular events at high speed and enhanced sensitivity.

The instrument was obtained from the award of a NIH competitive instrumentation grant awarded to a team of collaborative investigators in the College of Medicine and the College of Engineering. Dr. Tom Rich is the principal investigator on the grant.
2009-2010
Summary of Scholarly Activities
Department of Physiology

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


Jian MY, Thorneloe K, Townsley MI. Effect of GSK1016790A, a potent TRPV4 agonist, on lung endothelial permeability. FASEB J 2010;24:797.5.


Methner C, Cohen MV, Downey JM, Krieg T. Both A₂a and A₂b adenosine receptors are necessary to reduce infarct size at reperfusion in mouse hearts. J Mol Cell Cardiol 2010 Mar;48(Suppl 1):S159-60. Abstract no. P-3-25-5.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Ballard ST. Invited speaker. CFTR mutations in dogs. University of Pennsylvania; 2010 Apr 21; Philadelphia, PA.

Cohen MV. Invited speaker. The biology and mechanisms of ischemic preconditioning. Unofficial satellite symposium of 2009 American Heart Association Scientific Sessions; 2009 Nov 15; Orlando, FL.

Cohen MV. Invited speaker. Cardioprotective A2b adenosine receptors are localized to mitochondria rather than the sarcolemma. XXth World Congress International Society for Heart Research; 2010 May 14; Kyoto, Japan.

Cohen MV. Invited speaker. Both A2a and A2b adenosine receptors are necessary to reduce infarct size at reperfusion in mouse hearts. XXth World Congress International Society for Heart Research; 2010 May 16; Kyoto, Japan.

Cohen MV. Invited speaker. Suppressed radical production by intracellular A2b adenosine receptors in rabbit cardiomyocytes. XXth World Congress International Society for Heart Research; 2010 May 13; Kyoto, Japan.


Downey JM. Invited speaker. A2b receptors in cardioprotection. Adenosine A2b workshop; 2009 Dec 5; Padova, Italy.


Downey JM. Invited speaker. Ischemic preconditioning, the key to protecting the heart. Anesthesia Grand Rounds. University of Rochester; 2010 Apr 8; Rochester, NY.

Downey JM. Invited speaker. Redox signaling in cardioprotection. XXth World Congress International Society for Heart Research; 2010 May 14; Kyoto, Japan.

Downey JM. Invited speaker. Protecting the ischemic heart. Peter Harris Distinguished Scientist Award. XXth World Congress International Society for Heart Research; 2010 May 14; Kyoto, Japan.


Lincoln TM. Invited speaker. Cyclic AMP dependent protein kinase and expression of smooth muscle specific genes. Experimental Biology 2010; 2010 Apr 27; San Diego, CA.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Physiology maintained excellent overall extramural funding for the 2009-2010 year. Drs. David Weber and Stephen Ballard were recipients of grants from NIH and the Cystic Fibrosis Foundation, respectively. Drs. Michael Cohen, James Downey, and Mary Townsley received awards provided by pharmaceutical companies. In total, the Department of Physiology has over $2.5 million in extramurally funded awards over the past year.

Faculty in the Department of Physiology maintained high visibility in local, national, and international scientific communities. Several faculty members (Drs. Ballard, Downey, Lincoln, Taylor, Townsley, and Yang) presented external seminars and invited symposium talks at scientific meetings. Dr. Mary Townsley continues to chair the American Heart Association United Peer Review Steering Committee. Drs. Cohen, Downey, Lincoln, and Townsley all serve on the Editorial Boards of several scientific journals. Dr. Mark Taylor was named Director of the College of Medicine Imaging Core Facility. Dr. Townsley serves as Chair for the LCME Task Force, charged with a college-wide self-study of educational and academic programs.

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

Teaching activities continue 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." Dr. Lincoln continued as course director for Medical Physiology and Graduate Physiology Special Topics. Dr. Weber assumed the role of Director of the Vascular Biology Graduate Program, a focus area for Basic Medical Sciences. 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.
2009-2010
Summary of Scholarly Activities
Department of Psychiatry

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Parker SK. Invited speaker. An overview of AltaPointe Health Systems and the University of South Alabama Department of Psychiatry. Mobile Bay Psychiatric Society; 2010 Jun 17; Mobile, AL.

Parker SK, Franks R. Invited speakers. Handling the stress associated with the Gulf of Mexico oil spill. University of South Alabama Med School Café; 2010 Jul 22; Mobile, AL.

Penaskovic K. Invited speaker. I wish I knew then what I know now: taking over the reins of a psychiatry clerkship. Assoc of Directors in Medical Student Education in Psychiatry (ADMSEP); 2010 Jun 13; Jackson Hole, WY.

Simkin DR, Else I. Invited speaker. Media theater presentation. Hawaii – a film that can be used to teach cultural diversity and bias, as well as countertransference and transference issues. The American Academy of Child and Adolescent Psychiatry Annual Meeting; 2009 Oct 29; Honolulu, HI.

V. NATIONAL PROFESSIONAL RECOGNITION


VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

J. Luke Engerer, M.D. was appointed as the Director of Residency Training in November 2009. Under his direction significant improvements were made in the quality
of the educational experience for residents. His collaboration with the Departments of Psychology and Neurology has strengthened our curriculum.

Dr. Engeriser has redesigned our website to improve both our recruiting of potential residents as well as departmental communication.

Our faculty and residents are committed to increasing their scholarly activity. In addition to increased publication over the past year, there are several additional articles in press. The faculty’s dedication to teaching is evident.

Dr. Shakeel Raza received clinical instructor of the year award in July 2010 by the Physician Assistant students. Dr. Kenan Penaskovic received the Red Sash Award on May 7, 2010 voted by the senior College of Medicine students. Dr. Fasiha Haq, PGY 2, was the recipient of the William J. Patterson Resident Research Award at the Alabama Psychiatric Society Spring Meeting. At this meeting, J. Luke Engeriser, M.D. was elected Treasurer and Kenan Penaskovic, M.D. was elected Membership Chair of the Alabama Psychiatric Society.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Brogdon BG. Invited speaker. Murder, or not! The Southern Radiological Conference 53rd Annual Meeting; 2010 Jan 30; Point Clear, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Byron G. Brogdon serves on the Editorial Board of the Journal of Forensic Sciences; Member of the Advisory Board of Virtopsy Foundation, Berne, Switzerland; Member, Research Committee, 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. 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. Brogdon has been appointed Overseas Expert in Forensic Medicine by the Ministry of Health, Singapore.

Dr. Maria Figarola was appointed as Delegate to the American Medical Association as a University Radiologist. President, Southern Radiological Conference, Manuscript Reviewer: American Journal of Radiology.

Dr. Donald E. Herbert serves as a member of the Biological Effects Subcommittee of the American Association of Physicists in Medicine. He continues to serve as a reviewer for the Journal of Medical Physics.

Dr. 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.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Dr. Jeff Brandon was appointed acting chair following the unexpected and tragic death of Dr. Steven Teplick.

Dr. Byron G. Brogdon conducts two to three Orthopaedic conferences as well as two to five 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 Winter 2010.

Dr. Maria Figarola continues to be the CME Director for the Department of Radiology. Dr. Figarola continues to bring in outside Radiologists/Speakers for Grand Rounds for the Department. Dr. Figarola continues to organize the Journal Club’s quarterly meeting. She was the primary advising radiologist on the administrative team that purchased a new state of the art Toshiba Aquilion One CT for USA Children & Women’s Hospital, July 2010.

Dr. Donald E. Herbert has been invited to prepare another chapter on Modern Statistical Modeling for the monograph; Advances in Medical Physics 2012. Dr. Herbert is also working on a paper entitled Misclassification of Pulmonary Hypertension in Sickle Hemoglobinopathies using Doppler-Echocardiography. Dr. Herbert continues to revise and expand his series of lectures on medical statistics: Models in Medicine. He continues
to work 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, Estimation and Inference on Heterogeneous Data: The EM and MCMC Methods and An Introduction to Evidence-based Statistics: Bernard’s Dilemma, I Stein’s Paradox and Bayes’ Theorem. Dr. Herbert continues to provide statistical consultations to USA COM faculty as his time permits.

Dr. Ian G. Malcolm returned to the Department of Radiology full-time as Associate Professor and Section Chief of Chest from University of Alabama.

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 2010 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. Qureshi has been placed in charge of AD Hoc Breast & Women’s Imaging for the Alabama Academy of Radiology. She is also secretary of the Faculty Assembly Offices.

Dr. Todd Standley was a contributing advisor on the Toshiba Aquilion One CT purchase for USA Children & Women’s Hospital, July 2010.
2009-2010
Summary of Scholarly Activities
Department of Surgery

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Bosarge PL. Invited speaker. Pelvic fractures in the hemodynamically unstable patient. Greater Gulf Coast Trauma Symposium; 2010 Jan 25; Mobile, AL.

Contreras CM. Invited speaker. Selective use of arterial resection during pancreaticoduodenectomy for pancreatic cancer is effective. 117th Scientific Session, Western Surgical Association; 2009 Nov 11; San Antonio, TX.

Dyess DL. Invited speaker. Breast cancer in 2010. Medical Alumni Weekend, College of Medicine, University of South Alabama; 2010 Jun 4; Orange Beach, AL.

Dyess DL. Invited speaker. Screening for patients with colorectal cancer. Alabama Chapter of the American College of Surgeons; 2010 Jun 12; Point Clear, AL.

Frye KE. Invited speaker. Advances in burn wound excision. 22nd Annual Southern Region Burn Conference; 2009 Nov 6; Shreveport, LA.

Frye KE. Invited speaker. Fibrin sealant use in burn wound excision. 22nd Annual Southern Region Burn Conference; 2009 Nov 7; Shreveport, LA.

Gandy RE. Invited speaker. Alabama Chapter of the American College of Surgeons; 2010 Jun 11; Point Clear, AL.

Gandy RE. Invited speaker. History of medicine. DREAM Program for Underrepresented Minorities, USA Medical Sciences Building; 2010 Jul 6; Mobile, AL.

Gonzalez RP. Invited speaker. Current management of colorectal injuries. Greater Gulf Coast Trauma Symposium; 2010 Jan 25; Mobile, AL.
Gonzalez RP. Invited speaker. Pre-hospital clinical clearance of the cervical spine: a prospective study. Southeastern Surgical Congress; 2010 Feb 22; Savannah, GA.

Gonzalez RP. Invited speaker. Patient transport from rural vehicular trauma sites. Does aeromedical evacuation improve survival? Alabama Chapter of the American College of Surgeons; 2010 Jun 12; Point Clear, AL.

Gonzalez RP. Invited speaker. Rural EMS en route IV insertion improves IV insertion success rates and EMS scene time. Midwest Surgical Association; 2010 Aug 3; Mackinac Island, MI.

Hodge JS. Invited speaker. Violence against women. Eta Phi Chapter of Chi Eta Phi Sorority, Inc., Alabama State Nurses Association and Mobile County Nurses Society, Annual Nurses Week Seminar, Providence Hospital; 2010 May 15; Mobile, AL.


Luterman A. Invited speaker. The use of artissR fibrin sealant (human) in burn surgery skin grafting. Luncheon Seminar, Sponsored by Baxter Healthcare, 22nd Annual Southern Region Burn Conference; 2009 Nov 6; Shreveport, LA.

Luterman A. Invited speaker. Burn care: what a trauma doc needs to know about burns. 2010 Greater Gulf Coast Trauma Symposium, University of South Alabama; 2010 Jan 25; Mobile, AL.

Luterman A. Invited speaker. Fibrin sealant in burn treatment. Baxter Dinner Presentation, Original Oyster House, Dauphin Street; 2010 Mar 20; Mobile, AL.

Luterman A. Invited speaker. Lessons from the burn world for the foot and ankle orthopaedic specialist. 21st Annual Southeastern Orthopaedic Foot Club Meeting; 2010 May 13; Sandestin, FL.

V. NATIONAL PROFESSIONAL RECOGNITION

Daniel A. Beals serves on the American Pediatric Surgical Association (APSA) Ethics Committee.

Patrick L. Bosarge serves as a Major in the United States Army Reserve and was a recipient of a United States Army Commendation Medal.
D. Lynn Dyess serves as a member of the Breast Disease Committee for the National Surgical Adjuvant Breast & Bowel Project (NSABP); the American College of Surgeons – State Chair for the Commission on Cancer; and as a Board Member of the Alabama Chapter, American College of Surgeons.

Roy E. Gandy serves on the Editorial Board of Current Surgery and is a Member of the Association of Program Directors in Surgery.

Richard P. Gonzalez serves as Chairman on the Gulf Region State Trauma Advisory Council. He also serves on the Alabama State Trauma Advisory Council and Committee on Trauma Care.

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 Laparoscopic & 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 and Resource Editor, Association of Women Surgeons and Career Development; Executive Council of the American College of Surgeons Medical Student Committee; International Pediatric Endosurgery Group (IPED) Co-Chair, Standards & Safety Committee, Publication Committee, and Emerging Technology Committee; and SAGES Pediatric Liaison 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 (DIO) for the Accreditation Council for Graduate Medical Education (ACGME) of the American Medical Association. 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 on the Sanofi-Aventis, Regeneron, Data Safety Monitoring Board (DSMB). He serves on the Editorial Board of the following journals: American Surgeon, Current Surgery, New Directions in Critical Care Nursing, and the Journal of Burn Care and Research. He serves as an invited reviewer for the Journal of Trauma and the Journal of the American College of Surgeons. He is listed in America’s Top Doctors (8th edition/2009 and 9th edition/2010): Castle Connolly Medical Ltd. New York and Best Doctors in America Data Base: Best Doctors in America Inc.

William O. Richards serves as a Member of the Board of Governors for the Society of American Gastrointestinal and Endoscopic Surgeons and for the American College of Surgeons. He serves as an ad hoc reviewer for the Annals of Surgery, Surgical Endoscopy, Digestive Diseases and Sciences, Journal of Surgical Research, and Surgery. He is Editor for the Journal of Laparoscopic and Advanced Surgical Techniques. He is Joint Professor, Department of Physician Assistant Studies, College of Allied Health Professions, University of South Alabama; and an External Associate of the
Vanderbilt Institute for Integrative Biosystems Research and Education. He is the recipient of the 2010 Research Grant Award from the Society of American Gastrointestinal and Endoscopic Surgeons and American Society for Metabolic and Bariatric Surgery.

Charles B. Rodning serves as President-Elect, Alabama Chapter, American College of Surgeons; and President-Elect, Medical Society, County of Mobile. He also serves on the Board of Trustees of the Mobile Medical Museum and the Christian Medical Ministry of South Alabama. He is a recipient of the Distinguished Service Award/2010, Alumni Association, College of Medicine, University of South Alabama.

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

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Surgery (DOS) continues to mature under the able leadership of William O. Richards, M.D., F.A.C.S., Professor and Chairman. Despite the evolving medical economic environment, the heightened morale and enthusiasm of the residents and faculty of the Department of Surgery is readily apparent. The core value system of the Department of Surgery – commitments to surgical education, community service, and research in relationship to the art and science of surgery – remains foremost in our objectives and planning.

Trauma/critical care surgery: Initiatives for the Division of Trauma/Critical Care Surgery have centered on the development of the Level 1 Trauma System within the State of Alabama. USA faculty are substantively involved in the planning and the execution of a trauma system within the state. Organizational meetings to review hospitals that wish to become part of the trauma system and development of a plan for funding will be presented to the State. Dr. Richards was appointed by the Medical Association of the State of Alabama as one of the representatives to the Statewide Trauma Committee in September 2010. The committee chaired by Dr. Don Williamson will investigate and make recommendations to the State legislature regarding the funding for the statewide trauma system.

During this past year, the Division of Traumatology/Surgical Critical Care recruited two new faculty—Patrick L. Bosarge, M.D., F.A.C.S. who completed his trauma/critical care fellowship at the University of CA, San Diego has returned as a trauma/critical care surgeon and Sid Brevard, M.D., F.A.C.S. trauma/critical fellowship trained, former U.S. Air Force Flight Surgeon, joined the Department in July, 2010. These two critical care trained surgeons have greatly increased the capabilities of our trauma unit.

The DOS hosted the First Annual Greater Gulf Coast Trauma Symposium, January, 2010, coordinated by Richard P. Gonzalez, M.D., F.A.C.S., Professor and Director, Center for Traumatology and Surgical Critical Care. Numerous faculty from the Department of
Surgery participated in that valuable educational endeavor which focused upon numerous aspects of traumatology and acute care surgery.

Kenneth L. Maddox, M.D., F.A.C.S., Professor and Vice-Chairman, General Surgical Division, Michael E. DeBakey, Department of Surgery, Baylor College of Medicine, Houston, Texas, graciously served as the William A. L. Mitchell Endowed Lecturer in Traumatology and Surgical Critical Care, March, 2010.

He is a pre-eminent authority in relationship to those topics and holds prominent national leadership positions in the American Association for the Surgery of Trauma and the Committee on Trauma/American College of Surgeons.

USA Burn Center. The University of South Alabama Burn Center admits greater than 400 patients a year from the Gulf Coast region. A multispecialty team of physicians, nurses, therapists and technicians provide the complex care required for successful recovery and rehabilitation from these injuries. The Department of Surgery is instrumental in providing the leadership and surgical and critical care expertise for this effort. The center also serves as a major teaching resource for the College of Medicine undergraduate and graduate students (residents and fellows), Nursing and paramedical personnel. The center is a community resource serving as tertiary treatment resource center for the medical services of southern Alabama, southern Mississippi, western Florida and eastern Louisiana. The University of South Alabama Burn Center has served in this capacity for over 30 years and is the only Burn Treatment facility in a roughly 400 mile radius area servicing more than 1.5 million people.

The University of South Alabama Burn Center has been instrumental in the development of numerous new modalities of burn care and is internationally recognized for its contributions in burn care. An active research program continues with the mission to expand and develop new modalities for ongoing care of burn patients. The results or outcomes of patients treated at this center as reported by the National Burn Data Base of the American Burn Association shows superior results with survival data that far exceeds the national averages. Continuing research efforts and ongoing support from the University of South Alabama Medical Center, and the University of South Alabama College of Medicine continues so that the prognosis for burn patients will continue to improve.

Surgical Oncology was a major focus during the past year as a number of oncologic surgeons have been interviewed and recruited. The DOS perceives that there is a huge opportunity for development of Surgical Oncology along the Gulf Coast and has initiated dialogue with Dr. Boyd and his colleagues at the USA/Mitchell Cancer Institute (USA/MCI) to develop such a program.
Surgical Oncology now has a number of physicians as associate or affiliate members of the USA/MCI including: D. Lynn Dyess, M.D., F.A.C.S., Paul F. Rider, M.D., F.A.C.S., and Dr. Richards, all of whom interact with other physicians at the USA/MCI to discuss multidisciplinary care of patients with cancer.

