ANNUAL REPORT
UNIVERSITY OF SOUTH ALABAMA
COLLEGE OF MEDICINE

October 1, 2003 through September 30, 2004
Message from the Dean
and Vice President of College
Of Medicine

The Annual Report of the University of South Alabama College of Medicine documents the achievements of the faculty in the areas of teaching, research, and service. These efforts and accomplishments are instrumental in enhancing the health and overall quality of life of people in the Gulf Coast, State of Alabama, and throughout the nation. The College of Medicine is pleased to share this information and invites comments and questions related to the contents of the report.

Robert A. Kreisberg, M.D.
Dean, College of Medicine
Vice President of Medical Affairs
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Reports from Departments and Programs</td>
<td></td>
</tr>
<tr>
<td>Biochemistry and Molecular Biology</td>
<td>1</td>
</tr>
<tr>
<td>Cell Biology and Neuroscience</td>
<td>6</td>
</tr>
<tr>
<td>Comparative Medicine</td>
<td>12</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>17</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>21</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>24</td>
</tr>
<tr>
<td>Medical Genetics</td>
<td>41</td>
</tr>
<tr>
<td>Microbiology and Immunology</td>
<td>46</td>
</tr>
<tr>
<td>Neurology</td>
<td>52</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>58</td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td>60</td>
</tr>
<tr>
<td>Orthopaedic Surgery</td>
<td>67</td>
</tr>
<tr>
<td>Pathology</td>
<td>74</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>85</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>97</td>
</tr>
<tr>
<td>Physiology</td>
<td>108</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>123</td>
</tr>
<tr>
<td>Radiology</td>
<td>125</td>
</tr>
<tr>
<td>Surgery</td>
<td>131</td>
</tr>
<tr>
<td>Biomedical Library</td>
<td>142</td>
</tr>
<tr>
<td>Cancer Research Institute</td>
<td>149</td>
</tr>
<tr>
<td>Center for Lung Biology</td>
<td>158</td>
</tr>
<tr>
<td>Comprehensive Sickle Cell Center</td>
<td>159</td>
</tr>
<tr>
<td>Center for Healthy Communities</td>
<td>166</td>
</tr>
<tr>
<td>Office of Emerging Health Technologies</td>
<td>173</td>
</tr>
<tr>
<td>Office of Technology Development</td>
<td>179</td>
</tr>
<tr>
<td>II. Summary of Extramural Support</td>
<td>180</td>
</tr>
<tr>
<td>III. Report from Student and Alumni Affairs/Medical Education</td>
<td>212</td>
</tr>
<tr>
<td>IV. Report from Admissions</td>
<td>232</td>
</tr>
<tr>
<td>V. Report from Medical Student Summer Research Program</td>
<td>237</td>
</tr>
<tr>
<td>VI. Report from the Graduate Program in Basic Medical Sciences</td>
<td>240</td>
</tr>
</tbody>
</table>
2003-2004
Summary of Scholarly Activities
Department of Biochemistry & Molecular Biology

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press


Barik S, Bitko V. Pharmacology and emerging clinical applications of RNA. Encyclopedia of Molecular Biology and Molecular Medicine. Forthcoming.


II. PUBLISHED ABSTRACTS

Adams B, Mai T, Barik S. Reversible phosphorylation regulates motility and infectivity of toxoplasma gondii. Molecular Parasitology Meeting XIV; Abstract 223A.


Kumar R, Pannell L, Barik S. Phosphoproteomics of plasmodium falciparum. Molecular Parasitology Meeting XIV; Abstract 263B.

Swingle MR, Ciszak EM, and Honkanen RE. Structural basis for the catalytic activity of human serine/threonine: Protein phosphatase type 5 (PP5) FASEB Summer Research Conference 2004 July; Protein Phosphatases, p. 53.

III. BOOKS PUBLISHED

IV. PRESENTATIONS

Adams B, Mai T, Barik S. Reversible phosphorylation regulates motility and infectivity of toxoplasma gondii. Paper presented at: Molecular Parasitology Meeting XIV; Boston, MA.


Barik S. SiRNA as drugs against respiratory syncytial virus. Paper presented at: Alnylam Pharmaceuticals, 2004 May 18; Boston, MA.


Kumar R, Pannell L, Barik S. Phosphoproteomics of plasmodium falciparum. Paper presented at: Molecular Parasitology Meeting XIV; Boston, MA.


V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Nathan N. Aronson, Jr. served as the Past President of the American Medical and Graduate Departments of Biochemistry and is a member of the Nomination Committee of the American Society for Biochemistry and Molecular Biology.

Dr. Sailen Barik was an invited speaker for the Keystone Symposia on siRNAs and is a Study Section Member of the American Heart Association, SE Affiliate.

Dr. Richard Honkanen was a featured speaker at the FASEB Summer Research Conference on Protein Phosphatases and was a study section member for review of research grants for the American Cancer Society.

Dr. Jim Gaubatz was on the ZRG1 FO9 Oncology Study Section that reviews NIH fellowship applications. Dr. Gaubatz also serves on the National Scientific Advisory Council that reviews grant applications for the American Federation for Aging Research.

Dr. Roger Lane consults in medical education for Kaplan International.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Biochemistry Graduate students achieved excellent progress in the 2003-2004 academic year. Mark Swingle (Dr. R. Honkanen’s Laboratory) continued his studies with a predoctoral fellowship from NASA and Guofei Zhou (Dr. R. Honkanen’s Laboratory) had a predoctoral fellowship award from the American Heart Association. Guofei Zhou, Brian Adams, Lauren Amable, and Sonya Urnowey taught in the summer BEAR program.
Dr. Rajinder Kumar and Brian Adams made poster presentations at the 15th annual Woods Hole Molecular Parasitology Meeting. Lauren Amable presented her research on protein phosphatase inhibitors at the FASEB Summer Research Conference. She also has received an NIH predoctoral fellowship. Kathy Bonness was awarded a predoctoral fellowship in the NHLBI-funded Training Program in Cell Signaling and Pathobiology. Sonya Urnowey obtained a position with the Florida State Research Laboratory while finishing her Ph.D. degree this coming year. A first-year medical student, Andrea Braden, completed a summer medical research project entitled “Mutational Analysis for Protein Phosphatases” in Dr. Honkanen’s laboratory.

Three faculty members of the Biochemistry Department are active participants in the Alabama EPSCoR (Experimental Program to Stimulate Competitive Research) Program sponsored by the National Science Foundation. Drs. Aronson, Barik, and Honkanen are members of the Alabama Structural Biology Consortium (ASBC) that includes the University of South Alabama, University of Alabama at Birmingham and University of Alabama at Huntsville.

The Synchrotron at the Argonne National Laboratory was used for several of our projects, resulting in the determination of crystal structures of a number of proteins of fundamental and clinical importance.

In regards to teaching, this summer the Department offered a make-up course in medical biochemistry. Twelve students participated in the course. Students came from Arizona, Texas, Louisiana, Mississippi, Tennessee, Georgia, Puerto Rico, and Rhode Island. Dr. Lane was voted Best Basic Science teacher by the 2004 graduating medical school class. The Department was recognized with an Excellence Award from the students in the second year BEAR program. Two recent alumni reported important new professional positions. Dr. Yuan Liu (Dr. Aronson, Ph.D. 1998) is an Assistant Professor at Georgia State University, and Dr. Emily Burke (Dr. Barik, Ph.D. 1999) is working at the biotech firm ISIS Pharmaceuticals.
I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press


II. PUBLISHED ABSTRACTS


Costa ADT, Garlid KD, Cohen MV, Downey JM, Criz SD. Cyclic GMP and PKG activate mKATP channels in isolated mitochondria. 1st Annual Symposium of the American Heart Association Council on Basic Cardiovascular Sciences: Stress Signals, Molecular Targets and the Genome, 2004.


Krieg T, Alexeyev MF, Felix SB, Cohen MV, Downey JM. Acetylcholine and bradykinin must activate Akt to generate ROS that preconditions myocardium. American Heart Association Meeting, 2004 #04-ss-a-8075-AHA.


III. BOOKS PUBLISHED

IV. PRESENTATIONS

Critz SD. Mitochondrial KATP channels and their role in cardioprotection. Paper presented at: NIH Cardiovascular Pathophysiology IRG; 2004 May 20; Washington, DC.

LeDoux SP. Targeting of DNA repair proteins to the mitochondria effects a phenotypic change. Paper presented at: Louisiana State University-Shreveport; 2004 Feb 8; Shreveport, Louisiana.

LeDoux SP. Targeting of DNA repair proteins to the mitochondria effects a phenotypic change. Paper presented at: 1\textsuperscript{st} US-European DNA Repair Meeting: Endogenous Stress; 2003 Oct 14-17; Washington, DC.

LeDoux SP. Targeting of DNA repair proteins to the mitochondria. Paper presented at: 2\textsuperscript{nd} US-Japan DNA Repair Meeting; 2004 Jun 4-8; Honolulu, Hawaii.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Leonard Aldes served on the USMLE Step I Oversight Committee.

Dr. Ronald Balczon served on the Editorial Board of *Frontiers in Bioscience*.

Dr. Mohan Bhatnagar served as an Ad Hoc reviewer for *Biology of Reproduction* and the Proceedings of the National Institute of Science in India.
Dr. Stuart Critz served as an Ad Hoc reviewer for Journal of Molecular and Cellular Cardiology, Cardiovascular Research, Journal of Neuroscience.

Dr. Phillip Fields served on the By-Laws Committee and Nominating Committee for the Society for the Study of Reproduction; served on the Planning Committee and Editorial Board for Relaxin Conference 2004; Ad Hoc reviewer for NSF and USDA grants.

Dr. Tony Gard served as a Grant Reviewer for U.S. Civilian & Research Development Foundation for States of the former Soviet Union; as an Ad Hoc reviewer for Journal of Neurochemistry and Neuroscience Research.

Dr. Steve Kayes served as a Judge for the Southeastern Society of Parasitologists Student Paper Competition at the Annual Meeting; nominated for Vice President of the American Society of Parasitologists; served as Chair of the Business Advisory Committee and the Local Arrangements Committee for the 2005 Annual Meeting to be held in Mobile for the American Society of Parasitologists; served as Associate Editor of Journal of Parasitology.

Dr. Susan LeDoux served on the Editorial Board of DNA Repair; as a member of the National Institutes of Health Study Section on Radiation Biology and Therapeutics; served as a member of the Special Emphasis Panel P01-AG021830 and Panel R13-ES0133690; as a member of FIU, University of Miami ARCH Mid-Program Review Panel; as a member of the FAMU-Wayne State ARCH Mid-Program Review Panel.

Dr. Solomon Ofori-Acuah served as a reviewer for Microvascular Research and Histology textbook (Chapter 9, Hematopoiesis). He was also elected as a Member of the American Society of Hematology.

Dr. Glenn Wilson served as a reviewer for the National Institute of Environmental Health Sciences Site Visit Team for the Center Grants at the University of Arizona and the University of North Carolina; reviewer for the National Cancer Institute Program Project at the University of Washington, the University of Vermont and Harvard University; as a reviewer for the National Institutes of Health Center for Scientific Review Metabolism Study Section; as a regular member of the National Institutes of Environmental Health Sciences Parent Review Committee; as chair of the National Institute of Environmental Health Sciences Special Emphasis Panel on Toxicology Training Grants.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

During the past year the department did experience some change in faculty. Dr. Warren Zimmer left to assume the position of Professor and Vice Chair in the Department of Pharmacology at Texas A & M University. Dr. Mikhail Alexeyev was recruited into the Department at the level of Assistant Professor. Dr. Alexeyev had previously been in the Department of Pharmacology.

To enhance the scholarly activities in the Department, three distinguished scientists were invited to visit and present seminars. Dr. Errol C. Friedberg from the Southwestern Medical Center in Dallas, TX presented a seminar on November 2, 2003; Dr. Bruce Murphy from the University of Montreal presented a seminar on December 11, 2003; and Dr. Stephen Embury from the University of California at San Francisco presented a seminar on April 15, 2004.

The department continued to place a strong emphasis on teaching over the past year. In addition to providing over a quarter of the instruction given to medical students in the basic sciences, three courses were given in the summer for medical students requiring remedial education. These courses were in Cell Biology and Histology, Gross Anatomy, and Neuroanatomy. Additionally, courses were presented to enhance the educational opportunities for Residents. A review course in Neuroanatomy was presented to Neurology Residents and a course in Pelvic Anatomy was presented to Gynecology Residents. Also, the department helped with the training of students in the Allied Health Sciences.

A course in Gross Anatomy was presented for students training to become Physician’s Assistants. Finally, the Department was instrumental in organizing a course in Neuroanatomy for Pharmaceutical Representatives. Over the next year new ways will be developed to enhance the learning opportunities in the anatomical sciences for individuals in health care professions.
2003-2004
Summary of Scholarly Activities
Department of Comparative Medicine

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press


II. PUBLISHED ABSTRACTS


III. BOOKS PUBLISHED

IV. PRESENTATIONS


Abee CR. Summary statement/strategic plan. Paper presented at: Chimpanzees in biomedical research: status and strategic planning meeting, University of Texas M.D. Anderson Cancer Center; 2004 May 3-4; Bastrop, TX.

Abee CR. Paper presented at: The National Scientific Advisory Board Meeting, Southwest National Primate Research Center; 2004 May 6; San Antonio, TX. Chaired meeting and presented exit briefing.
Brady AG. Medical primatology as applied ethology: The importance of behavior in primate clinical medicine. Paper presented at: American Society of Primatologists Meeting; 2004 Jun 10; Madison, WI.


Gibson SV. Diseases of owl monkeys and squirrel monkeys. Paper presented at: Centers for Disease Control and Prevention; 2004 Jan 26; Chamblee, GA.

Gibson SV. Transmissible spongiform encephalopathies. Paper presented at: Center for Domestic Preparedness; 2004 Feb 27; Anniston, AL.


Gibson SV, Williams LE, Abee CR. Twinning in squirrel monkeys (Saimiri spp.). Paper presented at American Society of Primatologists Annual Meeting; 2004 Jun 9-12; Madison WI.

Gibson SV. Neotropical primates in biomedical research. Paper presented at: American Society of Primatologists Annual Meeting; 2004 Jun 9-12; Madison WI.

Williams LE. Research in neotropical primates. Paper presented at: the meeting of American Society of Primatologists Annual Meeting; 2004 Jun 9-12; Madison, WI.

V. NATIONAL PROFESSIONAL RECOGNITION

Christian R. Abee, D.V.M., is a Council Member Emeritus, Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC), an NIH Site Visitor and Review Committee Member - Base Grant, Oregon National Primate Research Center, the Chair, Southwest National Primate Research Center Scientific Advisory Board - San Antonio, TX, a member of the University of Washington National Primate Research Center, Scientific Advisory Committee at Seattle, WA, and consultant for development of a resource allocation plan at Yerkes National Primate Research Center, Atlanta, GA.
Alan G. Brady, D.V.M., is a member of the American College of Laboratory Animal Medicine (ACLAM) Foundation Committee, and chair of ACLAM Foundation Grant Review Subcommittee. He also serves as president of the Alabama Association for Biomedical Research (AABR). Dr. Brady is a member of the American Association for Laboratory Animal Science (AALAS) and is on of the Board of Directors of the MidSouth Branch. He is president-elect of the Association of Primate Veterinarians (APV), a member of the Workshop Planning Committee and Board of Directors. Additionally, he is a member of the American Society of Primatology and a member of the Program Committee for the 2005 meeting. Dr. Brady is also consultant on animal care to the U.S. Air Force at Keesler Air Force Base, MS.

Susan V. Gibson, D.V.M., is a member of the Finance and Membership Committee of the American Society of Primatologists, 2003-2004.

Lawrence E. Williams, Ph.D., is a member of the Program Committee, American Society of Primatologists, Program Committee Chair 2002-2005 as well as a member of the Committee on Captive Care and Breeding Committee of the International Primatological Society. He is also a reviewer for three (3) scientific journals: Contemporary Topics in Laboratory Animal Science, American Journal of Primatology, and Animal Behavior.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Comparative Medicine (DCM) is one of six basic medical science departments of the College of Medicine. In addition to research and educational responsibilities, the department provides professional and technical support for all animal research laboratory facilities and administration of the laboratory animal care and use program of the University. The DCM occupies approximately 48,000 square feet divided between two geographically separate sites. The Medical Sciences Building, Biologic Research Laboratory (BRL) was completed in 1996 and includes 36,000 square feet of space and the Primate Research Laboratory (PRL) includes 12,000 square feet of research and administrative space for departmental operations. The DCM is organized with five core functions. These are the laboratory animal medicine core, the animal diagnostic laboratory core, the biological resource core, the computer operations/database core, and the administrative core.
This year the department has been awarded four grants totaling more than $11,000,000. The Squirrel Monkey Breeding and Research Resource center grant was renewed and will be funded through its twenty-ninth year in 2009. A new national resource research grant was awarded by the National Center for Research Resources (NCRR) of the National Institutes of Health (NIH) to establish a breeding resource and research program for the owl monkey (Aotus sp.). The department also has been awarded a grant from the NCRR/NIH of $4,000,000 to construct a 30,000 square foot addition to the existing Primate Research Laboratory. In addition to these grants, an NIH grant subcontract was awarded to develop a new diagnostic test for tuberculosis in nonhuman primates. These grants support the largest breeding center for Neotropical primates in the United States.

Previous experience with the owl monkey has revealed a high occurrence of heart disease, concentric left ventricular hypertrophy, dissecting aortic aneurysms, and congestive heart failure consistent with hypertension. Squirrel monkeys have also been found to develop congestive heart failure in aged animals. Investigations to document hypertension and progression of heart disease are underway to better understand the pathogenesis of this disease.

The DCM is composed of six full-time and two jointly appointed faculty members. Dr. Jonathan Scammell, Professor, has a primary appointment in the Department of Pharmacology with a joint appointment in the Department of Comparative Medicine. Dr. Marcelo G. Horenstein, Associate Professor, has a primary appointment in the Department of Pathology with a joint appointment in the Department of Comparative Medicine. Drs. Alan G. Brady, Susan V. Gibson, Julio C. Ruiz, and Lawrence E. Williams are Associate Professors. Dr. A. Michele Schuler joined the department as an Assistant Professor in 2003. Departmental faculty and staff balance their activities between departmental research programs and service activities in the university’s animal care and use program.
I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press

II. PUBLISHED ABSTRACTS


III. BOOKS PUBLISHED

IV. PRESENTATIONS
V. NATIONAL PROFESSIONAL RECOGNITION

Frank S. Pettyjohn served in the following positions: Cardiology Consultant to the Federal Aviation Administration; Board of Directors and President Elect, International Academy of Aviation and Space Medicine; and Board of Directors, American College of Emergency Physicians (Alabama Chapter).

Michael L. Sternberg served in the following positions: Member, Council on Medical Education for State of Alabama; Board of Directors, Southwest Alabama Emergency Medicine Services; Chairman, Bylaws Committee, American College of Emergency Physicians (Alabama Chapter); Public Relations Committee, American College of Emergency Physicians (Alabama Chapter); President, American College of Emergency Physicians (Alabama Chapter).

Alan E. Heins serves in the following positions: American College of Emergency Physicians Academic Affairs Committee (ACC); Sub-Committee Chair, American College of Emergency Physicians Academic Affairs Committee; Society of American Emergency Medicine Program Committee and Scientific Sub-committee Member; Reviewer, Academic Emergency Medicine.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Emergency Medicine continues to emphasize excellence in Clinical Emergency Medicine, education of housestaff and medical students, and the development of the Academic Faculty. The primary goal of the Department is to develop and implement a broad-based educational program utilizing bedside clinical teaching and advancing educational technologies. The goal of acquiring a full Residency Program in Emergency Medicine is underway. Support by the Dean, College of Medicine, and Faculty for the development of the Residency Program has been maintained. Recruiting of additional faculty has maintained clinical capabilities, enhancing the teaching program, and provides basis for implementing the Emergency Medicine Residency Program.

EDUCATION: The Faculty of the Department of Emergency Medicine continues to be recognized by the graduating medical school class of the College of Medicine as having significantly enhanced their medical education. Frank S. Pettyjohn, M.D., Michael L. Sternberg, M.D., Melissa W. Costello, M.D., Lynne McDonnell, M.D., James Y. Wan, M.D., and W. Scott McNair, M.D., were again selected to receive recognition at the honors convocation of the College of Medicine graduating class of 2004. The medical students continue to select the Emergency Medicine rotation as one of the most-sought-after training sites. Additionally, Dr. Sternberg was voted the best clinical preceptor and convocation speaker for the U.S.A. Physician Assistant Program.
The Department of Emergency Medicine continues to provide teaching in the Introduction to Clinical Medicine Course for the College of Medicine. This adds to the educational experience of the medical students and provides initial interaction with Emergency Medicine Attending Faculty. Michael L. Sternberg, M.D. continues to direct the teaching syllabus for the fourth-year medical student elective, which receives recognition by the medical students. Frank S. Pettyjohn, M.D. directs the Emergency Medicine Acting Intern program for the fourth year medical student. Alan E. Heins, M.D. directs the PGY-I Intern rotation and has developed the written curriculum. Frank S. Pettyjohn, M.D. serves as Medical Director School of Continuing Education, EMS training providing education of Physicians, Medical Students and Emergency Medical Technicians.

RECRUITING PROGRESS: The recruiting program continues to be active, with the goal of obtaining Emergency Medicine Residency Trained and Board Certified Emergency Medicine Physicians to meet the Emergency Medicine Residency requirements. Melissa W. Costello, M.D. and Alan E. Heins, M.D. joined the department in July 2003 and with Marion C. Berg, M.D., and David N. Olson, M.D., form the core faculty as Emergency Medicine Residency Trained and Board certified Physicians. Michael L. Sternberg, M.D. and Frank S. Pettyjohn, M.D. are also Board Certified in Emergency Medicine. Additional staff physicians providing a broad-base for educational efforts include: P. Conrad McGuire, M.D., Residency Trained and Board eligible in Internal Medicine and Board eligible Pediatrics; Lynne A. McDonnell, M.D., Residency Trained and Board certified in Internal Medicine and Pediatrics; W. Scott McNair, M.D., Residency Trained and Board certified in Internal Medicine and Pediatrics; James Y. Wan, M.D., Residency Trained in Internal Medicine and Michael R. Ambrose, M.D., Residency Trained and Board certified in Family Practice joined the Department.

FACULTY DEVELOPMENT: Joint Faculty activities continue with the Departments of Pediatrics, Internal Medicine, Surgery, and Radiology. Dr. Samy Saleeb provides overall emergency medicine radiology educational programs for the Department. Dr. W. Scott McNair, Dr. Conrad P. McGuire, and Dr. Lynne A. McDonnell provide educational programs for joint Emergency Medicine and Pediatrics. Enhanced internet capabilities in the departmental offices provide the faculty with updated technologic capabilities to continue developing educational programs.
Photographic capabilities utilize an improved scanner capability, digital camera, and LCD projector to provide clinical presentations. The digital camera and 35mm still camera are used as the primary photographic capability to be used in the Emergency Department for patient documentation. Dr. Michael L. Sternberg serves as the primary faculty contact for the development and coordination of these educational opportunities.

**CLINICAL FACILITIES:** During the 2003-2004 program year, the Department of Emergency Medicine continues to support the operations of the University of South Alabama Medical Center, Level I Trauma Center and Emergency Department. The Department is also responsible for the clinical emergency care delivery at the Emergency Department of U.S.A. Knollwood Park Hospital.

A core group of Clinical Faculty provides support for the USA Knollwood Park Hospital Emergency Department. Thomas J. Kelly, D.O., Barbara C. Mitchell, M.D., Antonio L. Pacheco, M.D., James Y. Wan, M.D., and Michael R. Ambrose, M.D. provides the Emergency Medicine services at this facility. These physicians are appointed as Clinical Emergency Medicine Faculty in the Department of Emergency Medicine.

The Department of Emergency Medicine provides support to the USA Children and Women’s Hospital. Lynne A. McDonnell, M.D., P. Conrad McGuire, M.D., and W. Scott McNair, M.D., provide Attending coverage for the Children’s Evaluation Center. Close coordination between the USA Medical Center, Level I Trauma Center, and the Children 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 USA Children and Women’s Hospital and the USA 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 ninth year of operation, with the primary clinical site at Medical Office Park Three, at the USA Knollwood Park Hospital Campus. The program is under the Principal Investigator, Frank S. Pettyjohn, M.D., with Affia Halim-Kirollos, M.D., as the Director of the 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 comparative anti-hypertensive agent trials, dyslipidemic treatment trials, and cardiovascular therapy trials. This effort provides a unique research opportunity, clinical support, and an educational location for the Department of Emergency Medicine.
2003-2004
Summary of Scholarly Activities
Department of Family Medicine

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press

II. PUBLISHED ABSTRACTS


III. BOOKS PUBLISHED
IV. PRESENTATIONS

Morgan SS. Obesity: a national problem: a critical review of popular diets. Paper presented at: University of South Alabama College of Medicine Alumni Association Annual Reunion Weekend; 2004 June 18; Orange Beach, AL.


V. NATIONAL PROFESSIONAL RECOGNITION

Ron L. Lee served as Meeting Coordinator for the Clinical Track Section of the Annual Meeting of the Southeast Chapter of the American College of Sports Medicine which was held in Atlanta, Georgia, January 29 to February 2, 2004. He is also a Board member of the Southeast Chapter of the American College of Sports Medicine.

Allen Perkins was as a reviewer for American Family Physician. Dr. Perkins also continues to serve at the national level as the head of the Group on Community Medicine for the Society of Teachers of Family Medicine and as a member of the Communication Committee for the Association of Family Medicine Residency Directors.

E. Lee Taylor serves as Co-Chair of the Alabama Academic Family Council, a statewide council of the two medical schools, the Alabama Academy of Family Physicians and other residency programs which are studying methods to increase student interest in primary care, Family Medicine and rural health. He has also been asked to serve as USA’s representative on the State of Alabama Emergency Response Commission to Address the Health Care Crisis in Alabama as a member of the Subcommittee on Health Manpower. Dr. Taylor serves as the College of Medicine delegate to the American Medical Association Section on Medical Schools.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Dr. Larry Henderson, Assistant Professor, joined the faculty in July after having completed his residency in Family Medicine at USA. In addition to his clinical duties, he assists the Predoctoral Director with all undergraduate activities and serves on an Information Technology taskforce for the department.

Dr. Ron Lee completed a Grant Generating Project Fellowship under the sponsorship of the University of Missouri-Columbia, producing a grant on a Multidisciplinary Teaching Approach to Childhood Obesity. He also served as faculty mentor to MS-II, Brandon Nichols, who conducted a summer research study on the Sociocultural Differences in Dietary Habits, Physical Activity Levels and Body Weight Ideals among African American, Hispanic, and Caucasian Female Children.

Dr. Nicole Lawson, who serves as Co-chief Resident, was among twenty physicians who received the American Academy of Family Physicians/Bristol-Myers Squibb Award for Excellence in Graduate Medical Education award. She joins a group of previous winners who represent the most outstanding Family Medicine residents in the country. The award recipients will be honored in October at the AAFP Annual Scientific Assembly in Orlando, Florida.

Dr. Lee Taylor and Dr. Allen Perkins were recognized by the Class of 2004 as distinguished faculty. Dr. Ehab Molokhia was selected by the graduating Family Medicine residents as "Clinical Teacher of the Year, 2004".

Dr. Lee and Dr. Morgan continue their service to our country in the U.S. Army Reserve. Dr. Lee was called for the second time to active duty in May and has been stationed in Germany. The National Committee for Employer Support of the Guard and Reserve recognized Dr. Taylor and the Department with the "Patriotic Employer" award which was presented at an awards ceremony on August 21, 2003 at Battleship Park.

The Department has generated over 2,500 referrals from the Family Medicine Clinic to the USA Physicians over the last year.
I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press


Valantas MR, DiPalma JA. Do gastroenterologists notify polyp patients that family members should have screening? South Med J. Forthcoming.


II. PUBLISHED ABSTRACTS


Valantas MR, DiPalma JA. Do gastroenterologists notify polyp patients that family members should have screening? Am J Gastroenterol 2003;98:S117.


III. BOOKS PUBLISHED


IV. PRESENTATIONS


Bass JB, Jr. Acid-base balance. Paper presented at: Tripler Army Medical Center Department of Medicine; 2003 Sep 23; Honolulu, HA.

Bass JB, Jr. Tuberculosis, mummies and vampires: an interrupted history of man, cows and the arts. Paper presented at: Tripler Army Medical Center Grand Rounds; 2003 Sep 24; Honolulu, HA.


Broughton WA. Who is hypnos and why should I care? Paper presented at: Louisiana State Respiratory Care Annual Meeting; 2004 Apr 14-16; Baton Rouge, LA.

Broughton WA. Pulmonary function testing. Paper presented at: Tristate Respiratory Care Conferences; 2004 Apr 18; Orange Beach, AL.

Calderon E; Jablecki JS; Ramsey KM; Tyler SK; Green WK; Vande Waa JA; Bass JB, Jr. The impact of a single case of laryngeal tuberculosis in a small community. Paper presented at: 43rd Annual ICAAC; 2003; Chicago, IL.

Carney, RK; Green WK; Montgomery, TB. Mycobacterium avium complex infection in a patient with chronic myelogenous leukemia. Paper presented at: Annual Regional Meeting of the Southern Society of General Internal Medicine; 2004 Feb 12-14; New Orleans, LA.

Carney R; Montgomery T. Mycobacterium avium complex in a patient with chronic myelogenous leukemia. Poster presentation at: Society of General Internal Medicine Annual Meeting; 2004 Feb; New Orleans, LA.

Cohen MV. Acetylcholine-induced EGF receptor transactivation requires metalloproteinase cleavage of pro-HB-ECG to generate mitochondrial ROS. Paper presented at: American Heart Association; 2003 Nov; Orlando, FL.

Cohen MV. Multiple, brief coronary occlusions during early reperfusion protect rabbit hearts by activation of ERK and production of nitric oxide. Paper presented at: American Heart Association; 2003 Nov; Orlando, FL.

Cohen MV. Cardioprotection: the maturity of preconditioning vs the revolutionary nature of post conditioning. Paper presented at: University of Tennessee at Memphis; 2004 Jan; Memphis, TN.
Cohen Michael V. Cardioprotection at reperfusion: the impossible has arrived. Paper presented at: Louisiana State University Health Sciences Center; 2004 Feb; Baton Rouge, LA.

Cohen MV. Cardioprotection at reperfusion: from bench to bedside. Paper presented at: Third Gulf Coast Physiological Society Meeting; 2004 Mar; Mobile, AL.

Cohen MV. Free radicals from the mitochondria rather than NADPH oxidase trigger acetylcholine-induced protection in isolated hearts. Paper presented at: Third Gulf Coast Physiological Society Meeting; 2004 Mar; Mobile, AL.