Carlo Contreras, M.D., F.A.C.S., who has recently completed his fellowship in Surgical Oncology at the M.D. Anderson Hospital in Houston, TX, joined the DOS, September, 2010. Dr. Dyess and Dr. Contreras will have their academic offices and clinics within the USA/MCI and be the first surgeons within the DOS to develop a close relationship with the USA/MCI. The DOS is recruiting a second fellowship trained Surgical Oncologist.

Colorectal Surgery: Dr. Rider has developed a very active program in colorectal surgery and has worked closely with the USA/MCI in development of critical pathways for treatment of colon and rectal cancers. Dr. Rider is the sole colorectal surgeon in Mobile, so we think that there is substantial potential for recruitment of other colorectal surgeons to bolster our service to the community and our educational mission.

Bariatric Surgery: A bariatric surgical program has been established by Dr. Richards. Ms. Tammy O’Haver was recruited to provide expert dietary education pre- and post-operatively. The third floor of the USA Medical Center (USAMC) has been designated as our Bariatric floor and additional training in the care of bariatric patients has been initiated with the assistance of Ms. Valerie Heinl, RN. Furthermore, to amplify the program, we have applied to BLIS Insurance Program for inclusion. That program allows patients who wish to pay cash for their bariatric procedure to be insured on the BLIS Program against complications that might occur. Ultimately, the program is preparing to perform 125 cases per year and we plan to apply for Center of Excellence designation from the American College of Surgeons in 2011.

Pediatric Surgery: We have recruited a second full-time Pediatric surgeon, Daniel A. Beals, M.D., F.A.C.S., who joined the practice August 1, 2009. The addition of Dr. Beals has dramatically increased the numbers and types of cases being performed by the Pediatric Surgical Service. The Division experienced a 62.9% increase in charges between 2009 and 2010. As the DOS anticipates the renovation and expansion of the wards and operating rooms at USA Children’s and Women’s Hospital, we plan to recruit a third pediatric surgeon to handle the marked increase in operative cases being performed by the Pediatric Surgery Service.

General Surgery: Julie A. Freischlag, M.D., F.A.C.S., The William Stewart Halsted Professor and Chairman, Department of Surgery, Johns Hopkins University, and Surgeon-in-Chief, Johns Hopkins Hospital, Baltimore, Maryland, served superbly as the Emmett B. Frazer, M.D., F.A.C.S./Milton M. Leigh, M.D., F.A.C.S. Memorial Lecturer, April, 2010. She is an exceptional authority in relationship to peripheral occlusive arterial disease and surgical education and serves as Editor-in-Chief of the Archives of Surgery.
Several faculty members were recipients of the Red Sash Award from the Graduating Class, College of Medicine, 2010, for their teaching excellence, including: Drs. Gandy, Hodge, Luterman, and Rodning. The DOS is incredibly proud of the excellent teaching provided by these surgeons.

Resident Education: Dr. Bosarge was installed as Program Director, DOS, December, 2009. The Assistant Program Director, Roy E. Gandy, M.D., F.A.C.S., served admirably while Major Bosarge was deployed to Iraq as a US Army Surgeon. Dr. Bosarge has reinvigorated resident education. That emphasis on the acquisition of basic and clinical science knowledge resulted in improvements in virtually every single resident on the annual ABSITE standardized test. In addition, recently 3 out of 4 of the graduating chief residents notified us of their successful passing score for the ABS Qualifying Examination. This 75% pass rate thus exceeds the 65% mark that is mandated by the ABS. An Interesting Case Conference has evolved to a specific senior resident and attending presentation of an interesting case along with the salient clinical and basic science facts ending with a question and answer period that has heightened the learning experience for the residents. Dr. Bosarge has done a yeoman’s job of proctoring the review of Schwartz’s Textbook of Surgery for the residents and there is a high attendance at these conferences with vigorous discussion. Another important aspect of the DOS resident education is the increase in the number of operative cases being performed at USAMC.

Operating Rooms USAMC: It was quickly recognized that USAMC had a limited number of operating rooms and thus increased capacity could not be added without expansion. However, as previously discussed, we have expended considerable effort and manpower to provide 24/7/365 coverage of our surgical intensive units and the Level 1 Trauma Center, with in-house attending surgeons as well as a resident night float system that provides expert coverage. Over the past year a substantial increase of general surgery operative cases, primarily bariatric, MIS foregut, and colorectal, has yielded a substantial increase in the volume of cases and an increase in the percentile of insured patients.

Finances: At every faculty meeting this past year, the need for careful attention to billing has been emphasized. One of the major initiatives was the development of General Surgical Consultation and Admission templates that enable careful documentation of attending involvement. These notes also incorporate clinical features that are necessary to complete the National Surgical Quality Improvement Project (NSQIP) forms which will allow for accurate and complete depiction of the co-morbidities and risk factors for patients undergoing operative procedures at USAMC. These initiatives have increased our charges by 7.4% and our billing percentage by 3%, which has resulted in a healthy 14% increase in revenues to the DOS over this past year with the same number of faculty. In addition, the DOS has been very frugal and decreased cost to below that budgeted.
NIH Funded Research: Dr. Richards has successfully transferred his NIH grant “Biomagnetic Signals of Intestinal Ischemia,” which is funded through NIDDK. Significant research alliances have been made with the College of Engineering (Dr. Tom Thomas and Dr. Silas Leavesley) to support and renew this grant. The renewal project was submitted July, 2010, and several visits to Vanderbilt University to work on the grant were initiated by Dr. Richards. Co-investigator, Dr. Allen Bradshaw, visited Mobile, AL, during 2009, for a series of seminars and collaborative discussions regarding the research project.

Funded Research Projects: Considerable interest in metabolism, obesity, and metabolic syndrome has engendered collaborations among Dr. Richards and COM researchers throughout the year. Two research projects were funded with Dr. Richards as the Principal Investigator—one from the Society of American Gastrointestinal and Endoscopic Surgeons entitled “Erythrocyte and Adipocyte G6PD Activity Levels Correlate with Differing Degrees of Dyslipidemia, Insulin Resistance, and Obesity.” That research project segways with Dr. Sachin Gupta in attempting to correlate basic science discoveries to patients undergoing bariatric surgery. Mr. Andrew Schneider is a Senior Pre-Medical student and is doing his honors thesis in relationship to this project. The other grant was funded by the American Society for Metabolic and Bariatric Surgery entitled, “Vascular Endothelial Changes after Bariatric Surgery.” That clinical research aims to translate basic science findings by Dr. Diego Alvarez and Dr. Donna Cioffi from the USA Center for Lung Biology to morbidly obese patients. Additional collaborators include Dr. Lyudmila Rachek, who is looking at mitochondrial function in diabetic individuals undergoing bariatric surgery. Dr. Gonzalez received funding for a research project entitled “Optimizing Pre-hospital Time and Appropriate Utilization of Rural Medical Evacuation Helicopter Services.” Overall, the DOS aspires to amplify greatly its clinical research activities with pharmaceutical and device manufacturers as well as with the NIH working in close collaboration with our basic scientists.

Surgical Resident Research: The DOS commitment to resident research is also ongoing and amplified by the success of Dr. Josh Chouteau, who has been working with Mark Gillespie, Ph.D., Professor and Chairman, Department of Pharmacology. Dr. Chouteau received the James Glenn Donald, III, M.D., F.A.C.S. Memorial Resident Paper Competition Award at the 2010 Annual Meeting of the Alabama and Mississippi Chapters of the American College of Surgeons. His presentation was entitled "A mitochondrially targeted DNA repair enzyme prevents oxidant-induced edema formation in ex vivo perfused lungs."

Dr. Jack Rostas began his basic science experience working with Dr. Rajeev Samant in the USA/MCI. The goal of that research is to investigate the role of N-myc interactor in modulating breast tumor progression.

Junior Student Clerkship Direction. One of the new initiatives for the DOS is the institution of hands-on training in basic knot tying and surgical suturing skills for all of
the incoming junior medical students during their June orientation prior to their clinical rotations. Many of the surgical faculty were organized by Celeste Hollands, M.D., F.A.C.S., and Dr. Gandy to participate in this activity after watching videos of the techniques to be learned. It is anticipated that further training in surgical techniques and simulations will be developed in the future.

The faculty of the Department of Surgery strive daily to fulfill their missions as clinicians, educators, and investigators. The implications of the Health Reform Act and what it portends for not-for-profit, safety net, public hospitals, are unclear. Nevertheless, we continue to provide substantive clinical, educational, and investigative opportunities for our students and residents.
I. Published Journal Articles, Book Chapters, and Patents


II. Published Abstracts


Shipman JP, Staggs GB, Funk CJ. Jammin' with the results of the MLA/NLM health information literacy research project. Southern Chapter/Medical Library Association Annual Meeting [Internet] 2009 Oct 28-Nov 1; Memphis, TN [cited 2010 Aug 4]; Available from: http://library.uthsc.edu/scmla09/program/papers/

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Burnham J. Invited speaker. Bibliometrics. University of Southern Mississippi School of Library and Information Science, Research Class; 2010 Apr 15; Online.

Rossini B. Invited speaker. Health information literacy: University of South Alabama Health Disparities Research Group; 2009 Nov 20; Mobile, AL.

Staggs GB. Invited speaker. Jammin' with the results of the MLA/NLM health information literacy research project. Southern Chapter/Medical Library Association Annual Meeting; 2009 Oct 31; Memphis, TN.

Wright AL. Invited speaker. Web 2.0 tools in clinical practice and PT education: keeping current, sharing information, and marketing. The Annual Conference and Exposition of American Physical Therapy Association; 2010 Jun 17; Boston, MA.

Wright AL. Invited speaker. Monitoring your web traffic with Google Analytics. University of South Alabama Baldwin County Campus Social Media Conference; 2009 Dec 9; Fairhope, AL.
Wright AL. Invited speaker. Mobility: keeping up with customers on the go. University of South Alabama Baldwin County Campus Social Media Conference; 2010 Aug 11; Fairhope, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Robert Britton is Chair of the Continuing Education Committee, Alabama Health Libraries Association. Robert is also editor of Synapse, the newsletter of the Alabama Health Libraries Association.

Judy Burnham is a member of the Medical Library Association Board and is Section Council Chair/Medical Library Association. She is a Research Mentor for the Southern Chapter/Medical Library Association and is Secretary of the Consortium of Southern Biomedical Libraries (CONBLS). Judy is a Distinguished member of the Academy of Health Information Professionals.

Clista Clanton is Chair of the Medical Library Association Credentialing Committee and is a member of the Honors & Awards Committee, Southern Chapter/Medical Library Association. Clista is a Senior member of the Academy of Health Information Professionals.

Trey Lemley is President of the Alabama Health Libraries Association (ALHeLA) and is a member of the Research Committee of Southern Chapter/Medical Library Association.

Jie Li is Chair of the Health Libraries Partnership Committee of International Cooperation Section of the Medical Library Association. She is also Chair of the Emergency Preparedness Committee, Alabama Health Libraries Association (ALHeLA) and a member of the Emergency Preparedness Committee of the Regional Advisory Committee of the National Network of the Libraries of Medicine (NNLM) Southeast-Atlantic Region (SE/A). Jie is a Distinguished member of the Academy of Health Information Professionals.

Justin Robertson is a member of the Technology Committee, National Network of Libraries of Medicine, Southeastern/Atlantic Region, and is a member of the Public Relations Committee, Southern Chapter/Medical Library Association and served on the Editorial Board, Journal of Electronic Resources in Medical Libraries (Haworth Press). For Health InfoNet, Justin serves as a Co-State Administrator, Health InfoNet/Go Local Expansion Project, a member of the Advisory Board Committee and a member of the Education Committee, and Standards Committee, Justin is a Senior member of the Academy of Health Information Professionals.

Beverly Rossini is a member of the Education and Training Committee for the Sharing and Transforming Access to Resources Section (STARS) division of the Reference and Users Association (RUSA) of the American Library Association (ALA), 2009 -2011.
She presented on Health Information Literacy to the Health Disparities Research Group in Mobile.

Geneva Staggs has been recognized as a Specialist in Consumer Health Information by the Medical Library Association. Geneva is a member of the Southern Chapter/Medical Library Association Bylaws Committee and received the Southern Chapter/Medical Library Association Martha C. Watkins Memorial Scholarship for the 2009 meeting. Geneva is a Distinguished Member, Academy of Health Information Professionals.

Andrea Wright serves on the Medical Library Association 2011 National Program Committee and won the EBSCO/Medical Library Association Annual Meeting Grant. Andrea is a member, Communications Committee, Southern Chapter/Medical Library Association, and serves as Member-at-Large for the Alabama Health Libraries Association.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Services
A mobile devices/resources web page was developed. It is formatted for the mobile device and links to appropriate resources tools for the mobile device. The Biomedical Library also started a Facebook page to enhance communication with our users, with over 100 individuals following the postings.

Two librarians continue to attend committee meetings at both the Medical Center and the Children’s and Women’s Hospital. Additional, a librarian is attended the Graduate Medical Education Committee.

The service continuity plan was put to the test during the threat of snow in February. We were able to monitor the ILL requests, the reference e-mail account and the reference chat from off site. In conjunction with the Alabama Health Libraries Association, a web page, http://www.alhela911.org, was established that will allow users to access our resources if the University is without power or our servers are unavailable. It links via our proxy page so resources can be used off campus. Documents concerning the disaster preparedness plan were deposited in an off-site server for access in case of a disaster.

Librarians are working with others from the COM to develop medical informatics curriculum for the 3rd Year medical students.

The Medical Matters wiki was expanded to include resources for unaffiliated health care professionals and link to teen health sites.

Two librarians served on LMCE committees.
The Biomedical Library newsletter, Biofeedback, is now distributed electronically with print copies available only upon request.

The Biomedical Library faculty, in conjunction with the College of Medicine Curriculum Committee is developing a longitudinal curriculum for medical informatics.

Facility
Two additional group study rooms were constructed on the third floor, with funding provided by the Colleges of Medicine, Nursing and Allied Health Professionals.

Outreach
During National Medical Librarians Month (October), the BL set up information tables at the sites of our user populations -- the USA Medical Center, Children's and Women's Hospital, Health, Allied Health and Nursing Building and Medical Sciences Building. We also participated in the USA Health Employee Benefits Fair and a Health Occupations Career Fair.

Grant funding provided for two community events that focused on disaster preparedness with one held at Mobile Public Library and another at Fairhope Public Library. Librarians demonstrated technology tools that can be used to prepare for and following a disaster and other exhibitors such as the first responders participated. Another grant funded outreach project involves developing a network of health ministry leaders in areas of high health disparities and helping them locate the health information needed by their congregations. The culmination of this project will be community health fairs. The Biomedical Library is also involved in a grant funded outreach project at the Our Neighborhood Health Clinic, the Dumas Wesley Community Center clinic and the 15 Place clinic. The librarian's participation focuses on health literacy. The Biomedical Library exhibited at the Alabama Rural Health Association meeting using grant funding.

Librarians provided curriculum and training for the DREAM program and the STARS & STRIPES programs, all minority pipeline programs.

Librarians presented at several sessions of the Joint Social Networking Task Force in Baldwin County, at the Alabama Society of Physician Assistants and at the American Physical Therapy Association.

Resources
The e-book web page has been revised to include a search boxes for title and chapter keywords, an alphabetical list and a topic list. The Biomedical Library is continuing to work on identifying an adequate federated search engine to search across multiple e-book platforms. E-books are being added to the online catalog.

For financial reasons, the Biomedical Library cancelled Web of Science. The Scopus database can be used for citation indexing.
The print book collection is being weeded to make the collection more relevant and current.

To provide space needed by the University for other purposes, the journals in the off-site storage facility were withdrawn from the collection. Before withdrawing them, lists were checked to make sure all the titles are available in other medical libraries in our region.
2009-2010
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. Two issues, Fall and Spring, were distributed to our academic colleagues throughout the country as a way to illustrate exciting research and academic opportunities in the Center. Our next issue will be released in the Fall of 2010.

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 several seminars during the past year. Our first guest, Dr. James Klinger, Associate Professor of Medicine at Brown University presented The Role of ANP in Pulmonary Permeability at our Distinguished Scientist Seminar series. Dr. Klinger also gave a Medical Grand Rounds presentation at USAMC entitled The Importance of Right Ventricular Function in Acute and Chronic Pulmonary Hypertension. Our second guest, Dr. Scott Sinclair, Associate Professor Division of Pulmonary, Critical Care and Sleep Medicine at the University of Tennessee Health Science Center, presented Medical Grand Rounds entitled Non-
Pharmacological Interventions in Acute Lung Injury: beyond low tidal volumes. Our Critical Care Conference series in conjunction with the Pulmonary Division hosted three speakers. This conference focuses on translational research and acute lung injury, and is held monthly on Fridays at 2:15 pm. Dr. Sonia Flores, Professor of Medicine at University of Colorado Health Sciences Center presented HIV-related Pulmonary Hypertension: From Monkeys to Humans to the Bench. Dr. Scott Sinclair, Associate Professor Division of Pulmonary, Critical Care and Sleep Medicine presented The Combined Effects of Hyperoxia and Mechanical Stretch on Ventilator-induced Lung Injury. Dr. David Cornfield, Director-Center for Excellence in Pulmonary Biology Professor, Pediatrics - Pulmonary Medicine Stanford School of Medicine presented Developmental Regulation of Oxygen Sensing in the Lung.

Extramural Funding

In the past year, CLB principal investigators submitted 20 grant applications to the American Heart Association (AHA), National Institutes of Health (NIH), and other foundations/industries. To date, five of these applications were awarded generating over $2.4 million in new revenue over the next five years. This represents a 25% success rate in grant submission for this fiscal year.

The Center received two awards from NIH. The first was a competitive renewal received by Dr. Troy Stevens. The second was an instrumentation grant received by Dr. Thomas Rich to purchase a confocal microscope for the new Bio Imaging Facility in the COM. Dr. Natalie Bauer received a Research Scholars Program award in Pulmonary Arterial Hypertension from Gilead Sciences. Dr. Thomas Rich received a Collaborative Research Trials award through GlaxoSmithKline’s Respiratory Medicine Development Center. Glenda Parra-Bonilla, a graduate student in Dr. Troy Stevens laboratory, received a pre-doctoral fellowship from AHA, Greater Southeast Affiliate.

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 seven students for the Summer Undergraduate Research Fellowship (SURF) program. Students participating in
the program and sponsors respectively were John Boni, University of South Alabama (Drs. Diego Alvarez, Silas Leavesley, and Thomas Rich), Kandie Collier, University of South Alabama (Dr. Eugene Cioffi), Kristin Grant, North Carolina State University (Dr. Thomas Rich), Sujata Mulekar (Dr. Abu-Bakr Al-Mehdi), Jaclenw Nickels (Dr. Troy Stevens), Matthew Robson, Alabama School of Math and Science (Drs. Troy Stevens, and Songwei Wu), and Trevor Stevens, Spanish Fort High School (Dr. Songwei Wu).

CLB faculty played an active role in the 36th Annual Medical Student Research Day sponsoring eleven summer medical students. Drs. Sarah Gebb (Chair), Karen Fagan, Susan LeDoux, Sarah Sayner and Mary Townsley served on the Student Research Committee. Students participating in the program and sponsors respectively were LaShaundra Murphy (Dr. William Gerthoffer), Libby Wilson (Drs. Sarah Gebb and John Benjamin), Ryan Kunstadt (Dr. Sarah Sayner), Sara Long (Dr. Brian Fouty), Brian Dilworth (Dr. Stephen Ballard), Jason Largen (Dr. Richard Honkanen), Robert Kobelja (Dr. Sachin Gupta), Sarah Kelley (Dr. James Parker) James Towner (Dr. Glenn Wilson) Nicholas Bates (Drs. John Benjamin and Joseph Brewer) and James Gallé (Dr. Thomas Lincoln). In addition, several students participating in the UCUR and Healthy Communities summer programs were sponsored by CLB members: Maya Battles (Dr. William Gerthoffer), Samantha Stocker (Drs. Silas Leavesley, Thomas Rich, and Diego Alvarez), Alexandria Broadnax (Dr. Troy Stevens and Glenda Parra-Bonilla), Lea Brown (Drs. Eugene Cioffi and Donna Cioffi), Alison Johnson (Dr. Diego Alvarez), Quinton Miles (Dr. Mary Townsley), April Haven (Dr. Mary Townsley).

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 (1:30-2:30 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.

Three students received their Ph.D. this year. Salina Gairhe defended her dissertation on September 23, 2010. Dr. Ivan F. McMurtry served as the major professor on her dissertation entitled Myoendothelial Gap Junctional Signaling Regulates Pulmonary Arterial Smooth Muscle Phenotype. Kevin Lowe defended his dissertation on May 25, 2010. Dr. Troy Stevens served as the major professor on his dissertation entitled Analysis of the Pathologic Impact of Site Specific Accumulations of Extravascular Pulmonary Fluid. Ryan J. Viator received defended his dissertation on April 21, 2010. Dr. Brian Fouty served as the major professor on his dissertation entitled Oxygen Tension Controls Glucose Uptake and Metabolism in Endothelial Cells.

Several graduate students in the CLB training program received special recognition. Glenda Parra-Bonilla received Predoctoral Fellowship awards from the American Heart Association, Southeast Affiliate. Glenda’s project is entitled Essential Role of Lactate Dehydrogenase A
(LDHA) in Lung Neo-angiogenesis and is sponsored by Dr. Troy Stevens, Professor of Pharmacology and Internal Medicine, Director, Center for Lung Biology. Salina Gairhe received a travel award to attend the International American Thoracic Society conference in New Orleans. Cristhiaan Ochoa received a travel scholarship to attend the Gordon Research Conference on Endothelial Cell Phenotypes in Health and Disease in Biddeford, ME.

The NIH-funded T32 training grant on Cell Signaling and Lung Pathobiology, is directed by Dr. Mary Townsley. The T32 supports 6 pre-doctoral trainees per year, along with 4 short-term summer research trainees. Summer trainees are drawn from the COM medical students and engineering master's students who apply 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

PERCIPIO™ 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, PERCIPIO, which means "to learn through the senses". Percipio has been busy with its community outreach component of the Art in Science program. In October, we participated in Med School Café, a lunch and learn lecture series sponsored by the USA Physicians Group. The Mobile Museum of Art hosted the fall series and The Palette Café located in the museum catered the event. Using images from our Art in Science Gallery, Dr. Troy Stevens, Professor of Pharmacology and Medicine, and Director of the CLB, presented a lecture on how art interfaces with science and medicine, specifically relating to lung diseases. A collection of framed images used in the presentation were on display. We received positive feedback from the well attended (approximately 100 people) lecture.

Downtown Mobile comes alive the second Friday of each month with the LoDa Artwalk celebrated in the Cathedral Square arts district. Numerous venues, including art galleries, studios, and specialty shops hold an open house inviting the public in for a personal glimpse. Brad Robertson of the Robertson Gallery graciously hosted a collection of our framed images...
during October’s Artwalk. Artists represented during Artwalk were Abu-Bakr Al-Mehdi, Kathy Bonness, Clayton Campbell, Judy Creighton, and Judy King.

Percipio had a busy schedule this spring with in-classroom art in science presentations on the respiratory system for three local middle schools. Dr. Donna Cioffi, Assistant Professor of Biochemistry and Molecular Biology, presented two art in science seminars at local middle schools. The first at Scarborough Middle School for Ms. Natasha Cox’s 7th grade science classes on February 26, 2010. The second for Ms. Sheela Bhat at Chastang Middle School March 18, 2010 who was interested in using our art in science presentation as an incentive for her life sciences students. The third presentation was given by Dr. Natalie Bauer, Assistant Professor of Pharmacology, for Ms. Natasha Laxton’s 7th grade science classes at Grand Bay Middle School on March 19, 2010.
2009-2010
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.

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.

Title: Broad-based collaborative on minority health and health disparities
Grant #; 1P20 MD002314
Reporting Period May 1, 2009 to May 31, 2010

OVERALL SUMMARY

A.) Objectives
The overall goal of the University of South Alabama Center for Healthy Communities (CHC) Center of Excellence (COE) is to utilize a broad-based collaborative and multidisciplinary effort to address health disparities within the University of South Alabama (USA) service area. In year three of the P-20 grant we have focused on sustaining programs and relationships within our service area. We continue to take an approach based on community based participatory research principles. Our relationships with our community partners have been strengthened and we continue to include those partners in decisions regarding our future.

B.) Studies and Results
The leadership of the COE has remained intact with all core leaders maintaining their roles. We continue meetings of Core leaders 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 members of the internal advisory committee continue to be strong advocates as well as advisors.
The community engagement core strengthened our community health advocates (CHAs) program. A number of CHA initiated projects have been implemented. The CHA initiated projects were focused on the areas of importance outlined in our previous Regional Health Disparities Symposium. We have enrolled several African American churches into a web-based program that facilitates activities of health ministries and allows for a personally created electronic record of health information. The pipeline programs of the community engagement core continue with the successful recruitment and retention of junior high and high school students. We have maintained a relationship with several of our students who have now completed their freshman year of college. We have continued our 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. These students come from the communities on which our COE focus.

C.) Significance

Our efforts continue to increase the community’s knowledge and interest about health disparities. The COE award has been instrumental in enhancing the role of the Center for Healthy Communities (CHC) as a leader and resource in the fight against health disparities along the Northern Gulf Coast. Our CHA’s have been empowered to develop their own initiatives in the fight against health disparities in their own communities. We believe these grassroots efforts are most likely to be successful in this fight.

D.) Publications:

Abstracts/ Presentations


Hudson K, Hawthorne S, Arrieta M, Crook E. The impact of labor market segmentation on access to health care in low income neighborhoods: some preliminary findings. 73rd Annual Meeting of the Southern Sociological Society 2010 Apr 21-24; Atlanta, GA.

Myles H, Hanks RS, Kendrick LA. Youth and adult community health advocates take a stand against health disparities: intergenerational constructions and solutions. Association for Applied and Clinical Sociology 2009 Oct 8-9; San Antonio, TX.
Myles H, Hanks RS, Kendrick LA. Pumping progress: a pipeline to the health professions. Partnering to Improve Health: The Science of Community Engagement, National Center for Research Resources and Association for Prevention Teaching and Research 2010 May 13-14; Arlington, VA.

Myles H, Hanks RS, Kendrick LA. The cycle of success: moving from community identification of priorities to engaging community health advocates in the process of eliminating health disparities. Partnering to Improve Health: The Science of Community Engagement, National Center for Research Resources and Association for Prevention Teaching and Research 2010 May 13-14; Arlington, VA.

Reports from Individual Cores

Administrative Core

A.) Objectives:
The aims of the Administrative Core remain unchanged and 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:
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.

Our internal advisory board, chaired by Troy Stevens, PhD, Professor of Pharmacology and Director of the University of South Alabama Center of Lung Biology, has met and offers advice continually. Other members of the committee come from the Schools of Allied Health, Nursing, Art and Sciences and Education.

As to the second objective, we continue to nurture established relationships. As mentioned above, we are challenged in our capacity to form new partnerships. Therefore, we have focused our efforts on strengthening those relationships currently in existence. We continue to use personal meetings, our newsletter, our website, and collaborative projects to sustain these relationships. Of note, the Core Director and Grant PI, Dr. Crook, gave 12 presentations on health care reform to various groups between May 2009 and June 2010.
The content of the presentation evolved with the health care reform debate and eventual adoption of legislation.

Like last year, we continued our support of the University’s Sickle Cell Center’s annual conference. We supported the keynote speaker, Dr. K. Haskell, MD, Director of the Sickle Cell Center at the University of Colorado Health Sciences. We were able to support the attendance of many of our CHAs at this meeting where important and practical information was disseminated.

**Community Engagement Core**

**A.) Objectives:**
The objectives of the community engagement core remain unchanged and 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:** In year 3 our major intervention to achieve this goal was to nurture 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.

**Community Health Advocate (CHA) Program**

Our CHA program has continued to develop. We now have 127 adult CHAs and 62 youth CHAs (189 total). This represents considerable growth of the program as there were 73 active CHA’s reported at the end of year 2. We have continued our Advisory Board for the CHAs. The Advisory Board is built on a stakeholder model and each stakeholder on the CHA advisory board is a member or leader of a community organization that has provided other CHAs already and are likely to provide more in the future.

This project is based on community-based participatory principles. In year 3, several CHAs identify the health initiatives that deserve priority. Similar to pass years they have continued to focus their efforts on physical activity, obesity, cardiovascular disease, diabetes, hypertension, women’s health, and stress. In year 3 our many of our CHA’s have become trainers for the other CHA’s in many of these areas. The CHA initiated projects have had success and have been used as demonstration projects for other CHA’s to implement in their areas. As in previous years we continue to have monthly meetings for our CHA’s and continue our “Passport Program” to acknowledge their accomplishments and additional training. Certain events and programs to are highlighted below.
Highlighted CHA/YCHA events

**Martin Luther King Day** presented an opportunity to distribute information at the Health Fair at a local community park, Lyons Park. The day’s events also included workshops and seminars at a local community college campus where CHAs and Youth CHAs had an opportunity to participate in open forums and listen to discussions by community leaders. Over 2,000 community members participated and more than 200 people were screened for blood pressure and blood glucose. In a collaborative effort with one of the local community centers, Dumas Wesley, volunteers from across the area, CHAs and University of South Alabama students engaged in hands-on volunteer activities in the 36617 zip code. Dumas Wesley Community Center provides a multitude of services to residents in Mobile. These services include but are not limited to, daycare and after school care, senior programming and transitional housing for women and children. The Martin Luther King Day activities included removing debris from the streets, painting interior walls for low-income residents, repairing a roof for an elderly citizen and building a ramp for accessibility at Dumas Wesley. Over 500 participants assisted in the neighborhood improvements sponsored through the partnership between the CHC Center of Excellence, University of South Alabama and Dumas Wesley Community Center.

**Go Red for Women**, an annual event hosted by the CHC Center of Excellence, was held at a local restaurant, The Spot of Tea, in downtown Mobile. The event emphasized the importance of physical activity to reduce heart disease, obesity, diabetes, stroke and kidney disease. Guest speakers were Alabama State Senator Vivian Figures, a local political figure who has made health care an important part of her legislative agenda, and Dr. Clara Massey, Chief of Cardiologist and Professor at USA. The day’s events concluded with a Dancefit session conducted by, CHA, S Woods, in the Cathedral park across the street from the restaurant. All 115 attendees received tools to facilitate and motivate continued physical activity.

**“Walk for Families”** was sponsored by Dumas Wesley Community Center. The walk was complimented by a health fair where Center of Excellence staff as well as CHAs distributed health information, provided health screenings, and disseminated valuable information about Center programs and services.

Our youth CHA organized and ran an event in August 2009 focused on 5 priority area that they identified. The **“One Night Stand”** was a great success with valuable information and discussions exchanged on teen pregnancy, domestic/ dating violence, obesity, physical activity and HIV / STDs. Many community and governmental organizations participated and described this event as one of the best venues for having access to large groups of teenagers.

**Other Initiatives**

**Online Training Curriculum**

In an attempt to standardize the information being disseminated by CHAs, a health curriculum is being developed. Content areas were determined by health disparities targeted in Healthy People
2010 and those identified by our CHAs. Session topics include: Diabetes, Heart Disease and Stroke, Nutrition and Obesity, HIV/AIDS & STDs, Childhood Asthma, Cancer, Kidney Disease, Injury & Violence Prevention, Health Communication/Literacy and Health Care Policy. Online modules are being developed to provide a convenient venue for training. CHAs will be able to access the curriculum through the COE website.

Community Health Advocate Mini Grant Program
In July 2009 five (5) mini-grants were awarded to active CHA’s. These CHAs developed their proposals with help of Community Engagement Core staff. The proposal outlined the goal to be achieved, the target audience, the needs to be met, the assessment method and a budget breakdown. An application review committee comprised of COE staff and CHA’s reviewed applications and selected the first five projects. Based on the success of these initiatives a second round of the mini-grant program was offered in March 2010 with completion scheduled for June 30, 2010. The first five mini-grants are outlined below. Over 400 participants were involved in the 5 programs outlined below.

W. P. Lewis - Emotional Clutter (Domestic Violence)
Program - Presenting techniques, providing resources and sharing information to and with women dealing with domestic violence to help women identify abusive relationships, evaluate self-worth, and healing through information, education, and hope. Amount awarded: $1000

S. Graham - It's Your Choice, Kids Ready, Set, Fit (Physical Activity / Obesity)
Program - Health and Fitness program for kids from the ages of 9-12, Amount awarded: $1000

D. Thomas - Inspire Me! Zumba Fitness & Obesity Awareness
Program - Zumba fitness group exercise class for obesity awareness and the importance of being active. Amount awarded: $1000

T. McPherson - Listen, Learn, and Live (Blood pressure control and stress reduction)
Program - The project focused on techniques to reduce stress and anxiety and on healthy dietary practices, including food preparation demonstrations. Amount awarded: $1500

B. Rigsby - Hypertension Improvement: A Faith-Based Approach
Program – This faith-based project focused on improving the blood pressure control of African American adults through the implementation of healthy lifestyle modifications.

Participants were given blood pressure measuring devices for the length of the program, monitored their blood pressure, and were given information on healthy dietary and exercise practices to lower blood pressure. Amount awarded: $1976.55

Universal Patient Record Information System (UPRIS)
Many of the CHAs have come to the program as representatives of their respective church’s health ministries. 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. We have provided this resource to 6 churches represented by our CHAs and it will continue through year 5 of the grant. Health ministries are able to find valuable resources from the site. Information is culturally sensitive and focused on health issues of importance to African American congregations.

**Objective 2:** Our major intervention for this objective is our pipeline programs for school age children. We have continued our high school programs STARS (Students Training for Academic Reinforcement in the Sciences) and STRIPES (Special Training to Raise Interest and Prepare for Entry into the Sciences). Students in these 2 programs attend 4 inner-city high schools that are located in our service area. We administer pre- and post-tests to participants, and were happy to see a significant increase in post-test scores over the last summer session.

In the STARS program we had 7 students who participated in classes to enhance their science, math, communication, research and test taking skills. These students will graduate from high school in 2010. In addition, there were 7 students who had experiences in health career arenas during the summer of 2009. These students graduated from high school in 2009. The observerships were in nursing, optometry, pediatrics, sports medicine, family medicine, anesthesiology and pharmacy.

There were 20 students in the STRIPES program. Like the STARS students these rising juniors participated in classes that enhance math and science skills. This program was for 4 weeks and all efforts were made over the year to retain these students as STRIPES for the summer of 2010. Saturday academies were held once a month to encourage retention and to enhance skills in test taking, self-study and career development. In addition, we provided tutoring in areas identified as challenges by our STARS and STRIPES students. Tutoring was provided by medical students so that mentoring could occur.

Like in previous years we are gratified that several of our students were able to take advantage of other special opportunities. We had 2 STARS students selected for a program called STEP-UP. The **Short-Term Education Program for Underrepresented Persons (STEP-UP)** was 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 health disparate areas. This program provided support for eight consecutive weeks of research education and training during the summer provided by Center of Excellence faculty (R. Hanks, Ph.D.) and a cancer researcher (E. Reed, MD). 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:
We had 2 students earn summer scholarships to colleges. One student earned a scholarship to Dillard University, where she eventually matriculated, and another earned a scholarship for a summer internship to the School of Veterinary Medicine at Auburn University. These pre-med and pre-veterinary students took advantage of these opportunities and used the summer of 2009 as a jump-start to their freshman year.

Other 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 6-week session during 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. Like we did in the summer of 2009, we are providing financial support for his program for the summer 2010 with year 3 funds.

Objective 3: Our evaluation plan for the Outreach Core is both formative and summative. As part of the formative evaluation, we continue to look at the process of engagement for CHAs. We have conducted interviews with CHAs to understand their motivation and barriers to being a CHA. We continue discussions with our CHA leadership council regarding the approach to take to evaluate the effective of this strategy. We have continued developing our database to record such indicators as: meeting attendance, training event participation, information delivery, and health education activities in the community. With the initiation of CHA directed projects we have opportunities to evaluate more directly the impact of CHA efforts on lifestyle modification, behavior modification, and enhancement of health literacy / IQ. 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 the last year 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 / 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:
We evaluated the programs that were proposed for this core. In the original proposal we designed The Career Pathway for Minority Scientists (CPMS) program. 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 Townsley, Professor of Physiology and Assistant Dean for Faculty Affairs, USA College of Medicine. The other program was the undergraduate research program where we took undergraduate students from health disparate populations and placed them in summer research experiences.

The Core Leaders, members of the Health Disparities Research Group, and members of the internal advisory committee evaluated both programs with regard to potential impact and overall contribution to the COE. A decision was made to focus on the undergraduate research program. This program allows for a longer experience at a point in the educational careers where students start to make decisions about their professional careers. In addition, it provides a mechanism for us to maintain contact with students who participated in our pipeline program as high school students. It is our hope that maintaining contact with these students, via such a program, will make it more likely that they continue on a path toward a health care career. Of note, there are programs that are available to these students after their sophomore year that can provide a bridge to medical school or other graduate school programs. Therefore, we have decided to focus on providing a research opportunity for our STARS graduates in the summer after their freshman year.

In the summer of 2009 we had 5 students participate in the Undergraduate Research Program. Two of these students were STARS alumni and another was a graduate of a high school in our service area. We ended the summer with a conference where participants did an oral presentation of their work. Students were involved in research on sickle cell, approach to health disparities in the community, childhood obesity, nicotine use in expectant mothers, and impact of employment-based benefits on health seeking behavior. Those in attendance in addition to participants were their mentors, COE staff, and other members of their research groups. Feedback from participants and mentors was positive.