Cohen MV. Postconditioning protects isolated hearts through PI3K signaling. Paper presented at: International Society for Heart Research; 2004 May; Cancun, Mexico.

Cohen MV. Acetylcholine preconditions by activating Akt and NOS to generate ROS. Paper presented at: International Society for Heart Research; 2004 Jun; Dresden, Germany.

Culpepper M. Hypertension treatment in diabetic patients. Paper presented at: Medical Grand Rounds, Huntsville Hospital; 2004 Jan 29; Huntsville, AL.

Culpepper M. Preventive treatment for diabetic nephropathy. Paper presented at: Medical Grand Rounds, Atlanta VA Hospital; 2004 Oct 30; Atlanta, GA.


DiPalma JA. Chronic constipation. Internal medicine update. Paper presented at: Northeastern Ohio Universities College of Medicine; 2004 May 3; Akron, OH.


DiPalma JA. How to make colon cancer screening more effective. Colon cleansing preparations. Paper presented at: Pan American Congress of Gastroenterology; 2003 October 2; Wunta Del Este, Uruguay.

DiPalma JA. Constipation, clinical update. Paper presented at: American College of Gastroenterology Governor’s Course; 2004 Jan 15; Scottsdale, AZ.

DiPalma JA. Capsule endoscopy in clinical practice. Course director and lecturer; 2004 Feb 21; Atlanta, GA.
DiPalma JA. A new paradigm in the management of constipation. American Medical Director’s Meeting. 2004 Mar; Phoenix, AZ.

Green WK. Terrorist threats and community preparedness. Paper presented at: 32nd Annual Seminar of the Operating Room Nurses of South Alabama; 2003; Orange Beach, AL.

Green WK; Tyler SK; Wilson PC; Aikens TM; Ramsey KM. Nosocomial transmission of Norwegian scabies despite contact precautions. Paper presented at: 14th Annual Meeting of SHEA; 2004 Apr 19; Philadelphia, PA.


Herrera JL. Evaluating abnormal liver function tests. Recent developments in the management of liver and biliary disease. Paper presented at: UAB Liver Center; 2003; Birmingham, AL.

Herrera JL. Hepatitis C in the hispanic community. Paper presented at: Hispanic Healthcare Professional Association, Inc. University of North Texas Health Science Center; 2003 Oct 16; Fort Worth, TX.

Herrera JL. Viral hepatitis. Paper presented at: Gastroenterology Grand Rounds, Walter Reed Army Medical Center; 2004 Feb 12; Washington, D.C.


Herrera JL. Hepatitis C in Sickle Cell disease. Practical issues in sickle cell disease IV: treatments and outcomes. Paper presented at: USA Comprehensive Sickle Cell Center; 2004 Mar 13; Mobile, AL.

Herrera JL. Hepatitis B infection. Paper presented at: Gastroenterology Grand Rounds, University of Tennessee; 2004 Mar 26; Memphis, TN.
Herrera JL. Advances in Hepatitis C side effect management. Paper presented at: Liver Institute for Education and Research; 2004 Jun 29; Houston, TX.


Herrera JL. Update on chronic liver disease: important clinical decisions. Paper presented at: Chronic Liver Disease Foundation Meeting; 2004 Jun 18; St. Louis, MO.

Herrera JL. Hepatitis C: a primer for pharmacists. Paper presented at: Louisiana Pharmacy Association Annual Convention; 2004 Jul 17; Point Clear, AL.


Haynes J. Practical issues IV: patients and providers working together to manage sickle cell disease. Paper presented at: Auburn University; 2004 Jul 21; Montgomery, AL.
Lindhorst S; Montgomery T. Using jello as a diagnostic aid. Poster presentation at: Society of General Internal Medicine Annual Meeting; 2004 Feb; New Orleans, LA.

Montgomery T. Clinical vignette reviewer/moderator. Society of General Internal Medicine Annual Meeting; 2004 Feb; New Orleans, LA.

Ramsey KM. Get the facts: Methicillin-resistant staph aureus (MRSA). Paper presented at: Alabama Board of Nursing; 2004 Apr 10; Mobile, AL.


Rodriguez R; DiPalma JA. Wireless capsule endoscopy compared to combined push-enteroscopy with enteroclysis examination of the small bowel. Poster presented at: American College of Gastroenterology Annual Scientific Session; 2003 Oct 26; Baltimore, MD.

Stevens TE. A clinical approach to the spectrum of dementia. Paper presented at: Internal Medicine Group; 2004 Aug; Gulfport, MS.

Valantas MR; DiPalma JA. Do gastroenterologists notify polyp patients that family members should have screening? Poster presented at: American College of Gastroenterology Annual Scientific Session; 2003 Oct 25; Baltimore, MD.

Warner BA. Type 2 diabetes: the completed puzzle. Paper presented at: Andalusia County Medical Society; 2003 Oct 7; Andalusia, AL.

Warner BA. Type 2 diabetes: the completed puzzle. Paper presented at: Community Physicians; 2003 Dec 4; Dothan, AL.

Warner BA. New insulins: when should the emperor wear his new clothes? Paper presented at: Brewton County Medical Society; 2004 Jan 13; Brewton, AL.
Warner BA. Syndrome X. Paper presented at: Mississippi Osteopathic Medical Association; 2004 Mar 6; Jackson, MS.

Warner BA. New insulins: when should the emperor wear his new clothes? Paper presented at: Alabama Osteopathic Medical Association; 2004 Jul 18; Destin, FL.

Wilkes JM; DiPalma JA. Brachial blood pressure monitoring is preferred to ankle monitoring during colonoscopy. Poster presented at: American College of Gastroenterology Annual Scientific Session; 2003 Oct 26; Baltimore, MD.

V. NATIONAL PROFESSIONAL RECOGNITION


W. A. Broughton served in the following capacities: Member ATS/ISDA Consensus Panel For the Statement on Community Acquired Pneumonia (Diagnosis of C.A.P.); President: Alabama State Thoracic Society, 2003-2005; Overall Tri-State Thoracic Conference Program Chairman; Board Member: Tri-state Respiratory Conferences; Program Planner: For USA College of Medicine ATS Tri-State Thoracic Society Meeting.

Michael V. Cohen served on the National Cardiovascular Pathophysiology One Section, American Heart Association. He serves on the Editorial Board of Basic Research in Cardiology; Heart Disease: A Journal of Cardiovascular Medicine.

J.A. DiPalma serves on the Board of Trustees for the American College of Gastroenterology (ACG) and as Vice-President of the College. He is the President-Elect. He serves on the Capital Campaign Committee and the executive board of the ACG. He is also on the Board of Directors for the ACG Institute for Research and Education. Dr. DiPalma was re-elected to the Board of Censors for the Medical Society of Mobile County and the Mobile County Board of Health. He also serves on the Brantree MiraLax Advisory Board and IBS Advisory Board.
Green W. Kevin was appointed to the Internet Committee of Society for Healthcare Epidemiology of America (SHEA).


J.J. Herrera continues to serve as a member of the Board of Directors of the Alabama Chapter of the American Liver Foundation. He received this year’s Excellence Award from the American Liver Foundation in recognition for his work in the area of liver disease. He is a reviewer for the American Journal of Gastroenterology, the Clinical Journal of Gastroenterology, the Southern Medical Journal and the American Journal of Medicine.

Clara V. Massey served as District Councillor for the Alabama Chapter of the American College of Cardiology.

Joseph P. Michalski is on the Medical Advisory Board of the American Behcet’s Association.

Frank S. Pettyjohn served as cardiology consultant to the Federal Aviation Administration: Board of Directors and President Elect, International Academy of Aviation and Space Medicine.

Keith Ramsey continues to serve as a Councillor of the Southern Society for Clinical Investigation and Chair of the Fund Raising Committee. Dr. Ramsey is completing a three year term as Secretary for the Society for Healthcare Epidemiology of America (SHEA).

Barry A. Warner served on Editorial Review Boards for the following journals: Diabetes Research and Clinical Practice; Endocrine Practice; Metabolism Clinical & Experimental.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Division of Geriatrics, established in December of 2000, has continued to pursue excellence in the realms of patient care and education. It continues to offer residents, medical students, physician assistant and geriatric nurse practitioner students a broad geriatric experience. We have a firm presence in two nursing homes with a patient base of approximately 60. This is unique to the residents, Physician’s Assistants students and Nurse Practitioners students. They are exposed to a complex integrated team care approach to management. We have established a geriatric assessment clinic on Thursday mornings in which a detailed evaluation of frail, elderly patients is performed by the residents, physician assistant students or geriatric nurse practitioner students as available. A team conference is held to discuss a plan of care focusing on the geriatric principles of function and quality of life.

We have proposed the creation of a house call program that would further round out the experiences of these young professionals. This will enable them to experience the various realms of healthcare from ambulatory to acute hospitalization and homebound to chronic long-term care.

Finally, this division supports the University of South Alabama in other ways, not the least of which is our capture of patients outside of this population brought in through our nursing home practice. We are the leading care provider for Dementia in Southern Alabama, West Florida and South Mississippi region. We also have a strong relationship with the E. A. Roberts Center, an Alzheimer’s daycare affiliated with Mobile Infirmary, from whom we have received many referrals. The Division of Geriatrics is a sound unit that continues to promote and achieve excellence in education and patient care, and acts as a community representative of the University of South Alabama.

The Division of Infectious Diseases is composed of three full time faculty, Drs. Keith M. Ramsey, John A. Vande Waa, William Kevin Green, and a Physician Assistant, Theresa P. Miller. Dr. Shannon Tyler completed her ID Fellowship and has joined Infection Limited in Mobile, AL. Dr. Nausheen Faruqi is in her second year as a Fellow, and Dr. Edward Hyndman began his first year of Fellowship. The Division welcomed the Tyler and Margaret Bland Endowed Research Fund in Infectious Diseases in 2004.
The Division of Pulmonary and Critical Care Medicine Two faculty members have been recruited at the Associate Professor level: Brian Fouty, M.D. and Kane Schaphorst, M.D. They have joint appointments in the Center for Lung Biology. Dr. Michael Kirkpatrick has retired, but will contribute to education conferences in the Division. Dr. Syed Raza has moved to Pittsburgh, PA where he will manage a sleep center at a hospital affiliated with the University of Pittsburgh. The Pulmonary Fellowship Program has been accredited again by ACGME until 2006 (at the time of the next Internal Medicine program review).

A new service has been developed at USA Knollwood Hospital: a multidisciplinary intensive care unit (ICU). This service is composed of an intensive care specialist attending, a pulmonary fellow, and two internal medicine residents. This service has been well received and provides excellent intensive patient care and education.

The Division of Cardiology continues to emphasize excellence in clinical cardiology, education of house staff and medical students, and the development of the academic faculty and program. The Cardiology Fellowship continues to be a highly sought training program by graduating residents.

During the 2003-2004 program years the Division of Cardiology provided direction and supervision of the Heart Station for the University of South Alabama Medical Center and support of non-invasive studies conducted at USA Knollwood Hospital and USA Women’s and Children’s Hospital. Development of the echocardiographic systems and automated equipment for the Cardiovascular Catheterization Laboratories is complete. The major components have been updated and are fully operational at the USA Medical Center.

The Division has moved the clinical offices to the Heart Center at the Pavilion, USA Knollwood Hospital Campus. The Cardiology outpatient volume is rapidly increasing with the new facilities and capabilities. The Echo Laboratories have received accreditation. Development and advancement of the Cardiac Catheterization Laboratories is underway with the arrival of Dr. Shazib Khawaja, a board certified Interventionalist. Dr. Khawaja serves as the Director of the Cardiac Catheterization Laboratories.
Additional interventional support from the community has been provided by Dr. Hercules Panayiotou, Diagnostic and Medical Clinic, Dr. Gary Rich and Dr. George Eyrich and their associates in the Heart Group.

Dr. Barbara Burckhartt is providing nuclear cardiology support along with the Department of Radiology. She is also providing peripheral vascular interpretation in support of the clinical cardiology efforts. Dr. G. Mustafa Awan completed his Cardiology Fellowship in June and has joined the faculty providing academic teaching, non-invasive studies, pacemakers, and diagnostic catheterizations.

The Residency Review Committee for Internal Medicine reviewed the Cardiology Fellowship and approved the program for two years with next site visit scheduled for August 2006. The Fellowship program continues to have 100% board passage of the graduates.

**The Division of Endocrinology/Metabolism** is a fully integrated interdepartmental division between Internal Medicine and Pediatrics. House officers are exposed both to Pediatric and Internal Medicine as well as adolescent endocrine problems in both the inpatient and outpatient settings. The division is engaged in active teaching involvement of Internal Medicine, Pediatric, and Family Practice residents, structured conferences involving the clinical faculty, house staff and medical students as well as full-time endocrine faculty. Patients will present with the full spectrum of endocrine disease including: pituitary, thyroid, parathyroid, gonadal, and diabetic problems.

**The Division of Nephrology** currently operates with two physicians, Drs. Michael Culpepper and Wanda Kirkpatrick, representing 1.5 physician FTE’s and has maintained a chronic dialysis practice providing care to about 150 patients over the past year. Additional clinical activities include the Renal Consult Service provided at USAMC, faculty consultative services at USAKPH and KPLTC, and outpatient evaluations at the Mastin Clinic. A special clinic for pre-ESRD evaluation and care has been very successful in improving patient care with primary patient contact by our certified nurse practitioner, Mrs. Sherrye Taylor.

Patients who will need dialysis or transplantation within a 3-9 month period are directed to this clinic for attention to potential complications of advancing renal failure and for orderly preparation for renal replacement therapy.
The Division continues to participate in clinical investigations that include both Phase II and Phase III trials. Ongoing studies include evaluation of anti-hypertensive combinations for specific disease states, hematopoietics for patients with chronic kidney disease before initiation of dialysis and long-acting anticoagulation for preservation of dialysis access in chronic dialysis patients. In addition, Dr. Culpepper provides hypertension management for patients enrolled by Dr. Zweifler in the NIH-sponsored SPS3 study of prevention of recurrent subcortical strokes. Other studies planned include evaluation of a direct renin inhibitor in hypertensive patients and an immunomodulating agent to prevent relapse of lupus nephritis.
I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press


II. PUBLISHED ABSTRACTS


III. BOOKS PUBLISHED

IV. PRESENTATIONS

Chen TJ. Human mitochondrial disorders. Paper presented at: School of Basic Medical Sciences, Peking University; 2004 Jul 14; Beijing, China.

Chen TJ. Co-Chair of organization committee. International Conference on Medical Genetics; 2004 Jul 15-17; Beijing, China.

Chen TJ. Chaired session. International Conference on Medical Genetics; 2004 Jul 15; Beijing, China.


Hilliard M; Wertimelecki W. Linking infants with birth defects to early intervention services via the medical home. Poster presented at: National Birth Defects Prevention Network 7th Annual Meeting; 2004 Jan 21-23; Salt Lake City, UT.


Martinez J. Microdeletions and other teratogens. Paper presented at: 13th Conference in Obstetrics and Gynecology; 2004 Apr 1; Mobile, AL.


Wertimelecki W. National folic acid fortification project. Paper presented to: Ukrainian National Food Fortification Alliance at: Institute for Occupational Medicine, 2004 Jun 7; Kyiv, Ukraine.

Wertimelecki W. Moderator. Birth defects monitoring in Ukraine; 2004 Jun 10; Kyiv, Ukraine.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. W. Wertimelecki was granted a “Doctor Honorus Causa” by the Mohyla Academy University of Kyiv, Ukraine and received the 2004 Alabama Retarded Citizens’ Peter Leibert Community Action Award. Dr. Wertimelecki continues to serve as Secretary and Treasurer of the World Alliance of Organizations for the Prevention of Birth Defects. Dr. Wertimelecki serves as Director of the Ukrainian-American Birth Defects Program (UABDP) and the Alabama Birth Defects Surveillance and Prevention Program. In addition, he serves as Webmaster of the International Birth Defects Information Systems (IBIS) web site, which attracts between 500 and 1000 visitors per day.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The COM II Medical Genetics Course has further expanded its emphasis on case-based learning and web-based assignments. Every student is asked to explore and analyze our IBIS web site, developed as one component of the USAID-sponsored program to provide an informational resource to Ukraine. This exercise requires each student to engage in several hours of web explorations, focused on a specific domain of human developmental pathology. The majority of this year's class has rated the course as "very good" or "excellent".

Clinical activities have been expanded and continue to offer opportunities for training throughout southern Alabama. Medical and nursing students, pediatric residents and fellows actively participate during patient evaluations, not only in our core clinic in Mobile, but throughout our outreach system. An increased demand for clinical services has required further expansion of the frequency of outreach clinics held in Dothan and Montgomery, Alabama.

Yearly, over 900 families affected by a variety of genetic disorders, birth defects, mental retardation and other developmental disabilities are offered comprehensive medical evaluations and counseling.

The Clinical Cytogenetics Laboratory maintained CLIA and CAP certification. The growing importance of chromosome analysis in neoplasia has led to a further increase in oncocyto genetic studies in our laboratory. Molecular cytogenetic studies continue to increase significantly, spurred by the introduction of a variety of new FISH probes and growing physician awareness of the diagnostic power of this technology. Dr. Tuck-Muller investigated DNA Hypomethylation and Cancer in a collaborative study with investigators at Tulane University sponsored by a Grant from the National Institutes of Health.

The Diagnostic Molecular Genetics Laboratory performs 14 DNA-based tests, including Fragile-X syndrome, Prader-Willi syndrome, and Sickle Cell disease. Population screening for Cystic Fibrosis disease and DNA paternity testing are recently added services. The laboratory is also active in clinical research, and has identified a new type of mutation on the RPS6KA3 gene, which causes the Coffin-Lowry Syndrome. Other research projects have also been focused on the development of early-detection methods for colon cancer.
The Department continues to foster close links with state agencies and continues to receive financial assistance from the Alabama Departments of Mental Health/Mental Retardation and Department of Rehabilitation Services.

We continue to implement the Alabama Birth Defects (BD) Program. Surveillance is linked with care and prevention services. Our Surveillance Program received renewed funding from CDC to continue surveillance on behalf of the State of Alabama. Voluntary agreements have been signed with 25 hospitals throughout southern Alabama, and trained “genetics” nurses were deployed to obtain active, population-based BD information.

Our Ukrainian-American Birth Defects Program (UABDP) demonstrated that there is an epidemic of Spina Bifida in Ukraine. We established 5 OMNI Centers, 2 of which have started a pilot program to prevent Fetal Alcohol Syndrome in partnership with the National Institute on Alcohol and Substance Abuse and University of California (San Diego). Our International Websites continue to attract a large number of visitors. (~ 700,000 per year).
2003-2004
Summary of Scholarly Activities
Department of Microbiology and Immunology

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


Winkler HH. Rickettsiae are prokaryotic pathogens that are committed to the richest environment on earth, the eukaryotic cytoplasm. Nova Acta Leopoldina 2003;88 (333):185-190.


B. Articles in Press


II. PUBLISHED ABSTRACTS


Gong S, Foster JW. Era-like GTPase TrmE is conditionally required for E. coli acid resistance. In: ASM 104th General Meeting; 2004 May; New Orleans, LA.

Lausch RN, Yin R, Molesworth-Kenyon S, Oakes JE. IL-17 receptor is expressed and functional on resident corneal cells of both man and mouse. In: ARVO 2004.

Ma Z, Foster JW. EvgAS bifucated control circuit regulates the GadE activator of E. coli acid resistance. In: ASM 104th General Meeting; 2004 May; New Orleans, LA.


Richard HT, Foster JW. E. coli acid resistance systems reverse transmembrane potential during acid stress. In: ASM 104th General Meeting; 2004 May; New Orleans, LA.

Stanford SE, Foster JW. Vibrio vulnificus growth stimulatory factor. In: ASM 104th General Meeting; 2004 May; New Orleans, LA.

Testerman TL, Conn B, McGee DJ, Mobley HLT. Identification of additional nutrients required for growth of Helicobacter pylori and other Helicobacter species in the absence of serum or proteins. In: ASM 104th General Meeting; 2004 May; New Orleans, LA.


Viator RJ, Mendz GL, Rest RF, McGee DJ. Characterization of the Helicobacter pylori and Bacillus anthracis arginases. In: ASM 104th General Meeting; 2004 May; New Orleans, LA.

III. BOOKS PUBLISHED

IV. PRESENTATIONS

Foster JW. Biochemistry and genomics of E. coli acid resistance: Tales of an amateur acidophile. Paper presented at: University of Illinois at Chicago; 2004 Mar 1; Chicago, IL.


Winkler HH. Rickettsiae are prokaryotic pathogens that are committed to the richest environment on earth, the eukaryotic cytoplasm. Paper presented at: Leopoldina Conference. 2003; Wurtzberg, Germany.

Wood DO. Reaping the benefits of genome information: Global approaches to the genetic analysis of Rickettsia prowazekii. Paper presented at: Centers for Disease Control; 2003; Atlanta, GA.

Wood DO. Gene manipulation i.i Rickettsiae. Paper presented at: Bacterial Genomics and Proteomics as Related to Biodefense; 2003; Cumberland, MD.
V. NATIONAL PROFESSIONAL RECOGNITION

Dr. John W. Foster serves as a reviewer for: Molecular Microbiology, Journal of Bacteriology, Infection and Immunity, FEMS Microbiology, and USDA. Dr. Foster also served as Divisional Lecturer, Division K, ASM General Meeting this past May in New Orleans, LA.

Dr. Robert Lausch continues to serve as Special Reviewer, Visual Science A Study Section, NEI; Member Panel of Primary Reviewers, Journal of Immunology; and remains an Ad Hoc Reviewer for Investigative Ophthalmology and Visual Science, Ocular Immunology and Inflammation, Journal of Leukocyte Biology, Journal of General Virology, Experimental Eye Research, and Current Eye Research.

Dr. John Oakes serves on the Primary Reviewers Panel, Journal of Immunology and is Ad Hoc reviewer for Investigative Ophthalmology and Visual Sciences.

Dr. Herbert Winkler serves on the Academy Microbiology - Chronic Infections.

Dr. David Wood serves on the editorial board of Infection and Immunity. He also served as a Divisional Lecturer, Division K, 104th ASM Meeting.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Dr. Robert Lausch remains active in the Lions/USA Eye Research Institute as Research Coordinator and Member of Board of Directors of the Lions/USA Eye Research Institute. Dr. John Oakes is still active in the Lions/USA Eye Research Institute as a member of the Board of Directors.

This past year Dr. David McGee received his first R01 grant from NIH entitled Helicobacter pylori arginase modulation of ulcers and cancer. He developed a Research Internship for Young Scientists (RIYS) program to promote research for high school students and brought in the first applicant for the program. He also found time to serve as a Judge for the Mobile Regional Science Fair. Dr. McGee remains course director for IDL576: Introduction to Literature Reports, which he developed in 2002 to train first year graduate students how to present literature articles to an audience. As course director for Molecular Microbiology and Immunology in the BEAR program, he balanced the topics and added one new topic.
He used an innovative approach in his lectures in IDL 580 and 581 by using animation in his Power Point slides and using animated world wide web sites to highlight some important points. He also used movies for his lecture on chemotaxis, which was voted the best lecture in the entire course.

A Microbiology and Immunology mixer was held in conjunction with the ASM General Meeting held in New Orleans in May. Over 50 current and past Faculty, Students and Postdocs attended a reception at the Royal Sonesta Hotel on Bourbon Street. One of the attendees, Dr. Lausch's former graduate student Dr. Terrence Tumpey, appeared in the PBS documentary "Secrets of the Dead - Killer Flu". Dr. Tumpey is in CDC's influenza branch. He will be a Distinguished Scientists Seminar speaker January 27, 2005.
2003-2004
Summary of Scholarly Activities
Department of Neurology

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press


Zweifler RM, Voorhees ME, Mahmood MA, Parnell M. Magnesium sulfate increases the rate of hypothermia via surface cooling and improves comfort. Stroke. Forthcoming.

II. PUBLISHED ABSTRACTS


III. BOOKS PUBLISHED


IV. PRESENTATIONS


Maertens P; Parada V. Hemispherectomy in an infant with holoprosencephaly microsigns. Poster presented at: 2003 American Epilepsy Society Annual Meeting; 2003 Dec 8; Boston, MA.


V. NATIONAL PROFESSIONAL RECOGNITION


Hamilton, WJ. Greater Gulf Coast Epilepsy Chapter, advisory board Alabama Osteopathic Medical Association, educational advisor.

Maertens, P. Journal of Neuroimaging, editorial board and member Society of Neuroimaging Examination Committee, committee member.


Rothrock, J. Editor-in-chief, Headache Named to America's Top Doctors for the 4th consecutive year.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Neurology's outpatient office operations continues to have an increase in patients evaluated, which has improved patient insurance mix. Additionally, the number of patients we admit to USA Knollwood Hospital and the USA Long-term Care facility have increased over the last year. Unfortunately, the number of out-patient referrals has outstripped our capabilities to provide timely evaluations. The neurology residents' performance on the national in-service neurological examination has improved. Our core neurology rotation for the third year medical students has been well received and has stimulated several students to pursue neurological careers.

The number of patients admitted to the epilepsy monitoring unit at USA Knollwood Park Hospital has increased. This is a considerable financial resource, and provides an important component to our residency's educational program.

A major thrust of the department is to increase the number of outpatients evaluated, to continue procuring outside research funding, to increase supplementation of faculty salaries from research dollars and to increase the scholarly activities through peer-reviewed publications.

In conclusion, our department has made considerable improvements, including diversification, increased research activities and funding. The department provides excellence in teaching and neurological care.
2003-2004
Summary of Scholarly Activities
Department of Neurosurgery

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full length published articles


B. Articles in press

II. PUBLISHED ABSTRACTS

III. BOOKS PUBLISHED

IV. PRESENTATIONS

V. NATIONAL PROFESSIONAL RECOGNITION

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Neurological Surgery moved its offices from the Health Services Building to Medical Office Two at the Knollwood Campus. This will provide Neurosurgery patients better access to hospital services.

The Department mourns the passing of our esteemed colleague, Dr. Eric Weber. He contributed greatly to the success of the Department and will be sorely missed.

The Department of Neurological Surgery continues to treat pediatric patients at USA Children and Women’s Hospital with diseases including hydrocephalus, myelodysplasia, and pediatric head injury.

The Neurosurgical Service continues to do significant elective procedures at Knollwood Park Hospital.
Dr. Kent Sauter has developed the spinal cord injury service at University of South Alabama Medical Center to the point where we are now receiving referrals from a multi-state area for difficult spinal fixation problems.

Dr. Eugene Quindlen continues the Vagal Nerve Stimulation program for epilepsy. This procedure has produced significant improvements for seizure patients who have been unresponsive to medications. The Department is receiving outside referrals from area neurologists and is currently the only center in the area that is doing the Vagal Nerve Stimulator implants.
2003-2004
Summary of Scholarly Activities
Department of Obstetrics and Gynecology

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full length published articles

**Angell NF.** Controversy concerning the Women's Health Initiative Trial. Middle East Fertil Soc J 2004; 9(1).


**Rizk B.** Polycystic ovarian syndrome. Southeast Regional Endocrine 3rd Annual Meeting 2003; Proc. 3rd Annual Meeting:51-76.


B. Articles in Press


II. PUBLISHED ABSTRACTS


III. BOOKS PUBLISHED

IV. PRESENTATIONS

Altermatt CM. Basic infertility work-up. Paper presented at: 13th Annual CME OB/GYN Conference; 2004 Apr 1-2; Mobile, AL.


Hogan WL. New HIV therapy-impact on OB and GYN. Paper presented at: 13th Annual CME OB/GYN Conference; 2004 Apr 1-2; Mobile, AL.


Messer CF. Woman’s preventive health. Paper presented at: 13th Annual CME OB/GYN Conference; 2004 Apr 1-2; Mobile, AL.

Owens SA. Fetal monitoring and cerebral palsy. Paper presented at: 13th Annual CME OB/GYN Conference; 2004 Apr 1-2; Mobile, AL.

Porter KB. Future of ultrasound. Paper presented at: Recent Advances in Ultrasound Imaging Scan Workshops; 2003 Oct 29; Biloxi, MS.


Rizk B. Management of hyporesponders in assisted reproductive technology. Paper presented at: Egyptian Fertility and Sterility Society, 9th Annual Meeting; 2003; Cairo, Egypt.


Rizk B. Osteoporosis. Paper presented at: Southeast Regional Endocrine 3rd Annual Meeting; 2003 October 25; San Destin, FL.


Rizk B. Update on PCO disease syndrome X. Paper presented at: 12th Annual Continuing Education Conference in Obstetrics and Gynecology; 2003 May 2; Mobile, AL.

Rizk B. Hirsutism. Paper presented at: 13th Annual Continuing Education Conference on Obstetrics and Gynecology; 2004 Apr 2; Mobile, AL.

Rizk B. Surgery and assisted reproductive technology in the treatment of endometriosis associated with infertility. Egyptian Fertility and Sterility Society, 10th Annual Meeting, 2004 Sep 2; Cairo, Egypt.
Rizk B. Novel medical therapies for endometriosis: are they novel? Paper presented at: Egyptian Fertility and Sterility Society, 10th Annual Meeting; 2004 Sep 3; Cairo, Egypt.

Rizk B. Designer babies: do we have the right to make the choice? Paper presented at: Current Trends Conference; 2004 Sep 9; Mobile, AL.

Sherman CD. Premature rupture of membranes and update preterm labor. Paper presented at: 13th Annual CME OB/GYN Conference; 2004 Apr 1-2; Mobile, AL.


Zimbelman S. The heart and its amazing formation. Paper presented at: 13th Annual CME OB/GYN Conference; 2004 Apr 1-2; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Kathy B. Porter, M.D. is Treasurer for the National Organization, Society for Executive Leadership in Academic Medicine (SELAM). Dr. Porter was awarded a National Library of Medicine Fellowship on Medical Informatics for 2004. She again served as an Oral Board Examiner for the American Board of Obstetrics and Gynecology, Inc.

Dr. Botros Rizk serves as the Chairman of the American Society for Reproductive Medicine International Membership Committee. He serves as the Chairman of the American Society for Reproductive Medicine 60th Annual Meeting Post-Graduate Precongress Course in Philadelphia, PA and has served as Chairman for post-graduate courses. He also serves as the Chairman for the Scientific Committee for the Southeast Regional Endocrine Meeting. He served as Chairman of the Scientific Committee of the Middle East Fertility Society Chapter of the American Society for Reproductive Medicine.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Obstetrics and Gynecology has continued to emphasize excellence in clinical OB/GYN, education of house staff and medical students, collaborative and independent clinical research, and the development of the academic faculty. These efforts and accomplishments have proved instrumental in enhancing the health, well-being and overall quality of life of women along the Gulf Coast, within the State of Alabama, and throughout the nation. Dr. Asad Sheikh joined the department on August 1, 2004 as Head of the Division of Maternal Fetal Medicine.
2003-2004
Summary of Scholarly Activities
Department of Orthopaedic Surgery

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press


II. PUBLISHED ABSTRACTS

Bryant G, Pearsall A. A new technique for augmentation of chronic Achilles tendon rupture. 53rd Annual Meeting of the Alabama Orthopaedic Society Program Book, p. 20; 2004 Apr 30-May 2; Orange Beach, AL.