We have 6 STARS alumni who have just completed their freshmen year of medical school participating in the program in the summer of 2010. Mentors have been identified, several of whom have been advisors and mentors for us since the inception of the COE. We have placed our students in labs of the Center of Lung Biology so that they can benefit from the relationships that they built within our programs over the last several years.

While not definite, we hope to have another CPMS session in year 4 of the grant. This program was highly rated by participants in the past, but we had significant challenges in finding participants. Therefore, we will focus on young faculty at the University of South Alabama’s Health Science Division. The health science division includes the Colleges of Medicine, Nursing and Allied Health. Several new faculty have joined these Colleges and CPMS would be of value in assisting them to develop their scientific careers. Moreover, we will have the opportunity, at a
critical time in their career, to demonstrate the importance of pursuing a line of research focusing on health disparities. Identification of potential participants will be facilitated by Deans and Associate Deans who have relationships with our Center.

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/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 disparities. 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.

1) Health Disparities Research Group
The HDRG is an assembly of university faculty and community members who regularly convene to discuss health disparities research and determine local strategies to address the problem. Members come from all 3 colleges in the health science division and the colleges of business, education, and arts and sciences. We have successfully continued this effort and have been able to grow interest in the group’s activities. Meetings are held monthly and participation continues among the core group of participants. The HDRG held a retreat in May 2010 where participants outlined their research interests in an effort to enhance collaborative efforts in health disparities research. In addition, the group determined areas where the HDRG may concentrate some of its collaborative efforts. The collaborative efforts of the HDRG have resulted in a study that is a collaborative project with a community group. This grassroots initiative of the HDRG is one example of the energy and commitment of this group.

2) 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 Core Director (M. Arrieta) and the PI (E. Crook) continue to be sought out by 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. The Core Director monitors all research projects and works with project PI’s to facilitate productive use of COE resources.

A new pilot project has been implemented in year 3 from a RFP to university investigators. This new project was selected from among 24 project applications. We are particularly excited about this project as it is the result of a collaboration between a clinician and a basic science investigator examining a novel mechanism that may explain disparities in cardiovascular disease seen in high risk groups like African Americans. The PI on the grant has presented at Internal Medicine Grand Rounds to highlight the study. This presentation should enhance recruitment into the study and also raised awareness of the opportunities in health disparities research when clinical and basic investigators collaborate. In addition we have announced another RFP for projects to be implemented in year 4.

All project principal Investigators present at HDRG meetings so that all of our partners are aware of their work and can look for ways to collaborate. In these sessions several ideas are shared that ultimately strengthen projects. We have supported health disparities researchers as visiting professors that interact with faculty. We provide local data on health disparities to investigators preparing proposals. In addition, we have evaluated several future options where we may pursue additional funding.

3) Individual Research Projects with Specific Aims- PI: S. Ofori-Acquah, Ph.D.

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 studied 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 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

4) Pilot Projects

Pilot 1
Title: A Family Based Approach for the Treatment of Childhood Obesity
PIs: Judy V. Blair-Elortegui, M.D., (Associate Professor, Department of Internal Medicine), and Daniel Preud’Homme, M.D. (Professor, Department of Pediatrics)

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 were 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.

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
PI: Kenneth Hudson, Ph.D. (Associate Professor, Department of Sociology and Anthropology)

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.

Pilot 4
Title: Community-Based Asthma Intervention Consortium
PI: Loran Clement, M.D. (Professor and Chair, Department 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. 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. 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 health center, a public school system, civic groups, and concerned volunteer individuals.

Pilot 5

Title: A network approach to facilitating continuity of care for chronic diseases in the aftermath of a natural disaster

PI: Martha Arrieta, M.D., M.PH., Ph.D. (Associate Professor, Department of Internal Medicine)

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.

Specific Aims:
1) 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.

2) 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.

Study 6
Bay Area Women’s Coalition – HDRG Collaborative
PIs: Kenneth Hudson, Ph.D., and Martha Arrieta, M.D., M.P.H., Ph.D.

Objective and aims: Underrepresented minority groups are less likely to participate in medical research programs. There is a long history of mistrust for the medical establishment among ethnic minorities. As a result specific interventions that may improve the health of these populations cannot be studied or go undiscovered. We hypothesized that underrepresented groups would be more likely to embrace medical research if they understood it better. This project is a collaborative effort of the HDRG and the Bay Area Women’s Coalition, an advocacy group from one of our target neighborhoods. We felt the best way for health disparate populations to garner an understanding for medical research was for them to be empowered with knowledge of how medical research is conducted, knowledge of how to review the literature on a topic, and knowledge of how to formulate a research question.

Study 7
Heat shock protein 27 (HSP27) as a marker of atherosclerosis
PI: William Gerthoffer, Ph.D. (Professor and Chair, Department of Biochemistry and Molecular Biology)

Objectives and Aims:
We are proposing a pilot study to test the hypothesis that low plasma levels of small heat shock protein 27 (Hsp27) is a risk factor in medically underserved populations of patients who are at high risk for cardiovascular disease. Hsp27 is considered an “anti-atherogenic” protein because it has antiproliferative and anti-inflammatory effects in vascular smooth muscle and endothelial cells. Hsp27 is secreted into the blood in nondiseased individuals, and in one clinical study patients with coronary artery disease had much lower plasma levels of Hsp27 compared to nondiseased patients. There is also cell biological data showing unstable atherosclerotic plaques contain much less Hsp27 than nondiseased arterial tissue. Based on these observations low plasma levels of Hsp27 has been proposed to be a marker of plaque instability. To test the hypothesis that plasma Hsp27 levels correlates inversely with the incidence and severity of coronary artery disease in a high risk, diverse patient population, Hsp27 levels will be measured by enzyme-linked immunoassay in blood samples in a cross-sectional study of three groups of patients: 1. Control volunteers with one or no major risk factors for cardiovascular disease. 2. Patients with multiple risk factors undergoing outpatient cardiovascular stress testing. 3. Patients who undergo elective cardiac catheterization.
Each patient population will represent differing degrees of risk of cardiovascular disease. By comparing plasma Hsp27 levels in these three clinically distinct groups we will test for a correlation between low plasma levels of Hsp27 and clinical evidence of coronary artery disease.

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 (B. Eichold, PI). In this project we test the hypothesis that real-time feedback for blood sugars via telemonitoring will improve control of diabetes among health disparate populations. Recruitment was a challenge but was completed. We have employed several strategies to enhance recruitment and retention. Data acquisition will be completed in the fall.

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). The project will be completed in the fall. There has been great enthusiasm among the partners for the acceptance of the technology and the data acquired.

Summary Center of Healthy Communities Activities
The 2009-10 year has been a productive year for the University of South Alabama Center for Healthy Communities. The Center of Excellence Grant continues to successfully address 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 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. In the next academic year the Center will prepare for renewal of its COE grant.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Roach RD. Invited speaker. The role of the regional extension center. Rural Health Conference; 2010 Mar 24; Prattville, AL.

Roach RD. Invited speaker. Alabama Regional Extension Center. Alabama Hospital Association Rural Constituency Section Meeting; 2010 Apr 20; Montgomery, AL.


Roach RD. Invited speaker. Alabama Regional Extension Center. Medical Society State of Alabama Health Information Technology Committee Meeting; 2010 May 18; Montgomery, AL.

Roach RD. Invited speaker. Available technical assistance through REC. Alabama Hospital Association Training Webinar: Meaningful Use Objectives to Receive State and Federal Incentive Payments; 2010 Aug 19; Mobile, AL.

Taylor C. Invited speaker. The emerging role of global situational awareness 2.0 resources in disaster response. Asia Conference on Emerging Issues in Public Health; 2009 Nov 30; Hong Kong, China.

Taylor C. Invited speaker. The emerging role of global situational awareness 2.0 resources in disaster response. SPIE Defense, Security and Sensing 2010; 2010 Apr 6; Orlando, FL.


Taylor C. Invited speaker. Surge capacity and resource management. 2010 Tri-State Respiratory Care Conference; 2010 Aug 4; Biloxi, MS.

Wallace DL. Invited speaker. Business continuity planning for health centers. Alabama Primary Health Care Association 24th Annual Conference and Clinical Forum; 2009 Oct 1; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Dan Roach III, MD is the co-chair of the Technical Infrastructure Work Group for the Alabama Health Information Exchange and serves on the Alabama Health Information Exchange Advisory Commission.

Carl Taylor serves as a Broadband Ambassador to the Internet Innovation Alliance, a subject matter expert for the Office of the National Coordinator for Health Information Technology and served on the Governor's Broadband Advisory Board. He is a grant peer reviewer for the Health Resources and Services Administration, an evaluator for the Northwest Regional Telehealth Resource Center, and a member of the Institute for Health Technology Transformation's Telehealth and Remote Patient Monitoring Action Group. He served as an advisor to the New Zealand Trade and Enterprise's 2010 Focus on Health challenge and on the Center for Disease Control Team B Advisory Panel for the BP Oil Spill. He was a panelist at the Institute for Health Technology Transformation Spring Health IT Summit and the Innovation in Disaster Risk Assessment Understanding Risk Forum. He continues to serve on the Department of Health and Human Services Haiti Health Facilities Work Group and on the American Medical Association Disaster Preparedness Demonstration Project.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

In 2009-2010, the Center for Strategic Health Innovation (CSHI) enjoyed unprecedented success in our two primary focus areas: health technology innovation and medical informatics; and disaster preparedness teaching and training. CSHI was awarded $7.9
million by the Office of the National Coordinator for Health Information Technology to lead Alabama in a nationwide effort to help providers select, implement, and meaningfully use electronic health records (EHR). This competitive grant is one of the largest in the University's history, and USA is one of only 60 nonprofit organizations selected nationwide by the U.S. Department of Health and Human Services to receive the Health Information Technology Regional Extension Center award. Funded by the American Recovery and Reinvestment Act of 2009, this two-year cooperative agreement establishes the Alabama Regional Extension Center, or ALREC, a consortium of partners led by USA that includes the Medical Association of the State of Alabama, Alabama Medicaid Agency, University of Alabama at Birmingham, Auburn University, Alabama Primary Healthcare Association, Management and Medical Consulting Services, Inc., and the JHD Group. ALREC will help primary care providers in Alabama transition to electronic health record systems as part of the national initiative to improve health care efficiency and patient outcomes.

In addition, CSHI received $470,000.00 to purchase equipment needed to develop a Disaster Medical Response Simulation Theater. The simulation theater creates a live, simulated environment that immerses participants in a life-like scenario, and allows them to rehearse their response, test their plans, and to simulate the future impact of the disaster. Through this funding, CSHI also received designation as the National Center for Disaster Medical Response (NCMDR).

The Realtime Medical Electronic Data Exchange (RMEDE™), our patient-centric health record and claims management system, continued growth in 2009-2010. Through our efforts, total patient records managed remained constant at 1.1 million in 2009-2010, and total patients participating in our in-home monitoring project grew to 638 patients, representing a 27% 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 forty-four ARRTC Road Shows at hospitals and other facilities throughout the state. We continue to link more than 778 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 (RMEDE™), a secure web-based life-state management system including in-home monitoring of patients with chronic disease and an interventional informatics reporting system. In 2009-2010, 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 RMEDE™. 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, 628 patients are actively transmitting home monitoring information into RMEDE™, representing a 27% 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’s RMEDE™ also partnered with the Medicaid Maternity Program in their quest for Better Birth Outcomes and lower Infant Mortality rates. RMEDE™ is used to develop a data collection system with reporting capabilities utilizing recipient information gathered from enrollment activities to evaluate compliance with accepted national standards of practice. RMEDE™ provides Medicaid and their contractors the ability to enter and view the data online. Data is utilized by Medicaid to determine benchmarks for compliance and comparisons.

In a collaborative effort with The Mobile County Health Department, a recipient of the Robert Wood Johnson Foundation grant, “Finding Answers: Disparities Research for Change,” CSHI’s RMEDE™ was utilized to implement and evaluate a blood glucose telemonitoring intervention. One hundred eighty-three (183) patients measured their blood glucose level with glucometers and input their blood glucose values via telephone into RMEDE™. If a glucose value was out of range, RMEDE™ sent an automatic alert to the patient’s nurse for follow-up. The goal of the Finding Answers project was “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.”

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 a total of 778 user facilities including: 18 Community Health Centers, 11 EMA facilities, 319 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 continues to promote AIMS as a daily use tool for health facilities across the state, as well as to develop and promote cross border links in AIMS.
Enhancements and upgrades to AIMS include development and deployment of an Influenza Module to collect H1N1-related data to enhance the situational awareness of ADPH, development of social networking capabilities to encourage the establishment of local response regions among health facilities in the same region, and creation of a NIMS compliance module to enable assessment of hospital disaster preparedness.

**Training Programs**: Now in its seventh year, ARRTC is regional response training designed to teach effective collaborative healthcare community response to all disasters, natural or man-made. This program is made possible by a grant from the Alabama Department of Public Health Center for Emergency Preparedness through a cooperative agreement from ASPR. This year, CSHI offered training on-site in Mobile (ARRTC Basic) and at regional hospitals throughout the state (ARRTC Road Show). ARRTC Basic is a 2-day course which provides regional response partners with basic, core disaster response training. Sessions are scheduled by hospital planning region, fostering interaction with regional response partners. ARRTC Road Show is a 1-day course which takes ARRTC training to healthcare facilities across the state, thereby allowing participation by more staff, and invites the participation of regional neighbors/response partners for the purpose of establishing and enhancing a common knowledge of the basics of disaster response for healthcare facilities. An additional ½ day training was available to those facilities requesting additional training or assistance in the completion of a hazard threat vulnerability assessment and disaster plan development. A combined total of 56 sessions were presented to participants which included representatives from public health, hospitals, nursing homes, community health centers (CHCs), and emergency management and response agencies. Attendee evaluation scores were consistently high, with 96% rating the program as “Excellent” or “Good.”
2009-2010
Summary of Scholarly Activities
Comprehensive Sickle Cell Center

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Haynes J. Invited speaker. A primary care provider guide to preventative care in adults with sickle cell disease. University of Alabama Baptist Medical Center; 2009 Nov 12; Montgomery, AL.

Haynes J. Invited speaker. Adult care: addressing common challenges. Sickle Cell Association of America; 2009 Dec 7; Mobile, AL.

Haynes J. Invited speaker. Leadership characteristics. Bishop State Community College; 2010 Apr 13; Mobile, AL.
Haynes J. Invited speaker. Primary care provider guide to preventative care in adults with sickle cell disease. 10th Annual Sickle Cell Regional Conference; 2010 Apr 24; Mobile, AL.

Haynes J. Invited speaker. A primary care provider’s guide to preventive and acute care management of sickle cell disease. Southeastern Sickle Cell Disease Association; 2010 Jul 26; Dothan, AL.

Haynes J. Invited speaker. Pulmonary hypertension in sickle cell disease. Morehouse School of Medicine; 2010 Sep 22; Atlanta, GA.

Imran H. Invited speaker. Splenic sequestration crisis: a dreadful complication of sickle cell disease. 10th Annual Sickle Cell Regional Conference; 2010 Apr 24; Mobile, AL.

Peck-Mabien A. Invited speaker. Nursing management of the hospitalized individual with sickle cell disease: the ABCs and one, two, threes. 10th Annual Sickle Cell Regional Conference; 2010 Apr 24; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Johnson Haynes Jr., Listed in “America’s Top Doctors” by Ltd. Castle Connolly Medical, Castle Connolly Medical, all editions; “Best Doctors in America” by Naifeh and Smith, Woodward White, Inc., 2009-2010.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

General Operations: Dr. Johnson Haynes, Jr. continues as Director of the USA Comprehensive Sickle Cell Center. Despite state funding cuts, 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 Emmaus Medical, Inc. to study “A Phase III, Prospective, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Multicenter Study of L-Glutamine Therapy for Sickle Cell Anemia and Sickle B0 – Thalassemia." 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 the 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. Dr. Hamayun Imran is the collaborating investigator and local PI for TWITCH study at the University of South Alabama.
This study is sponsored by NIH and led by St. Jude Children's Research Hospital. It is a national clinical trial for children with sickle cell disease on chronic transfusion therapy for critical TCD velocity. This is a 3-year project.

Clinical Operations: The 2009-2010 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 and Hamayun Imran are the physicians caring for patients in the Pediatric Sickle Cell Outpatient Clinic. A new pediatric hematologist Abdul Siddiqui, MD recently joined the Department of Pediatrics and has begun providing services in the Pediatric Sickle Cell Clinic.

An adult hematologist and urologist to support the adult operations remain 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 24, 2010 the Center hosted its’ tenth conference on “Practical Issues in Sickle Cell Disease X: “Casting The Net.” Dr. Kathryn Hassell, Professor of Medicine and Director of the Sickle Cell Center in the Department of Medicine at the University of Colorado in Denver delivered the Cecil Parker Lectureship, “Life’s Passages: Making Transition Work in Sickle Cell Disease.” Local speakers from the University of South Alabama: Rachel Weaver, PharmD, Johnson Haynes, Jr., MD, Ardie Pack-Mabien, CRNP, Hamayun Imran MD, and Benjamin Estrada MD. Dr. Rachel Weaver discussed “Opioids: The Good, Bad, and Ugly”. Dr. Johnson Haynes, Jr. addressed guidelines for the primary care physician that could be used in the preventive and acute care of individuals with sickle cell disease. Ms. Pack-Mabien discusses nursing management of the hospitalized individual with sickle cell disease. Dr. Hamayun Imran’s topic concerning splenic sequestration crisis diagnosis and management in sickle cell disease,
and Dr. Benjamin Estrada provided an update on vaccine preventable diseases in patients with sickle cell disease. 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 as President. 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 September 2010.
2009-2010

Summary of Activities
Office of Development and Alumni Relations

The Medical Alumni Office is directed by Mr. Travis Grantham, Director of Medical Development and Alumni Relations. Office personnel consist of one part-time Assistant Director, Melodie Robinson and Cynthia Harris, full-time Secretary V staff member. The primary role of the office is to organize alumni and student events and to serve as a liaison to the USA Medical Alumni Association.

With the inclusion of the sixty-six (66) new graduates from the Class of 2010, the Medical Alumni Association now has 2117 medical graduates (including one post-humous degree), this number does not include Ph.D. graduates and medical residents/Fellows for the USA Hospital System.

The President of the Executive Board for the Medical Alumni Association was Dr. Thomas B. Montgomery who finished his term in June 2010 and is replaced by Dr. Amy M. Morris. Serving on the 2009-10 Board are the following alumni: Dr. Oscar Almeida, Dr. William Blaylock, Dr. Lamar Duffy, Dr. Cynthia Donnell, Dr. Diana Hashmi, Dr. Russell Hudgens, Dr. Wanda Kirkpatrick, Dr. Kit Outlaw, Dr. Jill Ringold and Dr. David Ross, Dr. Christopher Semple, Dr. John Todd and Dr. Stacey Wing. The Executive Board meets four times a year.

Funding for all alumni and students events/projects is from one revenue source – the Annual Membership Dues Program and Annual Fund Drive – which is a combined effort. Annual membership is $50 per year with lifetime memberships available for $500. The three month project raised a total of $56,350 with 559 alumni graduates participating.

Scholarship development and recognition of academic achievement continues to be a focus for the organization. A new award program was initiated during this period to recognize children of alumni. Legacy Scholarships ($2,000 each) were awarded to six rising sophomores: Sara Long, Patrick Murphy, Michael Phillips, Amanda Schnee, Joseph Sewell and William Sonnier. Other scholarships sponsored by the MAA were the Christian Grinaker Memorial Scholarship (awarded to Christina Cochran '10), the Lester Sockwell Award (awarded to Jamie Caudill '10) and the Clyde "Sid" Huggins Scholarship (frozen 2010). The MAA donated $10,000 to the Endowed Scholarship Fund and provided the Office of Admissions additional scholarship funds totaling $20,000 for recruitment of highly qualified students. The Medical Alumni Leadership Award was presented during Honors Convocation to Aaron Mates (by vote of his class) in recognition of outstanding service during the four years of medical school.

The MAA sponsors the Annual Medical Alumni Weekend, a multi-day event for all USACOM graduates – including hospital residents and faculty. The weekend was held June 4-6 at the Perdido Beach Resort, Orange Beach, AL with six classes celebrating reunion dates (1980, 1985, 1990, 1995, 2000, and 2005). The activity included seven CME presentations (one a panel discussion) providing 6.75 CME hours for all registered attendees. The presenters were: Dr.
Lynn Dyess ’82, Dr. William Broughton ’82, Dr. Mark Williams ’80, Dr. William Richards, Dr. Ronald Franks and Dr. Robert Kreisberg. The weekend included the presentation of the Distinguished Service Award to Dr. Charles B. Rodning, Professor of Surgery, in recognition of his longstanding commitment to medical education and his administrative contributions to the College of Medicine. The 2011 annual meeting will be held June 4-5 at the same location.

During 2009-10 the MAA donated to several student organizations and sponsored events for alumni and students including: the White Coat Ceremony, Freshman Orientation, Skit Night, Review of Systems, Alumni Mobile Chapter Meeting, BSSO Fall Picnic, team sponsorships for the Regan Robinson Chili/Gumbo Cook-off, and the Caduceus Ball.

The Medical Alumni Office also provides database support for Alpha Omega Alpha Honor Medical Society and is responsible for organizing their events and dues program. In addition, the office develops a monthly E-Newsletter and a COM Facebook page only for alumni medical graduates and current students of the College of Medicine.
### UNIVERSITY OF SOUTH ALABAMA
### COLLEGE OF MEDICINE
### NUMBER OF GRADUATES BY CLASS

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Total: 2117*  
*Total includes forty-four deceased alumni
2009-2010
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. An additional Assistant Dean participates in academic counseling and career counseling is partly driven by clinical departments under the direction of Student Affairs.

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

The Office of Student Affairs continues to be ably staffed by Ms. Kimberlee Nodine (MSB) and Ms. Karen Braswell (Mastin). Rhonda Smith, College of Medicine Registrar, Sharon Bull, College of Medicine Financial Aid Officer, and Connie Land, Student Affairs Business Manager, dealt with a myriad of student issues throughout the academic year. Emily Alford, secretary to Dr. Hattie Myles, Assistant Dean for Educational Enrichment, ably assisted with the organization and management of the DREAM program, in its second year having succeeded the BEAR program.

The Medical Association of the State of Alabama once again sponsored Match Day festivities which were again held at the USA Brookley Magnolia Ballroom on March 18, 2010. Match envelopes were distributed and at the stroke of 11 a.m., the bell was rung, and students opened their envelopes. While over half of the Class of 2010 remained in the State of Alabama, two students matched to Colorado and three to California.

Honors Convocation for the College of Medicine was held on Friday evening, May 7, 2010, in the Mitchell Center on the USA campus. Dr. Allan Tucker, chair of the Department of Pathology, was selected as the faculty speaker by the Class of 2010 and James Christopher Bailey was selected to be the class speaker. Awards for academic achievement and community service were announced along with the first recipient of the Regan Robinson Young Scholarship, created in memory of the young medical student who succumbed to cancer in the spring of her senior year several years ago.

Dr. Margaret O’Brien administered the Hippocratic Oath. An informal on-site reception followed the ceremony. Graduation was held at 2 p.m. the following day.

Junior Orientation for the 2010-2011 school year was completely redesigned this year. Instead of occurring immediately at the end of the second year, the orientation was a week long and was scheduled the week before the beginning of the third year. In addition to the historic topics of patient privacy and confidentiality, medical records, and student safety, professionalism in the clinical years was particularly addressed and a hands-on surgical skills session was added. All students were certified in ACLS.
At the end of their orientation week, rising third year students attended the White Coat Ceremony, sponsored by the Medical Alumni Association, on Saturday, June 26, 2010. Due to a constellation of factors, there was a last minute venue change. The White Coat Ceremony was held for the first time at the Saenger Theater in downtown Mobile. The students were addressed by Dr. Felicia Wilson, oncologist in the Department of Pediatrics, and by class president, Kacie Jackson. The junior students were “coated” by Drs. Strada and Franks. Subsequently, the new inductees of the Gold Humanism Honor Society were recognized. Dr. Margaret O’Brien administered the USA "Medical Student Oath."

Student Affairs supports a tutoring program which pays upperclassman and/or graduate students to tutor students who request assistance in the Basic Science courses. In 2009-2010, five (5) tutors provided 68.75 hours of tutoring to fourteen (14) students in Physiology, Neuroscience, Microbiology, Histology, Biochemistry, and Gross Anatomy.
The number of visiting medical students who participated in Senior elective courses at USACOM in 2009-2010 is outlined below:

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Completed Paperwork, but Cancelled Visit

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Departments in which Electives were taken

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Letters of evaluation (Dean’s Letters) were written for each of the 66 seniors who graduated in May, 2010. Students applied to 1917 residency programs through the AAMC Electronic Residency Application Service (ERAS).

Fifty-eight (58) of the sixty-six (66) students matched for residency positions. Fifty-nine (59) of the May graduates used the NRMP as their primary means of obtaining residency. Two (2) graduates used the Military Match and two (2) used the San Francisco Match. Ten (10) students secured a residency training position in the “scramble” that followed the match.

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### University of South Alabama Seniors
#### Residencies Received by State

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<td>33</td>
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Sixty-six seniors received the Doctor of Medicine degree at Commencement on May 8, 2010. On the evening of May 7, the College held its thirty-fifth Honors Convocation, which took place in the Mitchell Center. Dr. J. Allan Tucker addressed the class and Christopher R. Bailey responded for the graduates. Prior to hooding the graduates, the following awards were presented:

- **Dean's Award** – Haley Hallman Ballard
- **Outstanding Student in the Anatomical Sciences** – Haley Hallman Ballard
- **Charles M. Baugh Award in Biochemistry** – Haley Hallman Ballard
- **Medical Assurance Award** – Brandon Winslett Kirkland
- **Leonard Tow Humanism in Medicine Award** – Brian Wesley Wells and Mary Mancao, M.D.
- **SNMA Leadership Award** – Tiffany Chanté Henderson Mullins
- **Community Service Award** – Tiffany Chanté Henderson Mullins and Loucresie Nichelle Rupert
- **Lewis Anderson Medical Student Achievement Award** – Aaron Kyle Mates
- **William A. Gardner, Jr. Pathology Award** – James Richard Frost
- **Merck Award** – James Richard Frost and Sarah Silver Payne
- **Samuel Eichold Award** – Rachel Kristina Traylor
- **Hollis J. Wiseman Award for Excellence in Pediatrics** – Jamie Brooke Caudill
- **Pharmacology Achievement Award** – Haley Hallman Ballard
- **John W. Donald Memorial Award in Surgery** – Brandon Winslett Kirkland
- **Medical Alumni Leadership Award** – Aaron Kyle Mates
- **Charles W. Urschel Achievement Award in Physiology** – Haley Hallman Ballard
- **Excellence in Emergency Medicine Award** – Adam Wesley Watterson
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<td>3.73</td>
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<tr>
<td>Genetics</td>
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<td>32</td>
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<tr>
<td>Intro. To Clinical Med. II</td>
<td>61</td>
<td>14</td>
<td></td>
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<td>3.81</td>
</tr>
<tr>
<td>Microbiology</td>
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<td>41</td>
<td>10</td>
<td>3</td>
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<td>Neuroscience</td>
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<tr>
<td>Pathology</td>
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<td>Pharmacology</td>
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<td>43</td>
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<td><strong>Junior Clerkships</strong></td>
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<td>26</td>
<td></td>
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<tr>
<td>Internal Medicine</td>
<td>38</td>
<td>32</td>
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</tr>
<tr>
<td>Neurology</td>
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<td>5</td>
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<td></td>
<td></td>
<td>3.93</td>
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<tr>
<td>Obstetrics/Gynecology</td>
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<td>17</td>
<td>8</td>
<td></td>
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<td>3.54</td>
</tr>
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<td>Pediatrics</td>
<td>35</td>
<td>34</td>
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<td>1</td>
<td></td>
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<td>Psychiatry</td>
<td>42</td>
<td>28</td>
<td>1</td>
<td></td>
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<td>3.58</td>
</tr>
<tr>
<td>General Surgery</td>
<td>61</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td>3.81</td>
</tr>
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</table>
# Academic Progress of Medical Students

Source: Part II of LCME Annual Medical School Questionnaire

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Students in Class</td>
<td>64</td>
<td>67</td>
<td>67</td>
<td>70</td>
<td>75</td>
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<tr>
<td>Graduates</td>
<td>60</td>
<td>63</td>
<td>65</td>
<td>63</td>
<td>66</td>
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<tr>
<td>True Attrition (will not receive M.D. in any year)</td>
<td>N/A</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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</tr>
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<tr>
<td>Dismissed</td>
<td></td>
<td></td>
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<tr>
<td>Freshmen</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Sophomores</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Juniors</td>
<td>1</td>
<td>1</td>
<td>0</td>
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</tr>
<tr>
<td>Seniors</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Placed on Leaves of Absence (LOA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sophomores</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Juniors</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Transferred to Another Medical School</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Withdrew</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Admitted with Advanced Standing or Re-entered from Graduate School</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Deceased</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Repeated All or Part of the Year</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
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<tr>
<td>Enrolled on a Decelerated Schedule</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Minority Students (Black, Native American, Hispanic)</th>
<th>2005-06</th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>28</td>
<td>31</td>
<td>26</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Freshmen</td>
<td>6</td>
<td>10</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>All Other Classes</td>
<td>22</td>
<td>21</td>
<td>20</td>
<td>18</td>
<td>21</td>
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</table>
### United States Medical Licensure Examination (USMLE) Step 1
#### First Time Takers

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students</td>
<td>65</td>
<td>64</td>
<td>69</td>
<td>67</td>
<td>72</td>
</tr>
<tr>
<td>National Overall Mean</td>
<td>217</td>
<td>218</td>
<td>222</td>
<td>221</td>
<td>221</td>
</tr>
<tr>
<td>USACOM Overall Mean</td>
<td>225</td>
<td>211</td>
<td>221</td>
<td>215</td>
<td>219</td>
</tr>
<tr>
<td>Failure Rate – National</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Failures at USA</td>
<td>2%</td>
<td>9%</td>
<td>3%</td>
<td>7%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Minimum passing score = 176 in 1997; 179 in 1998-2000; 182 beginning in 2001; 185 in 2007; Standard deviation approximately 20

### United States Medical Licensure Exam (USMLE) Step 2
#### First Time Takers

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students</td>
<td>59</td>
<td>63</td>
<td>65</td>
<td>63</td>
<td>66</td>
</tr>
<tr>
<td>National Overall Mean</td>
<td>221</td>
<td>225</td>
<td>226</td>
<td>229</td>
<td>230</td>
</tr>
<tr>
<td>USACOM Overall Mean</td>
<td>212</td>
<td>224</td>
<td>216</td>
<td>227</td>
<td>225</td>
</tr>
<tr>
<td>Failure Rate – National</td>
<td>6%</td>
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<td>4%</td>
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<tr>
<td>Failures at USA</td>
<td>8%</td>
<td>3%</td>
<td>9%</td>
<td>3%</td>
<td>0</td>
</tr>
</tbody>
</table>

Minimum passing score = 170 for Class of 1997-2000; 174 beginning with the Class of 2001; 182 beginning with the Class of 2004; 184 beginning with the Class of 2008 Standard deviation = approximately 20

### United States Medical Licensure Examination (USMLE) Step 3

<table>
<thead>
<tr>
<th></th>
<th>Class of 2003</th>
<th>Class of 2004</th>
<th>Class of 2005</th>
<th>Class of 2006</th>
<th>Class of 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Percentage Passing</td>
<td>96</td>
<td>97</td>
<td>97</td>
<td>96</td>
<td>96</td>
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<tr>
<td>USA Percentage Passing</td>
<td>100</td>
<td>98</td>
<td>96</td>
<td>92</td>
<td>95</td>
</tr>
<tr>
<td>USA Number of Students</td>
<td>58 (a)</td>
<td>61 (b)</td>
<td>54 (c)</td>
<td>50 (d)</td>
<td>56 (e)</td>
</tr>
</tbody>
</table>

(a) 59/60 students had taken Step 3 as of 6/07
(b) 58/59 students had taken Step 3 as of 6/08
(c) 61/63 students had taken Step 3 as of 6/09
(d) 56/56 students had taken Step 3 as of 12/09
(e) 59/60 students had taken Step 3 as of 12/09
Evaluation of Student Performance in the First Postgraduate Year*

The questionnaire adopted by the Curriculum Committee in 1990-91 for assessment of graduates of the College of Medicine was sent to the Directors of the PGY-1 programs of our 2009 graduates. A total of 54 responses were received out of 63 requests. Below is a summary of the responses to the four major areas that were assessed.

<table>
<thead>
<tr>
<th></th>
<th>Class of 2006</th>
<th>Class of 2007</th>
<th>Class of 2008</th>
<th>Class of 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top Fifth</td>
<td>1%</td>
<td>20%</td>
<td>21%</td>
<td>30%</td>
</tr>
<tr>
<td>Upper Middle Fifth</td>
<td>27%</td>
<td>48%</td>
<td>39%</td>
<td>46%</td>
</tr>
<tr>
<td>Middle Fifth</td>
<td>51%</td>
<td>24%</td>
<td>27%</td>
<td>22%</td>
</tr>
<tr>
<td>Lower Middle Fifth</td>
<td>13%</td>
<td>6%</td>
<td>11%</td>
<td>1%</td>
</tr>
<tr>
<td>Bottom Fifth</td>
<td>0%</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Data Collection</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Top Fifth</td>
<td>12%</td>
<td>17%</td>
<td>22%</td>
<td>27%</td>
</tr>
<tr>
<td>Upper Middle Fifth</td>
<td>39%</td>
<td>52%</td>
<td>42%</td>
<td>49%</td>
</tr>
<tr>
<td>Middle Fifth</td>
<td>45%</td>
<td>25%</td>
<td>32%</td>
<td>24%</td>
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<td>Lower Middle Fifth</td>
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<td>6%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Bottom Fifth</td>
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<td>0%</td>
</tr>
<tr>
<td><strong>Clinical Judgment and Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top Fifth</td>
<td>21%</td>
<td>29%</td>
<td>27%</td>
<td>24%</td>
</tr>
<tr>
<td>Upper Middle Fifth</td>
<td>36%</td>
<td>40%</td>
<td>38%</td>
<td>55%</td>
</tr>
<tr>
<td>Middle Fifth</td>
<td>39%</td>
<td>20%</td>
<td>28%</td>
<td>20%</td>
</tr>
<tr>
<td>Lower Middle Fifth</td>
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<td>7%</td>
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</tr>
<tr>
<td>Bottom Fifth</td>
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<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Professional Attitudes</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Top Fifth</td>
<td>24%</td>
<td>39%</td>
<td>36%</td>
<td>51%</td>
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<tr>
<td>Upper Middle Fifth</td>
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<td>36%</td>
<td>41%</td>
<td>31%</td>
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<tr>
<td>Middle Fifth</td>
<td>39%</td>
<td>18%</td>
<td>20%</td>
<td>17%</td>
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<tr>
<td>Lower Middle Fifth</td>
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<td>6%</td>
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</tr>
<tr>
<td>Bottom Fifth</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Evaluated by Residency Program Director and/or Faculty
CURRICULUM COMMITTEE

The 2009-2010 Curriculum Committee was chaired by Dr. Abu Al-Mehdi, Associate Professor of Pharmacology. During the year, the Committee addressed the following issues:

• Proposed new senior level electives in surgery, including a new acting internship in laparoscopic surgery were approved.

• The second year Basic Science course directors presented their courses to the Committee including performance statistics, student feedback, and correlation to institutional objectives.

• A task force examined the content of the second year, spring semester, medical genetics course. With the assistance of the medical genetics course director, the essential course content was incorporated into existing courses, particularly Developmental Anatomy, Biochemistry, Pathology, and Neuroscience. The Curriculum Committee then approved the cessation of the Medical Genetics course on the grounds that the prior course had duplicated material and a concerted effort has been made to lighten the curricular load in the spring semester of the second year so that students may better prepare for USMLE Step 1.

• A task force under the leadership of Dr. Tony Gard developed uniform, standardized, e-mail-driven course evaluations that will be utilized beginning in the fall of 2010. The course evaluations will provide bankable data for Curriculum Committee purposes. Dr. Gard’s task force was ably assisted by Cecelia Martin from the Office of Institutional Research, Planning and Assessment.

• Dr. Benjamin Estrada was the head of a task force that examined the need for informatics instruction at both the faculty and student level. His task force is in the process of designing online educational modules in this area.

• Drs. Al-Mehdi and Sosnowski headed up a task force to examine the need for case-based integrated review for USMLE Step 1. A two-week curriculum was adopted by the Curriculum Committee which will utilize case scenarios developed by clinicians, presented by students and will focus on integration of basic science information. The course will be pass/fail/honors and will be held at the end of the school year.

• A medical education workshop was held for the third consecutive year during the summer. The workshop focused on issues such as incorporation of an informatics curriculum, on-line evaluations, and the inclusion of simulation within the curriculum.
EXECUTIVE COMMITTEE OF STUDENT ASSEMBLY

As set forth in the Student Handbook, the Student Assembly addressed issues affecting student life. The Officers for 2009-10 were Christina Cochran - President, Brandon Kirkland - Vice President, and Sonia Singh – Secretary/Treasurer. The Faculty Advisors were Dr. T. J. Hundley, Internal Medicine and Dr. Anthony Gard, Cell Biology.