Cenac C, Nimityongskul P. Spinal cord injury without radiographic abnormality: a review and report. 53rd Annual Meeting of the Alabama Orthopaedic Society Program Book, p. 27; 2004 Apr 30-May 2; Orange Beach, AL.

Edmiston T, Rodriguez R, Madanagopal S, Pearsall A. Posterior tibial tendon rupture in a closed ankle fracture: a case report. 53rd Annual Meeting of the Alabama Orthopaedic Society Program Book, p. 21; 2004 Apr 30-May 2; Orange Beach, AL.

Howard C, Hughey J, Madanagopal S, Pearsall A. The use of osteoarticular transplantation in conjunction with Fulkerson osteotomy in the treatment of patellar arthritis. 53rd Annual Meeting of the Alabama Orthopaedic Society Program Book, p. 36; 2004 Apr 30-May 2; Orange Beach, AL.

Jarrett C, Pearsall A. The use of bilateral anterior and posterior bone blocks in the treatment of multidirectional shoulder instability. 53rd Annual Meeting of the Alabama Orthopaedic Society Program Book, p. 41; 2004 Apr 30-May 2; Orange Beach, AL.


Lemak D, Meyer F, Mason D. Scapulothoracic dissociation: a case report. 53rd Annual Meeting of the Alabama Orthopaedic Society Program Book, p. 31; 2004 Apr 30-May 2; Orange Beach, AL.


Madanagopal S, Ibrahim K, Hollis J, Pearsall A. Changes in tibiofemoral pressure and area after opening and closing wedge valgus osteotomy. Proceedings of the 22nd Annual Meeting of the Mid-America Orthopaedic Association; 2004 Apr 14-18; LaQuinta, CA.

Patterson J, Nimityongskul P. Interposition of periosteum in Salter-Harris Type I and II fractures of the distal tibia. 53rd Annual Meeting of the Alabama Orthopaedic Society Program Book, pp. 42; 2004 Apr 30-May 2; Orange Beach, AL.


Rodriguez R, Nimityongskul P. Treatment of osteoid osteoma by radiofrequency ablation. 53rd Annual Meeting of the Alabama Orthopaedic Society Program Book, pp. 24; 2004 Apr 30-May 2; Orange Beach, AL.

III. BOOKS PUBLISHED
IV. PRESENTATIONS

Kovaleski J; Hollis J; Heitman R; Gurchiek L; Pearsall A. Biomechanical analysis of stiffness and laxity of the ankle: diagnosing lateral ligament injuries. Paper presented at: The Southeast Athletic Trainers Association Annual Research Seminar; 2004 Mar 27; Atlanta, GA.


Madanagopal S; Pearsall A; Kovaleski J; Heitman R. Short-term use of oral corticosteroids in athletes: efficacy and complications. Paper presented at: Mid-America Orthopaedic Association 22nd Annual Meeting; 2004 Apr 14-18; La Quinta, CA.

Madanagopal S; Ibrahim K; Hollis J; Pearsall A. Changes in tibiofemoral pressure and area after opening and closing wedge valgus osteotomy. Paper presented at: Mid-America Orthopaedic Association 22nd Annual Meeting; 2004 Apr 14-18; La Quinta, CA.

Meyer F. Flexor tendon injuries. Paper presented at: University of Alabama at Birmingham Department of Orthopaedics; 2003 Nov 20; Birmingham, AL.

Meyer F. Sports injuries of the upper extremity and their treatment options. Paper presented at: Southeast Chapter American College of Sports Medicine 32nd Annual Meeting; 2004 Jan 30; Atlanta, GA.


Meyer F. Carpal instability. Paper presented at: Lewis D. Anderson Society Bi-Annual Meeting; 2004 Jun 4; Orange Beach, AL.


Nimityongskul P. Current trends in Pediatric Orthopaedics in the USA. Paper presented at: Siriraj Hospital, Mahidol University; 2004 May 26; Bangkok, Thailand.

Nimityongskul P. Update in scoliosis treatment in the USA. Paper presented at: Ramathibodi Hospital, Mahidol University; 2004 May 27; Bangkok, Thailand.


Pearsall A; Madanagopal S; Kavaleski J; Hughey J. Osteoarticular autograft and allograft transplantation of the knee: Three year follow-up evaluation. Paper presented at Mid-America Orthopaedic Association 22nd Annual Meeting; 2004 Apr 14-18; La Quinta, CA.

Pearsall A. Current surgical options for osteochondral lesions of the tibio-talar joint. Paper presented at: Southeastern Orthopaedic Foot Club 15th Annual Meeting; 2004 Apr 29; Orange Beach, AL.


V. NATIONAL PROFESSIONAL RECOGNITION

Frederick N. Meyer, M.D. Dr. Meyer was elected to membership in the American Orthopaedic Association. He continued to serve as a member of the American Academy of Orthopaedic Surgeons Business Practice/Practice Management Committee.

Prasit Nimityongskul, M.D. 2004-05 President, Alabama Orthopaedic Society. Dr. Nimit was also elected to membership in the American Orthopaedic Association.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

During the past year, Dr. Frederick Meyer, Professor and Chairman of the Department, was appointed Associate Dean for the Faculty Practice. Dr. Albert Pearsall was promoted from Associate Professor to Professor. Dr. Prasit Nimityongskul was named President of the Alabama Orthopaedic Society for 2004-05. Dr. Sudhakar Madanagopal was one of three first-time recipients of the University of South Alabama Mitchell Medical Scholars Program Award granted in December, 2003. Funding from this award is intended for the educational advancement of students in our medical school. J. Marcus Hollis, Ph.D. resigned from the position of Research Associate within the Department. However, his clinical appointment as Adjunct Associate Professor in the Department will be maintained and he will continue to collaborate with researchers in the department on projects with biomechanical engineering involvement.

Faculty members presented numerous papers at regional, national and international scientific meetings. Funded research includes a grant from the U.S. Department of Transportation on which Dr. Sudhakar Madanagopal is one of three investigators. The grant period is from 8/01/03 through 7/31/05 with a total award of $100,000. Other sources of income to the department include the USA Sports Medicine & Reconstruction Fellowship Grant from Zimmer Southeast, an annual award in the amount of $100,000 under the direction of Dr. Albert Pearsall. In April of this year, the department successfully relocated to a new physical location at the Knollwood Hospital Complex which houses both the Orthopaedic Outpatient Clinic and the Departmental Academic Offices in one facility. We also developed a collaborative Basic Science relationship with the Department of Cell Biology and Neuroscience to enhance our research program, improve efforts to obtain support from extramural sponsoring agencies, and develop research opportunities for Orthopaedic Residents. Toward this goal, Dr. Valentina Grishko was appointed as Assistant Professor of Orthopaedics in our department with a secondary appointment in the Department of Cell Biology and Neuroscience. The department sponsored the 15th Annual Southeastern Orthopaedic Foot Club Meeting at Orange Beach, Alabama on April 29, 2004. This is a regional CME conference with an audience of orthopaedic surgeons, physicians, and allied health professionals attending from Alabama, Florida, Louisiana and Mississippi. Dr. Frederick Meyer served as Course Chairman for the conference and the guest speaker was Dr. Michael Shereff, 2000-2001 President of the American Orthopaedic Foot and Ankle Society.
2003 – 2004
Summary of Scholarly Activities
Department of Pathology

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press


II. PUBLISHED ABSTRACTS


Kahn AG, Farooqui G, King JAC. Analysis of foreign material identified in non-neoplastic lung tissue with energy-dispersive x-ray. Mod Pathol 2004;17:366A.


III. BOOKS PUBLISHED

IV. PRESENTATIONS

Boudreaux, CW. Hot topics in women’s health: update in cervical cancer. Paper presented at: Southern Medical Association Annual Meeting; 2003 Nov 8; Atlanta, GA.


Carter E. Fatal cerebral phaeohyphomycosis due to Curvularia lunata in an immunocompetent patient. Paper presented at: College of American Pathologists; 2004 Sep; Phoenix, AZ.


Howard ML. Splenomegaly: an unusual presentation. Paper presented at: 97th Annual Scientific Assembly of the Southern Medical Association; 2003 Nov; Atlanta, GA.


King JA. Role of ALCAM in interaction of breast cancer metastases and the endothelium of the lung. Paper presented at: Experimental Biology Meeting; 2004 Apr 17-21; Washington, D.C.


Manci, EA. Pathologic findings in the heart in autopsy cases of hemoglobin sickle-beta thalassemia. Paper presented at Annual Meeting of The Sickle Cell Disease Association of America; 2004, Apr 18; Los Angeles, CA.

Tucker, JA. Applications of electron microscopy in diagnostic surgical pathology. Paper presented at: American College of Veterinary Pathologists 54th annual meeting; 2003, Nov 19; Banff, Alberta, Canada.

Tucker, JA. Faculty development and teaching academies (workshop). Paper presented at: Association of Pathology Chairs Annual Meeting; 2004, Jul 22; Mont Tremblant, Quebec, Canada.
V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Allan Tucker, Louise Lenior Locke Professor and Chair, completed his term as president of the Society for Ultrastructural Pathology, an international organization of diagnostic electron microscopists. He continued to serve as associate editor (for North and South America) of the journal *Ultrastructural Pathology*, with the American office of that journal located in the department. He served on the education committee, the strategic planning committee, and as an ambassador of the U.S. and Canadian Academy of Pathology. He is a member of the executive council of the Association of Directors of Anatomic and Surgical Pathology and was appointed chair of the Advisory Committee on Practice Management. He continued his membership on the Electron Microscopy Ad Hoc Review Group, performing quality assurance for the Veterans Affairs Electron Microscopy Program. This year, he was appointed to the Practice and Management Committee of the Association of Pathology Chairs. He continued his term as director on the board of the USA Foundation.

Dr. Cynthia Donnell continued to serve on the United States Medical Licensing Examination Step I Anatomy Committee and as Chapter Councilor of the AOA honor medical society.

Dr. Marcelo Horenstein was appointed to a four year term on the Membership Committee of the American Society of Dermatopathology. He continued his work as a member of the editorial board of the *Journal of Cutaneous Pathology*.

Dr. Judy King was elected as Councilor for the state of Alabama for the Southern Medical Association, and this year is President-elect of the Southeastern Microscopy Society. She was named one of America’s Top Physicians by the Consumers’ Research Council of America.

Dr. Elizabeth Manci continued her ongoing collaborative studies with the NIH National Acute Chest Syndrome Study Group, and this year began collaborative work with the Emory University Department of Pediatric Hematology-Oncology Division, and served as a co-investigator on a National Heart, Lung and Blood Institute study at the Rockefeller University.

Dr. LeRoy Riddick continued his work on the Scientific Review Board for the Armed Forces Institute of Pathology.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Concluding a national search by the pathology chair search committee, chaired by Dr. Sam Strada, the dean appointed Dr. J. Allan Tucker as chair of the department in December of 2003. Dr. Tucker was also named Louise Lenior Locke Professor at that time.

After more than 20 years of service, Dr. Betsy Bennett left her position as professor of pathology and vice dean to become the executive vice president of the American Board of Pathology. She accepted a continuing appointment in the department as an adjunct professor.

Dr. James Stubbs, Professor and Vice Chair, left the department this summer to accept a position at the Mayo Clinic in Rochester, Minnesota. This departure necessitated several changes in the administrative structure of the department. Dr. Allan Tucker accepted the role of director of the clinical laboratories for USAMC and Knollwood Hospital, and Dr. Jacek Polski was appointed co-director at Knollwood Hospital and Dr. Elliot Carter co-director at USAMC. Dr. Carnahan was already serving as system-wide director of transfusion medicine, and he added the system-wide directorship of coagulation and of clinical chemistry to his duties.

Dr. Dan Roach has begun a full-time position in emerging health technologies. Dr. Maura Pieretti, assistant professor and director of molecular pathology, left the department in the fall to join her husband in Florida. Dr. Miguel Pappolla, a faculty member in the departments of pathology and neurology, left the department to work in the private practice of neurology in Mississippi. The department is currently conducting a search for a neuropathologist.

Mr. Michael Titford, who served as supervisor of the histology department for many years, was given a faculty appointment as lecturer upon the departure of Mr. Dale Ulmer. Dr. Kim Patterson returned to the department in August from a private practice position in Florida. Dr. Judy King is continuing her research involvement with the Center for Lung Biology Center. Dr. Margaret O’Brien, following in the footsteps of Dr. Bennett, accepted the position of Associate Dean of Student Affairs, but is continuing part-time teaching and service work in the department.
Dr. Gene Hart, who served as chief resident during his final year here, was selected for a fellowship in forensic pathology at the University of Texas in Houston. Dr. Martin Howard was selected for a surgical pathology fellowship at Vanderbilt University. Dr. Ozlem Ulusarac, who will complete her surgical pathology fellowship in December, has tentatively accepted a position with the Veterans Affairs Medical Center in Kansas City. The department welcomed two pathology residents, Dr. Jolie Rodriguez and Dr. Jesalyn Taylor, who began their training in July.

The department created a new award this year, the Betsy D. Bennett award, which will be presented annually to the pathology resident receiving the highest rating from the students for his or her participation in the second year pathology course. The first recipient was Dr. Gene Hart. The residents elect an individual each year to honor for outstanding housestaff teaching, and Dr. LeRoy Riddick was this year’s faculty recognition awardee.

The William A. Gardner, Jr., Pathology award was presented at Honors Convocation to two outstanding students this year, Robin Colbert and Courtney Hall. During this ceremony, several members of the department received special recognition as “Red Sash Faculty.” These were Drs. Carter, Donnell, Tucker, and Riddick. Dr. Allan Tucker was selected by the graduating class as the speaker at the convocation.

The Pathology and Laboratory Medicine course, under the direction of Dr. Cynthia Donnell and Dr. Elliot Carter, received the Best Basic Science Course award for the 7th year in a row. Two members of the department, Dr. Elliot Carter and Dr. Allan Tucker, were nominated for Best Basic Science Professor.
2003-2004
Summary of Scholarly Activities
Department of Pediatrics

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


Estrada B. Mycobacterium marinum: be careful around barnacles! Infect Med 2004 August;21(8):364.


Quiñonez JM. Con article - Steroids for Otitis Media with effusion. Pediatric Infections Forum 2003 Dec;5(3)3,6.


B. Articles in press


II. PUBLISHED ABSTRACTS


III. BOOKS PUBLISHED


IV. PRESENTATIONS


Bhowmick S. Parathyroid adenoma in prepubertal children. Paper presented at: Annual Pediatric Endocrine Society Meeting; 2003 Nov 8; Charlotte, NC.

Clement LT. Diagnosis and treatment of asthma in children. Paper presented at: California Department of Health Services Conference on the Diagnosis and Treatment of Asthma; 2004 Jun 22-24; Los Angeles, CA.

Clement LT. Asthma and the community practitioner. Paper presented at: Mobile Pediatric Society Quarterly Meeting; 2004 Jul 15; Mobile, AL.

Estrada B. Infections in children with primary immunodeficiencies. Paper presented at: Driscoll’s Children’s Hospital 8th Annual Pediatric Infectious Diseases Conference; 2003 Oct 22; Corpus Christi, TX.

Estrada B. Streptococcus pneumoniae infections in children. Paper presented at: Mobile Infirmary Medical Center; 2003 Nov 17; Mobile, AL.

Eval FG. Current Respiratory/IVH Update. Advanced Pharmacology Course for Neonatal Nurse Practitioners. Paper presented at: Alabama State University, Division of Continuing Education; 2004 Apr 22; Montgomery, AL.

Falkos S. Supraventricular Tachycardia in Newborns. Paper presented at: Louisiana Neonatal Nurse Practitioners Conf; 2004 Apr 22; Brewton, AL.

Kittredge D; Baldwin C; Bar-on M; Beach P; Trimm F. Applying the new APA educational guidelines to your program. Paper presented at: Association of Pediatric Program Directors Annual Meeting/Workshop; 2004 Apr 29; San Francisco, CA.

Kittredge D; Baldwin C; Bar-on M; Beach P; Trimm F. Using the new online APA educational guidelines to enhance your residency program. Paper presented at: Pediatric Academic Societies/Ambulatory Pediatric Association Annual Meeting; 2004 May 1; San Francisco, CA.

Norberg JA; Chung AM; Vidal R; Falkos S. Efficacy and economic evaluation of a volume-based Cathflo Activase protocol versus a fixed-dose alteplase protocol for catheter occlusions in pediatric patients. Paper presented at: Am Coll Clin Pharm Annual Meeting; 2003 Nov 4; Atlanta, GA.

Quiñonez JM. Update on pediatric combination vaccines. Paper presented at: Alabama Primary Care Society; 2003 Sep 4; Orange Beach, AL.
Trimm F, Bar-on M, Kittredge D, Baldwin C, Beach P. Build it yourself! Creating curriculum planning tools with the new online APA educational guidelines. Paper presented at: Association of Pediatric Program Directors Annual Meeting; 2004 May 1; San Francisco, CA.

Vidal R. Chaired session. Respiratory issues. ISCCM Pediatric Scientific Program; 2004 Feb 6; Mumbai, India.


Wilson FL. History of Hemophilia treatment and new factor products. Paper presented at: Gulf Coast Chapter National Hemophilia Foundation; 2003 Sep 27; Mobile, AL.

Wilson FL. Newborn screening, intro to thalassemia and intro to genetics. Paper presented at: Sickle Cell Association Counselor Certification Program; 2004 Jan 29; Mobile, AL.


Yang YM. Newborn screening, intro to thalassemia and intro to genetics. Paper presented at: Sickle Cell Association Staff Certification Program; 2003 Jul 21; 2003 Nov 13; 2004 Apr 29; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Surendra Baliga served as a Reviewer for *Nutrition Research*.

Samar Bhowmick served as a Reviewer for *Pediatrics, Clinical Pediatrics* and the *Southern Medical Journal*. 
Allison Chung served as an Ad Hoc Reviewer for the American Journal of Health-System Pharmacy, Annals of Pharmacotherapy and Journal of Pediatric Pharmacology and Therapeutics. She was also Chair of the Noncurricular Programming Subcommittee for the American College of Clinical Pharmacy (ACCP) 2004 Annual Meeting Program Committee.

LaDonna Crews was nominated by the American Academy of Pediatrics Alabama Chapter to Chair the Alabama AAP Adolescent Health Forum. Dr. Crews also served as a Reviewer for Clinical Pediatrics.

Karen Crissinger has been appointed to the Abstract Selection Committee, Nutrition and Metabolism Section of the Society for Pediatric Research and served as a Reviewer for Clinical Pediatrics.

Benjamin Estrada was selected through a competitive process to be one of three faculty recipients of the Mitchell Medical Scholar Award in 2004. Dr. Estrada was also selected to be a member of the Scientific Advisory Council of the Society for Clinical Pediatrics. He continues to serve as the American Academy of Pediatrics, Pediatric Research in Office Settings (PROS) Coordinator for the State of Alabama; and he is the Institutional Representative for the Executive Council of the Southern Society for Pediatric Research. He serves on the Editorial Board of Pediatric Infectious Diseases Forum and Infections in Medicine, and he is a Reviewer for Clinical Pediatrics and Medscape General Medicine.

Fabien Eval continues to serve on the Alabama Chapter, American Academy of Pediatrics, Committee on the Fetus and Newborn. He also served as a Reviewer for The Journal of Maternal-Fetal and Neonatal Medicine.

Sheryl Falkos served as a Series Editor for Medscape Pediatrics and as a Reviewer for Clinical Pediatrics.

Charles Hamm served as a Reviewer for Clinical Pediatrics.

Mary Mancao again served on the Alabama Department of Public Health Sexually Transmitted Disease Medical Advisory Council. She is Chairperson of the Area XI HIV/AIDS Consortia for Mobile County and a member of The Expert Panel of the Governor of Alabama’s HIV Commission.
Keith Peevy continues to serve as a member of the Alabama Chapter of the American Academy of Pediatrics Fetus and Newborn Committee and the American Academy of Pediatrics Subspecialty Section on Neonatal-Perinatal Medicine.

Jorge Quiñonez was invited to become a member of the Scientific Advisory Council of the Society for Clinical Pediatrics. He served as Pediatric Research in Office Settings Co-Coordinator for the American Academy of Pediatrics, Alabama Chapter. He also served as a member on the Committee on Health Care Financing of the Alabama Academy of Pediatrics and as a Reviewer for Clinical Pediatrics.

Kenneth Retting served as Interim Chair of the Department of Pediatrics from January 1, 2004 to May 1, 2004. He also served as a Reviewer for Clinical Pediatrics.

R. Franklin Trimm served on the Project Team for revision of the Ambulatory Pediatric Association’s Educational Guidelines for Residency Training in General Pediatrics. He continues to serve as a member and module writer for the Bright Futures Health Promotion Workgroup, and he has served as a Reviewer for Ambulatory Pediatrics and the Journal of Pediatrics.

Richard Whitehurst continues to serve on the Alabama Regional Perinatal Advisory Committee.

Felicia Wilson served as a member of the American Board of Pediatrics Hematology/Oncology Study Section; the State of Alabama Hemophilia Advisory Committee; the State of Alabama Newborn Screening Advisory Committee; and as a Reviewer for Clinical Pediatrics.

Yih-Ming Yang was presented with the Leonard Tow 2004 Humanism in Medicine Award in recognition of his exemplary compassion, competence and respect in the delivery of care. He continues to serve as a member on the Board of Directors of the Sickle Cell Disease Association; the State of Alabama Hemophilia Advisory Committee; the Alabama State Newborn Hemoglobinopathies Committee; and as Director of the Hemoglobin Diagnosis Laboratory, Sickle Cell Association of America, Mobile Chapter. Dr. Yang was a reviewer and member of the National Institute of Health Scientific Review Group.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Pediatrics welcomed Dr. Loran Clement as Professor and Chair of Pediatrics effective May 1, 2004. Dr. Clement brings a strong background in both basic immunology and clinical research to the Department as well as a thorough understanding of childhood asthma and its impact on the health of underserved populations.

This past year saw the departures of Dr. David A. Gremse (Pediatric Gastroenterology/Nutrition), who accepted the position of Chair of the Department of Pediatrics at the University of Nevada School of Medicine in Las Vegas; and Dr. Zenia Fleming, who completed her duties as Pediatric Chief Resident.

The following Pediatric Faculty members were recognized by the COM students as Distinguished Faculty Members at the 2004 Honors Convocation: Drs. Samar Bhowmick, Judy Blair-Elortegui, Mary Mancao, Keith Peevy, Kenneth Rettig, Franklin Trimm, Felicia Wilson, and Yib-Ming Yang. Dr. Charles Hamm was promoted to Professor of Pediatrics. The eleventh recipient of the Hollis J. Wiseman Award for Excellence in Pediatrics during the Pediatric Clerkship was Sandra Gilley.

Seven of the graduating medical students chose residencies in pediatrics or combined medicine/pediatrics. Of the pediatric residents completing residency this year, one joined our faculty in the Division of General Pediatrics (Chief Resident), one joined our clinical faculty at USA Children’s and Women’s Hospital Evaluation Center, two started fellowship programs, three entered private practice, and one is undecided. Of our medicine/pediatric residents completing residency, two entered private practice and one started work in the ER at Jackson Medical Center in Alabama. On July 1, 2004, nine first-year residents entered the pediatric residency program, and two first-year residents entered the combined medicine/pediatrics residency program.

The 2004 Children’s Miracle Network was very successful, raising over $513,000 to benefit the USA Children’s and Women’s Hospital.

Through the use of telemedicine equipment provided through the College of Medicine, the Department of Pediatrics has strived to enhance services offered to rural practitioners located in southwest Alabama. During the past year, the Division of Neonatology has provided clinical consultations using telemedicine technology, and efforts to extend additional consultative and educational services during the coming year are planned.


B. Articles in press


Thorin E, Stevens T, Patterson CE and Dejana E. Heterogeneity of lung endothelial cells. In: Lung Endothelial in Health and Disease. Forthcoming.

Wei Z, Manevich Y, Al-Mehdi AB, Chatterjee S, Fisher AB. Ca\(^{2+}\) flux through voltage-gated channels with flow cessation in pulmonary microvascular endothelial cells. Microcirculation. Forthcoming.


II. PUBLISHED ABSTRACTS

Al-Mehdi AB, Patel M, Haroon A. Mechanosensing of shear-stress cessation by mitochondria in flow-adapted pulmonary endothelial cells. 100\(^{th}\) ATS Annual Meeting, Orlando, 2004;A164.


Liang J, Olson JW. Inactivation of ornithinedecarboxylase (ODC) by difluoromethylornithine (DFMO) suppresses bax activation and apoptosis induced by camptothecin in cultured pulmonary microvascular endothelial cells (PMVECs). FASEB J 2004;18(4):A331.


III. BOOKS PUBLISHED

IV. PRESENTATIONS


Bailey SW; Malinow MR; Hess DL; Upson BM; Graf E; Cohen MV; Nozawa M; Alverson PB; Ayling JE. Dose dependent lack of metabolism in humans. Paper presented at: Experimental Biology; 2004 Apr 17-21; Washington, DC.

Gillespie M. New roles for mitochondrial and nuclear DNA modifications in the life and death of lung cells. Paper presented at: Northwestern University College of Medicine; 2004 Jan; Chicago, IL.


Offer T; Bailey SW; Sabens EA; Ayling JE; Ames BN. Catalysis of UV-induced DNA damage: comparison of folic acid with 5-methyl-tetrahydrofolate. Paper presented at: OCC Congress on Oxidants and Antioxidants in Biology; 2004 Mar 10-13; Santa Barbara, CA.

Offer T; Bailey SW; Sabens EA; Ayling JE; Ames BN. The photochemistry of folate, and catalysis of DNA damage. Paper presented at: FASEB Summer Research Conference; 2004 Jul; Snowmass, CO.

Schaffer SW. DNA damage: role in diabetic cardiomyopathy. Paper presented at: 1st World Congress of the International Academy of Cardiovascular Sciences; 2003 Oct; Belo Horizonte, Brazil.


Stevens T. On the endothelial cell Isoc. Paper presented at: University of Arizona; 2003 Dec; Tucson, AZ.
Stevens T. Calcium regulation of lung vascular function. Paper presented at: St. Louis University; 2004 Jan; St. Louis, MO.

Stevens T. The role of the calcium in endothelial cell barrier. Paper presented at: American Thoracic Society Postgraduate Course; 2004 May; Orlando, FL.


Stevens T. Introduction to endothelial heterogeneity. Paper presented at: Grover Conference; 2004 Sep; Sedalia, CO.

Wu S. Disruption of the dynein in motor promotes endoplasmic reticulum-plasmalemma coupling important for activation of the $\text{Ca}^{2+}$-selective store-operated current in pulmonary microvascular endothelium. In Featured Topic Session: Hot Topic in Lung Endothelial Biology; Paper presented at: Experimental Biology; 2004 Apr 21; Washington, DC.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. Mark Gillespie served as Chairman of the Program Committee and served on the Leadership and Long Range Planning Committees for the Pulmonary Circulation Assembly of the American Thoracic Society; American Journal Physiological-Lung Cellular Molecular Physiology Society, and on four NIH Study Sections including Lung Biology and Pathology, National Sickle Cell, STTR/SBIR, and the Program Project Grant Review Committee. Dr. Gillespie received the Terry Wagner Endowed Lectureship award at the Grover Conference in Sedalia, Colorado.

Dr. Abu-Bakr Al-Mehdi served as an American Heart Association Southeast Affiliate study section member.
Dr. Michael Chinkers served on American Heart Association Peer Review Study Group on Basic Cell and Molecular Biology, Southeast, Ohio Valley, and Florida/Puerto Rico affiliates. Dr. Chinkers was a reviewer for Cell Communication and Signaling, Journal of Biological Chemistry, Journal of Neuroscience.

Dr. Jonathan Scammell has served from 2000-present on the editorial advisory board for the Journal of Pharmacology and Experimental Therapeutics, and as an ad hoc reviewer for Cell Stress and Chaperones, International Immunopharmacology, Molecular and Cellular Biochemistry, Physiological Genomics, and Proceedings of the Royal Society, Biological Sciences.

Dr. Stephen W. Schaffer served on the editorial board for Molecular Cell Biochemistry, was section editor for Amino Acids, and a member of NIH study section – Cardiac Dysfunction and Disease SSCOR Study Section.

Dr. Troy Stevens served on the Planning and Program Committees for the Pulmonary Circulation Assembly of the American Thoracic Society; served on the Program Committee for the American Physiological Society; served as an ad hoc Member for Lung Biology and Pathology Study Section, Respiratory and Applied Physiology Study Section, Experimental Cardiovascular Sciences Study Section and Program Project Grants for NHLBI.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Mr. Brad Swiger received pre-doctoral fellowship from the American Heart Association, Southeast Affiliate. Mr. Swiger was sponsored by Dr. Mark Gillespie the title of his research project is: “EDHB, a prolyl hydroxylase inhibitor, stimulates reactive oxygen species production in rat liver mitochondria.

Dr. Wesley Denny received his Ph.D. in May 2004. His dissertation was entitled “A Structure-Function Analysis of the Potent GR-Inhibitory Immunophilin–Squirrel Monkey FKB51.” Dr. Jonathan Scammell was his Major Professor.

Dr. Songwei Wu received a five year award from NIH for his grant entitled: “Lung Endothelium in Vaso-Oclusion.” He is also a Co-Investigator on another grant from NIH, entitled: “Store operated Ca^{2+} entry: Lung Endothelial Permeability.” Dr. Wu was also appointed to the position of Assistant Professor in the Department of Pharmacology.
The Department was the recipient of an Award for Excellence in Teaching Molecular Pharmacology for Phase I of the Biomedical Enrichment and Recruitment Program.

The Department of Pharmacology hosted visits by several distinguished scientists: Drs. Grant N. Pierce (University of Manitoba), Simeon E. Goldblum, (University of Maryland), Paul A. Insel (University of California-San Diego), Immo Scheffler, (University of California-San Diego).

Two undergraduate students were recipients of NSF-REU summer fellowships. Jill Semenza was sponsored by Dr. Abu-Bakr Al-Mehdi and Omid Tavana sponsored by Dr. Mark N. Gillespie. Ms. Stephanie Mills [SURF Program] worked in Dr. Al-Mehdi’s laboratory.
I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full length published articles


Stegemann JP, Dey NB, Lincoln TM, Nerem RM. Genetic modification of smooth muscle cells to control phenotype and function in vascular tissue engineering. Tissue Eng 2004 Jan-Feb;10(1-2):189-99.


B. Articles in press


II. PUBLISHED ABSTRACTS


Dey NB, Lincoln TM. Involvement of cyclic GMP-dependent protein kinase on matrix metalloproteinase expression in rat aortic smooth muscle cells. FASEB J 2004; Late Breaking Abstract.


Krieg T, Qin Q, Alexeyev MF, Cohen MV, Downey JM. Acetylcholine preconditions by activating Akt and NOS to generate ROS. J Mol Cell Cardiol 2004;36:741.


III. BOOKS PUBLISHED

IV. PRESENTATIONS


Cohen MV. Cardioprotection: the maturity of preconditioning vs the revolutionary nature of postconditioning. Paper presented at: University of Tennessee at Memphis; 2004 Jan: Memphis, TN.

Cohen MV. Cardioprotection at reperfusion: the impossible has arrived. Paper presented at: Louisiana State University Health Sciences Center; 2004 Feb; Shreveport, LA.

Cohen MV. Cardioprotection at reperfusion: from bench to bedside. Paper presented at: Third Gulf Coast Physiological Society Meeting; 2004 Mar; Mobile, AL.

Cohen MV. Free radicals from the mitochondria rather than NADPH oxidase trigger acetylcholine-induced protection in isolated hearts. Paper presented at: Third Gulf Coast Physiological Society Meeting; 2004 Mar; Mobile, AL.

Downey JM. Chaired session. Mitochondrial potassium channels. American Heart Association Basic Cardiovascular Science Council; 2003; Snowbird, UT.


Krieg T, Qin Q, Alexeyev MF, Cohen MV, Downey JM. Acetylcholine preconditions by activating Akt and NOS to generate ROS. Paper presented at: International Society for Heart Research; 2004 Jun; Dresden, Germany.
Lincoln TM. Role of nitric oxide and cyclic GMP signaling pathways in arterial vascular diseases. Paper presented at: University of Alabama at Birmingham Annual Hypertension Retreat; 2003 Oct; Destin, FL.

Lincoln TM. Regulation of vascular smooth muscle cell gene expression by nitric oxide and cyclic GMP signaling. Paper presented at: Department of Molecular Physiology, Vanderbilt University, 2003 Nov; Nashville, TN.

Lincoln TM. GMP signaling pathway in vascular disorders. Paper presented at: Invited seminar at Department of Physiology, LSU School of Medicine; 2003 Nov; New Orleans, LA.

Lincoln TM. Nitric oxide-cyclic GMP signaling in vascular smooth muscle cells. Paper presented at: Third Annual Gulf Coast Physiological Society; 2004 Mar 5-6; Mobile, AL.

Lincoln TM. Cyclic GMP and cyclic GMP-dependent protein kinase signaling in smooth muscle. Paper presented at: 100th Annual American Thoracic Society; 2004 May; Orlando, FL.

Lincoln TM. Role of the cyclic GMP-cGMP-dependent protein kinase pathway in vascular smooth muscle gene expression and vascular diseases. Paper presented at: Invited seminar at Cardiovascular Research Center, Morehouse University School of Medicine; 2004 May; Atlanta, GA.

Lincoln TM. Regulation of vascular smooth muscle gene expression by nitric oxide and cyclic GMP-dependent protein kinase. Paper presented at: Invited seminar at Department of Pharmacology, Tulane University School of Medicine; 2004 Sep; New Orleans, LA.

Taylor MS. Altered expression of small conductance Ca$^{2+}$-activated K$^{+}$ (SK3) channels modulates arterial tone and blood pressure. Paper presented at: Third Gulf Coast Physiological Society Meeting; 2004 Mar 5-6; Mobile, AL.

Townsley MI. Remodeling of lung endothelial barrier function in heart failure - A role for EETs and SOC? Paper presented at: Department of Physiology, LSU Health Sciences Center; 2004 Mar; New Orleans, LA.

Townsley MI. Remodeling of lung endothelial barrier function in heart failure. Paper presented at: Division of Pulmonary and Critical Care, Department of Medicine, Medical College of Wisconsin; 2004 Mar; Milwaukee, WI.

Yang J. Regulation of sterol regulatory element-binding protein-1a (SREBP-1a) gene expression. Paper presented at: Third Gulf Coast Physiological Society Meeting; 2004 Mar 5-6; Mobile, AL.

Yang XM, Cui L, Krieg T, Downey JM, Cohen MV. Postconditioning protects isolated hearts through PI3K signaling. Paper presented at: Third Gulf Coast Physiological Society Meeting; 2004 Mar 5-6; Mobile, AL.

Yang XM, Cui L, Krieg T, Downey JM, Cohen MV. Postconditioning protects isolated hearts through PI3K signaling. Paper presented at: International Society for Heart Research; 2004 May; Cancun, Mexico.

Yang XM, Downey JM, Cohen MV. Multiple, brief coronary occlusions during early reperfusion protect rabbit hearts by activation of ERK and production of nitric oxide. Paper presented at: American Heart Association; 2003 Nov; Orlando, FL.

V. NATIONAL PROFESSIONAL RECOGNITION


Michael V. Cohen served in the following capacities: Editorial Board of Basic Research in Cardiology and Heart Disease: A Journal of Cardiovascular Medicine; and Member of National Cardiovascular Pathophysiology One Study Section, American Heart Association. Abstract grader for the American Heart Association Scientific Sessions.

James M. Downey served in the following capacities: Member, Mobile County Board of Directors, American Heart Association; Consultant to Cognetix Corp. Editorial board member for Circulation Research, Journal of Molecular and Cellular Cardiology, Basic Research in Cardiology, and Cardiovascular Pharmacology; Abstract grader for the American Heart Association Scientific Sessions. President of the International Society for Heart Research.
Thomas M. Lincoln served as: Editorial Board Member for *Journal of Biological Chemistry, Molecular Pharmacology,* and *Journal of Vascular Research*; reviewer for approximately 20 other journals. He also serves on National Institute of Health Vascular Cell Molecular Biology Study Section (now Vascular Cell Molecular Biology Study Section), Special Emphasis Panels for the National Heart Lung and Blood Institute (NHLBI), and service for the NHLBI as a special reviewer for Program Project Proposals and for Institutional Training Proposals.

James C. Parker served in the following capacities: Reviewer: *Journal of Applied Physiology, American Journal of Respiratory and Critical Care Medicine, American Journal of Physiology,* and *Journal of Biomedical Engineering.*


VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Physiology continues to grow and diversify its research interests. We have completed an initial round of recruiting and hired three new faculty members in 2003 – 2004. Dr. Jian Yang arrived in August 2003, Dr. Mark Taylor arrived in November 2003 and Dr. David Weber arrived in January 2004. Dr. Yang received his Ph.D. from Ohio State University with Dr. Alan Lambowitz in Molecular Biology and did his postdoctoral training at the University of Texas Southwestern with Nobel Laureates Drs. Michael Brown and Joseph Goldstein. Dr. Yang’s research interests are the biochemistry and molecular biology of fatty acid and cholesterol metabolism, and his major emphasis is the use of mouse genetic models to understand the regulation of hepatic and adipose tissue gene expression as it relates to metabolic disorders.

Dr. Mark Taylor received his Ph.D. from the University of South Alabama with Dr. Joseph Benoit and did his postdoctoral training at the University of Vermont with Dr. Mark Nelson. Dr. Taylor’s research interest is the cellular basis of vascular contraction using imaging and electrophysiological approaches, and his major emphasis is the role of ion channels and nitric oxide in the regulation of endothelial cell/vascular smooth muscle function. Dr. David Weber received his Ph.D. in Physiology from the Medical College of Wisconsin with Dr. Julian Lombard and did his most recent postdoctoral training with Dr. Kathy Griendling at Emory University. Dr. Weber’s research interest is the cellular and molecular basis of vascular smooth muscle cell motility especially as it relates to atherosclerosis, and his major emphasis is the use of mouse genetic models to explore the role of oxidative stress on signal transduction pathways that regulate cell motility. The Department is pleased to expand its research programs in these emerging areas of importance in biomedical sciences with these new faculty members.

The Department of Physiology hosted the Third Gulf Coast Physiological Society meeting at the Adams Mark Hotel in March 2004. Dr. Mary Townsley and the physiology department staff went above and beyond the “call of duty” to put on a first-rate meeting and see to its success. Over 150 scientists, students, and fellows were in attendance. The participants were provided state-of-the-art lectures from renowned scientists throughout the southeast and presented two poster sessions on up-to-date research activities in their laboratories.
Extramural funding continues to increase in the Department to support research programs. New Scientist Development Grants from the American Heart Association National Program were awarded to Drs. Mark Taylor and David Weber. This year, a new National Institutes of Health Institutional T32 Training Grant from the NHLBI was awarded to the College of Medicine with Dr. Mary Townsley as the Director of the Program. Finally, Diego Alvarez was awarded an American Heart Association student fellowship award.

The faculty in the Department of Physiology continue to enjoy worldwide acclaim for research accomplishments in their fields. Faculty gave approximately two dozen oral lectureships, symposium presentations, and seminars at various meetings and institutions during the year. Several faculty members held high visibility positions with national peer review panels and boards and leadership positions with national societies thus increasing our impact on science in the external community.

Closer to home, the faculty in the Department of Physiology assumed important leadership roles in the College of Medicine's educational missions. Dr. Mary Townsley continues to serve as the Director of the Basic Medical Sciences (BMS) Graduate Program. Dr. Tom Lincoln assumed the course directorship of "Fundamentals of Basic Medical Sciences," the basic course for all incoming graduate students. New courses were offered in the BMS by Drs. Lincoln ("Advanced Signal Transduction") and Dr. Townsley ("Statistics and Experimental Design in Biomedical Research"). We have instituted a one-day annual Departmental Faculty Retreat for the purpose of evaluating and improving the Medical Physiology course.
I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press

II. PUBLISHED ABSTRACTS

III. BOOKS PUBLISHED


IV. PRESENTATIONS


Rich CL. The role of antidepressant treatment in suicide prevention. Paper presented at: University of California San Diego Department of Psychiatry Grand Rounds, 2004 Feb 12; San Diego, CA.
V. NATIONAL PROFESSIONAL RECOGNITION

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

While the full-time faculty has shrunk to three, volunteer and part-time faculty members have become more active in the teaching mission.

Solidification and expansion of affiliations with community psychiatric services, especially the Mobile Mental Health Center and the Mobile Infirmary Medical Center, have improved for the medical student and residents educational opportunities.

Departmental research efforts have continued to follow established paths. Dr. Rich is pursuing his scholarly work in suicidology. Dr. Manuel Cepeda is still investigating underlying mechanisms of attention processing in Attention-Deficit/Hyperactivity Disorder in school children. Dr. Croake continues his collaboration with colleagues in Seattle on factors influencing fear in adults and children.
I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


R. Articles in press


II. PUBLISHED ABSTRACTS


III. BOOKS PUBLISHED

IV. PRESENTATIONS

Brogdon BG. Dr. B's unusual knees. Paper presented at: the Southern Radiological Conference 48th Annual Meeting; 2004; Point Clear, AL.

Brogdon BG. Survey of physician members of the American Academy of Forensic Sciences. Paper Published at: the American Academy of Forensic Sciences; 2004; Dallas, TX.


Teplick SK. CT then and now. (Advances in CT: a primer for the ordering physician.) Paper presented at: The Medical Association of the State of Alabama; 2004 May 21; Point Clear, AL.

Wesenberg RL. What's new at AMA. Paper presented at: AUR Board of directors, AUR Annual Meeting; 2004 Apr 21; San Francisco, CA.

V. NATIONAL PROFESSIONAL RECOGNITION

B.G. Brogdon is a member of the Board of Trustees of the Forensic Science Foundation and Chaired the Nominating Committee for 2004. He serves on the Editorial Board of the Journal of Forensic Sciences. He is a member of the Convention Planning Committee of the International Skeletal Society. He Chairs the Continuing Education Committee of the American Academy of Forensic Sciences. Dr. Brogdon was appointed an honorary member of the Advisory Board of the Virtopsy Foundation of Bern, Switzerland. Dr. Brogdon's book, A Radiologic Atlas of Abuse, Torture, Terrorism, and Inflicted Trauma, won the Highly Commended Award at the Annual Competition of the British Medical Association.

D.E. Herbert is a member of the Editorial Board Technology and Health Care. International Journal of Health Care Engineering. He is the Associate Editor of Medical Physics Journal and the Associate Editor of International Journal of Radiation Oncology, Biology and Physics. He is a member of AAPM Biological Effects Committee and Chair of the Task Group 5 "The Design of Experiments in Radiation Biology" of the AAPM Biological Effects Committee. He serves as Chair on Task Group 7 "Complexity Theory" of the AAPM Biological Effects Committee. He also serves on the Research Advisory Committee for the American Institute of Physics Statistical Research Advisory Committee. Dr. Herbert was awarded the American Association of Physicists in Medicine (AAPM) 2004 Award for Achievement in Medical Physics.
S.K. Teplick is a manuscript reviewer for the American Journal of Gastroenterology, Journal of Vascular and Interventional Radiology, Journal of Radiology, Journal of Gastrointestinal Endoscopy, Kidney International, American Journal of the Medical Sciences, Journal of the Society of Cardiovascular and Interventional Radiology, and Kidney International. He is a member of the Education & Research Council for the Radiological Society of North American (RSNA) and is also an RSNA reviewer for Awards in Excellence in Research and Education and RSNA Grant Reviewer. Dr Teplick was appointed to Chair the Professionalism Committee of the RSNA. Dr Teplick is a Councilor to the American College of Radiology - Alabama Academy of Radiology.

R.L. Wesenberg reviewed numerous Diagnostic Radiology Residency Programs and presented findings at Diagnostic Radiology, RRC Meetings, 2003 and 2004. Dr. Wesenberg was reappointed by AMA to serve as an AMA representative on the Residency Review Committee for Diagnostic Radiology January 1, 2004-2006. He also serves on the Council on Medical Education for the Medical Association of the State of Alabama. Dr. Wesenberg serves as an Association of University Radiologists (AUR) representative to the AMA House of Delegates.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department is pleased to welcome Dr. Gary M. Levine as Associate Professor. The Department welcomes Dr. Thea C. Moran as Assistant Professor in Interventional Radiology. Dr. W. Howard Cooper, III, M.D. also joins the Department as an Adjunct Assistant Professor. Ronald J. Ori joins the Department as Practice Director. Dr. Steven K. Teplick was given a joint appointment in the College of Allied Health. Dr. Brogdon received the Outstanding Teacher award from the Radiology Residents, 2004.

We are actively recruiting for two to three more faculty members in an attempt to continue improving our clinical services and resident teaching. We are continuing to expand our outside business contracts including our teleradiology outreach program. We physically go to Evergreen Medical Center and Georgiana Hospital. We provide teleradiology coverage for ten community hospitals, The Eglin AFB, and three Veterans Administration Hospitals.
A. Full-length published articles


B. Articles in press


Gonzalez RP, Cummings G. Increased mortality in rural vehicular trauma: identifying contributing factors through data linkage. Forthcoming.


II. PUBLISHED ABSTRACTS


130


Rao P, Skelton SB, Crenshaw RL, Magnone M, Scantlebury V, Thacker L. Can a positive B cell crossmatch really be that bad? International HLA and Transplant Conference; 2004 Jan 31-Feb 1; Los Angeles, CA.


III. BOOKS PUBLISHED

IV. PRESENTATIONS

Boullier JA; Palagiri AV; Doshi RJ; Tucaet J; Moore RG; Berni KC; Cummings JM. Paper presented at: 68th Annual Meeting of the Southeastern Section of the American Urological Association; 2004 Mar 24-27; Oranjestad, Aruba.

Ellis CN. Inherited colorectal cancer. Paper presented at: Piedmont Society of Colorectal Surgeons; 2004 Mar; Savannah, GA.

Frye K. Application of acticoat® prior to use of integra® artificial skin. Paper presented at: 16th Annual Regional Burn Seminar; 2003 Dec; Orlando, FL.


Fuenfer MM. Pediatric trauma experience in Afghanistan. Presented at: U.S. Army Neurotrauma Conference; Uniformed Services University; 2004 Mar; Bethesda, MD.

Gonzalez RP. Extra-abdominal Trauma Surgery. Paper presented at: Eastern Association for Surgery of Trauma; 2004 Jan; Amelia Island, FL.

Gonzalez RP. Adult respiratory distress syndrome. Paper presented at: Alabama Respiratory Therapists Association; 2004 Mar; Perdido Beach, AL.

Gonzalez RP. Rural vehicular trauma. Paper presented at: Alabama Emergency Nurses Association; 2004 May; Orange Beach, AL.

Gonzalez RP. Rural vehicular trauma. Paper presented at: Alabama Chapter of the American College of Surgeons; 2004 Jun; Point Clear, AL.


LoCicero J 3d. The surgeon’s role in the future fight against lung cancer. Paper presented at: Alabama Chapter, American College of Surgeons; 2004 Jun 11; Point Clear, AL.

Luterman A. Burn and wound care in the new millennium. Paper presented at: Alabama Chapter of the American College of Surgeons 2004 Conference; 2004; Point Clear, AL.

Luterman A. Burn patients, a hot topic. Paper paper presented at: 14th Annual Trauma Conference: District 1 EMS, Sacred Heart Health System, Baptist Health Care, West Florida Healthcare; 2004; Pensacola Beach, FL.

Luterman A. Burns. Paper presented at: Alabama Emergency Nursing Association Education Conference; 2004; Orange Beach, AL.

Luterman A. Criteria for admission to a burn center. Paper presented at: Baptist Home Health Care: Community Education Program for Referring Health Care Providers; 2004; Pensacola, FL.

Scantlebury VP. Presentations on issues in transplantation to members of congress. Paper presented at: American Society of Transplant Surgeons Legislative Day; 2004 Jun; Washington, DC.

V. NATIONAL PROFESSIONAL RECOGNITION

Dr. D. Lynn Dyess served as a member of the Breast Disease Committee for the National Surgical Adjuvant Breast & Bowel Project (NSABP).

Dr. C. Neal Ellis served as a Member of the Program Committee for the American Society of Colon and Rectal Surgeons. He is also a member of the Standards Committee for the American Society of Colon and Rectal Surgeons; a member of the Technologies Committee for the American Society of Colon and Rectal Surgeons; a member of the Breast and Ovarian: Genetic/Familial High Risk Assessment, National Comprehensive Cancer Network (NCCN); and a member of the Association of Program Directors (Colorectal) non-voting. He serves as a Reviewer for the Diseases of the Colon and Rectum, as well, served as an Assistant Selected Abstracts Editor for the Diseases of the Colon and Rectum; and served as Regional Advocate for the American College of Surgeons Oncology Group.
Dr. Michael M. Fuenfer received the U.S. Army Commendation Medal awarded for activities in support of Operation Enduring Freedom (Afghanistan). He was also recertified by the American Board of Surgery in Surgical Critical Care.


Dr. A. Lutterman served on the Editorial Boards for the following journals: The American Surgeon; Current Surgery; New Directions in Critical Care Nursing; Journal of Burn Care and Rehabilitation; and Journal of Burns. He served on the Ad Hoc Editor Board for the Journal of Trauma and the Journal of the American College of Surgeons. He is a member of the Advanced Burn Life Support Committee for the American Burn Association; and he is a member of the Membership Committee for the International Burn Association.

Dr. Mario Magnone served on the Southeastern Regional Advisory Board on Renal Transplant.

Dr. Randall W. Powell served as Editorial Consultant to the Journal of Pediatric Surgery and Reviewer for the Journal of Trauma. He also served on the Trauma Committee of the American Pediatric Surgical Association.
Dr. Charles B. Rodning is a Representative in the College of Medicine to the Section of Medical Schools, Liaison Committee, Graduate Medical Education, American Medical Association. He served as a Member on the Alabama Quality Foundation; the ad hoc Committee, Building for Medical Museum, Mobile County Medical Society; the Historical Mobile Preservation Society; Physician Member of the American College of Surgeons Oncology Group; and Honorary Member of the Board of Director, Mobile (Eichold-Heustis) Medical Museum. He was the Scientific Program Coordinator for the Annual Meeting of the Alabama Chapter of the American College of Surgeons.

Dr. Velma P. Scantlebury served as a member on the following committees: Awards Committee; Educational Committee; Women's Health Committee; and the Minority Affairs Committee. She served as a Board of Director Member for the National Kidney Foundation of Alabama; and the Minority Organ and Tissue Transplant Educational Program (MOTTEP). She was also elected to the "Best Doctors" listing.

Dr. Frederick M. Silver was a Member of the Southwest Oncology Group.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

During this academic year, several notable events occurred. This year, three of our surgeons were named "Best Doctors," a national registry of excellence: Joseph LoCicero, 3d, MD, Arnold Luterman, MD, and Velma Scantlebury, MD. Michael Fuenfer, MD had a tour of duty with the Army in Afghanistan. He served with distinction and received the Army Commendation Medal. As part of a national effort to improve the understanding of geriatric issues for the surgical specialties, Joseph LoCicero, 3d, MD wrote and co-edited "New frontiers in geriatric research," which was published by the American Geriatrics Society. This is a national research agenda for all surgical specialties and addresses many common problems. Dr. LoCicero also was a Visiting Professor at East Tennessee State University and the Drapanas Visiting Professor at Tulane University. Charles Rodning, MD was cited in a variety of "Who's Who" publications and again received the Red Sash Award from the graduating class of the College of Medicine.
The Department acquired the services of C. Neal Ellis, MD, a colon and rectal surgeon. He is a native of Alabama, trained at the University of Alabama and the Baptist health system. He is a member of the standards committee and the technology committee of the Society of Colon and Rectal Surgeons. His major focus is in the area of pelvic floor dysfunction. He serves as Associate Professor of Surgery and chief of Colon and Rectal surgery. The Department eagerly awaits the arrival of help for the Division of Trauma and Critical Care. Moustafa Hassan, MD joins the Department as a General Surgeon. He will work part time in the Division and is from Michigan State University where he was Assistant Professor of Surgery. Dr. Herbert A. Phelan, 3d, who recently finished a fellowship in Trauma and Critical Care at Southwestern in Dallas after his General Surgery residency at Louisiana State University joins the Division as a full time member.

The Department continues to challenge itself to strive for excellence toward the mission of the University of South Alabama: Teaching, Research and Service.

Teaching
The residents and staff spent most of the past year getting used to the new 80 hour work week. It has taken much adjustment. Residents are now considered specialized students. The decrease in available residents has led to better communication between residents and more sharing of the workload. It will ultimately lead to more trust between residents and will expose earlier the residents who are deficient. The biweekly special education conferences added to provide concentrated training in surgical, test taking and teaching skills went well last year. Similar courses are planned for this year. The practice oral examination remains a big hit with the residents and will be held twice this coming academic year.

This year, the Department hosted Carlos Pellegrini, MD, Professor and Chairman of Surgery at the University of Washington as the Emmett B. Frazier lecturer. He discussed the challenges in surgical education with the explosion of technology. In addition to the Emmett B. Frazier lectureship held every year at the Mobile Infirmary Medical Center, two special clinically oriented Grand Rounds with illustrative case presentations were held each at Mobile Infirmary Medical Center and Providence Hospital. Sufficient interest was generated to continue this plan into the coming academic year.
Last year lectures to the third year medical students on Surgical Basic Science were added and the core lectures were directed at providing the student with the fundamental skills in the most common surgical conditions. The students are now responsible for being able to diagnose common surgical conditions, prepare the patients for surgical intervention, discuss options with the patient and family, understand the potential complications and management options for the planned procedure, and participate in the perioperative management of the patient.

James Hassell, MD, Adjunct Associate Professor of Surgery at the University of South Alabama created a new course in medical decision making. He, along with Dr. LoCicero who will teach decision theory and analysis will present the course in the spring of 2005 to the second year medical students.

The most exciting development is the creation of a working Departmental web site. Resident call schedules, student and resident conference schedules as well as reading assignments and learning tools are posted there. There is a secure link to an evaluation site allowing the faculty, residents and students to find private information and an avenue to evaluate each other at anytime. Soon, there will be an alumni page with updates on everyone’s activities. This site will be the focal point for the Department allowing all to view our progress.

**Research**

The Center for Rural Vehicular Trauma received a continuation of funding. As the Medical Center prepares for national certification as a Level One Trauma Center, this grant will play a prominent role in furthering the research mission of the section of Trauma/Surgical Critical Care.

Clinical studies continue to be a major focus of activity for the Department. This year, seven studies were closed and there are 18 studies open for accrual through the Department of Surgery – an all time record. The Department is a main member institution of the American College of Surgeons Oncology Group, a multi-specialty cancer study cooperative group with four protocols open.
Service

The Section of Trauma/Surgical Critical Care expects to apply for national recognition as an ACS designated Level One Trauma Center. This will include national certification of our well known Regional Burn Center.

The Gulf Coast Transplant Unit continues to grow under the direction of Dr. Velma Scantlebury. The service has performed 24 successful transplants in the last year including several living donor transplants. Dr. Scantlebury is increasing her efforts toward community outreach.

Dr. LoCicero secured a grant from the Chest Foundation for improving outreach to families of patients in critical care units. The program termed the Critical Care Family Assistance Program is a multidisciplinary program that includes hospital renovation and newly refocused efforts on the part of the staff to ease the fears of families holding vigils for their sick loved ones.

The Department had an increase in clinical activity at the Medical Center and Knollwood Hospital over last year. With the addition of new faculty, the future looks quite bright for the Department.
2003-2004
Summary of Activities
Biomedical Library

The Biomedical Library Faculty and Staff wish to dedicate this year's Annual Report to Linda Ramm, long-time library employee who passed away in February of 2004.

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press

Fell DW, Burnham J. Access is key: teaching students and therapists to access evidence, expert opinion and patient values. J Phys Ther Educ. Forthcoming.


II. PUBLISHED ABSTRACTS

III. BOOKS PUBLISHED

Williams TL. Editor in Chief, You Say Cuisine; I Say Vittles: The Southern Chapter Compendium of Recipes and Reminiscence; Southern Chapter of the Medical Library Association, 2004. Clanton C, Robertson J; Whaley M; Singarella T; Bridges J, editors.

IV. PRESENTATIONS


Burnham J. Access to medical information for legal assistants. Presentation at: Mobile Area Paralegal Group; 2004 Jan 15; Mobile, AL.

Burnham J; Clanton C; Li J; Robertson J; Sayed E; Williams T. Integrating complementary/ alternative medicine using evidence-based medicine. Paper presented at: Southern Chapter of the Medical Library Association Annual Meeting; 2003 Oct 11; Coral Gables, FL.

Burnham J; Fell D. Citation analysis of complementary alternative medicine in physical therapy. Poster presented at: Southern Chapter/ Medical Library Association Annual Meeting; 2003 Oct 11; Coral Gables, FL

Clanton C. Digital library resources (MerckMedicus.com). Presented at: Staff continuing education program, Providence Physicians Group; 2004 Sep 22; Semmes, AL.

Clanton C. PDA's in medicine. Cyber Cafe presentation at: Medical Association of the State of Alabama 143rd Annual Session; 2004 May 21-22; Point Clear, AL.

Clanton C. Digital library resources (MEDLINEPlus, CME, PDA resources). Paper presented at: Staff continuing education program, Providence Physicians Group; 2004 Jan 29; Semmes, AL.
Clanton C; Robertson J. Bridging the gap: non-traditional library instruction for non-traditional students. Paper presented at: Southern Chapter of the Medical Library Association Annual Meeting; 2003 Oct 11; Miami, FL.

Li J; Burnham JF; Robertson JC; Williams TL. Delivering distance training to rural health care professionals. Poster presented at: Medical Library Association Annual Meeting; 2004 May 24; Washington, DC.

Robertson J. Coordinator and presenter of Cyber Café at: Medical Association of the State of Alabama (MASA) Annual Meeting; 2004 May 21-22; Point Clear, AL.

Robertson J. Digital library resources (MEDLINEPlus, MerckMedicus.com, PDA resources). Staff continuing education program presented at: South Baldwin Hospital; 2004 Aug 6; Foley AL.

Robertson J. Digital library resources (MEDLINEPlus, MerckMedicus.com, PDA resources). Staff continuing education program presented at: Dale Medical Center; 2004 Aug 17; Ozark AL.

Robertson J. Introduction to searching the medical literature. Presented at: St. Paul’s Advanced Placement Biology Classes (3 classes); 2003 Dec; Mobile, AL.

Robertson J; Staggs GB. Free full text on the Internet. Cyber Café presentation at: Medical Association of the State of Alabama 143rd Annual Session; 2004 May 21-22; Point Clear, AL.

Sayed EN; Reed E; Thompson E. Selection and implementation of Interlibrary loan management software. Poster presented at: Medical Library Association Annual Meeting; 2004 May 21-26; Washington, DC.

Sayed EN; Staggs GB. Improving fill rates at an academic medical library. Poster presented at: Medical Library Association Annual Meeting; 2004 May 25; Washington, DC.

Smith G; Sayed EN; Robertson J. Sister libraries: moving forward. Paper presented at: Medical Library Association; 2004 May 24; Washington, DC.
Staggs GB. Digital library resources (MD Consult, Books@OVID, Alabama Virtual Library, MEDLINEplus). Monthly Medical Staff Meeting presented at: Mizell Memorial Hospital; 2004 Mar 4; Opp, AL and Physician CME program presented at: South Baldwin Medical Center; 2003 Nov 18; Foley, AL.

Staggs GB. Digital library resources (NLM Gateway, AVL). Staff Continuing Education program presented at: Mizell Memorial Hospital; 2004 March 4; Opp, AL. AND Staff Continuing Education program presented at: South Baldwin Medical Center; 2003 Nov 18; Foley, AL.

Staggs GB. Health information on the Internet. Presented at: Alabama Library Association Annual Meeting; 2004 Apr 21; Montgomery AL. and Goodwill/Easter Seals Child Development Center parents meeting; 2004 Jun 15; Mobile, AL.

Staggs GB. Health science librarianship as a career. Program planner and moderator at: Alabama Library Association Annual Meeting; 2004 Apr 21; Montgomery AL.

Staggs GB. MEDLINEplus and AVL. Exhibit at: Goodwill/Easter Seals Child Development Center. 2004 Aug 24; Mobile, AL.