ISSUES ADDRESSED BY THE STUDENT ASSEMBLY

1) Student Health Insurance. Prior to the start of the 2009-2010 academic year, a University-wide task force was formed to bid out specifications for student health insurance. United Health Care was awarded the contract. Many incoming freshmen purchased the United Health Care policy and subsequently complained to the Student Assembly about inadequate service and payment of benefits. The Blue Cross Blue Shield policy, previously purchased from Alabama Administrators, expired when Alabama Administrators declined to further participate with the Student Assembly. Subsequently, the Student Assembly permitted students to have any form of health insurance and then voted to require a more expensive policy directly with Blue Cross Blue Shield. At the end of 2009-2010, students were covered by policies either from parents/spouse, United Health Care, or Blue Cross Blue Shield of Alabama.

2) The Student Assembly voted to change the officer structure. It was noted that senior members of the Student Assembly frequently missed meetings secondary to externships. Accordingly, the Assembly voted to draw Assembly officers from the junior class, instead of the senior class.

3) The second annual Gumbo Chili Cookoff, supported by the Student Assembly, occurred in February, 2010. This event was created last year to benefit the Regan Robinson-Young Scholarship fund. The support and response were unprecedented and the event earned more than $15,000.

4) A new Student Mentoring and Advising Program was designed to offer students in the first and second year “peer” advice from upperclassmen. The SMAP program will be instituted in the fall of 2010.

5) Skit Night was held at the Temple in downtown Mobile in May, 2009; it was again financially supported by the Student Assembly.

6) Previously outstanding yearbooks finally issued.
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, 2009, through July 31, 2010, fifteen (15) emergency loans were approved for a total amount of $7,200.00. During that period, thirteen (13) payments totaling $6,500.00 were paid back into the loan account.
Office of Educational Enrichment

Diversity, Recruitment, and Enrichment for Admission into Medicine (D.R.E.A.M.)

The summer of 2010 marked the twenty-fourth (24th) year of the summer recruitment and enrichment program at the University of South Alabama College of Medicine. Over this period of time, the program has served a total of 248 students.

Recent University budget challenges have made it necessary to reduce the number of program participants, for the second year in a row, to the original number, seven (7), accepted when the program first began in 1986.

The focus of the D.R.E.A.M. continues to promote diversity within our college and help educationally and economically disadvantaged candidates realize their dreams of becoming physicians. The envisioned outcome is that these students will remain in the state and return to their communities to serve the underserved and help eliminate health disparities within our state and the nation.

Phase I

The composition of the 2010 Phase I class of incoming D.R.E.A.M. students was a total of seven (7) students; two (2) males and five (5) females representing five (5) institutions:

- Alabama A&M ........................................... 1
- Howard .................................................. 1
- Mississippi Gulf Coast Community College .... 1
- Stillman .................................................. 1
- University of South Alabama ....................... 3

Four (4) of the seven students are Alabama residents, two (2) are residents of Mississippi, and one (1) is a resident of Columbus, Georgia. The grade point averages of Phase I entering students ranged from 3.35 to 4.0, and ACT scores ranged from 18 to 29.

Phase II

All of the students who participated in Phase I of the program in the summer of 2009 were successful and returned in 2010 for Phase II except one (1) student from USA who chose a different major field. The Phase II students represent four (4) different institutions:

- Auburn .............................................. 2
- Mississippi Univ. for Women .... 1
- Stillman ............................................ 2
- USA.................................................. 1

Five (5) of the six Phase II students are Alabama residents; one (1) is a resident of Jackson, Mississippi.

Admissions

In August of 2010, three (3) males and two (2) females, former D.R.E.A.M. students, entered the University of South Alabama College of Medicine freshman class. The new students represent Tuskegee University (1), University of Alabama, Huntsville (1), Notre Dame (1), Salem College
(1), and Texas Christian (1). Three (3) students are Alabama residents, one (1) is a resident of Texas, and one (1) is a resident of California.

**Other Recruitment**
The Office of Educational Enrichment visited fewer colleges this year, again due to budget challenges. Recruitment trips were made to five (5) colleges and universities: Alabama State University, Stillman College, University of Alabama, and Xavier and Dillard Universities of Louisiana.
OFFICE OF ADMISSIONS
Annual Report for 2009-2010

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 11, 2010, opened June 1 and closed November 15, 2009.

For the Class of 2014, one thousand one hundred sixty-nine (1169) applications were received. Three hundred eighty one (381) applications were received from Alabama residents, six hundred seventy eight (678) applications from out of state U.S. citizens, and one hundred ten (110) applications from citizens of foreign countries. The Admissions Committee interviewed a total of two hundred eighteen (218) applicants of which one hundred seventy-eight (178) were residents of Alabama. Of the applicants interviewed, one hundred forty-six (146) were offered admission to fill a class of seventy-four (74). Sixty-two (62) of the matriculating students are Alabama residents. Fourteen (14) offers of admission were made to black applicants; six (6) will matriculate. Five (5) of the matriculating black students are DREAM (Diversity Recruitment and Enrichment for Admission into Medicine) students. This year, our records indicate a decrease in the number of applicants (1298 in '09 vs. 1169 in '10); there was also a decrease in Alabama applicants (410 in '09 vs. 381 in '10). Table I gives comparative data since 2007.

The matriculating Class of 2010 represents twenty-nine (29) colleges and universities from the United States and Canada as reflected in Table V. Fifty-three percent (53%) of this year's class, however, come from the four (4) largest universities in the state.

Recruitment and Retention Efforts

1. Undergraduate campus recruiting 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 upon request for high school students, community organizations, and premedical special interest groups.

5. The following publications were produced and distributed by the Office of Admissions: The College of Medicine Bulletin, Policies and Procedure Manual.

6. Special admissions reports and correspondence were produced and distributed monthly to in-state premedical advisors and selected out-of-state advisors.
7. A total of 16 Applicant Interview Day programs were conducted from September until mid-April. The interviewers, primarily College of Medicine basic science and clinical faculty, serve as members of the Committee on Admissions and/or ad hoc members. These members interviewed 218 candidates; each candidate was interviewed by three committee members, giving a total of 654 interviews.

8. The following Admissions Committee subcommittees were active in 2009-2010:
   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 acceptance from the University of South Alabama College of Medicine. The students enter the Health Preprofessions Program at the University of South Alabama, and their curriculum includes the core requirements for their selected baccalaureate program and prerequisites for entering medical school. Students in this program must maintain a specific grade point average during college and are required to meet all other requirements for entering medical school. Students participate in a variety of activities on an individual basis to provide a broad exposure to medical education. Students participating in the program are expected to enter the College of Medicine following completion of the baccalaureate degree.

This year, one hundred (100) applications were received from students wishing to enter this program. After a screening process, forty-five (45) of the applicants were selected for interviews and fifteen (15) were offered admission to the program.
### Table I
University of South Alabama College of Medicine Admissions Report

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
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<th>2010</th>
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<td>Black (excludes BEARs)</td>
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OFFICE OF CONTINUING MEDICAL EDUCATION

General:
Sharrie Cranford continued in her capacity as Director of Continuing Medical Education with the support of Yolanda Mack. The USA College of Medicine CME program will be up for re-accreditation in 2011. Ms. Cranford, supported by the CME Committee, seeks re-accreditation with commendation, the highest possible rating for a CME program. In 2009-2010 the CME Office coordinated CME programs provided by the clinical departments to physicians with 27 regularly scheduled series (Grand Rounds) for 708.5 CME credit hours and 10 unique activities, accounting for 56 CME credit hours. In total 8,458 physician CME hours were awarded and 1,874 non-physician credit hours were awarded. Additionally, two joint sponsorship programs, with outside entities, were supported by the Office of CME. One was jointly sponsored with Mercy Medical in Baldwin County and addressed End of Life concerns. The second was jointly sponsored by the internationally-based Society for Ultrastructural Pathology which was held in Richmond, Virginia in the summer of 2010. Currently, two on-line CME activities are available.

Significant CME Achievements:
- Enforcement of commercial support policies under ACCME criteria with occasional denial of CME credit hours.
- Support for several unique CME programs, including Foot Club and the annual OB/GYN conference.
- Purchase and utilization of an audience response system “clickers.” The clicker system permits outcomes data monitoring.
- Survey of departmental chairs and residency directors for needs assessment for ethics education.
- CME staff appointed to the Performance Improvement Committee.

CME Plans for 2010-2011:
1. Work closely with Quality Management to monitor the effect of CME content on core outcomes.
2. In view of the increased numbers of required CME hours in the state of Alabama, consider nominal charges for on-line CME credits in the months of November and December.
3. A second jointly sponsored program with Mercy Medical of Baldwin County.
4. Timely submission of materials for re-accreditation and subsequent acquisition of re-accreditation with commendation.
5. Working with other professions to combine CME credit with CEU credits.
6. Develop a “research” aspect to the development and utilization of CME.
2009-2010
Summary of Activities
Medical Student Summer Research Program

The Thirty-sixth Annual Medical Student Research Day was held on Friday, August 6, 2010
hosting approximately 115 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. Jane Reusch, Professor of Medicine and Biochemistry, and Director of Diabetes Team and
Microscopy Core at the University of Colorado at Denver – Health Sciences Center was the
keynote speaker. Dr. Reusch’s seminar was entitled, “Cyclic AMP Response Element Binding
Protein: An Unexpected Journey in Translational Medicine”.

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

**ORAL PRESENTATIONS**

*Jason Largen*, freshman medical student. Investigating the roles of PP5 on the cellular
response to genomic stress. Sponsored by Honkanen, Richard, Ph.D., Department of
Biochemistry and Molecular Biology.

*William Gannon*, sophomore medical student. Clinical significance of chromosomal
microdeletions and duplications among children with developmental disabilities.
Sponsored by Swingle, Hanes, M.D., M.Ph., and Martinez, Jose’, M.D., Department of
Pediatrics.

*Russ Terry*, sophomore medical student. Regulation of vascular smooth muscle
phenotype in coronary collateral growth. Sponsored by Rocic, Petra, Ph.D., Department
of Biochemistry and Molecular Biology.

*Krishna Karthik Chivukula*, sophomore medical student. Alloderm for repair of complex
abdominal wall defects in neonates and children. Sponsored by Hollands, Celeste, M.D.,
Department of Surgery.

*Robert Kobelja*, sophomore medical student. Glucose-6-Phosphate dehydrogenase
(G6PDH) functions as a baro/chemo-gauge in pulmonary artery smooth muscle
(PASMC). Sponsored by Gupte, Sachin, Ph.D., Department of Biochemistry and
Molecular Biology.
Cullen McCarthy, sophomore medical student. Restenosis following PCTA is potentiated in metabolic syndrome patients by enhanced VSMC dedifferentiation. Sponsored by Weber, David, Ph.D., Department of Physiology.

POSTER PRESENTATIONS

Sarah Kelley, freshman medical student. Myosin light chain kinase regulates the surface expression and calcium entry through transient receptor potential vanilloid 4 channels in rat pulmonary microvascular endothelial cells. Sponsored by Parker, James, Ph.D., Department of Physiology.


Thomas Garth, Jr., freshman medical student. Caregivers' health literacy skills and opinions regarding pediatric providers' communications skills: a cross-sectional survey at the USA C&W. Sponsored by Connelly, Rosina, M.D., Department of Pediatrics.

Raleigh Adams, sophomore medical student. The role of acidosis on surface expression of acid-sensing ion channel-1A and -2A. Sponsored by Zha, Xiangming, Ph.D., Department of Cell Biology and Neuroscience.

Sara Long, sophomore medical student. The effect of oxygen tension and hyperglycemia on Glut-1 expression and glucose uptake in pulmonary artery endothelial cells. Sponsored by Fouty, Brian, M.D., Department of Pharmacology and Center for Lung Biology.

Annie Lee, freshman medical student. Emergency room visits and hospitalizations for acute and chronic diabetes-related complications of type 2 diabetes mellitus patients participating in a glucose status telemetry trial. Sponsored by Arrieta, Martha, M.D., M.Ph., Ph.D., and Crook, Errol, M.D., Department of Internal Medicine, and Center for Healthy Communities.

Brian Dilworth, sophomore medical student. Possible role of nitric oxide in liquid and macromolecule secretion by porcine bronchi. Sponsored by Ballard, Stepehn, Ph.D., Department of Physiology.

James Towner, freshman medical student. Overcoming cytokine-induced mtDNA damage in insulin secreting cells through enhanced repair capacity. Sponsored by Wilson, Glenn, Ph.D., Department of Cell Biology and Neuroscience.

Libby Wilson, sophomore medical student. Tracheal aspirate rage as a predictor of bronchopulmonary dysplasia in preterm infants. Sponsored by Benjamin, John, M.D., M.Ph., Department of Pediatrics, and Gebb, Sarah, Ph.D., Department of Cell Biology and Neuroscience.
Ryan Kunstadt, sophomore medical student. Biocarbonate channel expression and intracellular pH fluctuations following sodium bicarbonate correction of acidosis in pulmonary endothelial cells. Sponsored by Sayner, Sarah, Ph.D., Department of Cell Biology and Neuroscience.

Austin Fox, freshman medical student. Activation of B cells from lupus-prone Rasgrp-1 deficient mice. Sponsored by Barrington, Robert, Ph.D., Department of Microbiology and Immunology.

Nicholas Bates, freshman medical student. Ventilator-induced injury and the unfolded protein response. Sponsored by Benjamin, John, M.D., M.Ph., Department of Pediatrics, and Brewer, Joseph, Ph.D., Department of Microbiology and Immunology.

Ben Shepherd, sophomore medical student. Physiologic impact of endothelial K_ca channels and eNOS on coronary artery tone. Sponsored by Taylor, Mark, Ph.D., Department of Physiology.

Lashundra Tiara Murphy, freshman medical student. Role of small heat shock protein 27 (HSP27) in atherosclerosis. Sponsored by Gerthoffer, William, Ph.D., Department of Biochemistry and Molecular Biology.

Missia Kohler, sophomore medical student. Cerebellar cortex derived from mature cystic teratomas of the ovary. Sponsored by Sosnowski, Jeffrey, M.D., Ph.D., Department of Pathology.

James Galle, sophomore medical student. Effect of cyclic GMP-dependent protein kinase (PKG) on platelet-derived growth factor (PDF-BB)-induced ERK1/2 phosphorylation in rat aortic smooth muscle cells. Sponsored by Lincoln, Thomas, Ph.D., Department of Physiology.

The Clyde G. "Sid" Huggins Medical Student Research Awards were presented to Mr. William Gannon, sophomore medical student for best oral presentation entitled, "Clinical significance of chromosomal microdeletions and duplications among children with developmental disabilities." He was sponsored by Hanes Swingle, M.D., M.Ph., and Jose' Martinez, M.D., Department of Pediatrics, and Ms. Sara Long, sophomore medical student for best poster presentation entitled, "The effect of oxygen tension and hyperglycemia on Glut-1 expression and glucose uptake in pulmonary artery endothelial cells." She was sponsored by Brian Fouty, M.D., Department of Pharmacology and Center for Lung Biology. Each winner was presented with a plaque of recognition and cash award. Both recipients are eligible to make their presentations at the Annual National Research Forum in Galveston, Texas.
Graduate Program in Basic Medical Sciences

Administration

Dr. Ronald Balczon is completing his fifth year serving 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 all required documents, the Graduate Office reviews the file for accuracy before forwarding it to the program’s Admissions Committee for review. The committee’s decision regarding acceptance and an offer to matriculate or a decline is communicated to the student.

The Graduate Office hosted interviews in March, April, May, June, and July for applicants to the Fall 2010 class. A total of 18 students were interviewed (US=10; International=8). See summary below.

<table>
<thead>
<tr>
<th>Admissions - BMS Graduate Program</th>
<th>2010</th>
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</thead>
<tbody>
<tr>
<td>Inquiries</td>
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<tr>
<td></td>
<td>International</td>
</tr>
<tr>
<td>Applicants</td>
<td>US</td>
</tr>
<tr>
<td></td>
<td>International</td>
</tr>
<tr>
<td>Acceptance</td>
<td>US</td>
</tr>
<tr>
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<td>International</td>
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<td>Matriculant</td>
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<tr>
<td></td>
<td>Average GRE</td>
</tr>
<tr>
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<td>Average GPA</td>
</tr>
</tbody>
</table>

Recruitment Activities

1. Graduate program information was distributed at several local high schools.
2. Graduate Office personnel hosted sessions at regional science conferences.
3. Dr. Balczon distributed program information and met with faculty colleagues at over thirty regional colleges and universities during Fall Semester. In April, Ms. Flagge participated in the Louisiana Regional College Career Fair in north Louisiana.
4. Local presentations were made to USA's Premedical Honors Society and Freshman Biomedical Sciences students.

5. Students and faculty from both Spring Hill College and William Carey University attended the Graduate Forum in November.

Curriculum

1. The format for instruction in the IDL 581 Fundamentals of Biomedical Sciences course was altered. The new mode was used for teaching spring semester, 2010. Changes are being considered for the IDL 580 Fundamentals and Signal Transduction courses for the 2011 academic year.

2. The third COM Research Forum was held on November 20, 2009.

New Programs/Policies/Requirements

1. Beginning Fall, 2009, graduate students began registering for Distinguished Scientist Seminars each week. Details regarding the number of absences allowed and work required for absences beyond the ones excused were approved at the 2009 December meeting of the Executive Committee.

2. Policy regarding the length of the written Qualifying Exam/Formal Proposal was reviewed at the Executive Committee's 2010 July meeting. Though NIH has shortened the length for grant proposals from twenty to twelve pages, the Basic Medical Sciences Executive Committee voted to keep the program's current policy in effect. Students are required to submit a twenty-page proposal.

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 through a week-long bake sale in October and T-Shirt sales for the American Cancer Society.

Extramural Support for Graduate Training

1. The NIH Institutional Training Grant on "Cell Signaling and Lung Pathobiology" continues to provide six predoctoral students with stipend support.

2. Many BMS Graduate Program students are applying for and receive extramural grant awards through American Heart Association and EPSCOR, as well as travel awards for participating at national conferences and annual meetings in the disciplines.
Graduates

Six students completed all requirements for the Ph.D. degree during the academic year (September 2009-August 2010). They are:

Joel Franklin Andrews
DISSERTATION TITLE: "Association of Host Mitochondria with the Parasitophorous Vacuole of Toxoplasma gondii: Mechanisms and Significance"
MAJOR PROFESSOR: Sailen Barik, Ph.D.
DEPARTMENT: Biochemistry and Molecular Biology
CURRENT POSITION: Postdoctoral Fellow, Mitchell Cancer Institute, University of South Alabama

Kyla Marie Frohlich
DISSERTATION TITLE: "Transport and Metabolism of sn-Glycerol-3-Phosphate and Dihydroxyacetone Phosphate by the Obligate Intracytoplasmic Pathogen Rickettsia prowazekii"
MAJOR PROFESSOR: Jonathon Audia, Ph.D.
DEPARTMENT: Microbiology and Immunology
CURRENT POSITION: Postdoctoral Fellow, LSU-New Orleans

Michelle Boemler Henesy
DISSERTATION TITLE: "Regulation of ANP-Stimulated cGMP Signals in Murine Leydig Tumor Cells"
MAJOR PROFESSOR: Thomas Rich, Ph.D.
DEPARTMENT: Pharmacology
CURRENT POSITION: Manager of Hospital Services, The American Red Cross, Birmingham, Alabama

Jessica L. Jones
DISSERTATION TITLE: "Characterization of Dilution Growth Arrest in Vibrio vulnificus and Recovery by Secreted Growth Factors"
MAJOR PROFESSOR: John Foster, Ph.D.
DEPARTMENT: Microbiology and Immunology
CURRENT POSITION: Agent, Food and Drug Administration, Health Services Center, Dauphin Island, Alabama

Kevin Michael Lowe
DISSERTATION TITLE: "Analysis of the Pathologic Impact of Site Specific Accumulations of Extravascular Pulmonary Fluid"
MAJOR PROFESSOR: Troy Stevens, Ph.D.
DEPARTMENT: Pharmacology-CLB
CURRENT POSITION: Fellow of Surgery, Dallas Methodist Medical Center, Texas

Samer Fuad Swedan
DISSERTATION TITLE: "Mechanism of Suppression of Host Interferon Response by the Nonstructural Proteins of Human Respiratory Syncytial Virus"
MAJOR PROFESSOR: Sailen Barik, Ph.D.

DEPARTMENT: Biochemistry and Molecular Biology
CURRENT POSITION: Assistant Professor, College of Applied Medical Sciences, Department of Medical Laboratory Sciences, Jordan University of Science and Technology

Ryan Joseph Viator
DISSERTATION TITLE: "Oxygen-Tension Controls Glucose Uptake and Metabolism in Endothelial Cells"
MAJOR PROFESSOR: Brian Fouty, M.D., Ph.D.
DEPARTMENT: Pharmacology-CLB
CURRENT POSITION: Postdoctoral Fellow, LSU-New Orleans

To date, 167 students have received a Ph.D. degree in Basic Medical Sciences, awarded by departments as follows:

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<tr>
<th>Department</th>
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<tbody>
<tr>
<td>Biochemistry/Molecular Biology</td>
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<tr>
<td>Cell Biology and Neuroscience</td>
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<tr>
<td>Microbiology/Immunology</td>
<td>38</td>
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<tr>
<td>Pharmacology</td>
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<tr>
<td>Physiology</td>
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186
Summary of Extramural Support

Funding for the 2009-2010 academic year includes $39,783,335 and $4,340,992 in awards administered through the Office of Sponsored Programs and the South Alabama Medical Science Foundation, respectively.

Extramural Funds
Totals for Recent Years

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<td>2010</td>
<td>44,124,327</td>
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*Includes 19.6 million dollar MCI construction grant  
**Includes 12 million dollar MCI construction grant
## EXTRAMURAL FUNDING
(OCTOBER 1, 2009 – SEPTEMBER 30, 2010)

### BIOCHEMISTRY AND MOLECULAR BIOLOGY

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<th><strong>AGENCY</strong></th>
<th><strong>PROJECT TITLE</strong></th>
<th><strong>FISCAL YEAR FUNDING</strong></th>
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<td>Sailen Barik</td>
<td>Amira</td>
<td>Amira Sponsored Research – Effects of a DP2 Receptor Antagonist on RSV-Induced Ocular Immunopathology</td>
<td>$25,000</td>
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<td>Donna Cioffi</td>
<td>NIH 4 R00 HL089361-03</td>
<td>Inactivation of Endothelial I_{soe} Through Calcium-Phosphate Complexation</td>
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<td>William Gerthoffer &amp; Sailen Barik</td>
<td>NIH 1 R21 HL077726-06A1</td>
<td>Small Heat Shock Proteins in Smooth Muscle Plasticity</td>
<td>25,000</td>
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<td>William Gerthoffer</td>
<td>NIH 1 R21 HL097220-01A1</td>
<td>Molecular Determinants of Smooth Muscle Phenotype in Pulmonary Hypertension</td>
<td>222,375</td>
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<td>Sachin Gupte</td>
<td>NIH 5 R01 HL085352-04</td>
<td>Regulation of Vascular Smooth Muscle Calcium by NADPH Redox</td>
<td>367,500</td>
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<tr>
<td>Richard Honkanen</td>
<td>NIH 1 R21 NS0715553-01</td>
<td>Development of AHTS-Assay for Inhibitors of a Type 2C Protein Phosphatase (PPMD1/WIP1)</td>
<td>148,333</td>
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<tr>
<td>Petra Rocic</td>
<td>NIH 5 R01 HL093052-03</td>
<td>Regulation of Coronary Growth in the Metabolic Syndrome</td>
<td>362,552</td>
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<tr>
<td>Petra Rocic &amp; Tracy Dodd</td>
<td>NIH 3 R01 HL093052-03S1</td>
<td>Regulation of Coronary Collateral Growth in the Metabolic Syndrome/Diversity Research Supplement</td>
<td>42,809</td>
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### BIOCHEMISTRY AND MOLECULAR BIOLOGY (cont’d)

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<tr>
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<th>Agency</th>
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<tr>
<td>Petra Rocic</td>
<td>NIH 3 R01 HL093052-02S1</td>
<td>Regulation of Coronary Collateral Growth in the Metabolic Syndrome</td>
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Total: $1,776,136

### BIOMEDICAL LIBRARY

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<tr>
<td>Robert Britton &amp; Andrea Wright</td>
<td>NNLM 100200</td>
<td>Exhibition at the Alabama Rural Health Conference</td>
<td>$1,266</td>
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<tr>
<td>Clista Clanton &amp; Geneva Staggs</td>
<td>NNLM 100139</td>
<td>Promoting Clearer Communication Between Health Professionals and Patients</td>
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<tr>
<td>Justin Robertson &amp; Beverly Rossini</td>
<td>NNLM 100137</td>
<td>Storm Warning: Hurricane Information, Planning, and Preparedness for Families</td>
<td>4,815</td>
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<tr>
<td>Beverly Rossini &amp; Andrea Wright</td>
<td>NNLM 100262</td>
<td>University of South Alabama Biomedical Library Presents Harry Potter’s World: Renaissance Science, Magic, and Medicine</td>
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Total: $14,041
### CENTER FOR STRATEGIC HEALTH INNOVATION (cont’d)

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<tr>
<td>Carl Taylor</td>
<td>HRSA 100374</td>
<td>Regional Response Planning 2011</td>
<td>$ 86,737</td>
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<tr>
<td>Carl Taylor</td>
<td>HRSA 100376</td>
<td>Advanced Regional Response Training Center-Roadshow 2011 (ARRTC ROADSHOW 2011)</td>
<td>266,951</td>
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<td>Carl Taylor</td>
<td>HRSA 100375</td>
<td>Advanced Regional Response Training Center-Basic 2011 (ARRTC BASIC 2011)</td>
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<tr>
<td>Carl Taylor</td>
<td>HRSA 100378</td>
<td>Advanced Regional Response Training Center-Advanced (AARTC ADVANCED 2011)</td>
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### COM ADMINISTRATION

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<tbody>
<tr>
<td>Samuel Strada &amp; David Wood</td>
<td>NIH 1 C06 RR029870-01</td>
<td>Construction of a BSL-3 Laboratory of Infectious Diseases at the University of South Alabama</td>
<td>$ 14,506,327</td>
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<tr>
<td>Samuel Strada</td>
<td>AHA 09PRE2260387-02</td>
<td>Advanced Cardiovascular Research for Medical Students</td>
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### COMPARATIVE MEDICINE

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<tr>
<td>Michele Schuler</td>
<td>NIH 5 K01 RR021971-05</td>
<td>Stem Cell Derivation in Two Neotropical Primate Species</td>
<td>$ 122,850</td>
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### EMERGENCY MEDICINE

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<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>$ 20,260</td>
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<tr>
<td>W. Scott McNair</td>
<td>Boehringer Ingelheim</td>
<td>A Randomized, Double-Blind, Double Dummy, Active Controlled, Parallel Group, Forced Titration Study to Compare the Fixed-Dosed Combination of Telmisartan 80mg plus Hydrochlorothiazide 25mg (T80/HCTZ25) Versus Telmisartan 80mg (T80) Monotherapy as First Line Therapy in Patients with Severe Hypertension</td>
<td>8,370</td>
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<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>27,629</td>
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<tr>
<td>Frank Pettyjohn</td>
<td>Novartis Pharmaceuticals</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>11,097</td>
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<tr>
<td>Frank Pettyjohn</td>
<td>Novartis Pharmaceuticals</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>21,800</td>
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<tr>
<td>Frank Pettyjohn</td>
<td>Novartis Pharmaceuticals</td>
<td>A 24-Week, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, International Phase III Study with a 24-Week Extension Period to Evaluate the Safety and Efficacy of Dapagliflozin 10mg Daily in Patients with Type 2 Diabetes who have Inadequate Glycaemic Control on a DPP-4 Inhibitor (Sitagliptin) Alone or in Combination with Metformin</td>
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### FAMILY MEDICINE

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<tr>
<td>Carol Motley</td>
<td>HRSA 5 D56 HP05226-06-00</td>
<td>Pre-Doctoral Training in Primary Care</td>
<td>$ 100,000</td>
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<tr>
<td>Allen Perkins</td>
<td>AFPRHB 090439</td>
<td>A Resident Curriculum in Rural Family Medicine</td>
<td>30,000</td>
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<td>Allen Perkins</td>
<td>AFPRHB 090457</td>
<td>Student Preceptorship Subsidy</td>
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<tr>
<td>Allen Perkins</td>
<td>AFPRHB 100167</td>
<td>A Resident Curriculum in Rural Family Medicine</td>
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### INTERNAL MEDICINE

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<tr>
<td>Diego Alvarez</td>
<td>AHA 0835134N-03</td>
<td>Infusion of Resident Endothelial Progenitors Promotes Repair of Microvascular Barrier During Acute Lung Injury</td>
<td>$ 77,000</td>
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<tr>
<td>Martha Arrieta</td>
<td>Housing Urban Development</td>
<td>Ross-Elderly Persons with Disabilities</td>
<td>8,370</td>
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<tr>
<td>Barney Beaver</td>
<td>Novartis Pharmaceuticals</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>22,426</td>
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<tr>
<td>Barbara Burckhartt</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>$10,951</td>
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<tr>
<td>Errol Crook</td>
<td>NIH 5 P20 MD002314-04</td>
<td>Broad-Based Research Collaboratives on Minority Health</td>
<td>1,147,932</td>
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<tr>
<td>Michael Culpepper</td>
<td>Otsuka Maryland</td>
<td>A Phase 3, Multicenter, Double-Blind, Placebo-Controlled, Parallel-Arm Trial to Determine Long-Term Safety and Efficacy of Oral Tolvaptan Tablet Regimens in Adult Subjects with Autosomal Dominant Polycystic Kidney Disease</td>
<td>37,556</td>
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<tr>
<td>Michael Culpepper</td>
<td>Amgen</td>
<td>EVOLVE – Evaluation of Cinacalet HCI Therapy to Lower Cardiovascular Events</td>
<td>9,032</td>
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<td>Michael Culpepper</td>
<td>Amgen</td>
<td>Randomized Trial to Evaluate the Efficacy and Safety of Cinacalcet Treatment in Combination with Low Dose Vitamin D for the Treatment of Subjects with Secondary Hyperparathyroidism (SHPT) Recently Initiating Hemo-Dialysis</td>
<td>12,720</td>
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<tr>
<td>Michael Culpepper</td>
<td>Dynavax</td>
<td>An Observer-Blinded, Randomized Study Comparing the Safety and Immunogenicity of HEPLISAV to License Vaccine (Energix-B) among Adults (18-75 Years of Age) with Chronic Kidney Disease (CKD)</td>
<td>$ 2,500</td>
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<td>Michael Culpepper</td>
<td>Otsuka Pharmaceuticals</td>
<td>Multicenter, Open-label, Extension Study to Evaluate the Long-term Efficacy and Safety of Oral Tolvaptan Tablet Regimen in Subjects with Autosomal Dominant Polycystic Kidney Disease (ADPKD)</td>
<td>4,500</td>
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<td>Jack DiPalma</td>
<td>Takeda Pharmaceuticals</td>
<td>Comparison of Lubiprostone and Placebo for Relief of Constipation from Constipating Medications</td>
<td>35,080</td>
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<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>18,469</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>5,044</td>
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<td>Karen Fagan</td>
<td>Gilead Sciences</td>
<td>A Randomized, Multicenter Study of First-Line Ambrisentan and Tadalafil Combination Therapy in Subjects with Pulmonary Arterial Hypertension</td>
<td>2,500</td>
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<tr>
<td>Brian Fouty</td>
<td>AHA 09 GRNT2260917-02</td>
<td>Glucose 1 Transporter in Pulmonary Vascular Repair</td>
<td>82,500</td>
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<tr>
<td>Johnson Haynes</td>
<td>Novartis Pharmaceuticals</td>
<td>Incidence of Secondary Iron Overload in Adults with Sickle Cell Disease (SCD) Following Chronic, Intermitten Red Blood Cell (RBC) Transfusions</td>
<td>$20,539</td>
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<td>Johnson Haynes</td>
<td>Emmaus Medical</td>
<td>A Phase III, Prospective, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group, Multicenter Study of L-Glutamine Therapy for Sickle Cell Anemia and Sickle B-Thalassemia</td>
<td>$2,500</td>
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<tr>
<td>Jorge Herrera</td>
<td>Schering Plough</td>
<td>Long-term Follow-up of Subjects in a Phase 1, 2, or 3 Clinical Trial in Which Boceprevir or Narlaprevir was Administered for the Treatment of Chronic Hepatitis C</td>
<td>$7,146</td>
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<tr>
<td>Jorge Herrera</td>
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<td>A Phase 3 Safety and Efficacy Study of Boceprevir in Subjects with Chronic Hepatitis C Genotype I who Failed Prior Treatments with Peginterferon/Ribavirin</td>
<td>$11,444</td>
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<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>$33,368</td>
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<td>Jorge Herrera</td>
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<td>A Phase 3 Safety and Efficacy Study of Boceprevir in Combination with Peginterferon α-2a and Ribavirin in Subjects with Chronic Hepatitis C Genotype I Who Failed Prior Treatment with Peginterferon/Ribavirin</td>
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<tr>
<td>Jorge Herrera</td>
<td>Schering Plough</td>
<td>A Phase 3 Safety and Efficacy Study of Erythropoietin Use During Treatment of Subjects with Chronic Hepatitis C with Boceprevir, Peginterferon α-2b, and Ribavirin</td>
<td>$ 31,423</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>
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<tr>
<td>Clara Massey</td>
<td>Novartis Pharmaceuticals</td>
<td>A Multicenter, Randomized, Double-Blind, Parallel Group, Active-Controlled Study to Evaluate the Efficacy and Safety of both Aliskiren Monotherapy and Aliskiren/Enalapril Combination Therapy Compared to Enalapril Monotherapy, on Morbidity, and Mortality in Patients with Chronic Heart Failure (NYHA Class II-IV)</td>
<td>5,549</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>58,800</td>
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<tr>
<td>Reynaldo Rodriguez</td>
<td>Braintree Laboratories</td>
<td>An Efficacy Evaluation of 2 Different Bowel Cleansing Preparation in Adult Subjects (Protocol BL1800-303)</td>
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### MICROBIOLOGY

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<tbody>
<tr>
<td>Jonathon Audia</td>
<td>NIH 3 R01 AI015035-32S1</td>
<td>Permeability of the Epidemic Typhus Rickettsia</td>
<td>$355,059</td>
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<tr>
<td>Jonathon Audia</td>
<td>NIH 1 R56 AI085002-01A1</td>
<td>Elucidating the Role of Phospholipase in Induced Phagocytosis of the Epidemic Typhus Rickettsia</td>
<td>$334,031</td>
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<tr>
<td>Paul Brett</td>
<td>NIH 1 R21 AI088418-01</td>
<td>Development and Testing of Novel Glanders Vaccine Candidates</td>
<td>$210,089</td>
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<td>Joseph Brewer</td>
<td>NIH 2 R01 GM061970-11A1</td>
<td>Homeostasis of the ER in Differentiating B Cells</td>
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<td>Robert Lausch</td>
<td>Lion's Club</td>
<td>Lion's/USA Eye Research</td>
<td>$40,000</td>
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<tr>
<td>David Wood</td>
<td>NIH 2 R56 AI020384-27</td>
<td>Genetic Analysis of Rickettsia Prowazekii</td>
<td>$387,684</td>
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<tr>
<td>David Wood</td>
<td>NIH 3 R37 AI020384-26S1</td>
<td>Genetic Analysis of Rickettsia Prowazekii</td>
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### MITCHELL CANCER INSTITUTE