Staggs GB; Burnham J; Slay JJ. National Library of Medicine databases. Exhibit at: Alabama Library Association; 2004 May 21-22; Montgomery, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Judy Burnham won the 2004 2nd Place Research Poster Award at the Southern Chapter/Medical Library Association Annual Meeting for: Burnham J and Fell D. Citation Analysis of Complementary Alternative Medicine in Physical Therapy. She served as member of the jury for the MLA Scholarship, 2003-2004 and is the Jury Chair for 2004-2005. She served the Southern Chapter/MLA as a Research Mentor, and as Chair of the Communications Committee. She served as a member of the Nominating Committee in both 2003 and 2004 for the Alabama Health Libraries Association.
Clista Clanton serves as co-editor of *Southern Expressions* for the Southern Chapter of the Medical Library Association and as a member of the Chapter's Executive Committee. She also was an editor of the Chapter's Cookbook Project, a fund-raising activity. Clista serves on the Network of Alabama Academic Libraries (NAAL) Continuing Education Committee.

Jie Li has been the International News Column editor, for the *MLA News*, the monthly newsletter of the Medical Library Association, since April 2001. She is serving on the Medical Library Association's Global Initiative Task Force, May 2003-May 2005.

J. Michael Lindsey serves as on the Southern Chapter/MLA Public Relations Committee where his activities include writing press releases to recognize achievements of chapter members. He was awarded the First Time Attendee Scholarship to attend the 2003 Southern Chapter conference in Coral Gables, Florida.

Justin Robertson serves as co-editor of *Southern Expressions* for the Southern Chapter of the Medical Library Association and as a member of the Chapter's Executive Committee. He also was an editor of the Chapter's Cookbook Project, a fund-raising activity. Justin also serves in the Alabama Health Libraries Association as a member-at-large and as the webmaster (http://alhela.org) and listserv moderator.


Diane Williams serves at the editor of *Synapse*, the newsletter of the Alabama Health Libraries Association.

Thomas Williams was elected Chair-Elect of the International Cooperation Section of the Medical Library Association. He also served as Chair of the Southern Chapter/MLA Cookbook Committee, a fund raising activity and was Editor-in-Chief of “You Say Cuisine: I say Vittles: The Southern Chapter Compendium of Recipes and Reminiscences,” the product of the Committee's work.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

2003/2004 was another challenging year for the Biomedical Library, its faculty and staff. Continuing budget issues resulted in a complete re-evaluation of services and resources. Many book and journal titles, both print and online, were evaluated as being under-used or inordinately expensive per use. Most of these have been discontinued to help the BML stay within budget. All cut-backs were carefully evaluated to lessen any negative impact they may have had on the Library’s mission.

Much work has been done to establish a small library at the Knollwood site. Renovations were made to the Doctor’s Lounge at Knollwood Hospital to create a space for a small library facility. It will primarily be an electronic library with few printed works, limited staffing, but with PC workstations that will connect users to all resources of the Biomedical Library and the Internet. It is expected that the Knollwood Library will open sometime this Fall, 2004. While the Doctor’s Lounge at Knollwood will still be available for physicians, the Library will be available to all USA Medical/Nursing/Allied Health faculty, staff, and students as well as hospital staff.

There was no turnover in Biomedical Library faculty this year although there were several changes in Support Staff. Roberta Barclay, a long-time BML and University employee, retired. Sam Porter, formerly a SouthFlite pilot, joined the Systems Department as PC Applications Specialist, filling the slot left vacant by Roberta’s retirement. The BML was saddened at the premature death of long-time employee Linda Ramm who succumbed to cancer. Kimberly Williams was subsequently hired to fill Linda’s position.

Several services were added to the BML’s educational/reference program, including the addition of “Live Chat” wherein a library user can log in, via computer, and have real-time virtual conversations with a librarian. This has proven especially helpful to our many distance education students - most particularly those in Nursing. Wireless capability was added as well within the library.

By the end of the year the Biomedical Library was providing access to over 4,000 journal titles, both online and in print. Considering the budget situation, this was an especially satisfying achievement.
I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press


Kadushin MR, Ismawi O, Send LH, McKee TC, Boyd MR, Stevens PF, Soejarto DD. Calanolide B an anti-HIV compound from Calophyllum tesmannii var. inophyloide: study of variability of yield as basis for the sustainability of large-scale harvest of the raw material. Econ Botany. Forthcoming.


II. PUBLISHED ABSTRACTS

III. BOOKS PUBLISHED
IV. PRESENTATIONS

Casado B; Yang X; Hess S; Whalen G; Pannell LK; Clauw DD; Baraniuk JN. Comparison of Fibromyalgia/Chronic Fatigue Syndrome, Persian Gulf Illness and control groups. Paper presented at: American Society for Mass Spectrometry Conference; 2004 May 21-28; Nashville, TN.

Chen X; Cushman SW; Pannell LK; Hess S. Proteomics on secretory proteins from adipose cells. Paper presented at: American Society for Mass Spectrometry Conference; 2004 May 21-28; Nashville, TN.

Chen X; Cushman SW; Pannell LK; Hess S. Quantitative proteomic analysis of the secretory proteins from rat adipose cells using a 2D liquid chromatography-MS/MS approach. Paper presented at: American Society for Mass Spectrometry Conference; 2004 May 21-28; Nashville, TN.

Ju J. Simultaneous gene expression analysis of steady state and actively translated mRNA populations from osteosarcoma MG-63 cells in response to IL-1 alpha via an open expression analysis platform. Paper presented at: 16th Genome Sequence and Analysis Conference; 2004 Sep 26; Washington, DC.

Kim YJ; Pannell LK; Sackett DL. Mass spectrometric measurement of differential reactivity of cysteine to identify drug binding sites: Application to tubulin binding drugs. Paper presented at: American Society for Mass Spectrometry Conference; 2004 May 21-28; Nashville, TN.

V. NATIONAL PROFESSIONAL RECOGNITION

Michael R. Boyd, Ad Hoc Reviewer for Board of Scientific Counselors National Institute on Aging Technology Development; Consultant Office of Technology Transfer, National Institute of Health Member; Editorial Board, Journal of Antibiotics; Member, Commentaries Editorial Board, Biochemical Pharmacology

Steinar Aamdal, Member of EORTC-Early Clinical Study Group ECSG later NDDG); Member of the European Society of Medical Oncology (ESMO) (National Representative to Norway); Member of EORTC-Melanoma Cooperative Group (MG); Member of the WHO Melanoma Study Group; Member of American Association for Clinical Oncology

Lewis Pannell, Board Member NIST/EPA/NIH Mass Spectral Library; Editorial Board Membership - Biomacromolecular Mass Spectrometry

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Since Michael Boyd, M.D., Ph.D. began as Director in April 2002, the USA-CRI has grown to almost 40 employees, initiated research programs in three of its six planned thematic focus areas, and recruited two medical oncologists who will begin treating patients effective October 2004. Fiscal year 2004 includes the addition of senior faculty, further development of infrastructure and research programs and completion of the design phase for the new CRI building. All of these endeavors have been possible through the proactive and successful support of the CRI initiatives on the federal, state, and local level. Through the proactive work of our University President, staff, and Board of Trustees, the USA-CRI has been awarded over $21 million in federal appropriations. In addition, the State of Alabama has pledged $12 million in economic development funds, the USA Foundation has pledged $12 million to support the CRI initiative, the County and City of Mobile have pledged substantial funds in support of the CRI and, private donors have generously contributed to the initiative.

These already secured funds as well as future funding sources are critical to building the infrastructure to create a future NCI designated Comprehensive Cancer Center.

The strategic goal for the USA-CRI, to create an economically viable CRI that achieves designation as an NCI Comprehensive Cancer Center within the next decade, has remained at the forefront of all planning and implementation decisions. In order to achieve competitiveness for designation as a NCI Comprehensive Cancer Center, it is imperative that the USA-CRI successfully implement a wide range of basic, translational and clinical cancer research programs. Implementation of these programs is underway. These interdisciplinary research programs must collectively encompass cancer cause, diagnosis, treatment, prevention, control and population science.
FY 2004 activities have focused on recruiting outstanding research and clinical faculty, creating infrastructure, and submitting grants to ensure this goal is realized. The section below highlights new USA-CRI research and clinical programs and future activities.

Research and Clinical Programs
As the USA-CRI continues to recruit renowned senior faculty members, the broadly defined thematic research focus areas include:

1. Developmental Therapeutics Research Center
2. Metastasis and Tumor Biology Research Center
3. Cell and Immune Therapy Research Center
4. Molecular Pathology and Diagnostics Research Center
5. Drug Discovery Research Center
6. Prevention Research Center

It should be noted that several of these research focus areas involve collaboration with existing research efforts underway by various faculty within the USA College of Medicine.

Future Activities
The USA-CRI continues to recruit principal investigators, clinician-scientists and senior administrative staff, with the next major phase of recruitment sequenced to coincide with the occupancy of the new CRI facility. This last fiscal year has been full of exciting developments and the next year looks even more promising.
2003-2004  
USA Center for Lung Biology  
Summary of Activities

General Operations

The Center for Lung Biology’s (CLB) 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.

Our administrative office is located in the new expansion area of the Medical Sciences Building in Room 3340. 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, a patient information page, and information regarding scientific and training programs.

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 Experimental Biology 2004, the 100th International American Thoracic Society and various Gordon Conferences. In addition, our group sponsored the 2004 Grover Conference on the Pulmonary Circulation held at the Lost Valley Ranch in Sedalia, Colorado.

The CLB hosted a Distinguished Scientist Seminar in February, 2004. Our guest, Dr. Richard G.W. Atderson, is Professor and Chair of Cell Biology and Cecil H. Green Distinguished Chair in Cellular and Molecular Biology at the University of Texas Southwestern Medical Center in Dallas. His presentation was entitled Caveolae, Cholesterol and Signal Transduction: What are the Connections?

Breast Cancer Research, one of the most prominent breast cancer research journals in the world, issued a press release in June entitled Early Predictor of Breast Cancer Aggressiveness based on an article published by Dr. Judy A. King and colleagues from USA and the University of Wales. The study is based on the activity of the ALCAM gene and may help physicians make earlier decisions about the best treatment for breast cancer. The published article entitled Activated Leukocyte Cell Adhesion Molecule in Breast Cancer: Prognostic Indicator is available online at http://breast-cancer-research.com/content/6/5/R478. Co-authors are Drs. Solomon F. Ofori-Acquah, Troy Stevens, Abu-Bakr Al-Mehdi, Oystein Fodstad, and Wen G. Jiang.
Extramural Funding

Total extramural funding for the USA College of Medicine exceeded $23.2 million in 2002-2003. When the CLB was inaugurated in 2002, affiliating investigators generated approximately $5 million annually in extramural support, mostly from the NIH. In the past year, CLB principal investigators have submitted 19 grant applications to the National Institutes of Health, American Heart Association, and Susan G. Komen Breast Cancer Foundation. If funded, these submissions would total nearly $14.5 million in new revenue over the next five years ($2.9 million/year). In addition to new research initiatives, applications include a shared-instrumentation grant to fund a Leica multiphoton imaging system which would provide high-performance imaging capabilities and greatly facilitate the progress of currently funded NIH projects of CLB investigators.

In the past year, members of the CLB were awarded over $4.8 million in new grants. Drs. Brian Fouty, Solomon Ofori-Acquah, and Songwei Wu were awarded new research grants from NIH. Two of our graduate students received predoctoral awards from AHA, Judy Creighton sponsored by Dr. Troy Stevens, and Brad Swiger, sponsored by Dr. Mark Gillespie. Dr. Troy Stevens received a conference grant by NIH to support the 2004 Grover Conference entitled Genetic and Environmental Determinants of Pulmonary Endothelial Cell Function, and Dr. Mary Townsley received a predoctoral training grant entitled Training in Cell Signaling and Lung Pathobiology that provides stipends for graduate students planning a career in cell signaling and lung biology.

Art in Science

PERCPIO™. The Art in Science Program was developed by Dr. Kathy Ault Ziel to integrate scientific research performed at USA with the non-scientific community, providing an opportunity for research scientists to present aesthetic aspects of their data to the public. The primary purpose of this program is best defined by its title, PERCPIO, which means "to learn through the senses".

In November 2003 the inaugural PERCPIO exhibit, featuring images obtained through the pursuit of hypothesis-driven research, was displayed at the Mobile Museum of Art. An opening reception was held on November 14, 2003 to celebrate the debut of PERCPIO.

In addition to the artwork contributed by research scientists, the inaugural PERCPIO exhibit featured art created by students at Rockwell Elementary School in Daphne, Alabama. In response to the Education Outreach component of PERCPIO, Debbie Movelle, an honors educator at Rockwell, invited Dr. Ziel to give an Art in Science presentation to 4th and 5th grade honor students. In response to the presentation, the students used brightly colored acrylics on mat board to express their interpretation of Art in Science. The students' artwork has remained on display with the PERCPIO exhibit throughout the past year.
In addition to the Mobile Museum of Art, PERCIPIO has been featured at a number of other venues including the University of South Alabama main campus library, “R Place”, an art gallery/bistro in Pensacola, Florida, and the Exploreum Scientific Museum in Mobile, Alabama. The 2003 PERCIPIO exhibit will return to the University of South Alabama College of Medicine this fall where it will be permanently displayed.

The Second Annual PERCIPIO Exhibition at the Mobile Museum of Art is scheduled to be on display from November 12, 2004 through January 30, 2005. As with the 2003 PERCIPIO exhibit, the 2004 collection will showcase pieces selected from scientific data submitted to the Art in Science Gallery. In addition to the traditional pieces and the children's artwork, a short film is being designed to coincide with the 2004 show.

The CLB Art in Science Program hopes to increase appreciation, interest and understanding of scientific research. Through direct interactions with educational institutions students will be able to obtain a unique perspective on scientific research that may increase their propensity to choose a career in biomedical research.

**Education**

The CLB provides a vibrant collaborative research environment forming an outstanding framework for training in lung biology and related areas, and offers training opportunities for students and fellows at any academic stage. This past summer, the CLB accepted four students for the Summer Undergraduate Research Fellowship (SURF) program, two from USA, Jonathan Daigle (S. Wu) and Christina Barry (T. Stevens), and two from Alabama A&M University, Crystal Maitland (S. Ofori-Acquah) and Stephanie Mills (A. Al-Mehdi).

CLB faculty played an active role in the 31st Annual Medical Student Research Day sponsoring 4 summer medical students. Students participating in the program and sponsors respectively were Regan Bollig (T. Stevens), Amy Bowden (S. Ballard), Zachariah Chambers (J. King), and Andrea Braden (R. Honkanen).

At the graduate level, we reassessed the need for training in statistics. We felt that the application of statistics in conjunction with training in experimental design and hypothesis testing would be most useful. Drs. Troy Stevens and Mary Townsley developed a new course on Statistics and Experimental Design in Biomedical Research (IDL 640), which utilizes practical data sets and writing assignments to develop understanding of statistical methods, logic, hypothesis testing, and experimental design. This course, first offered Summer 2004, will be a requirement and will be offered every Summer term.
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. Tuesdays (11-12:00 pm) CLB holds a research-in-progress seminar. 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. Fridays (1:30-2:30 pm) CLB co-sponsors a research seminar series with the Division of Pulmonary and Critical Care Medicine. Presentations rotate between Journal Club, Case Conference, Basic Science Reports, and Research Conference. Research Conference is held in the joint Pharmacology Conference Room/CLB Art in Science Gallery (MSB 3360) whereas other Conferences are held in the Eichold Room at the USA hospital.
2003-2004
Summary of Activities
USA Comprehensive Sickle Cell Center

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in press

General Operations

Dr. Johnson Haynes Jr. continues as Director of the USA Comprehensive Sickle Cell Center. Ms. Rose Peterson continues to serve as Associate Director of the Psycho Social Program Division. October 1, 2004 will mark the end of the Psycho Social Program Division at the USA Comprehensive Sickle Cell Center and the Statistical Research Specialist position held by Ms. Mary Desverreaux. Despite the Centers' loss of NIH funding and State funding in part, the USA Comprehensive Sickle Cell Center has continued to maintain the same quality of clinical and educational services provided to the population of individuals affected with sickle cell disease and the educational activities provided to the healthcare community.
Research

The annual NIH sponsored Sickle Cell Program meeting was held April 17-21, 2004 in Los Angeles, California. Dr. Johnson Haynes presented his work on “Recombinant Human Platelet Activating Factor Acetylhydrolase Inhibits Activated Polymorphonuclear Cell-Mediated Sickle Red Blood Cell Retention/Adherence in the Perfused Rat Lung”. Dr. Haynes continues his quest in terms of investigating the potential therapeutic utility of the 5-lipoxygenase inhibitor Zileuton as a potential inducer of fetal hemoglobin and has established collaborations with Dr. Solo Kuvididila at Tulane University in understanding further potential anti-inflammatory roles of Zileuton as a therapeutic option in treating sickle hemoglobinopathies thru a mechanism involving IL-13 and VCAM-1.

Clinical Operations

The 2003-2004 academic year marks the close of the sixth 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 counties. Ms. Pack-Mabien and Ms. Durggin continue to support the pediatric outpatient clinical operations and serve as liaisons when transitioning patients from the pediatric to the adult services. Drs. Felicia Wilson and Yih-Ming Yang are the principal physicians caring for patients in the Pediatric Sickle Cell Outpatient Clinic. Dr. Yang left the University of South Alabama for Emory University in Atlanta, Georgia on September 1, 2004. His loss will result in an increase and clinical burden and stress on the pediatric operations solely to be conducted by Dr. Felicia Wilson along with the two Nurse Practitioners in that clinic at this time. There continues to be a gap in transitioning patients from the pediatric to the adult clinics and rather than narrowing the gap it seems to widening.
The overall clinical operations also suffers from a loss of Dr. James Stubbs (Hematopathologist). The absence of an adult hematologist to support the adult operations remains lacking and there is no proposed solution to this deficit of overall clinical operations currently in sight. The Children’s Youth Sickle Network (CYSN) was conducted for part of this physical year, but because of manpower, the CYSN is no longer operational.

**Education**

The Center faculty continues to provide a broad series of lectures throughout the academic and private medical community. The Center faculty and staff continue to support the Educator/Counselor Certification Program which took place four times this academic year at the Sickle Cell Disease Association of America, Mobile Chapter. On March 13, 2004 the Center hosted its’ forth conference on “Practical Issues in Sickle Cell Disease IV: Treatments and Outcomes”. Dr. Samir Ballas from Thomas Jefferson Hospital in Philadelphia was the Keynote Speaker. Dr. Ballas spoke on “Iron Overload: Chelation Issues and Management of Sickle Cell Disease”. Other speakers were Dr. Jorge Herrera - “Hepatitis C Infections: Diagnosis, Treatment and Significance”; Dr. Wanda Kirkpatrick - “Renal Insufficiency Complicating the Management of Sickle Cell Disease”. Highlight of this year's clinical conference was a roundtable discussion composed of physicians from within the University and the Community, both locally and regionally. The topic of the roundtable discussion was “Chronic Pain Management in Sickle Cell Disease”. Funding for this clinical venue was provided through a HRSA grant obtained in collaboration with the Sickle Cell Foundation of Montgomery as well as funding from Purdue Pharma and Wyeth Pharmaceuticals. The fourth Psycho social conference on “Patients and Providers Working Together to Manage Sickle Cell Disease” was held on July 21, 2004 at Auburn University at Montgomery. This conference was sponsored by the USA Comprehensive Sickle Cell Center and Sickle Cell Disease Foundation of Montgomery. The keynote speaker was Ms. Kim Davis, Director of Managed Care/Alabama Medicaid. She spoke on “Narrowing the Gap between Needs and Services: Can Alabama Medicaid Help?” Ms. Rose Peterson was the moderator of this conference.
Ms. Ardie Pack-Mabien, Nurse Practitioner and Ms. Stephanie Durggin, R.N. spoke on “Health Maintenance across the Lifespan of Individuals with Sickle Cell Disease”. Other speakers were Dr. Denise Davis Maye, Assistant Professor of Social Work at Auburn University who spoke on “Coping with a Chronic Illness: The Role of Case Management”. Mr. James Myrick, Field Supervisor, Alabama Department of Vocational Services spoke on “How can Vocational Rehabilitation Assist Individuals with Sickle Cell Anemia Achieve Their Maximum Vocational Potential?”. One of the highlights of this psycho-social conference was a panel discussion moderated by Ms. Rose Peterson on “Sickle Cell Patients’ Perception of Barriers to Healthcare, Education and Employment”. The nursing staff consisting of Ms. Ardie Pack-Mabien and Ms. Stephanie Durggin continue 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 in spite of the absence of outside funding.

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.

**Psychosocial Research Division**

The PRD is directed by Rosie Peterson and serves as the arm of the USA Comprehensive Sickle Cell Center to ensure that the behavioral, cognitive, and psychosocial programs are integrated in the overall care plan of individuals with sickle cell disease (SCD). Programs within the PRD this past year focused on SCD patients’ access to healthcare, quality of treatment and overall psychosocial functioning of the families and children with SCD. PRD also made every effort to influence the overall healthcare delivery system for individuals with SCD in the catchment area served by the Center. PRD participated in the following activities during 2003-2004: Successfully wrote USA’s component of an MCHB grant with the Montgomery Sickle Cell Association. Objective: To offer physicians, nurses, allied health care providers, patients and the public an opportunity to take part in learning about new approaches to care through a real time interactive distance learning video conferencing and web casting.
Background

The University of South Alabama Board of Trustees authorized the establishment of the Center for Healthy Communities on September 4, 2003. The Center’s mission is to serve as the lead entity within the University for coordinating community education, research, public service and health activities that can help eliminate health disparities, foster access to health care for underserved populations, and enhance the capacity of individuals to better participate in decision making about their health. This mission is accomplished through collaborative multi-disciplinary community and university based outreach, research, education and training programs designed to help develop “healthy sustainable communities.”

Although based in the College of Medicine, the Center is charged with involving the entire university in outreach activities to address health disparities and remove obstacles obstructing the development of healthy communities in the Gulf Coast Region. The focus of activities this first year has been on establishing an infrastructure to fulfill the Center’s mission. This includes:

- Acquiring and staffing office space;
- Developing a two-year work plan;
- Organizing university and community outreach networks;
- Developing local, state and national awareness of the Center; and
- Pursuing resources to support the Center’s program agenda.

Office Space and Staff Support

Following the University’s Board of Trustees approval to create the Center for Healthy Communities, Dr. Robert Kreisberg, Vice President for Medical Affairs and Dean of the College of Medicine, asked two of the individuals involved in developing the proposal for the Center to serve as its Director (Dr. Harvey White) and Associate Director (Dr. Martha Arrieta). Ms. Ginni Boyd, who also was involved in developing the proposal, subsequently volunteered her services and became the Center’s Program Director. Dr. Hattie Myles, Assistant Dean of Students in the College of Medicine, was appointed a program officer in the Center. Collectively this group constitutes the leadership team that accepted the challenge of making the Center for Healthy Communities a reality during its first year of operation.
The services of a temporary clerical employee, Ms. Melanie Knoepfler, were acquired in March. Ms. Knoepfler worked until Ms. Debra Moberg was recruited as the Center's permanent secretary in June. Ms. Christina Bright joined the team this summer as Coordinator of the Nonprofit Management Program. The services of two medical students (Ms. Amanda Mularz and Ms. Chenita Landry) were also made available for the summer to support the Center's research and grant initiatives.

The initial work of the Center was supported at the USA Medical Center. In January 2003, Dean Kreisberg approved requests for office space on the USA main campus and provided resources for secretarial support. After modest renovations, the Center occupied Suite 104 in the General Services Administration Building. The suite of four offices, conference room and reception area is the administrative nucleus for the Center's activities. The USA Medical Center, however, continues to support satellite office space for the Center.

Two-Year Work plan

Development of a work plan for the Center received early attention from the leadership team. The goal is to design and implement a two-year work plan that complements and augments existing programs and activities at the University and those of other organizations in the Mobile area that also address health needs of underserved communities. The specific objectives put forth for the Center's 2004-2005 programs are:

A. Working closely with centers and institutes at USA (i.e., Cancer Research Institute, Transplant Center, Stroke Center, Sickle Cell Center, Telemedicine, Rural Health, USA hospitals and clinics) to bring the best possible health care, research, technology, education and training resources to bear for eliminating health disparities and creating healthy communities in the Gulf Coast Region;

B. Building collaborative partnerships with all sectors of the USA community. Central to the Center's philosophy is the understanding that achieving Healthy Communities is not only a medical concern. Economic, educational, sociological, policy, technological, and other issues also must be addressed.

C. Establishing strong and productive relationships with communities served by the University of South Alabama and working collaboratively with communities to plan and design programs that address health related issues; and

D. Enhancing existing and fostering new relationships with public health departments, community health centers, religious organizations and community-based organizations to better understand and address health issues.
Consistent with these objectives, nine priority areas are the focus of current program activities:

- Conducting an Inventory of university community outreach resources;
- Developing "people-centered" community health assessment activities;
- Establishing a community health advisors program;
- Supporting health promotion campaigns;
- Enhancing cultural competence;
- Increasing the number of minority healthcare professionals;
- Enhancing research on health disparities;
- Utilizing technologies to help address health disparities; and
- Supporting a housing and healthy communities program

Developing university and community networks to encourage and support outreach activities and research projects is one of the 2004-2005 program activities that relates to each of the Center’s priority areas.

**University and Community Outreach Networks**

Formal and informal networks have been established that represent excellent opportunities for collaborative partnerships to address the health needs of underserved populations. These networks have been developed as a result of meetings requested by the Center’s leadership team.

**University Networking Activities:**

Productive meetings were held with the University’s vice presidents, attorney, Director of Public Relations, and deans to learn about current community outreach initiatives, to create a greater University-wide awareness of the Center, and to explore possible opportunities for collaboration. Productive meetings also were held with the CEO of USA Hospitals System and the COO for each hospital. Meetings with university officials are being followed up with a survey to identify specific community outreach initiatives in each college and school. Information gathered will be used to develop a USA Community Outreach Directory.

Several emerging collaborative outcomes from these meetings are worth noting:

- The College of Arts and Sciences is partnering with the Center to implement a Nonprofit Management Program;
- The College of Engineering has agreed to collaborate with the Center to involve civil engineering students in a joint project with Mobile United’s Health Affairs Committee.
- The School of Allied Health Professions is collaborating with the Center and the Mobile Chamber of Commerce on a Health Careers proposal.
- The College of Nursing collaborates with the Center on the submission of NIH grant proposals.
• The Center's Director is working with the Division of Student Affairs in arranging meetings to discuss issues concerning the University's Hillsdale properties.

A significant number of individuals from each school, college and division at the University are expressing interest in establishing collaborative relationships with the Center. This interest is most prevalent within the Medical Affairs Division where the Center has ongoing initiatives with staff members in Family Practice and Community Medicine, Office of Emerging Health Technologies, Sickle Cell Center, Student Affairs, Organ Transplant Center, Cancer Research Institute, and Medical Education. Individuals in these areas are collaborating with the Center to provide community outreach activities, develop grant proposals, and design research projects and service programs.

*Community Networking Activities:*

Representatives from numerous local government, community, and faith-based organizations have been engaged in discussions to acquire an understanding of prevailing health problems and the resources available to address them; to explain the purpose and mission of the Center; and to explore areas for potential collaborative partnerships. Of particular importance to the Center are organizations that care for underserved and underrepresented populations. These include:

Franklin Primary Health Center
Mobile County Health Department
Senior Citizens Services
Preschool for The Sensory Impaired
Mobile Community Action
Bay Area Food Bank
American Cancer Society
Bridges to Better Health
Life Matters
Health Partnership Coalition
The American Heart Association
Mobile Area Chamber of Commerce
Spring Hill Hospital

Mobile Infirmary Medical Center
Providence Hospital
The City of Prichard
Community Foundation
Mobile Education Foundation
Mobile United
St. Joseph Missionary Baptist Church
The City of Mobile, Mobile County
The University of Mobile
Spring Hill College
Mobile District Attorney
Alabama State University
Friendship Missionary Baptist Church
The Center's staff members meet regularly with representatives from community-based organizations and, in several instances, are actively planning collaborative program initiatives with them. Collaboration has been affirmed through letters of support for grant proposals and the formal relationships the Center has with several organizations.

The Center for Healthy Communities has developed memorandums of understanding with Mobile Community Action, Bay Area Food Bank, Mobile Chapter of the American Cancer Society, Mobile County Health Department, Life Matters, Health Partnership Coalition, and Franklin Primary Health Center. These organizations are partnering with the Center and USA Cancer Research Institute to form the "Community Networks to Reduce Cancer Disparities," which in turn is seeking funding from the National Cancer Institute.

Creating Awareness of the Center

Another significant focus of activity in 2003-2004 was the creation of state, regional and national awareness of the Center for Healthy Communities. The Center's Director traveled to Washington D.C. several times to discuss programs and resource possibilities with elected and appointed officials. Presentations on the Center were made to two deputy assistant secretaries for Health and Human Services, congressional staffs for Senators Shelby and Sessions, and Representatives Bonner and Davis. Meetings were also held with representatives from the National Center for Minority Health and Health Disparities, the National Cancer Institute, and the Centers for Disease Control and Prevention.

Staff represented the Center at professional meetings in Montgomery, AL; Washington D.C.; Pittsburgh, PA; and Portland, OR. The Center is actively engaged in program discussions with the Department of Biostatistics at the University of Alabama-Birmingham (UAB), The President's Office at Talladega College, and the Center for Minority Health at the University of Pittsburgh. The staff also has had discussions on possible joint program activities with representatives from Alabama State University, the Alabama State Department of Public Health, the UAB Export Center, and the Singing River Regional Cancer Center.

In addition to face-to-face meetings, telephone conversations, mailings and e-mails, the Center's web site is being used to share information about program activities. The web site includes the mission statement and a brief synopsis of the Center's history, a description of current and proposed projects, and staff and contact information. It has links to the National Center on Minority Health and Health Disparities, National Institutes of Health and other health related organizations.

Staff efforts have created significant local, state, regional and national awareness of the Center for Healthy Communities. Staff members are invited frequently to make presentations on health policy and health disparities. Increasing the internal and external visibility of the Center will continue to be a high priority.
Resource Development Activities

Pursuit of resources to support the Center’s programs received considerable attention this year. Efforts in this area were both internal and external. As discussed above, acquiring office and staff resources was an early focus for the Center. Resources for programmatic initiatives were also vigorously pursued. In addition to support from the College of Medicine, the USA Medical Center is providing space and secretarial support for the Center for Healthy Communities satellite office. The Medical Center also provided resources for co-sponsorship of “GO RED FOR WOMEN CAMPAIGN” and Women Healthy Heart Luncheon with the American Heart Association. The College of Arts and Sciences is providing resources to support the Center’s Nonprofit Management Program. The Division of Student Affairs has provided travel support for the Center’s Director to participate in meetings concerning the collaborative partnership between an inner-city community in Baltimore and Johns Hopkins University.