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<tbody>
<tr>
<td>Thomas Butler</td>
<td>Genetech</td>
<td>An Observational Study of Treatment Pattern and Safety Outcomes for Metastatic or Locally Recurrent Breast Cancer</td>
<td>$4,560</td>
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<tr>
<td>Thomas Butler</td>
<td>Hoffman-LaRoche</td>
<td>An International Multicenter Open-Label 2-Arm Phase II Trial of Adjuvant Bevacizumab in Triple Negative Breast Cancer</td>
<td>$43,099</td>
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<tr>
<td>Thomas Butler</td>
<td>Novartis Pharmaceuticals</td>
<td>A Phase II, Multicenter, Non-Randomized, Open-Label Study of TKI248 in Patients with Relapsed or Refractory Multiple Myeloma, who are with or without t(4;14) Translocation</td>
<td>3,000</td>
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<td>Thomas Butler</td>
<td>Sarah Cannon Research Institute</td>
<td>A Randomized Trial of Ixempra vs. Taxol in Adjuvant Therapy Triple-Negative Breast Cancer (TITAN)</td>
<td>2,700</td>
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<tr>
<td>Donato Dumlao</td>
<td>Wyeth Research</td>
<td>Open-Label Extension Study to Assess the Safety of a Fixed Dose of Subcutaneous Methylnaltrexone in Subjects with Advanced Illness and Opioid-Induced Constipation</td>
<td>3,094</td>
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<tr>
<td>Michael Finan</td>
<td>Bristol-Myers Squibb</td>
<td>A Phase III Open-Label, Randomized, 2 Arm Study of Ixabepilone Administered Every 21 Days Versus Paclitaxel or Doxurubicin</td>
<td>11,000</td>
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<tr>
<td>Hung Khong</td>
<td>Pfizer</td>
<td>A Phase III, Open-Label, Randomized, Comparative Study of Ticilimumab and Either Dacarbazine or Temozolomide in Patients with Advanced Melanoma</td>
<td>8,881</td>
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<tr>
<td>Hung Khong</td>
<td>Pfizer</td>
<td>A Phase 3 Study of SU011248 in Combination with Paclitaxel versus Bevacizumab with Paclitaxel in the First-Line Advanced Disease Setting in Patients Having Breast Cancer</td>
<td>13,485</td>
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<tr>
<td>Hung Khong</td>
<td>Genta</td>
<td>GM307: A Multicenter, Randomized, Double-Blind Study of Dacarbazine with or without Genasene in Chemotherapy-Naive Subjects with Advanced Melanoma and Low LDH</td>
<td>$7,900</td>
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<tr>
<td>Hung Khong</td>
<td>Pfizer</td>
<td>A Randomized Phase 2b Study of Sunitinib Plus Oxaliplatin, 5-Fluorouracil and Leucovorin (FOLFOX) versus Bevacismab Plus Folfox as First-Line Treatment in Patients with Metastatic Colorectal Cancer</td>
<td>$12,363</td>
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<tr>
<td>Hung Khong</td>
<td>Wyeth Research</td>
<td>A Phase I/II, Open-Label Study of Nertinib (HKI-272) in Combination with Capecitabine in Subjects with Solid Tumors and ErbB-2 Positive Metastic or Locally Advanced Breast Cancer</td>
<td>$14,674</td>
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<td>Hung Khong</td>
<td>Novartis Pharmaceuticals</td>
<td>A Phase III, Randomized, Double-Blind, Placebo-Controlled Multicenter Study of ASA404 in Combination with Paclitaxel and Carboplatin as First-Line Treatment for Locally Advanced or Mestatic Non-Small Cell Lung Cancer</td>
<td>$13,550</td>
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<td>Hung Khong</td>
<td>Novartis Pharmaceuticals</td>
<td>A Phase Ib, Open-Label, Two Arm Study of I.V. and Oral Panobinostat (LBH589) in Combination with I.V. Trastuzumab (Herceptin) and I.V. Paclitaxel as Treatment for Adult Female Patients with HER2 Overexpressing Metastatic Breast Cancer (MBC)</td>
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<tr>
<td>Hung Khong</td>
<td>Abraxis/Celgene</td>
<td>A Phase I/II Clinical Trial of the Hypomethylating Agent Azacitadien (Vidaza) with the Nanoparticle Albumin Bound Paclitaxel (Abraxane) in the Treatment of Patients with Advanced or Metastatic Solid Tumors and Breast Cancer</td>
<td>$44,580</td>
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<td>Hung Khong</td>
<td>Abraxis</td>
<td>ABX238-BC08US/A Phase I Study of Neoadjuvant Chemotherapy with Nanoparticle Albumin Bound Paclitaxel (Abraxane), Doxorubicin, and Cyclophosphamide (NAC) with or without Sorafenib in Patients with Stage I and II Breast Cancer</td>
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<td>Hung Khong</td>
<td>Novartis Pharmaceuticals</td>
<td>A Randomized Phase III, Double-Blind, Placebo-Controlled Multicenter Trial of Everolimus in Combination with Trastuzumab and Paclitaxel, as First-Line Therapy in Women with HER2 Positive Locally Advanced or Metastatic Breast Cancer</td>
<td>6,456</td>
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<tr>
<td>Hung Khong</td>
<td>Astellas</td>
<td>A Phase II, Multicenter, Open-Label Study of YM155 plus Docetaxel in Subjects Stage III (Unresectable) or Stage IV Melanoma</td>
<td>28,641</td>
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<td>Hung Khong</td>
<td>Astellas</td>
<td>A Phase II, Multicenter, Randomized Study of YM155 plus Docetaxel as First-Line Treatment in Subjects with HER2 Negative Metastatic Breast Cancer</td>
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<tr>
<td>Eddie Reed</td>
<td>Genetech</td>
<td>A Phase II, Multicenter, Randomized, Double-Blind, Placebo-Controlled Trial Evaluating the Efficacy and Safety of GDC-0449 as Maintenance Therapy in Patients with Ovarian Cancer in a Second or Third Complete Remission</td>
<td>6,461</td>
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<td>Eddie Reed</td>
<td>Bristol-Myers Squibb</td>
<td>A Randomized Double-Blind Phase 3 Trial Comparing Docetaxel Combined with Dasatinib to Docetaxel Combined with Placebo in Castration-Resistant Prostate Cancer</td>
<td>20,667</td>
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MITCHELL CANCER INSTITUTE (cont’d)

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<tr>
<td>William Taylor</td>
<td>Novartis Pharmaceuticals</td>
<td>An Open-Label, Multicenter Phase II Study to Compare the Efficacy and Safety of RAD001 as First-Line Followed by Second-Line Sunitinib</td>
<td>$ 24,767</td>
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NEUROLOGY

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<tr>
<td>Bassam Bassam</td>
<td>Novartis Pharmaceuticals</td>
<td>A 24-Month Double-Blind, Randomized, Multicenter, Placebo-Controlled, Parallel-Group Study Comparing the Efficacy and Safety of 0.5mg and 1.25mg Fingolimod (FTY720) Administered Orally Once Daily versus Placebo in Patients with Relapsing-Remitting Multiple Sclerosis</td>
<td>$ 44,922</td>
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<tr>
<td>Ivan Lopez</td>
<td>Schwarz Biosciences</td>
<td>An Open-Label Extension Trial to Determine Safety and Efficacy of Long-Term Oral SPM 927 in Patients with Partial Seizures</td>
<td>17,809</td>
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<tr>
<td>Paul Maertens</td>
<td>Eisai Medical Research</td>
<td>A Double-Blind, Placebo-Controlled, Parallel-Group Study of Rufinamide Given as Adjunctive Therapy in Patients with Refractory Partial Seizures</td>
<td>2,383</td>
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<tr>
<td>Paul Maertens</td>
<td>Eisai Medical Research</td>
<td>An Open-Label Extension Study of Rufinamide Given as Adjunctive Therapy in Patients with Refractory Partial Onset Seizures</td>
<td>$ 6,545</td>
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<tr>
<td>Paul Maertens</td>
<td>Pfizer</td>
<td>A Placebo-Controlled, Rising Dose, Multiple Dose Study to Evaluate the Safety, Tolerability and Pharmacokinetics of Pregabalin in Pediatric Patients with Partial Onset Seizures</td>
<td>11,088</td>
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<td>Paul Maertens</td>
<td>Schwartz Biosciences</td>
<td>A Multicenter, Open-Label Study to Investigate the Safety, Tolerability, and Pharmacokinetics of Lacosamide (LCM) Oral Solution (Syrup) as Adjunctive Therapy in Children with Partial-Onset Seizures (Protocol SP847)</td>
<td>4,000</td>
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<td>Paul Maertens</td>
<td>Schwartz Biosciences</td>
<td>A Multicenter, Open-Label Study to Investigate the Safety, Tolerability, and Pharmacokinetics of Lacosamide (LCM) Oral Solution (Syrup) as Adjunctive Therapy in Children with Partial-Onset Seizures (Protocol SP848)</td>
<td>3,700</td>
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<td>Dean Naritoku</td>
<td>Schwartz Biosciences</td>
<td>An Open-Label, Multicenter, Parallel-Group, Two-Arm Study Comparing the Pharmacokinetics of Keppra XR in Children (Age 12-16 years old) with Epilepsy and in Adults (Age 18-55 years old) with Epilepsy</td>
<td>57,020</td>
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### ORTHOPAEDIC SURGERY

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<tr>
<td>Valentina Grishko &amp; Albert Pearsall, IV</td>
<td>Muscular Skeletal Transplant Foundation</td>
<td>Effect of Hyaluronic Acid on Chonrocyte Viability and Function During Cold Storage</td>
<td>$100,000</td>
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### PEDIATRICS

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<tbody>
<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>$28,112</td>
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<tr>
<td>Karen Crissinger</td>
<td>Johnson &amp; Johnson PR&amp;D</td>
<td>A Multicenter, Double-Blind, Parallel-Group, and Open-Label Long-Term Maintenance Study to Evaluate the Safety and Efficacy of Rabeprazole Sodium Delayed Release Pediatric Bead Formulation in 1 to 11 year-old Pediatric Subjects with Symptomatic and Erosive Gastro-Esophageal Reflux Disease</td>
<td>43,015</td>
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<tr>
<td>Benjamin Estrada &amp; Mary Mancao</td>
<td>NIH N01 AI30025-01</td>
<td>A Phase 3, Randomized, Placebo-Controlled, Blinded Investigation of Oral Valganciclovir for Congenital CMV</td>
<td>19,400</td>
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<tr>
<td>Fabien Eyal</td>
<td>NIH A071868(M09A10144)</td>
<td>Gene Targets for IVH</td>
<td>1,483</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>$260,859</td>
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<td>Hamayn Imran</td>
<td>NIH 111513010-7366495</td>
<td>Twitch Research Protocol</td>
<td>24,756</td>
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<td>Hamayn Imran &amp; Aarati Rao</td>
<td>Hyundai</td>
<td>Hope on Wheels Hyundai Pediatric Cancer Research Award</td>
<td>40,000</td>
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<tr>
<td>Mary Mancao &amp; John Vande Waa</td>
<td>HRSA 5 H12HA23027-10-00</td>
<td>USA Family Specialty Clinic</td>
<td>332,356</td>
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<tr>
<td>Mary Mancao &amp; John Vande Waa</td>
<td>ADPH RW- USAF-1011</td>
<td>USA Family Specialty Clinic Grant</td>
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<td>Kenneth Rettig</td>
<td>ADPH C00113052</td>
<td>Endocrinology Clinic for State Newborn Screening Program</td>
<td>54,649</td>
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<td>Lawrence Sindel</td>
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<td>Cystic Fibrosis Clinic for State Newborn Screening Program</td>
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<td>Lawrence Sindel</td>
<td>C002-10/Center ID#101</td>
<td>Cystic Fibrosis Foundation Care Center</td>
<td>34,750</td>
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<td>Felicia Wilson</td>
<td>NIH 98543-1234</td>
<td>Children's Oncology Group Grant</td>
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<td>Felicia Wilson</td>
<td>NIH CA98543-08</td>
<td>Children's Oncology Group Grant</td>
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### PEDIATRICS (cont’d)

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<tr>
<td>Felicia Wilson</td>
<td>ADPH C00113053</td>
<td>Comprehensive Sickle Cell Center for State Newborn Screening Program</td>
<td>$ 40,440</td>
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<td>Felicia Wilson</td>
<td>Novartis Pharmaceuticals</td>
<td>A Randomized, Multicenter, Open-Label, Phase II Study to Evaluate the Safety, Tolerability, Pharmacokinetics and the Effects on Liver Iron Concentration of Repeated Doses of 10mg/kg/day of ICL670 Relative to Deferoxamine in Sickle Disease Patients with Transfusional Hemosiderosis</td>
<td>$ 33,146</td>
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**Total** $1,111,261

### PHARMACOLOGY

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<tr>
<td>June Ayling</td>
<td>ACHE 100362</td>
<td>Protection by 5-Methyltetrahydrofolate (5MTHF) Against UV-Induced DNA Damage</td>
<td>$ 25,000</td>
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<tr>
<td>Natalie Bauer</td>
<td>Gilead Sciences</td>
<td>Potential Role of Circulating Microparticles in Pulmonary Arterial Hypertension: Progression &amp; Treatment Assessment</td>
<td>$ 50,000</td>
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<tr>
<td>Natalie Bauer</td>
<td>Parker B Francis 100004</td>
<td>Pulmonary Microvascular Endothelial Response to Acute Hypoxia: Changes in RHOA/RHO Kinase Signaling</td>
<td>$ 52,000</td>
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<tr>
<td>Judy Creighton</td>
<td>NIH 1 R01 HL102296-01</td>
<td>AMPK A1 and N-Cadherin Form A Functional Complex Essential for Lung Endothelial Barrier Repair</td>
<td>$296,500</td>
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<tr>
<td>Mark Gillespie</td>
<td>AHA 09PRE2260451-02</td>
<td>Regulation of Hypoxic Gene Expression by G-Quadruplex Structures</td>
<td>$21,770</td>
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<tr>
<td>Mark Gillespie &amp; Glenn Wilson</td>
<td>NIH 5 R01 HL058234-10</td>
<td>DNA Lesions &amp; Gene Expression</td>
<td>370,938</td>
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<tr>
<td>Mark Gillespie</td>
<td>NIH 5 P01 HL066299-09-10-PROJ2</td>
<td>Mitochondrial DNA Integrity and Endothelial Cell Free Radical Stress – Project 2**</td>
<td>300,049</td>
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<tr>
<td>Ivan McMurtry &amp; Salina Gairhe</td>
<td>AHA 09PRE2250000-01</td>
<td>Endothelial Cell RHOA/RHO Kinase Signaling Regulates Vascular Smooth Muscle Cell Phenotype</td>
<td>21,770</td>
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<td>Jack Olson</td>
<td>CMREF-05</td>
<td>Polyamines and Human Pulmonary Artery Hypertension</td>
<td>98,250</td>
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<td>Thomas Rich</td>
<td>NIH 1 S10 RR027535-01</td>
<td>Request for Spectral Confocal Microscope</td>
<td>397,435</td>
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<td>Thomas Rich</td>
<td>GSK 013767</td>
<td>Determination of the Influence of AKAPS on Localized cAMP Signal in Human Airway Smooth Muscle</td>
<td>57,960</td>
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<td>Thomas Rich &amp; Bing Zhu</td>
<td>NIH 5 R01 HL094455-02</td>
<td>cAMP Phosphodiesterase and Lung Endothelial Cell</td>
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<td>Troy Stevens &amp; Glenda Bonilla</td>
<td>AHA 10PRE4320054</td>
<td>Essential Role of Lactate Dehydrogenase A (LDHA) in Lung Neo-Angiogenesis</td>
<td>21,770</td>
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**Center for Lung Biology Program Project**
PHARMACOLOGY (cont’d)

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<tr>
<td>Troy Stevens</td>
<td>NIH 5 P01 HL06629</td>
<td>Program Project Grant Administrative Core 1**</td>
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<td>&amp; Mark Gillespie</td>
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<td>Troy Stevens</td>
<td>NIH 5 P01 HL066299-09</td>
<td>Program Project Tissue Culture Core 2**</td>
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<td>Troy Stevens</td>
<td>NIH 5 P01 HL066299-10</td>
<td>cAMP Endothelial Cell Permeability Permeability-Project 1**</td>
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<td>Troy Stevens</td>
<td>NIH 2 RO1 HL060024-13</td>
<td>Store-Operated Calcium Entry: Lung Endothelial</td>
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<td>&amp; Songwei Wu</td>
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<td>Type-T Calcium Channels and Vond Willebrand Factor Release-Project 3**</td>
<td>275,326</td>
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<td>&amp; Troy Stevens</td>
<td>PROJ3</td>
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**Center for Lung Biology Program Project

Total $ 3,622,614
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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>Michael Cohen</td>
<td>Otuska Maryland Medicinal Labs</td>
<td>Evaluation of Cardioprotective Effect of Cangrelor in Cardiac Ischemia Reperfusion Injury Model in Cynomolgus Monkeys Using Open Chest Method</td>
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<tr>
<td>James Downey</td>
<td>NIH 5 R01 HL020648-30</td>
<td>Physical Factors and Coronary Flow</td>
<td>286,200</td>
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<td>Thomas Lincoln</td>
<td>NIH 5 R01 HL066164-10</td>
<td>cGMP-Dependent Protein Kinase (PKG) Expression</td>
<td>330,750</td>
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<td>James Parker</td>
<td>NIH 1 R01 HL092992-02 REV</td>
<td>TRPV4 Initiates Ventilator Induced Lung Injury</td>
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<td>Mark Taylor</td>
<td>NIH 1 R01 HL085887-04</td>
<td>Coronary Artery Regulation by Small-Conductance Ca$^{2+}$-Activated K$^+$ Channels</td>
<td>257,250</td>
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<tr>
<td>Mary Townsley</td>
<td>NIH 2 T32 HL076125-07</td>
<td>Training in Cell Signaling and Lung Pathobiology*</td>
<td>196,376</td>
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<td>Mary Townsley</td>
<td>NIH 5 P01 HL06629906-10-PROJ4</td>
<td>TRPV4 in Regulation of Lung Endothelial Permeability Project 4**</td>
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<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 HL084159-03</td>
<td>Reactive Oxygen Species Regulation of Vascular Smooth Muscle Cell Migration</td>
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*Center for Lung Biology Training Grant  
**Center for Lung Biology Program Project  

Total $ 2,406,884
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<tr>
<td>Patrick Bosarge</td>
<td>KCI USA</td>
<td>A Prospective Study Examining Clinical Outcomes Associated with the Management of the Open Abdomen with the ABTHERA Open Abdomen Negative Pressure Therapy System and Barker's Vacuum Packing Technique</td>
<td>$ 9,677</td>
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<td>Richard Gonzalez &amp; Glenn Cummings</td>
<td>DOT 281348-002</td>
<td>Enhancement of Global Positioning System Utilization in Emergency Medical Services</td>
<td>10,000</td>
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<td>Arnold Luterman</td>
<td>Mylan Pharmaceuticals</td>
<td>Prospective Evaluation of the Effects of Topical Therapy with Sulfamylon for 5% Topical Solution on Autograft Healing in Subjects with Thermal Injuries Requiring Meshed Autografts: A Comparison to a Historical Control Group</td>
<td>10,200</td>
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<tr>
<td>Arnold Luterman</td>
<td>Stemnion</td>
<td>A Phase I/II Prospective Randomized, Double-Blind Safety and Dose-Determining Efficacy Clinical Trial Comparing ACCS (Amnion-Derived Cellular Cytokine Solution) in Three Different Regimens with Standardized Care Using 0.9% NaCL (Saline) Solution in the Topical Treatment of Partial-Thickness Burns</td>
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<td>William Richards</td>
<td>NIH 7 R01 D058197-09</td>
<td>Biomagnetic Signals of Intestinal Ischemia</td>
<td>215,239</td>
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<td>William Richards</td>
<td>SAGES</td>
<td>Downregulation of G6PD Activity is a Mechanism of Action Improvement of Type II Diabetes After Bariatric Surgery</td>
<td>30,000</td>
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<td>William Richards</td>
<td>American Society for Metabolic &amp; Bariatric Surgery</td>
<td>Vascular Endothelium Changes After Bariatric Surgery</td>
<td>$35,000</td>
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<tr>
<td>Paul Rider</td>
<td>Gore &amp; Associates</td>
<td>Efficacy of Bioabsorbable Staple Line Reinforcement in Colorectal and Colo-anal Anastomoses</td>
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<tr>
<td>Paul Rider</td>
<td>DURECT Corp</td>
<td>Bupivacaine Effectiveness and Safety in SABER Trial (BESST)</td>
<td>9,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>$339,820</td>
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