The Center has taken the lead in writing three major grant proposals with other units in the College of Medicine. A HRSA Center of Excellence proposal was developed collaboratively with the Dean’s Office of Special Programs. The proposal is being revised for resubmission in 2005. An NIH EXPORT grant proposal was developed with the Dean’s Office. The proposal, entitled “Broad Based Collaboratives to Address Health Disparities” focused on tailored community based research, outreach and mentoring and training activities to address health disparities experienced by minority, low-income residents in the inner core of the City of Mobile and surrounding localities. The proposal was favorably reviewed and funds will be provided by the NIH National Center for Minority Health and Health Disparities to develop an EXPORT Center at the University of South Alabama.

The Center also partnered with the USA Cancer Research Institute on a grant to the National Cancer Institute, which is currently under review. In addition to these efforts, funding possibilities are also being pursued with local and national foundations, public corporations, and private donors that support program activities relating to the Center’s mission.

Towards A Second Year of Promising Possibilities

The Center for Healthy Communities’ first year was stout with challenges and opportunities. It began with no official offices, staff, budget, name recognition, nor program. These limiting circumstances, while not desirable, actually led to several positive and effective outcomes. Starting with no permanent personnel, the Center was able to create a virtual organization that involved individuals in the Center’s activities from various units within the University and from the community. The absence of existing programs allowed the Center to operate as an agile enterprise and take advantage of strategic opportunity on very short notice.
With administrative support from the College of Medicine and targeted program support from the USA Medical Center, College of Arts and Sciences, and Division of Student Affairs, the Center has, in a relatively short period of time, gained recognition as a significant resource for addressing health disparities. The outreach-inventory activities; Two-Year Work Plan; university and community outreach networks; local, state and national awareness; and grant activity described above represent significant progress towards making the Center for Healthy Communities a reality at the University of South Alabama.

Current efforts in each of these areas will continue during the next year. Several specific activities have been identified, however, that will be given priority consideration. These include:

1. Resubmitting the HRSA Center of Excellence grant proposal;
2. Working with the Mobile Chamber of Commerce to develop a grant application for the Health Careers Opportunity Program;
3. Developing a Healthy Families Program with Mobile Community Action Head Start Program;
4. Creating a "grant development" team within the USA Medical Center;
5. Developing diabetes, obesity, and hypertension grant proposals.

Its successful NIH grant activity, favorable reception within the University and broader community, and an effective leadership team are positioning the Center for Healthy Communities to make a significant contribution to the University's efforts to better address the needs of underserved populations. With appropriate university and community support, the Center is poised to become a national leader in addressing health disparities and building healthy communities.
2003-2004
Summary of Scholarly Activities
Office of Emerging Health Technologies

I. ARTICLES PUBLISHED IN BOOKS AND JOURNALS

A. Full-length published articles


B. Articles in Press

Barrow, Bill. Health care for poor is retooled. Mobile Register 2004 Aug 5;1B.


II. PUBLISHED ABSTRACTS

III. BOOKS PUBLISHED

IV. PRESENTATIONS


Taylor CW. From mars to main street gaining investor confidence in telemedicine. Paper presented at: NASA/ National Association of Seed and Venture Funds Forum; 2003 Nov; Baltimore, MD.

Taylor CW. Image is everything. Paper presented at: NASA International Space Consortium; 2003 Dec; Boca Raton, FL.


Taylor CW. Crossing borders, barriers and boors. Paper presented at: Cross Border Disaster Response Conference; 2004 May; Whitefish, MT.

Taylor CW; Wallace DL; Mohammed R. Alabama incident management system software project (AIMS). A technical demonstration presented at: The ATA Conference, Medical Emergency Operations Center (MEOC); 2004 May 2-5; Tampa, FL.


Taylor CW; Wallace DL; O’Connor LM. Hospital emergency incident command system (HEICS) training. Presentations to hospitals across the state of Alabama; 2004 May - Sep.
Wallace DL. A summary of findings from Alabama Biological Tabletop Exercises: Presentation at: The 1st Annual Region IV Preparedness and Response Conference; 2004 Mar; Philadelphia, MS.


Wallace DL. MMRS plan implementation training and comprehensive WMD preparedness training program. Presented to nine Southwest Alabama counties; 2004 Jan - Sep.

The Office of Emerging Health Technologies successfully completed an exciting and most productive year with projects ranging in scope from the delivery of home health monitoring to diabetic patients, to participating in disaster preparedness training for hospitals across the State. The projects outlined below reflect the broad range of activities covered by OEHT, which has become a recognized leader in creating, testing, defining and articulating the role of communication oriented technologies across multi-disciplinary healthcare platforms. Though our activities are diverse in nature they reflect a common goal that information appropriately captured, timely delivered and appropriately analyzed will lead to a new era of knowledge based decision making whether at the granular level of one patient at a time or across populations in time disasters.

Telemedicine

Last year we reported our emerging relationship with Children’s Rehabilitative Services (CRS) and the successful implementation and design of a working network for consultations. During this year, CRS has been extremely active in providing telemedical consults for their disadvantaged patients. Bi-weekly consults are regularly conducted between the Mobile and Birmingham sites thereby eliminating the need for patients to travel to Birmingham for these clinics. Additionally, HIV consults are conducted between the USA Medical Center and the Baldwin County Health Department located in Robertsdale. These clinics are also held on a bi-weekly basis.
A successful TeleTrauma network was completed this past year and consults from Monroe County Hospital have taken place. During this upcoming year, a second teletrauma site at J. Paul Jones Hospital in Camden, Alabama will be established. OEHT anticipates successful physician to physician relationships to emerge from this connection with USA specialist mentoring rural physicians during events of traumatic nature. OEHT will use the additional funding received to provide quality educational opportunities on related trauma consults to the two trauma remote sites.

**Home Monitoring**

The growth and expansion of the BioTrac home monitoring program has escalated again this past year. OEHT continues relationships with the Alabama Department of Public Health in their Geneva community as well as our initial site in Pine Apple. OEHT has gained national recognition for its part in proving home monitoring outcomes for patients suffering from chronic illnesses.

**Videoconferencing**

The spectrum of videoconferencing opportunities offered today through OEHT are numerous with an average of 20 hours of quality healthcare education provided to participating locations on a weekly basis. In 2003, OEHT “sponsored” a total of 434.5 educational hours for remote locations to participate in. This figure represents a growth of more than 223% over 2002 programs whose total hours sponsored was 195. There is no doubt that the 2004 total hours sponsored will by far overcome these numbers. OEHT has found that educational programs offered through videoconferencing means bring highly valued insight to participating remote communities. Working through relationships developed within the Alabama Department of Public Health, OEHT hopes to only continue to expand these efforts to potentially a statewide level. In this event, it is anticipated that the USA College of Medicine will be the lead educational resource to rural community practices.

In FY 2002 and 2003, OEHT also initiated a series of statewide training programs and technology development projects designed to prepare hospitals across the state to respond to a public health disaster or mass casualty event. The overarching goal was to provide the hospitals with a common platform of response, or incident command system, as well as individualized training on site in their facilities, to prepare them to respond effectively in a disaster. A summary of those projects follows:
Training Programs

OEHT staff, as well as College of Nursing staff, University of South Alabama Medical Center administrative staff, and Providence Hospital administrative staff have traveled across the entire state delivering Hospital Emergency Incident Command System (HEICS II) training. Last year, OEHT delivered HEICS training in 11 regional training sessions to approximately 45 hospitals in Alabama. This year, OEHT will train 75 hospitals onsite, to include training in the application of incident command systems, disaster planning, and completion of hazard threat vulnerability assessments. OEHT has also developed and delivered PHEICS training, or Public Health Emergency Incident Command System training, to senior management and staff at the Alabama Department of Public Health in Montgomery, Alabama. Using the experience gained in HEICS I and II, OEHT has developed and designed “PHEIC” which the Alabama Department of Public Health is adapting for use in public health responses to all hazards events. In addition to the Incident Command training, OEHT delivered 40 biological tabletop exercises to 40 counties in Alabama.

Each exercise employed a scenario in which a biological agent affected the community and required participants to practice their response. Trainees included personnel from hospitals, public health staff, and varied emergency response backgrounds, such as fire, medical, police, as well as school board and county government officials.

Technology Development

OEHT completed two technology/software development projects in 2003-2004. First, the Alabama Incident Management System (AIMS) is management information software designed to capture Hospital Emergency Incident Command System (HEICS) reported surge data. Surge capacity management requires knowing 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 will be entered into a database at each hospital and then transmitted and displayed at the local or regional Emergency Operations Centers (EOC) to be used in making emergent decisions. The AIMS software was initially tested at the American Telemedicine Association meeting held in May in Tampa. AIMS served as the core software managing multiple simulated care and treatment sites during a mock disaster. Subsequently AIMS was revised to meet peer expectations based upon comments by numerous civilian and military participants.
AIMS again was tested during Hurricane Ivan and proved to be a useful tool for capturing hospital specific data that is critical to decision making during a disaster of any kind. The second software project is the Advanced Incident Command Development (AICS). AICS is an evidence-based, outcome driven Incident Command training course that is modular, flexible and relevant to today’s hospital based Incident Commanders. Using a biological and a chemical scenario, the course will test and prompt decision-making for incident commanders, and drill them in applying the HEICS organizational structure to manage the disaster.

Planning and Assessments

OEHT also participated in other planning activities to include working on a collaborative regional planning piece and completing an Emergency Medical Services Assessment for EMS providers across the state. First, working in collaboration with the University of Alabama at Birmingham, OEHT held a regional planning session designed to encourage and stimulate dialogue between state emergency management and state public health officials and coordinators. The meetings were designed to solicit input from critical partners to identify best practices to be employed in a statewide response and evaluate existing assets vs. needs. A disaster planning template was developed and distributed for use on a statewide basis. Dialogue was also initiated on the roles and responsibilities of critical partners during an all hazards event. Second, OEHT designed and delivered a survey of emergency medical services systems in the state of Alabama.

The survey addresses the following: the capacity of individual EMS components to respond to acts of bioterrorism, infectious disease outbreaks, or other public health threats and emergencies; identification of training and educational gaps; the existence and/or current status of mutual aid agreements between EMS systems; the level of personal protective equipment available to EMS personnel; and a review of communications among and between EMS systems. Working in collaboration with administrative staff from USA’s Center for Rural Vehicular Trauma, OEHT distributed, collected, and tabulated results from the assessment with delivery of final report to the Alabama Department of Public Health.

It is our belief that the 2004-2005 year will bring about further growth in specific programs as home monitoring, videoconferencing as well as bioterrorism. Through these efforts, we will continue to evolve the position of national leadership in each of these areas.
2003-2004
Summary of Activities
Office of Technology Development

The Office of Technology Development (OTD) handles all phases of the intellectual property process for the College of Medicine, including evaluation of invention disclosures, assessment of marketability and patentability of inventions, negotiation of licensing and research agreements, oversight of material transfer agreements, and management of the existing patent portfolio.

OTD continued in FY2004 to provide leadership in the implementation of the USA Technology & Research Park. A full time staff person was hired in January 2004 and responsibility for management of the TechPark was transferred. In addition, OTD negotiated the gift of a large patent estate with significant potential value to the University from the Rohm & Haas Company.

In FY2004, OTD, through SAMSF, generated $307,038 in licensing income and $211,973 in sponsored research funding through four new research agreements, resulting in $519,011 total income for the College of Medicine for the fiscal year. SAMSF was reimbursed, either directly or through net expense deduction from licensing income, for 59% of external legal fees. One invention by College of Medicine faculty (Ayling & Bailey) was issued a U.S. patent.

Further details about the operation of the Office of Technology Development through July 31 of FY2004, and a comparison with the statistics of the previous four fiscal years, are shown in the table below. Cumulative totals include all data from FY1999 (not shown).

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>CUM TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensing Revenue (Gross)</td>
<td>$340,186</td>
<td>$76,125</td>
<td>$64,953</td>
<td>$108,114</td>
<td>$307,038</td>
<td>$903,594</td>
</tr>
<tr>
<td>Research Support Revenue</td>
<td>$111,500</td>
<td>$153,100</td>
<td>$329,000</td>
<td>$82,500</td>
<td>$211,973</td>
<td>$1,040,073</td>
</tr>
<tr>
<td>Licenses/Options Signed</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Research Agreements Signed</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Licenses Generating Revenue</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>n/a</td>
</tr>
<tr>
<td>Total Active Licenses</td>
<td>10</td>
<td>13</td>
<td>11</td>
<td>11</td>
<td>8</td>
<td>n/a</td>
</tr>
<tr>
<td>Invention Disclosures</td>
<td>4</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>4</td>
<td>37</td>
</tr>
<tr>
<td>US Patents Filed (all types)</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>31</td>
</tr>
<tr>
<td>US Patents Issued</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>Start-up Companies Formed</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Legal Fees Expended</td>
<td>$232,161</td>
<td>$81,945</td>
<td>$72,805</td>
<td>$127,570</td>
<td>$90,305</td>
<td>$735,817</td>
</tr>
<tr>
<td>Legal Fees Reimbursed</td>
<td>$148,832</td>
<td>$58,108</td>
<td>$62,878</td>
<td>$106,990</td>
<td>$53,717</td>
<td>$430,525</td>
</tr>
<tr>
<td>Legal Reimbursement %</td>
<td>64%</td>
<td>71%</td>
<td>86%</td>
<td>84%</td>
<td>59%</td>
<td>59%</td>
</tr>
<tr>
<td>Material Transfers Agreement</td>
<td>10</td>
<td>16</td>
<td>23</td>
<td>10</td>
<td>38</td>
<td>97</td>
</tr>
</tbody>
</table>
Summary of Extramural Support

The record of extramural support is a significant accomplishment of faculty actively engaged in research in the College of Medicine. The principal investigator is listed on the summary report, but many projects involve other faculty as co-investigators on grants, a practice highly encouraged by the administration. Funding for the 2003-2004 academic year includes $25,454,591 and $1,481,339 in awards administered through the University’s Office of Sponsored Programs and the South Alabama Medical Science Foundation, respectively. The awards listed reflect only those received funds during this fiscal period.

Extramural Funds
Totals for Recent Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Millions of Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>$11,563,000</td>
</tr>
<tr>
<td>1993</td>
<td>11,223,000</td>
</tr>
<tr>
<td>1994</td>
<td>11,859,000</td>
</tr>
<tr>
<td>1995</td>
<td>14,272,462</td>
</tr>
<tr>
<td>1996</td>
<td>16,507,457</td>
</tr>
<tr>
<td>1997</td>
<td>14,981,699</td>
</tr>
<tr>
<td>1998</td>
<td>18,338,972</td>
</tr>
<tr>
<td>1999</td>
<td>19,108,225</td>
</tr>
<tr>
<td>2000</td>
<td>20,431,119</td>
</tr>
<tr>
<td>2001</td>
<td>20,723,188</td>
</tr>
<tr>
<td>2002</td>
<td>20,734,491</td>
</tr>
<tr>
<td>2003</td>
<td>23,244,111</td>
</tr>
<tr>
<td>2004</td>
<td>26,935,930</td>
</tr>
</tbody>
</table>
# EXTRAMURAL FUNDING
(October 1, 2003 – September 30, 2004)

**BIOCHEMISTRY AND MOLECULAR BIOLOGY**

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Agency</th>
<th>Project Title</th>
<th>Fiscal Year Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sailen Barik</td>
<td>NIH 5 R01AI045803</td>
<td>Reversible Protein Phosphorylation in Apicomplexans</td>
<td>$252,875</td>
</tr>
<tr>
<td></td>
<td>NIH 5 R01EY013826</td>
<td>Interactions Between Ocular Tissue and RSV</td>
<td>$182,500</td>
</tr>
<tr>
<td>Richard Honkanen</td>
<td>NIH 2 RO1CA060750</td>
<td>Mechanisms of Tumor Promotion and Carcinogenesis</td>
<td>$262,800</td>
</tr>
<tr>
<td></td>
<td>NIH 3 RO1CA060750 Supplement</td>
<td>Mechanisms of Tumor Promotion and Carcinogenesis</td>
<td>$42,339</td>
</tr>
</tbody>
</table>

**Total** $740,514
### BIOMEDICAL LIBRARY

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justin Robertson</td>
<td>NLM (SUB U/MD)</td>
<td>Technology Awareness Conference for Health Professionals or Health Consumers Award Web Form</td>
<td>$ 4,836</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

### BIOTECHNICAL SERVICES

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raymond Hester</td>
<td>NIH 1 S10RR019091</td>
<td>FACSVANTAGE SE Upgrade</td>
<td>$ 226,377</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Michael Boyd</td>
<td>HRSA C 76HF01118</td>
<td>FY 04 USA CRI Construction</td>
<td>$3,444,559</td>
</tr>
<tr>
<td>Lalita Shevde-Samant</td>
<td>S.G. Komen BCF</td>
<td>BRMS1 Regulates Osteopontin Expression in Metastatic Cells</td>
<td>$250,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------</td>
<td>--------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Mikhail Alexeyev</td>
<td>NIH PO1HL66299</td>
<td>Program Project Grant Gene Delivery Core**</td>
<td>$142,816</td>
</tr>
<tr>
<td>Phillip Fields</td>
<td>NIH 1 RO1HD40448</td>
<td>Hormonal Regulation of the Cervix During Pregnancy</td>
<td>6,000</td>
</tr>
<tr>
<td>Anthony Gard</td>
<td>NIH 5 RO1AG019603</td>
<td>Mediators of Oxidative Damage in Oligodendrocytes</td>
<td>252,875</td>
</tr>
<tr>
<td>Susan LeDoux</td>
<td>NIH 1 RO1NS047208</td>
<td>Oxidative Stress in Neurons: Role of Mitochondrial DNA</td>
<td>303,863</td>
</tr>
<tr>
<td></td>
<td>NIH 5 RO1ES005865</td>
<td>Repair of DNA Damage Induced by Environmental Agents</td>
<td>250,342</td>
</tr>
<tr>
<td></td>
<td>NIH 1 RO3TW007044</td>
<td>Oxidative Stress in Neurons: Role of Aminochrome</td>
<td>38,500</td>
</tr>
<tr>
<td></td>
<td>(FOGARTY IRCA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solomon Ofori-Acquah</td>
<td>NIH 1 RO1HL077769</td>
<td>Role of CD 166/ALCAM in Lung Endothelial Barrier Function</td>
<td>275,900</td>
</tr>
<tr>
<td>Glenn Wilson</td>
<td>NIH 5 RO1ES003456</td>
<td>Environmental Beta Toxins-Mechanisms of Action</td>
<td>308,549</td>
</tr>
<tr>
<td></td>
<td>NIH 5 RO1AG019602</td>
<td>Oxidative Damage and Repair in Neuronal MTDNA</td>
<td>270,494</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$1,849,339</strong></td>
</tr>
</tbody>
</table>
**CENTER FOR LUNG BIOLOGY**

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary Townsley</td>
<td>NIH 1 T32HL076125</td>
<td>Training in Cell Signaling and Lung Pathobiology**</td>
<td>$120,815</td>
</tr>
<tr>
<td>Troy Stevens</td>
<td>NIH 5 P014L066299</td>
<td>Lung Endothelial Cell Phenotypes**</td>
<td>1,348,985</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$1,469,800</strong></td>
</tr>
</tbody>
</table>

The individual projects are listed in Departmental Sections**

**COM ADMINISTRATION**

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Kreisberg</td>
<td>NIH 1 R24MD001094</td>
<td>Broad-based Collaboratives to Address Health Disparities</td>
<td>$401,500</td>
</tr>
<tr>
<td>Samuel Strada</td>
<td>AHA, SE AFFIL</td>
<td>Advanced Cardiovascular Research for Medical Students</td>
<td>10,800</td>
</tr>
<tr>
<td></td>
<td>NASA (SUBCON UNIV AL HUNTSV)</td>
<td>AL Space Grant Consortium Fellowships</td>
<td>28,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$440,800</strong></td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------</td>
<td>---------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Christian Abee</td>
<td>NIH 2 P40RR001254</td>
<td>A Squirrel Monkey Breeding and Research Resource</td>
<td>$677,453</td>
</tr>
<tr>
<td></td>
<td>CDC 200-2003-01848</td>
<td>Breeding Colony for Squirrel Monkeys-Malaria Study</td>
<td>$70,668</td>
</tr>
<tr>
<td></td>
<td>NIH NO2 OR 44234</td>
<td>Maintenance of a Colony of Owl Monkeys</td>
<td>$550,785</td>
</tr>
<tr>
<td></td>
<td>NIH 1 R24RR020052</td>
<td>Squirrel Monkey Breeding and Research Resource Supplement</td>
<td>$552,499</td>
</tr>
<tr>
<td></td>
<td>NIH 1 CO6RR020129</td>
<td>Construction of an Addition to the Primate Research Laboratory</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>Baxter Healthcare Corp</td>
<td></td>
<td>Experimental Creutzfeldt-Jakob Disease in the Squirrel Monkey</td>
<td>$399,359</td>
</tr>
<tr>
<td>Joseph Schnieders</td>
<td></td>
<td>Schnieders Foundation: Innoculation of Red Blood Cells from an Experimental CJD Case</td>
<td>$52,288</td>
</tr>
<tr>
<td>Foundation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baxter Fenwall</td>
<td></td>
<td>Baxter Fenwall: Innoculation of Red Blood Cells from an Experimental CJD Case</td>
<td>$45,163</td>
</tr>
<tr>
<td>Susan Gibson</td>
<td>NIH 9 R44RR19845 (SUBCON SEQUELLA-SBIR)</td>
<td>A Rapid Lateral Flow Test for TB in Nonhuman Primates</td>
<td>$48,258</td>
</tr>
</tbody>
</table>

Total $6,396,473
<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson Haynes</td>
<td>HRSA 2 H46MC00236 (SUB FROM SCDA-MONTGO)</td>
<td>Special Projects of Regional and National Significance</td>
<td>$15,882</td>
</tr>
<tr>
<td>Novartis</td>
<td></td>
<td>A Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Multicenter, Multiple Dose (7 Days) Dose-ranging Study to Assess the Efficacy and Safety of 4 Doses of QAB149 (50,100,200, &amp; 400ug) Delivered Via a Single Dose Inhaler in Patients with Chronic Obstructive Pulmonary Disease</td>
<td>$2,032</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>Agency</td>
<td>Project Title</td>
<td>Fiscal Year Funding</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Frank Pettyjohn</td>
<td>Astrazeneca</td>
<td>A Phase III, Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group Factorial Study of Metoprolol Succinate Controlled-Release Tablets, Hydrochlorothiazide and their Combination in Patients with Essential Hypertension</td>
<td>$99,450</td>
</tr>
<tr>
<td>Boehringer Ingelheim</td>
<td>Astrazeneca</td>
<td>A Randomized, Double-Blind, Double-Dummy, Placebo-Controlled, Forced Titration, Comparison of MICARDIS HCT Versus DIOVAN HCT Using Seated Trough Cuff Blood Pressure in Patients with Stage 1 and Stage 2 Hypertension</td>
<td>31,769</td>
</tr>
<tr>
<td>Novartis Pharma Corp</td>
<td>Boehringer Ingelheim</td>
<td>A Prospective, Multinational, Multicenter, Double-blind, Randomized, Active-Controlled Trial to Compare the Effects of Lotrel to Benazepril and Hydrochlorothiazide Combined on the Reduction of Cardiovascular Morbidity and Mortality in Patients with High Risk Hypertension</td>
<td>4,916</td>
</tr>
<tr>
<td>Sanofi-Synthelabo</td>
<td>Novartis Pharma Corp</td>
<td>A Multicenter, Prospective, Open-Label Study Assessing the Efficacy and Safety of Avalide 150/12.5 mg and Avalide 300/25mg In Patients with Mild to Moderate Hypertension Uncontrolled on Monotherapy</td>
<td>8,100</td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Frank Pettyjohn</td>
<td>Alteon, Inc.</td>
<td>Effect of ALT-711 in Combination with Fixed-Dose Hydrochlorothiazide Therapy on Systolic Blood Pressure In Hypertensive Patients</td>
<td>$ 5,922</td>
</tr>
<tr>
<td>Astra/IBAH</td>
<td>A Randomized, Double-Blinded, Placebo-Controlled, Multicenter, Long-Term Efficacy Study Trial of Preventing Hypertension using Cadesartan Cilexetil 16mg in Patients with Borderline Hypertension High Normal Blood Pressure</td>
<td>24,975</td>
<td></td>
</tr>
<tr>
<td>AstraZeneca Pharma</td>
<td>A 6-Week, Open-Label, Dose Comparison Study to Evaluate, the Safety and Efficacy of Rosuvastatin Versus Atorvastatin, Cerivastatin, Pravastatin, and Simvastatin in Subjects with Hypercholesterolemia</td>
<td>11,295</td>
<td></td>
</tr>
<tr>
<td>Forest Laboratories</td>
<td>A Double-Blind Comparison of the Effects of Lercanidipine and Amlodipine on the Occurrence of Peripheral Edema in Hypertensive Patients</td>
<td>6,385</td>
<td></td>
</tr>
<tr>
<td>AstraZeneca Pharma</td>
<td>A 6-Week, Randomized, Open-Label, Comparative Study to Evaluate the Efficacy and Safety of Rosuvastatin and Atorva-Statin in the Treatment of Hypercholesterolemia in African American Subjects</td>
<td>21,341</td>
<td></td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Frank Pettyjohn</td>
<td>AstraZeneca Pharma</td>
<td>A 12-Week Randomized, Open-Label, 3-Arm Parallel Group, Multi-Center, Phase IIIb Study Comparing the Efficacy and Safety of Rosuvastatin Calcium with Atorvastatin and Simvastatin Achieving NCEP ATP III LDL-C Goals in High-Risk Subjects with Hypercholesterolemia in the Managed Care Setting</td>
<td>$ 33,735</td>
</tr>
<tr>
<td>Sanofi-Synthelabo</td>
<td></td>
<td>Clopidogrel for High Atherothrombotic Risk and Ischemic Stabilization, Management and Avoidance</td>
<td>2,874</td>
</tr>
<tr>
<td>AstraZeneca Pharma</td>
<td></td>
<td>A Randomized, Double-Blind, Placebo-Controlled, Multicenter, Phase III Study of Rosuvastatin (Crestor) 20mg in the Primary Prevention of Cardiovascular Events Among Subjects with Low Levels of LDL-Cholesterol and Elevated Levels of C-Reactive Protein</td>
<td>12,499</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$ 263,261</strong></td>
</tr>
</tbody>
</table>
# Emerging Health Technologies

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Agency</th>
<th>Project Title</th>
<th>Fiscal Year Funding</th>
</tr>
</thead>
</table>
| Carl Taylor            | USDHS 233010044 (SUBCON MOB COUNTY E) | Mobile Metropolitan Response System (MMRS)
|                        |        | Training Program Proposal | $118,171             |
|                        | CDC C 40118140A (SUB ADPH) | ADPH Bioterrorism Preparedness Grant | 53,685               |
|                        | CDC CEP 24PV4 (SUB ADPH) | ADPH AICS I: AFPH, Advanced Incident Command Training I | 125,000               |
|                        | CDC CEP 25QW4 | ADPH AICS II: ADPH, Advanced Incident Command Training II | 75,000               |
|                        | CDC CEP 19QW4 | ADPH HEICS II Training | 248,000               |
|                        | CDC CEP 31PV4 | ADPH Bioterrorism Planning Grant II | 30,000               |
|                        | HRSA 1 DIB TM 0056 (OAT) | USA Biotrac and Teletrauma Projects | 172,228               |
|                        | HRSA 2 DIBTH00007 | Traditional Telemedicine Project | 147,624               |

186
<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carl Taylor</td>
<td>CDC CEP 42PV4</td>
<td>ADPH Advanced Tabletops</td>
<td>$120,000</td>
</tr>
<tr>
<td></td>
<td>HRSA CEP 41QW4</td>
<td>ADPH EMS Assessment</td>
<td>55,571</td>
</tr>
<tr>
<td></td>
<td>CDC C 40118085</td>
<td>ADPH Aims Project</td>
<td>250,457</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$1,395,736</strong></td>
</tr>
<tr>
<td>FISCAL YEAR</td>
<td>AGENTY</td>
<td>PROJECT TITLE</td>
<td>FUNDING</td>
</tr>
<tr>
<td>-------------</td>
<td>--------</td>
<td>---------------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>HRSA</td>
<td>National Health Service Corps Search Program</td>
<td>$15,200</td>
</tr>
<tr>
<td></td>
<td>(SUBCON: ADPH)</td>
<td>Uniform Three Year Family Medicine Clerkship Curriculum</td>
<td>$24,500</td>
</tr>
<tr>
<td></td>
<td>AFPRHB</td>
<td>Student Preceptorship Study</td>
<td>$50,000</td>
</tr>
<tr>
<td></td>
<td>AFPRHB</td>
<td>Textbook/Family Practice Clerkship</td>
<td>$1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>$90,700</td>
</tr>
</tbody>
</table>

**Family Medicine**

**Principal Investigator:**

E. Lee Taylor
<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Culpepper</td>
<td>Novartis</td>
<td>A Prospective, Multinational, Multicenter, Double-Blind, Randomized, Active-Controlled Trials to Compare the Effects of Lotrel (Amiodipine/Benazepril) to Benazepril and Hydrochlorothiazide Combined on the Reduction of Cardiovascular Morbidity and Mortality in Patients with High Risk Hypertension</td>
<td>$3,956</td>
</tr>
<tr>
<td>Speedel Bio, Ltd.</td>
<td>A Randomized, Multicenter, Open-label, Parallel Group Study to Assess the Safety of PEG-Hirudin (SPP200) Compared to Unfractionated Heparin as Anticoagulant Treatment in Patients Undergoing Haemodialysis Via an Arteriovenous Graft</td>
<td>13,780</td>
<td></td>
</tr>
<tr>
<td>Amgen</td>
<td>A Randomized, Double-Blind, Placebo-Controlled, Multicenter Study Evaluating De Novo Once Every Two Weeks and Maintenance Once Monthly Darbepoetin Alfa Dosing in Subjects With Chronic Renal Disease Not Receiving Dialysis</td>
<td>4,658</td>
<td></td>
</tr>
<tr>
<td>Luitpold Pharma</td>
<td>Comparison of Safety and Efficacy of Intravenous Iron Versus Oral Iron in Chronic Renal Failure Subjects with Anemia</td>
<td>3,129</td>
<td></td>
</tr>
<tr>
<td>Jack DiPalma</td>
<td>GlaxoSmithKline/Icon</td>
<td>A Twelve Week, Randomized, Double-Blind, Placebo-Controlled, Study of PRN BID and Fixed Dosing Regimens of Alosteron in Female Subjects with Severe Diarrhea-Predominant IBS who have Failed Conventional Therapy</td>
<td>5,862</td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Jack DiPalma</td>
<td>Braintree Laboratories</td>
<td>Braintree-Colon Cleansing Comparison</td>
<td>$ 33,930</td>
</tr>
<tr>
<td></td>
<td>Braintree Laboratories</td>
<td>Braintree Gas Production Study</td>
<td>31,050</td>
</tr>
<tr>
<td>Brian Fouty</td>
<td>NIH 1 RO1HL070273</td>
<td>Cell Cycle Regulation of Pulmonary Vascular Remodeling</td>
<td>328,500</td>
</tr>
<tr>
<td>Jorge Herrera</td>
<td>Schering Corporation</td>
<td>Herrera Chronic Hepatitis Research</td>
<td>2,600</td>
</tr>
<tr>
<td></td>
<td>Braintree/AAI Pharma</td>
<td>Extended Use of Miralax Laxative in Constipated Patients</td>
<td>17,172</td>
</tr>
<tr>
<td></td>
<td>Roche Laboratories</td>
<td>A Randomized, Open-label, Multicenter, Efficacy and Safety Study Examining the Effects of Duration of Treatment and of a High Induction Dose of PEGASYS in Combination with Daily COPEGUS in Patients with Chronic Hepatitis C Who Did Not Respond to Previous Peginterferon Alfa-2b/Ribavirin Combination Therapy</td>
<td>21,375</td>
</tr>
<tr>
<td></td>
<td>Hoffman-LaRoche, Inc.</td>
<td>Randomized, Multicenter, Open label, Phase IV Study Evaluating the Efficacy and Safety of 16-Week Treatment With Pegasys in Combination with Copegus in Interferon-naïve Patients with Chronic Hepatitis C Genotype 2 or 3 Virus Infection</td>
<td>11,807</td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>Agency</td>
<td>Project Title</td>
<td>Fiscal Year Funding</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Jorge Herrera</td>
<td>Braintree Laboratories</td>
<td>Dose Ranging Pilot Study of PEG 3350 and Bisacodyl for Bowel Preparation</td>
<td>$75,000</td>
</tr>
<tr>
<td></td>
<td>Braintree Laboratories</td>
<td>Miralax Versus Zelnorm in Treatment of Patients with Chronic Constipation</td>
<td>3,000</td>
</tr>
<tr>
<td></td>
<td>Schering Plough Research</td>
<td>Comparison of PEG-Intron 1.5 ug/kg/wk Plus REBETOL versus PEGASYS 180 ug/kg/wk Plus COPEGUS in Previously Untreated Adults Subjects with Chronic Hepatitis C Infected with Genotype 1</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td>Institute</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SciClone</td>
<td>A Multicenter Double-Blinded Study in Non-Cirrhotic Patients with Chronic Hepatitis C Who Are Non-Responders to Prior Interferon Alfa or Interferon Alfa + Ribavirin Therapy, Comparing Treatment with Thymosin Alpha 1 + Peginterferon Alfa-2a with Peginterferon Alfa-2a + Placebo</td>
<td>9,000</td>
</tr>
<tr>
<td>Keith Ramsey</td>
<td>NIH NO1 AI30025</td>
<td>Clinical Trials for Antiviral Therapies</td>
<td>10,000</td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------</td>
<td>--------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Kane Schaphorst</td>
<td>SE AHA</td>
<td>Hepatocyte Growth Factor Mediated Enhancement of Endothelial Barrier Function: Role of the C-MET/GAB1 Interaction</td>
<td>$ 77,000</td>
</tr>
<tr>
<td>John Vande Waa</td>
<td>NMFS</td>
<td>Improving the Safe Consumption of Gulf Oysters, an Education Awareness Program</td>
<td>49,640</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$ 709,459</strong></td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------</td>
<td>-------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Cathy Tuck-Muller</td>
<td>NIH 5 RO1CA81506</td>
<td>DNA Hypomethylation and Cancer</td>
<td>$ 11,482</td>
</tr>
<tr>
<td>Wladimir Weretlecki</td>
<td>HRSA C 40870065</td>
<td>South Alabama Regional Genetics Program</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>ADMH/MR G4 932638</td>
<td>Genetics and Mental Health Program</td>
<td>137,268</td>
</tr>
<tr>
<td></td>
<td>ADRS</td>
<td>Birth Defects Surveillance System Development and Implementation Project</td>
<td>11,878</td>
</tr>
<tr>
<td></td>
<td>CDC U50/CCU421140</td>
<td>Alabama Birth Defects Surveillance and Prevention Program</td>
<td>306,611</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>$ 517,239</td>
</tr>
<tr>
<td>Fiscal Year Funding</td>
<td>Project Title</td>
<td>Principal Investigator</td>
<td>Agency</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>$281,800</td>
<td>Use of the IL-1 Proliferation and Cytokine Activity for Antigen Presentation</td>
<td>Joseph Coggin</td>
<td>NIH 5 RO1 CA 08603</td>
</tr>
<tr>
<td>222,530</td>
<td>Mechanisms and Control of Acid Resistance in E. coli</td>
<td>John Foster</td>
<td>NIH 5 RO1 GM 061147</td>
</tr>
<tr>
<td>99,689</td>
<td>Cold-Induced Hibernation of Marine Vibrios in the Gulf of Mexico</td>
<td>Robert Lausch</td>
<td>NIH 5 RO1 EY 11493</td>
</tr>
<tr>
<td>292,000</td>
<td>FC Gamma Receptors and Resistance to Herpes</td>
<td>David McGee</td>
<td>NIH 5 RO1 CA 101931</td>
</tr>
<tr>
<td>317,792</td>
<td>Helicobacter Pylori Arginase Modulation of Ulcers and Cancer</td>
<td>Herbert Winkler</td>
<td>NIH 5 RO1 A1 015035</td>
</tr>
<tr>
<td>$504,775</td>
<td>Permeability of the Epidemic Typhus Rickettsiae</td>
<td></td>
<td>NIH 5 RO1 A1 045533</td>
</tr>
<tr>
<td>285,384</td>
<td>Genomic Level Expression Patterns in Typhus Rickettsiae</td>
<td></td>
<td>NIH 5 R37 AI 020384</td>
</tr>
<tr>
<td>325,125</td>
<td>Genetic Analysis of Rickettsia Prowazkii</td>
<td></td>
<td>NIH 5 RO1 A1 055913</td>
</tr>
<tr>
<td>362,240</td>
<td>Global Analysis of the Rickettsia Prowazkii Proteome</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>John Rothrock</td>
<td>Abbott Laboratories</td>
<td>The Safety and Efficacy of Divalproex Sodium Extended-Release Tablets in Migrain Prophylaxis: A Double-Blind, Placebo-Controlled Study in Adolescents</td>
<td>$ 26,176</td>
</tr>
<tr>
<td>Ortho-McNeil</td>
<td>A Comparison of the Efficacy and Safety of Topiramate Versus Placebo for the Prophylaxis of Chronic Migraine</td>
<td>$ 15,050</td>
<td></td>
</tr>
<tr>
<td>GlaxoSmithKline</td>
<td>USA Headache School Study</td>
<td></td>
<td>$ 5,000</td>
</tr>
<tr>
<td>Elan Pharma</td>
<td>A Double-Blind, Randomized, Multicenter, Parallel Dose Study to Evaluate the Safety and Efficacy of Zonisamide 150mg and 300mg per Day and Placebo in Subjects with Migraine Headache</td>
<td>$ 23,794</td>
<td></td>
</tr>
<tr>
<td>Ortho-McNeil</td>
<td>A Comparison of the Efficacy and Safety of ULTRACET (Tramadol HCL/Acetaminophen) Versus Placebo for the Acute Treatment of Migraine Headache Pain: CAPSS-223</td>
<td>$ 3,091</td>
<td></td>
</tr>
<tr>
<td>Richard Zweifler</td>
<td>Aventis</td>
<td>An Open-label, Randomized, Parallel-Group, Multicenter Study to Evaluate the Efficacy and Safety of Enoxaparin Versus Unfractionated Heparin in the Prevention of Venous Thromboembolism in Patients Following Acute Ischemic Stroke</td>
<td>$ 7,500</td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Richard Zweifler</td>
<td>Centocor/Omicare</td>
<td>Abciximab in Acute Ischemic Stroke: A Phase III, Multinational, Multicenter, Randomized, Double-Blind, Placebo-Controlled Trial</td>
<td>$ 3,000</td>
</tr>
<tr>
<td>Boehringer Ingelheim</td>
<td></td>
<td>ProFESS- Prevention Regimen for Effectively Avoiding Second Strokes: A Double-Blind, Active and Placebo Controlled Study of Aggrenox Versus Clopidogrel + Aspirin, with and Without Micardis</td>
<td>7,496</td>
</tr>
<tr>
<td>Medivance, Inc.</td>
<td></td>
<td>Mild Induced Hypothermia in Awake, Unanesthetized Healthy Volunteers</td>
<td>2,500</td>
</tr>
<tr>
<td>Pfizer</td>
<td></td>
<td>A Double-Blind, Randomized, Placebo-Controlled Study of Atorvastatin as Prevention of Cerebrovascular Events in Patients with a Previous Transient Ischemic Attack (TIA) or Stroke</td>
<td>2,850</td>
</tr>
<tr>
<td>Sanofi-Synthelabo</td>
<td></td>
<td>Management of Atherothrombosis with Clopidogrel in High Risk Patients with Recent Transient Ischemic Attack or Ischemic Stroke</td>
<td>5,220</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$ 101,677</strong></td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>Agency</td>
<td>Project Title</td>
<td>Fiscal Year Funding</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Kathleen Porter</td>
<td>ADPH C 40118062</td>
<td>FY2004 Perinatal Coordinator Grant</td>
<td>$11,500</td>
</tr>
<tr>
<td>Kathleen Porter</td>
<td>NIH 5 U01HD039939</td>
<td>Vaginal Ultrasound Cerclage Trial</td>
<td>32,199</td>
</tr>
<tr>
<td>Botros Rizk</td>
<td>Eli Lilly</td>
<td>Teriparatide (rDNA origin) Injection (LY333334)</td>
<td>6,630</td>
</tr>
<tr>
<td>Solvay Pharma</td>
<td></td>
<td>A Multicenter, Double-Blind Study to Determine the Efficacy of ESTRATEST H.S. Tablets in Relieving Menopausal Symptoms in Estrogenized Postmenopausal Women</td>
<td>4,950</td>
</tr>
<tr>
<td>Solvay Pharma</td>
<td></td>
<td>A Multicenter, Double-Blind Study to Determine the Efficacy of ESTRATEST H.S. Tablets in Relieving Menopausal Symptoms in Estrogenized, Non-Hysterectomized Postmenopausal Women</td>
<td>5,400</td>
</tr>
<tr>
<td>Solvay Pharma</td>
<td></td>
<td>A Multicenter, Double-Blind Study to Determine the Efficacy of ESTRATEST H.S. Tablets in Relieving Menopausal Symptoms in Estrogenized, Hysterectomized Postmenopausal Women</td>
<td>4,200</td>
</tr>
<tr>
<td>Proctor &amp; Gamble</td>
<td></td>
<td>A Phase III, Multinational, Randomized, Double-Blind, Parallel-Group, Placebo-controlled 24 Week Study to Evaluate the Efficacy and Safety of Transdermal Testosterone in Naturally Menopausal Women with Hypoactive Sexual Desire Disorder on Current Oral Hormone Replacement Therapy</td>
<td>24,540</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$89,419</strong></td>
</tr>
</tbody>
</table>
### ORTHOPAEDIC SURGERY

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudhakar Madanagopal</td>
<td>K &amp; W Associates</td>
<td>Antibiotic Beads for the Prevention of Infection in Open Tibia Fractures</td>
<td>$ 4,200</td>
</tr>
</tbody>
</table>
| Albert Pearsall, IV          | Zimmer             | (1) The Determination of Viscoelastic Properties of the Human Supraspinatus Tendon  
|                             |                    | Total                                                                        | $ 71,916            |

### PATHOLOGY

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth Manci</td>
<td>NIH 1 RO1HL073307 (SUBCON EMORY UNIV)</td>
<td>Allogeneic Chimerism in Murine Sickle Cell Disease</td>
<td>$ 21,274</td>
</tr>
<tr>
<td></td>
<td>NIH 2 RO1HL019278</td>
<td>Beta-3 Integrins in Platelet and Vaso-Occlusive Disorders</td>
<td>14,036</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>$ 35,310</td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Fabien Eyal</td>
<td>Inhibetex</td>
<td>A Phase III, Randomized, Double-Blinded, Multicenter Clinical Trial Comparing the Safety and Efficacy of Veronate Versus Placebo for the Prevention of Nosocomial Staphylococcal Sepsis in Premature Infants (birth weight 500-1250g)</td>
<td>$ 17,700</td>
</tr>
<tr>
<td>Mary Mancao</td>
<td>HRSA 1 H12HA23027</td>
<td>USA Family Specialty Clinic</td>
<td>25,000</td>
</tr>
<tr>
<td></td>
<td>NIH 5 U01AI41025</td>
<td>Southeast Pediatric Aids Clinical Trial Unit</td>
<td>105,550</td>
</tr>
<tr>
<td></td>
<td>HRSA 2 H12HA23027</td>
<td>USA Family Specialty Clinic</td>
<td>335,713</td>
</tr>
<tr>
<td>Jorge Quinonez</td>
<td>Wyeth Research</td>
<td>A Pilot Study of Two GERD Symptom Questionnaires In Infants Aged 1 through 11 Months (GSQ-1) and Young Children Aged 1 Year though 4 Years (GSQ-YC)</td>
<td>5,700</td>
</tr>
<tr>
<td>Kenneth Rettig</td>
<td>Novo Nordisk</td>
<td>Basal/Bolus Therapy with Insulin Aspart (NovoLog) Versus Regular Human Insulin (Novolin R) or Insulin Lispro (Humanlog) in Combination with NPH: An Open-label, Randomized, Parallel Group, Multicenter Study in Children and Adolescents with Type 1 Diabetes</td>
<td>6,877</td>
</tr>
<tr>
<td>Lawrence Sindel</td>
<td>CFF</td>
<td>Cystic Fibrosis Center Program</td>
<td>20,443</td>
</tr>
</tbody>
</table>
## PEDIATRICS (cont'd)

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felicia Wilson</td>
<td>Purdue Pharma</td>
<td>Multicenter, Open-label, Multiple-Dose Study of the Conversion from Immediate Release Oxycodone to Controlled Release Oxycodone to Evaluate Pharmokinetics and to Characterize Safety and Efficacy in Pediatric Patients 6 to 16 Years of Age</td>
<td>$ 2,500</td>
</tr>
<tr>
<td></td>
<td>Genzyme</td>
<td>A Multicenter, Multinational, Open-label Extension Study of the Safety and Efficacy of Recombinant Human Alpha-L Iduronidase in Patients with Mucopolysaccharidosis I (MPS-I)</td>
<td>4,825</td>
</tr>
<tr>
<td>Yih-Ming Yang</td>
<td>NIH U10CA98543</td>
<td>Children's Oncology Group Chair's Grant</td>
<td>8,885</td>
</tr>
<tr>
<td></td>
<td>NIH U10CA98543</td>
<td>Children's Oncology Group Chair's Grant</td>
<td>12,939</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$ 546,132</strong></td>
</tr>
</tbody>
</table>
### PHARMACOLOGY

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abu-Bakr Al-Mehdi</td>
<td>NIH 5 P50AT000428</td>
<td>Specialized Center of Research in Hyperbaric Oxygen Therapy</td>
<td>$177,698</td>
</tr>
<tr>
<td>June Ayling</td>
<td>Pamlab, LLC</td>
<td>Bioavailability of Naturally Occurring Methylethahydrofolate (MTHF) Research</td>
<td>70,250</td>
</tr>
<tr>
<td></td>
<td>NIH 5 RO1HL068165</td>
<td>Pharmacokinetics and Metabolic Effects of Folic Acid</td>
<td>462,248</td>
</tr>
<tr>
<td>Michael Chinkers</td>
<td>NIH 5 RO1DK055877</td>
<td>Steroid Receptor Regulation by TPR Proteins</td>
<td>256,960</td>
</tr>
<tr>
<td>Mark Gillespie</td>
<td>SE AHA 0415537B</td>
<td>EDHB, A Prolyl Hydroxylase Inhibitor, Stimulates Reactive Oxygen Species Production in Rat Liver Mitochondria (Fellowship)</td>
<td>18,000</td>
</tr>
<tr>
<td></td>
<td>NIH 5 RO1HL058234</td>
<td>DNA Lesions and Gene Expression in Hypoxic Lung Disease</td>
<td>328,500</td>
</tr>
<tr>
<td>SYNT:EM</td>
<td></td>
<td>Lung BioDistribution of SynD6 Vector Coupled to an Anticancer Drug</td>
<td>4,973</td>
</tr>
<tr>
<td>NIH PO1HL066299</td>
<td></td>
<td>Mitochondrial DNA Integrity and Endothelium Cell Free Radical Stress **</td>
<td>322,179</td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Jonathan Scammell</td>
<td>NIH 5 R24RR013200</td>
<td>An Animal Model of Glucocorticoid Resistance</td>
<td>$ 255,500</td>
</tr>
<tr>
<td>Troy Stevens</td>
<td>AHA, SE AFFIL</td>
<td>Pseudomonas Aeruginosa Adenyyl Cyclase Synthesizes a cAMP Pool That Induces Pulmonary Microvascular Endothelial Gap Formation (Fellowship)</td>
<td>18,000</td>
</tr>
<tr>
<td></td>
<td>NIH 5 RO1HL060024</td>
<td>Store Operated Ca^{2+} Entry: Lung Endothelial Permeability</td>
<td>267,162</td>
</tr>
<tr>
<td></td>
<td>NIH PO1HL066299</td>
<td>Calcium Inhibition of cAMP Endothelial Cell Permeability-Project 1**</td>
<td>300,214</td>
</tr>
<tr>
<td></td>
<td>NIH PO1HL066299</td>
<td>Program Project Grant Administrative Core 1**</td>
<td>127,587</td>
</tr>
<tr>
<td></td>
<td>NIH PO1HL066299</td>
<td>Program Project Grant Cell Culture Core 2**</td>
<td>183,843</td>
</tr>
<tr>
<td>Songwei Wu</td>
<td>NIH 1 RO1HL074116</td>
<td>Lung Endothelial in Vaso-Oclusion</td>
<td>255,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>$3,048,614</td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Stephen Ballard</td>
<td>NIH 5 RO1HL063302</td>
<td>Airway Submucosal Glands and Cystic Fibrosis Disease</td>
<td>$ 252,875</td>
</tr>
<tr>
<td>Michael Cohen</td>
<td>NIH 5 RO1HL050688</td>
<td>Catechols and Adenosine in Myocardial Preconditioning</td>
<td>255,500</td>
</tr>
<tr>
<td></td>
<td>Bayer AG</td>
<td>Inhibition of Ischemic Injury by an Antagonist Of CysL T2</td>
<td>25,000</td>
</tr>
<tr>
<td>James Downey</td>
<td>NIH 5 RO1HL020648</td>
<td>Physical Factors and Coronary Flow</td>
<td>255,500</td>
</tr>
<tr>
<td>Thomas Lincoln</td>
<td>NIH 5 RO1HL066164</td>
<td>CGMP-Dependent Protein Kinase PKG Expression</td>
<td>365,000</td>
</tr>
<tr>
<td>James Parker</td>
<td>NIH  PO1HL066299</td>
<td>Mechanical Injury to Endothelium Cell**</td>
<td>262,346</td>
</tr>
<tr>
<td>Mark Taylor</td>
<td>NATL AHA</td>
<td>Coronary Artery Regulation by Small-Conductance Ca2+-Activated K+(SK3) Channels</td>
<td>65,000</td>
</tr>
<tr>
<td>Mary Townsley</td>
<td>AHA, SE AFFIL</td>
<td>Role of P450 Arachidonic Acid Metabolites in Regulation of Pulmonary Endothelial Cell Permeability (Fellowship)</td>
<td>18,000</td>
</tr>
<tr>
<td>PRINCIPAL INVESTIGATOR</td>
<td>AGENCY</td>
<td>PROJECT TITLE</td>
<td>FISCAL YEAR FUNDING</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Mary Townsley</td>
<td>NIH 5 RO1HL067461</td>
<td>T-Lymphocyte Involvement in Lung Ischemia-Reperfusion</td>
<td>$ 289,000</td>
</tr>
<tr>
<td></td>
<td>NIH 1 T32HL076125</td>
<td>Training in Cell Signaling and Lung Pathobiology**</td>
<td>120,815</td>
</tr>
<tr>
<td>David Weber</td>
<td>NATL AHA</td>
<td>Reactive Oxygen Species Regulation of Vascular Smooth Muscle Migration</td>
<td>90,268</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td>$1,999,304</td>
</tr>
</tbody>
</table>

**SURGERY**

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Boullier</td>
<td>Peninsula Pharma</td>
<td>A Multicenter, Phase 3 Study to Confirm the Safety and Efficacy of Intravenous Doripenem in Complicated Lower Urinary Tract Infection or Pyelonephritis</td>
<td>$ 3,293</td>
</tr>
<tr>
<td>Richard Gonzalez</td>
<td>DOT</td>
<td>Center for the Study of Rural Vehicular Trauma</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>Agency</td>
<td>Project Title</td>
<td>Fiscal Year Funding</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Juvonda Hodge</td>
<td>Ortho-McNeil</td>
<td>A Multicenter, Open-label, Randomized Study to Compare the Safety and Efficacy of Once Daily Levofoxacin Along with Once Daily Metronidazole Versus Piperacillin/Tazobactam in the Treatment of Complicated Appendicitis</td>
<td>$ 5,500</td>
</tr>
<tr>
<td>Joseph LoCicero</td>
<td>Chest Foundation</td>
<td>Critical Care Family Assistance Program Replication Project</td>
<td>39,303</td>
</tr>
<tr>
<td>Arnold Luterman</td>
<td>Wyeth Pharma</td>
<td>A Phase3, Multicenter, Double-Blind, Randomized (3:1) Study Evaluating Tigecycline and Linezolid for the Treatment of Selected Serious Infections in Subjects with Vancomycin-Resistant Enterococcus and Evaluating Tigecycline and Vancomycin for the Treatment of Selected Infections in Subjects with Methicillin-Resistant Staphylococcus</td>
<td>5,227</td>
</tr>
<tr>
<td></td>
<td>Baxter Healthcare</td>
<td>A Study to Evaluate the Safety and Efficacy of Fibrin Sealant with 4IU/ML Thrombin Vapor Heated, Solvent/Detergent Treated (FS 4IU VH S/D) to Adhere Tissues and Improve Wound Healing</td>
<td>6,550</td>
</tr>
<tr>
<td></td>
<td>Peninsula Pharma</td>
<td>A Multicenter, Double-Blind, Randomized, Phase 3 Study to Compare the Safety and Efficacy of Intravenous Doripenem with that of Meropenem in Complicated Intra-abdominal Infections</td>
<td>4,000</td>
</tr>
</tbody>
</table>
### SURGERY (cont’d)

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR</th>
<th>AGENCY</th>
<th>PROJECT TITLE</th>
<th>FISCAL YEAR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arnold Luterman</td>
<td>Baxter Healthcare</td>
<td>A Prospective, Multicenter, Double-Blind With In-House Blinding, Randomized, Comparative Study to Evaluate the Efficacy, Safety, and Tolerability of Ertapenem Versus Piperacillin/Tazobactam in the Treatment of Diabetic Foot Infections in Adults</td>
<td>$ 10,239</td>
</tr>
<tr>
<td>Velma Scantlebury</td>
<td>Fujisawa/Clinimetrics</td>
<td>A Phase III, Randomized, Open Label, Comparative Multicenter Study to Access the Safety and Efficacy of Prograf/MMF in De Novo Kidney Transplant Recipients</td>
<td>32,034</td>
</tr>
<tr>
<td>Bartel Turk</td>
<td>Pharmacia</td>
<td>Clinical Protocol for a Multiple Dose, Randomized, Double-Blinded, Placebo Controlled Study of the Analgesic Efficacy and Safety of Valdecoxb Compared to Placebo in Patients for Treatment of Post-Surgical Pain from Laparoscopic Cholecystectomy Surgery</td>
<td>8,723</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>$ 1,114,869</td>
</tr>
</tbody>
</table>
2003-2004
OFFICE OF STUDENT AFFAIRS AND MEDICAL EDUCATION

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 Alumni Affairs. In the past academic year, the former functions of Student Affairs were subdivided and an Assistant Dean of Curriculum and an Assistant Dean of Graduate Medical Education were appointed.

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

Student Affairs

Orientation programs, entirely organized by sophomore student efforts, were held for entering Freshmen on August 11-13, 2004. Sixty-eight students attended two days of structured activities which included introductory talks or presentations from the COM administration, Biomedical Library, Counseling Services, and various student organizations, a course in CPR and a book and instrument sale. Events included dinners at faculty homes on Wednesday night and a variety of optional activities on Friday. Orientation concluded with a party at Stewartfield House on the Springhill College campus on Friday night. These events were all very well attended and enjoyed by everyone.

Junior Orientation was held in the Mastin Building on the USAMC Campus on May 10, 2004. Dr. Rettig organized the activities which included advice from faculty and students on how to succeed in the Junior year. Additional presentations were made by staff from Medical Records, Risk Management, Infection Control, Quality Assurance, the Biomedical Library, and Hospital Safety and Security. In addition, the students were recertified in Basic Life Support.

The third annual White Coat Ceremony, sponsored again this year by the Medical Alumni Association, was held on Saturday, May 8, 2004, in the University Ballroom. Students and their families were welcomed by Dr. Margaret O’Brien for the Office of Student Affairs and Dr. Oscar Almeida for the Medical Alumni Association. Dr. Robert Kreisberg, Dean of the College of Medicine and Vice-President for Medical Affairs gave a short talk on what it means to be a physician. Following his address, Dr. John Bass presented members of the sophomore class with a white coat and a lapel pin (courtesy of the USACOM Alumni Association and the Arnold P. Gold Foundation for Humanism in Medicine, respectively). Dr. Robert Kreisberg administered the USA "Medical Student Oath." The president of the class, Kenneth Davenport, gave a brief talk which was followed by a “Clinical Welcome” by Dr. John Bass. The formal program was followed by a reception in the College of Medicine Conference Room. The events were well attended and received good reviews from all who came.
## Academic Progress of Medical Students

Source: Part II of LCME Annual Medical School Questionnaire

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Students in Class</td>
<td>60</td>
<td>65</td>
<td>64</td>
<td>65</td>
<td>67</td>
</tr>
<tr>
<td>Graduates</td>
<td>58</td>
<td>65</td>
<td>60</td>
<td>59</td>
<td>60</td>
</tr>
<tr>
<td>True Attrition (will not receive M.D. in any year)</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1999-00</th>
<th>2000-01</th>
<th>2001-02</th>
<th>2002-03</th>
<th>2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dismissed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Sophomores</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Juniors</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Seniors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</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>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Sophomores</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Juniors</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Transferred to Another Medical School</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Withdrew</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Admitted with Advanced Standing or Re-entered from Graduate School</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Deceased</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Repeated All or Part of the Year</td>
<td>4</td>
<td>11</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Enrolled on a Decelerated Schedule</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

## Minority Students (Black, Native American, Hispanic)

<table>
<thead>
<tr>
<th></th>
<th>1999-00</th>
<th>2000-01</th>
<th>2001-02</th>
<th>2002-03</th>
<th>2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>49</td>
<td>32</td>
<td>38</td>
<td>35</td>
<td>30</td>
</tr>
<tr>
<td>Freshmen</td>
<td>14</td>
<td>7</td>
<td>12</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>All Other Classes</td>
<td>35</td>
<td>25</td>
<td>26</td>
<td>26</td>
<td>23</td>
</tr>
</tbody>
</table>
United States Medical Licensure Examination (USMLE) Step 1
First Time Takers

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students</td>
<td>66</td>
<td>56</td>
<td>63</td>
<td>64</td>
<td>62</td>
</tr>
<tr>
<td>National Overall Mean</td>
<td>215</td>
<td>215</td>
<td>215</td>
<td>216</td>
<td>216</td>
</tr>
<tr>
<td>USACOM Overall Mean</td>
<td>216</td>
<td>218</td>
<td>213</td>
<td>207</td>
<td>210</td>
</tr>
<tr>
<td>Failure Rate - National</td>
<td>7%</td>
<td>8%</td>
<td>10%</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Failures at USA</td>
<td>5%(3)</td>
<td>0</td>
<td>5%</td>
<td>14%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Standard Deviation approximately 20

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

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students</td>
<td>59</td>
<td>64</td>
<td>57</td>
<td>59</td>
<td>Not Avail.</td>
</tr>
<tr>
<td>National Overall Mean</td>
<td>213</td>
<td>215</td>
<td>216</td>
<td>216</td>
<td>Not Avail.</td>
</tr>
<tr>
<td>USACOM Overall Mean</td>
<td>217</td>
<td>212</td>
<td>221</td>
<td>215</td>
<td>Not Avail.</td>
</tr>
<tr>
<td>Failure Rate - National</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
<td>4%</td>
<td>Not Avail.</td>
</tr>
<tr>
<td>Failures at USA</td>
<td>2%(1)</td>
<td>5%(3)</td>
<td>0</td>
<td>7%</td>
<td>Not Avail.</td>
</tr>
</tbody>
</table>

Points above and below national mean in parentheses

NA = Not Available. Individual 3-digit scores no longer reported after 2001

Minimum passing score = 170 for Class of 1997-2000; 174 beginning with Class of 2001; 182 beginning with the Class of 2004
Standard deviation = approximately 20
### United States Medical Licensure Examination (USMLE) Step 3

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>National Percentage Passing</td>
<td>96</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>96</td>
</tr>
<tr>
<td>USA Percentage Passing</td>
<td>100</td>
<td>100</td>
<td>98</td>
<td>100</td>
<td>96</td>
</tr>
<tr>
<td>USA Number of Students</td>
<td>58</td>
<td>62</td>
<td>53(^{*})</td>
<td>51(^{**})</td>
<td>50(^{***})</td>
</tr>
</tbody>
</table>

\(^{*}\)53/58 students have taken Step 3 as of 4/03  
\(^{**}\)51/59 students have taken Step 3 as of 8/03  
\(^{***}\)50/65 students have taken Step 3 as of 12/03
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 2002 graduates. A total of 39 responses was received out of 60 requests. Below is a summary of the responses to the four major areas that were assessed. Note that according to the results of the most recent questionnaire, about 60% of our graduates were felt to be functioning in the top fifth and upper middle fifth of their PGY-1 groups.

<table>
<thead>
<tr>
<th></th>
<th>Class of 2000</th>
<th>Class of 2001</th>
<th>Class of 2002</th>
<th>Class of 2003</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>24%</td>
<td>19%</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>Upper Middle Fifth</td>
<td>48%</td>
<td>55%</td>
<td>31%</td>
<td>28%</td>
</tr>
<tr>
<td>Middle Fifth</td>
<td>28%</td>
<td>23%</td>
<td>43%</td>
<td>36%</td>
</tr>
<tr>
<td>Lower Middle Fifth</td>
<td>2%</td>
<td>2%</td>
<td>0%</td>
<td>10%</td>
</tr>
<tr>
<td>Bottom Fifth</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Data Collection</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top Fifth</td>
<td>38%</td>
<td>15%</td>
<td>26%</td>
<td>21%</td>
</tr>
<tr>
<td>Upper Middle Fifth</td>
<td>28%</td>
<td>57%</td>
<td>44%</td>
<td>52%</td>
</tr>
<tr>
<td>Middle Fifth</td>
<td>35%</td>
<td>26%</td>
<td>28%</td>
<td>26%</td>
</tr>
<tr>
<td>Lower Middle Fifth</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Bottom Fifth</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<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>40%</td>
<td>19%</td>
<td>33%</td>
<td>21%</td>
</tr>
<tr>
<td>Upper Middle Fifth</td>
<td>38%</td>
<td>51%</td>
<td>33%</td>
<td>55%</td>
</tr>
<tr>
<td>Middle Fifth</td>
<td>19%</td>
<td>25%</td>
<td>33%</td>
<td>24%</td>
</tr>
<tr>
<td>Lower Middle Fifth</td>
<td>2%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Bottom Fifth</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Professional Attitudes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top Fifth</td>
<td>45%</td>
<td>40%</td>
<td>44%</td>
<td>28%</td>
</tr>
<tr>
<td>Upper Middle Fifth</td>
<td>43%</td>
<td>53%</td>
<td>31%</td>
<td>52%</td>
</tr>
<tr>
<td>Middle Fifth</td>
<td>12%</td>
<td>2%</td>
<td>23%</td>
<td>17%</td>
</tr>
<tr>
<td>Lower Middle Fifth</td>
<td>0%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Bottom Fifth</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

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

The 2003-2004 Curriculum committee was chaired by Dr. Susan LeDoux. During the 2003-2004 academic year, the Curriculum Committee focused on five areas. They were: (1) use of computers, (2) fourth year electives, (3) Psychiatry clerkship, (4) USMLE Step I performance, and (5) standardized student evaluations.

The Computers in Curriculum Subcommittee, chaired by Mrs. Judith Burnham of the Biomedical Library, was initially charged with identifying an appropriate platform and modules to be required and utilized in our curriculum. The strategy that the subcommittee followed was to first do a current "needs assessment." A questionnaire was generated and distributed to all course/clerkship directors. Based on data collected via the questionnaire, the report issued by the Medical Informatics Advisory Panel (AAMC) and other appropriate sources, the Computers in Curriculum Subcommittee made the following recommendations: (1) Data from the questionnaire revealed that faculty computers are "adequate" or "state-of-the-art" (86%-basic sciences; 100%-COM III), however, in order to maintain this level, funding should be set aside to upgrade a percentage of the COM faculty computers each year. (2) Based on data from the questionnaire concerning present and future plans, a recommendation was made that incoming freshman students should be required to have a laptop that can be used in the classroom and/or lab settings for access to course-related resources. This laptop should have a wireless connection and should include: Windows XP, Office Professional with Word, Excel, PowerPoint, Publisher, Access and Outlook, Adobe Photoshop Elements, Adobe Acrobat Reader, Endnote, and Stedman's Medical Spellchecker. Students will be responsible for purchasing their own laptops with the following minimum requirements: 20G, 256M, internal CDRWs, and wireless internal network cards. Advice should be available from the COM for students who need it. (3) While current data does not indicate a need for PDAs, the need for PDAs, based on curricular needs, should be evaluated each year. (4) Wireless networks should be established in all COM classrooms and labs that are used for instructional purposes with adequate ports for all students to access simultaneously. (5) Personnel should be added to COM who would provide guidance and instruction on incorporating technology into the curriculum, including eCompanion. This individual(s) should have a degree in instructional design. (6) Personnel should be added to COM who can provide expertise for maintenance, troubleshooting, etc. of COM computers, servers, networks, etc. (7) Workshops on incorporating technology into the curriculum should be developed and required for course directors. Course directors have indicated a need for instruction (40%-basic science; 83%-COM III) in test administration, server management/LAN basics/networking, instruction/lectures, PowerPoint, use of multimedia sources, distance learning, teleconference, Excel, PowerPoint, Word, Access, DVD, CD, floppy use, and PDA applications. (8) Continue instruction in library resources and evidence-based medicine currently conducted by the Biomedical Library. (9) Encourage COM IV electives to incorporate literature access and evaluation. (10) Basic computer literacy skills will be required of incoming freshmen including: launching a computer application, saving work to a computer file, printing a file, copying a file for use on another computer, using standard word processing program to create and edit a formatted document using tables and graphics, using electronic mail effectively, including proper etiquette, access to and use of the World Wide Web.
A Fourth Year Elective Subcommittee, chaired by Dr. Michael Culpepper, was formed to review the content and execution of fourth year electives. The Subcommittee collected data regarding fourth year electives, and, based on this data, a proposal was made and approved by the Curriculum Committee that involved codifying the standards for acting internships enabling certain previously listed electives to qualify as acting internships. The proposal set forth the standards required for a designated acting internship, essentially requiring student performance at a PGY-1 level. Possible existing rotations that could qualify include, several Surgical Subspecialties, Neurology and Emergency Medicine. The recommendation was made that students be required to do two acting internships in the fourth year. These changes will increase the number of required rotations in the fourth year from five to six. Additionally, a proposal was approved that all electives for the fourth year provide a minimum “contact time” of four hours per day. The contact time could consist of time with patients, time rounding with an attending, time in the operating room, time in conferences, etc. Further, the Course Directors should provide self-study/directed opportunities in addition to the four hours of contact time. Other electives are valuable, but may not provide the required daily contact hours. For those electives, partnering with other courses to obtain a sufficient number of contact hours was necessary.

The Psychiatry/Neurology Clerkship Subcommittee, chaired by Dr. O’Brien, was charged to collect data and further evaluate a proposed change in the length of the Psychiatry/Neurology rotation from three + three to four + four weeks. As a result of meetings with Drs. O’Brien and Cepeda, substantive changes to the rotation’s goals and objectives were made as well as the venue of the clerkship. Treatment modalities are now emphasized, as are lifelong learning skills and importantly, communication skills. Additional clinical exposure will be provided through an affiliation with Mobile Mental Health. In terms of substance, textbooks will be required and a detailed didactic syllabus complete with reading assignments is now included.

The Subcommittee on the USMLE Step 1 Examination, chaired by Dr. LeDoux, was charged to determine what could be done to enhance student performance on USMLE Step I. To try to determine whether there was quantitative data which would aid in our ability to identify students “at risk”, variables including undergraduate GPA, MCAT, grades in Organic Chemistry and Physics, undergraduate institution attended, and grades in the Basic Science Courses were analyzed by Dr. James Van Hanagen, Professor in the Department of Behavioral Studies and Educational Technology in the College of Education at USA. The results of this analysis suggested that the only predictor of students “at risk” was five or more “C’s” in the Basic Science courses. Additionally, a questionnaire was developed and given to the students in the summer of 2003 which contained questions focusing particularly on study habits. Based on the data obtained from both the retrospective analysis of variables and the questionnaire, the decision was made to provide our students with the opportunity for more structured preparation for USMLE Step I.
In the spring of 2004, arrangements were made for students to take the NBME Comprehensive Basic Sciences exam. Previously this had never been done at USA. This was followed by a review presented for each of the courses taught in the first year. Students that had been identified as “at risk”, (those who had made 5 “C’s” or more) were required to attend the reviews. The reviews were optional for all other students. Arrangements were made so that the students then took an eight hour computer simulated exam provided by KAPLAN.

After each of the exams, the students received feedback concerning their performance in the individual areas.

The Standardized Student Evaluation Subcommittee was formed to develop uniform course evaluations to be primarily available on-line. Dr. Lee Taylor served as chair of the subcommittee. The focus on the Committee was to develop a Web-based standardized evaluation with a minimal number of questions to centralize the information in order to determine trends. At the April Curriculum Committee meeting Dean Collins, the computer specialist in Family Medicine, was present to demonstrate a proposed evaluation. Basically, the student can flag down the course and faculty and utilize standard questions for both. Once the evaluation is submitted, it goes to a database with the student number but the student number is not reported to the departments. Designing an evaluation for each faculty member is challenging because there are numerous faculty in particular departments. All present agreed that a common evaluation form would be in everyone’s best interest.
EXECUTIVE COMMITTEE OF STUDENT ASSEMBLY

1. Following a vote of the senior class, the Student Assembly presented plaques to the best faculty/courses and updated the permanent plaques located in 1005 MSB and in the USAMC Biomedical Library:

   Best Basic Science Course: Pathology
   Best Basic Science Instructor: Roger Lane, Ph.D.
   Best Clerkship: Internal Medicine
   Best Clinical Instructor: John Bass, M.D.
   Best 4th Year Rotation: Diagnostic Electron Microscopy

2. Dr. Troy Stevens continued to serve as the Basic Science Faculty Advisor to the Student Assembly, and Dr. Martin Cunningham was selected by the Student Assembly to replace Dr. Steven Greenberg as the Clinical Faculty Advisor.

3. One of the big issues monitored by the Student Assembly was the implementation of the USMLE Step 2 Clinical Skills examination, which is required for all students graduating after 2004. During the year, Dean Kreisberg elected to require passage of the Clinical Skills exam as a requirement for graduation in addition to the already required passage of the USMLE Step 2 CK exam. The students were concerned about the expense of the clinical skills test itself ($975 for the test, few test sites available in the Country, requiring travel). Requiring passage of the exam for graduation allows the fees and travel to be included in financial aid packages. Thanks to the groundwork laid by Drs. Bennett and Rettig, the students were enrolled in a simulation of the Clinical Skills examination, which was held at Tulane Univ. in June, 2004. The total stipend of $450.00 per student was divided between each student ($150.00) and the College of Medicine ($300 per student).

4. Dr. O'Brien served as a liaison between the Curriculum Committee and the Student Assembly, keeping the Student Assembly abreast of changes, including the adoption of a new required 4th year course titled "Women's Health."

5. The student request regarding a "lounge" facility at the Medical Center was investigated and no available rooms were identified.

6. Kirkland Stein of Alabama Administrators met with the Student Assembly regarding health insurance. Although a rate increase occurred in the 2003-2004 academic years, she informed assembly members that the Blue Cross Blue Shield Insurance plan would be maintained at the current rate for the upcoming academic year.

7. The Student Assembly conducted an ongoing review of preparations for Skit Night and Review of Systems.

8. The Student Assembly discussed student wellness and counseling services and the best way to notify students of their availability. Also concerns about professionalism were discussed.
### OFFICE OF FINANCIAL AID

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Financial Aid</td>
<td>$5,012,708</td>
<td>$5,350,861</td>
<td>$6,025,601</td>
<td>$6,262,549</td>
<td>$6,996,664</td>
</tr>
<tr>
<td>Students on Aid</td>
<td>243</td>
<td>240</td>
<td>239</td>
<td>247</td>
<td>245</td>
</tr>
<tr>
<td><strong>Loans</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perkins</td>
<td>431,900</td>
<td>240,000</td>
<td>467,555</td>
<td>898,000</td>
<td>928,158</td>
</tr>
<tr>
<td>Health Professions Loan</td>
<td>123,081</td>
<td>231,307</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Stafford Loan</td>
<td>1,719,656</td>
<td>1,791,278</td>
<td>1,834,097</td>
<td>1,851,680</td>
<td>1,815,092</td>
</tr>
<tr>
<td>Graduate Unsubsidized</td>
<td>1,822,449</td>
<td>2,542,252</td>
<td>3,133,132</td>
<td>2,926,423</td>
<td>3,536,833</td>
</tr>
<tr>
<td>Alternative Loan Program</td>
<td>313,392</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Loans to Disadvantaged Students</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Outside Private Loans</td>
<td>31,589</td>
<td>33,200</td>
<td>18,500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Loans</strong></td>
<td>$4,442,067</td>
<td>$4,838,037</td>
<td>$5,453,284</td>
<td>$5,676,103</td>
<td>$6,280,083</td>
</tr>
<tr>
<td><strong>Scholarships</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Sponsored</td>
<td>295,050</td>
<td>344,600</td>
<td>367,950</td>
<td>372,200</td>
<td>417,638</td>
</tr>
<tr>
<td>Outside Sponsored</td>
<td>49,696</td>
<td>8,769</td>
<td>53,128</td>
<td>87,046</td>
<td>148,054</td>
</tr>
<tr>
<td>Military - Army</td>
<td>7,669</td>
<td>17,020</td>
<td>27,089</td>
<td>27,088</td>
<td>32,004</td>
</tr>
<tr>
<td>Military - Navy</td>
<td>38,513</td>
<td>25,548</td>
<td>27,081</td>
<td>27,060</td>
<td>21,300</td>
</tr>
<tr>
<td>Alabama Medical Board Scholarship</td>
<td>45,000</td>
<td>60,000</td>
<td>70,000</td>
<td>55,000</td>
<td>55,000</td>
</tr>
<tr>
<td>Military - Air Force</td>
<td>15,360</td>
<td>12,698</td>
<td>27,089</td>
<td>18,052</td>
<td>42,585</td>
</tr>
<tr>
<td><strong>Total Scholarships</strong></td>
<td>$451,288</td>
<td>$468,633</td>
<td>$572,317</td>
<td>$586,446</td>
<td>$716,581</td>
</tr>
<tr>
<td><strong>Average Indebtedness of a Graduating Senior</strong></td>
<td>$62,500</td>
<td>$70,103</td>
<td>$88,717</td>
<td>$82,904</td>
<td>$88,830</td>
</tr>
</tbody>
</table>

An Emergency Loan Fund is available to medical students. Loans of up to $500 may be obtained by students through a fund administered by the Office of Student Affairs and Medical Education for a period of up to 60 days for the purpose of alleviating an unanticipated financial need. There is no interest charged. During the period August 1, 2003, through July 31, 2004, 41 emergency loans were approved for a total amount of $20,500.00. During that period, 55 payments totaling $24,510.00 were paid back into the loan account.
OFFICE OF SPECIAL PROGRAMS

Biomedical Enrichment and Recruitment Program (BEAR):

Phase I:  
The summer of 2004 marked the completion of the eighteenth year for the BEAR program. There were a total of 31 applications submitted for the 2004 program. Seven (7) students entered into Phase I of the BEAR program.

The students selected for Phase I of the program represented the following schools:

Alabama A&M.................................................................1
Florida A&M .................................................................1
Mississippi Univ. for Women ...........................................1
Southern University ......................................................1
Talladega .................................................................1
Tuskegee .................................................................1
Xavier .................................................................1

and are residents of the states of Alabama (4), Louisiana (2), and Mississippi (1). Four (4) of the students are female and three (3) are male. All are African American. The grade point averages of the students who entered the program ranged from 3.16 to 4.0. Their ACT score range was 21-28. To date, a total of 186 students have entered the BEAR program.

Phase II:

Six (6) of the seven (7) students who participated in Phase I of the program during the summer of 2003 were successful and were promoted into Phase II.

The students in Phase II represented the following schools:

Alabama State .................................................................1
Alcorn .................................................................1
Tuskegee .................................................................1
UAB .................................................................1
USA .................................................................2

Of the Phase II students who participated, three (3) are residents of Alabama, one (1) is a resident of Georgia, and two (2) are residents of Mississippi. Six (6) of the students in Phase II were successful and are expected to matriculate into the USA College of Medicine in 2005.
In August 2003, seven (7) minority freshmen entered the College of Medicine; six of whom entered through the BEAR program. There were seven (7) 2004 minority graduates; six (6) were former BEAR program participants.

In the fall of 2004, five (5) BEAR students matriculated into the freshmen COM class from the original 2002 BEAR cohort of seven (7). One (1) Alabama student from Alabama A&M from the original 2002 BEAR cohort chose to attend Vanderbilt University where she entered the graduate program in Organic Chemistry, and one Alabama student from the University of South Alabama did not successfully complete Phase II. The total number of minority students in the freshman year is eight which includes two BEAR students repeating the freshman year. In the fall of 2004 the total enrollment is 257 students; twenty-five (9.7%) are BEAR students.

RECRUITMENT

In addition to the BEAR program recruitment efforts, the Office of Special Programs visited five (5) universities in an effort to recruit students. The universities visited were: Alabama State, Miles College, Talladega, Tougaloo and Tuskegee. We have made 161 new contacts through recruitment visits, phone calls to the office, or campus visits by students. Also, in an effort to track and recruit students we have mailed forty (40) letters to freshmen, thirty (30) letters to sophomores, one hundred forty-six (146) letters to juniors, and eighty-seven (87) letters to seniors.
BEAR PROGRAM STATISTICS SUMMARY
June, 1986 - August, 2004

Total who entered program ........................................... 186
Total who did not successfully complete Phase I ......................... 25
Total who did not successfully complete Phase II ....................... 26
Total who participated in Phase I only ................................ 2*
Total who participated in Phase II only ............................. 9*
Total who did not return for Phase II ................................. 12
Total scheduled to enter Phase II in 2004 ............................ 7
Total who successfully completed both Phases ......................... 106

* - Entered USA COM after only 1 year in BEAR
** - Participated in Phase II for enrichment only
2 - Two students entered other medical schools after only one year in

TRACKING INFORMATION OF THE 106
SUCCESSFUL BEAR PROGRAM STUDENTS

Of the 106 students who completed both phases:

Total BEAR students entered USA COM to date ....................... 88
Graduated from USA COM ............................................. 47
  Graduated in 4 years = 28
Currently enrolled in medical ......................................... 25
Withdrew from medical school ......................................... 9
Dismissed from medical school ......................................... 7
Chose not to matriculate ............................................... 4
Enrolled in other institutions ......................................... 5
Graduated other institutions ......................................... 3
Scheduled to enter USA COM in 2005 ................................ 6
Retention in USA COM .................................................. 81%

TRADITIONAL MINORITY STUDENT STATISTICS SUMMARY

Total traditional students entered USA COM to date ................. 63
Graduated ................................................................. 41
  Graduated in 4 years (20*) ...................................... 02
Currently enrolled ...................................................... 11
Dismissed ................................................................. 9
Retention ................................................................. 68%

*Includes 2 students attending 1 year in BEAR
Office of Medical Alumni Affairs
Summary of Activities for 2003-04

The 2003-04 Board of Directors for the Medical Alumni Association consisted of the following alumni: Dr. Oscar D. Almeida (president), Dr. Damian Collins, Dr. Gregory Cotter, Dr. Lamar Duffy, Dr. Diana Hashimi (president-elect), Dr. Russell Hudgens, Dr. Amy Morris, Dr. Terry Rivers, Dr. David Ross, and Dr. Katie Webster (past president). Dr. Kent Robinson finished the term for Dr. Rivers who was deployed to Iraq and Dr. Collins rotated off the board. The Association has a current membership of 1740 graduates (1976-2004).

Alumni activities and support to student programs are funded through the Dues Program and the Medical Alumni Annual Fund. Both programs have been combined into one single contribution for the convenience of members. Twelve alumni were added to Lifetime Membership (a total of 169 members). The revenue from both programs totaled $47,495.

Fifteen alumni scholarships were awarded to incoming freshmen in 2003-04. A total of $156,000 thus far has been distributed for student-alumni scholarships. In addition, two other scholarships receive total support from the Association: The Christian Grinaker Scholarship ($500) and the Clyde "Sid" Huggins Scholarship ($1,000). The Les Sockwell Memorial Scholarship ($1,000) was established this year. Other academic awards sponsored by the Association include the Michael Moore Memorial Award for Excellence in Gross Anatomy (freshman award), the Medical Alumni Leadership Award (senior), and Travel Assistance Awards for senior students interested in international externships.

The Medical Alumni Association hosted its annual meeting at the Perdido Beach Resort (June 2004). The weekend included CME sessions and the presentation of a $50,000 gift for the Alumni Endowment Fund. The Association also presented a $1,000 gift to the Biomedical Library in honor of Dr. Betsy Bennett, the 2004 Distinguished Service Award recipient.

The Association sponsored the Medical Alumni Weekend, the White Coat Ceremony, the Senior Reception, the Mobile and Baldwin Chapter Meeting, the Mississippi Gulf Coast Chapter Meeting, and co-hosted two receptions for state meetings with the UAB Medical Alumni Association (Medical Association of the State of Alabama and the Academy of Alabama Family Physicians Annual Conference). A number of student organizations and activities received financial support from the Association.

The Medical Alumni Office publishes the Medical Alumni Newsletter (Winter and Summer). The office supports the COM Public Relations staff for alumni stories used in its publication – USA Medicine (Fall and Spring). The Medical Alumni Office also maintains a website on the College of Medicine homepage.
USA College of Medicine
Office of Admissions
Annual Report for 2001-2002

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 16, 2004, opened June 1st and closed November 15, 2003.

For the Class of 2008, seven hundred eighty-seven (787) applications were received. Three hundred fifty-three (353) applications were received from Alabama residents, four hundred two (402) from out of state U.S. citizens, and thirty-two (32) from citizens of foreign countries. The Admissions Committee interviewed a total of two hundred seven (207) applicants of which one hundred eighty-eight (188) were residents of Alabama. Of the applicants interviewed, one hundred twenty-eight (128) were offered admission to fill a class of sixty-four (64). Fifty-six (56) of the matriculating students are Alabama residents. Thirteen (13) offers of admission were made to Black applicants; six (6) will matriculate. Five (5) of the matriculating black students are BEAR (Biomedical Enrichment and Recruitment) students. This year, our records indicate an increase in the total number of applications received (787 in '04 vs. 766 in '03); there was a slight decrease in Alabama applicants (353 in '04 vs. 371 in '03). Table I gives comparative data since 2001.

The 2003 entering class has an exceptional "mix" of academically well-qualified students who graduated from twenty-six (26) colleges and universities. However, 47% of this year's class is made up of students from the four 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 500 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 or placed on the Web by the Office of Admissions:
   The Admissions Policies and Procedure Manual
   The College of Medicine Bulletin

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 15 Applicant Interview Day programs were conducted from September until early March. The interviewers, primarily College of Medicine basic science and clinical faculty, serve as members of the Committee on Admissions and/or ad hoc committee members. These members interviewed 207 candidates; each interviewee was interviewed by three committee members, giving a total of 621 interviews.

8. The following Admissions Committee subcommittees were active in 2003-04:
   Early Acceptance Program Subcommittee

**Early Acceptance Program**

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

In 2004, the EAP Subcommittee interviewed 45 applicants for the program and offered 15 acceptances.
Table I  
University of South Alabama College of Medicine Admissions Report

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Applicants</td>
<td>743</td>
<td>694</td>
<td>766</td>
<td>787</td>
</tr>
<tr>
<td><strong>Residence:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alabama</td>
<td>336</td>
<td>343</td>
<td>371</td>
<td>353</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>367</td>
<td>303</td>
<td>239</td>
<td>366</td>
</tr>
<tr>
<td>Service Areas (FL &amp; MS)</td>
<td>30</td>
<td>31</td>
<td>49</td>
<td>36</td>
</tr>
<tr>
<td>Foreign</td>
<td>10</td>
<td>17</td>
<td>17</td>
<td>32</td>
</tr>
<tr>
<td>Alabama Female</td>
<td>139</td>
<td>149</td>
<td>183</td>
<td>156</td>
</tr>
<tr>
<td>Out-of-State Female</td>
<td>189</td>
<td>155</td>
<td>197</td>
<td>179</td>
</tr>
<tr>
<td>Alabama Rural</td>
<td>66</td>
<td>70</td>
<td>81</td>
<td>75</td>
</tr>
<tr>
<td>Alabama Black</td>
<td>54</td>
<td>48</td>
<td>59</td>
<td>56</td>
</tr>
<tr>
<td>Out-of-State Black</td>
<td>49</td>
<td>35</td>
<td>48</td>
<td>34</td>
</tr>
<tr>
<td><strong>Total Applicants Interviewed</strong></td>
<td>199</td>
<td>194</td>
<td>191</td>
<td>207</td>
</tr>
<tr>
<td><strong>Residence:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alabama</td>
<td>189</td>
<td>178</td>
<td>170</td>
<td>188</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>7</td>
<td>9</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Service Areas (FL &amp; MS)</td>
<td>2</td>
<td>8</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Foreign</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>79</td>
<td>91</td>
<td>76</td>
</tr>
<tr>
<td>Rural</td>
<td>38</td>
<td>39</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Black (excludes BEARs)</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total Applicants Accepted</strong></td>
<td>124</td>
<td>129</td>
<td>123</td>
<td>128</td>
</tr>
<tr>
<td><strong>Residence:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alabama</td>
<td>114</td>
<td>118</td>
<td>112</td>
<td>109</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>Service Areas (FL &amp; MS)</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Foreign</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>60</td>
<td>54</td>
<td>63</td>
<td>48</td>
</tr>
<tr>
<td>Rural</td>
<td>23</td>
<td>18</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>Total Black</td>
<td>16</td>
<td>11</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Regular Admissions</td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Bear Program</td>
<td>9</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Early Decision Program</td>
<td>8</td>
<td>11</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Matriculants</strong></td>
<td>64</td>
<td>64</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Average MCAT</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Average GPA</td>
<td>3.7</td>
<td>3.6</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Residence:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alabama</td>
<td>55</td>
<td>60</td>
<td>59</td>
<td>56</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Service Areas (FL &amp; MS)</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Foreign</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Female</td>
<td>30</td>
<td>26</td>
<td>38</td>
<td>25</td>
</tr>
<tr>
<td>Rural</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Total Black</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Regular Admissions</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>BEAR Program</strong></td>
<td>9</td>
<td>6</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

*Includes one Advanced Standing Student*
An awards luncheon was held on Thursday, August 26, 2004, to present the Clyde G. Huggins Medical Student Research Awards for best oral and poster presentations. *Mr. Brandon Nichols*, sophomore medical student sponsored by the Department of Family Practice, was the recipient for best oral presentation and *Ms. Rhianna Little*, sophomore medical student sponsored by the Department of Orthopaedic Surgery, received the award for best poster presentation. Both recipients are eligible to make their presentations at the Annual National Research Forum in Galveston, Texas in 2005.
Graduate Program in Basic Medical Sciences

Administration

Dr. Mary I. Townsley, Director of the Basic Medical Sciences Graduate Program, was re-elected for a second three-year term by the BMS Graduate Faculty in March, 2004.

Recruitment Activities

1. Ads were placed in the *The Vanguard*, and in other local college or university newspapers.
2. A mail-out was sent to 380 schools in the Southeast, including historically minority institutions, announcing the NIH-funded Training Program in "Cell signaling and lung pathobiology", opportunities for predoctoral research training in the area of Lung Biology, and the BMS Graduate Program.
3. The Program website was updated.
4. Presentations were made to the Premedical Honors Society and Freshman Biomedical Sciences students at USA.
5. Information about the graduate program was distributed at several regional science conferences and at the Alabama Minority Pre-Health Conference.

Admissions

In 2003-2004, we began processing applications to the program directly through the University Office of Admissions and/or the International Services Office. Other required materials continue to be received in the BMS Graduate Office. The Graduate Office held Interview Days in December, March, May, June and July for the Fall 2004 class. An admissions summary for the class of 2004 is shown below:

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inquiries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>204</td>
<td>114</td>
<td>138</td>
<td>58</td>
</tr>
<tr>
<td>International</td>
<td>295</td>
<td>168</td>
<td>292</td>
<td>113</td>
</tr>
<tr>
<td>Applicants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>22</td>
<td>30</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>International</td>
<td>113</td>
<td>90</td>
<td>108</td>
<td>32</td>
</tr>
<tr>
<td>Acceptances</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>11</td>
<td>19</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>International</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Matriculants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>International</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Average GRE</td>
<td>1668</td>
<td>1838</td>
<td>1101</td>
<td>1170</td>
</tr>
<tr>
<td>Average GPA</td>
<td>3.45</td>
<td>3.43</td>
<td>3.38</td>
<td>3.45</td>
</tr>
</tbody>
</table>

*Only the sum of verbal and quantitative scores included after 2002
Curriculum

1. Two new interdisciplinary courses were approved and implemented: Advanced Signal Transduction (IDL 635) and Statistics and Experimental Design in Biomedical Research (IDL 640).

2. The Director, together with the BMSSO leadership, has been working to implement working lunch sessions on various academic “survival skills”. In this academic year, sessions were held on grant writing and strategies for obtaining a postdoctoral position.

New Programs/Policies/Requirements

1. The BMS Student Handbook was updated. Print copies were distributed to incoming students and an electronic copy posted to the program web site.

2. The Qualifying Examination policy was amended to more clearly specify the composition of the Examination Committee.

3. Major Professors will be required to certify that Dissertations are original and free from plagiarism violations. "TURNITIN" software can be accessed through the University account for this purpose. Certification (Form 9) must accompany a copy of the Dissertation when submitted for review by the Graduate School.

BMSSO-Basic Medical Sciences Student Organization

The BMSSO sponsored their annual BMSSO T-shirt design and sale to raise a portion of their operating budget for the year, hosted a holiday appreciation luncheon for BMS Graduate Faculty in December, 2003, and participated in a number of community and philanthropic activities throughout the year.

Extramural Support for Graduate Training

1. Dr. Townsley is the Program Director for a newly funded NIH Predoctoral Institutional Training Grant on “Cell signaling and lung pathobiology”, through The Center for Lung Biology. The training program provides stipends for 4 predoctoral students in 2004. Students will receive support from the training grant for a minimum of two years and will be required to submit individual proposals for extramural funding.

2. In 2003-2004, eight doctoral candidates in the BMS Graduate program (students who have completed the Qualifying Examination) were supported by individual extramural predoctoral fellowships.
Graduates

Two students completed all requirements for the Ph.D. degree:

Wesley Blake Denny
DISSETATION TITLE: “A Structure-Function Analysis of the Potent GR-Inhibitory Immunophilin-Squirrel Monkey FKBP51”
MAJOR PROFESSOR: Jonathan G. Scammell, Ph.D.
DEPARTMENT: Pharmacology
CURRENT POSITION: Postdoctoral Fellow, University of South Alabama, Department of Physiology

Inna Nikolaevna Shokolenko
DISSETATION TITLE: “Modulation of Cell Survival by Altering Mitochondrial DNA Damage and Repair Following Genotoxic Stress”
MAJOR PROFESSOR: Glenn L. Wilson, Ph.D.
DEPARTMENT: Cell Biology and Neuroscience
CURRENT POSITION: Postdoctoral Fellow, University of South Alabama, Center for Cell Lung Biology

To date, 134 students have received a Ph.D. degree in Basic Medical Sciences.
The University of South Alabama provides equal educational opportunities to and is open and accessible to all qualified students without regard to race, color, creed, national origin, sex, or qualified handicap/disability, with respect to all of its programs and activities.