FOREWORD

The 2018-19 annual report for the University of South Alabama College of Medicine catalogues the accomplishments of our faculty, staff and students as they relate to teaching, research, scholarly and community service. While impressive on their own and a demonstration of the continued excellence of everyone involved, these endeavors become even more remarkable when people understand the backdrop of significant change that we have had this fiscal year. Most notable this year is our being fully reaccredited by the Liaison Committee on Medical Education (LCME) for the next eight years. This affirmation from LCME is further supported by our students’ continued success. For the past three years, they have scored higher than the national average on both Step exams and continue to compete for some of the most prestigious residencies in the nation. Further, they go on to practice in underserved areas at the highest levels of any school in the country. Not only do they flourish in their practice, but they bring that care to areas most in need.

We have had a number of leadership changes this year. We filled four department chairs – Richard Honkanen, PhD, in biochemistry and molecular biology; Kevin Macaluso, PhD, in microbiology and immunology, Mary Munn, MD, in obstetrics and gynecology, and Guillermo Herrera in Pathology. On the administration side, Kelly Roveda, MD, was named associate dean of student affairs, T.J. Hundley, MD, associate dean of medical education, and Carole Boudreaux, assistant dean of graduate medical education.

Our research efforts continue to be strong and growing. A significant change in this arena includes the research faculty from the Mitchell Cancer Institute joining home departments within the College to further foster interdisciplinary activity.

The individual and collective accomplishments detailed in this report are the result of the focused and continual effort of our excellent faculty, students and staff. I thank each of you for this successful year.

John V. Marymont, MD, MBA

VP Medical Affairs and Dean, College of Medicine.
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2018-2019
Summary of Scholarly Activities
Department of Biochemistry

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


D’Arcy BM, Swingle MR, Papke CM, Abney KA, Bouska ES, Prakash A, Honkanen RE. The antitumor drug LB-100 is a catalytic inhibitor of protein phosphatase 2A (PPP2CA) and 5 (PPP5C) coordinating with the active-site catalytic metals in PPP5C. Mol Cancer Ther. 2019 Mar;18(3):556-566.


Kim JS, Jeong K, Murphy JM, Rodriguez YAR, Lim SS. A quantitative method to measure low levels of ROS in nonphagocytic cells by using a chemiluminescent imaging system.


II. PUBLISHED ABSTRACTS


Comprehensive Cancer Center 20th Annual Research Retreat; 2018 Nov 16; Birmingham, AL.


Vukadin L, Park EY, Ahn EYE. SON represses RUNX1 expression and impairs megakaryocytic differentiation in acute megakaryoblastic leukemia (AMKL). O’Neal Comprehensive Cancer Center 20th Annual Research Retreat; 2018 Nov 16; Birmingham, AL.

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Honkanen R. Invited speaker. PPP2R5D cell lines provide insight into Jordan’s Syndrome. Jordan’s Guardian Angels Second Family Conference; 2019 Mar 28; San Francisco, CA.

Honkanen R. Invited speaker. CRISPR-genomic base editing and global phosphoproteomics provide insights into the actions of de novo missense variants of PPP2R5D. FEBS Europhosphatase 2019; 2019 Jun 12; Debrecen, Hungary.


Prakash A. Invited speaker. Structural and biochemical studies to assess protein interactions and classify VUSs. American Chemical Society National Meeting and Exposition; 2019 Apr 3; Orlando, FL.
Prakash A. Invited speaker. DNA repair: structural and biochemical studies to assess protein interactions and (re)classify variants of unknown clinical significance [video]. Produced by NIH Video Casting and Podcasting, as part of the DNA Repair Interest Group Videoconference; 2019 Feb 19; Bethesda, MD. Available from: https://videocast.nih.gov/summary.asp?Live=27120&bhcp=1

Prakash A. Invited speaker. Structural and biochemical studies to (re)classify variants of uncertain significance. University of Texas; 2018 Dec 17; Austin, TX.

V. NATIONAL PROFESSIONAL RECOGNITION

Erin Ahn: NIH Special Emphasis Panel/Scientific Review Group (ZRG1 F09B-M 20); NIH Cancer Genetic Study Section; Journal Peer Review: DNA Repair; Moderator: Human Diseases Gene Website Series; Leader: ZTTk-SONshine Foundation Advisory Board; Organizer: Touch-A-Truck; Nominee: RARE Champion of Hope Award.

Ron Balczon: Journal Peer Review: Scientific Reports.

Donna Cioffi: Journal Peer Review: Antioxidants and Redox Signaling Frontiers in Physiology; American Physiological Society; Co-Chair, Nomination Committee, American Physiological Society, Respiration Section; Steering Committee, American Physiological Society.

Richard Honkanen: Panel Member NIH (NIDDK) ZDK1 GRB-7 R13 Special Emphasis Panel; BSF. United States-Israel Binational Science Foundation; Nominated for Chair, FASEB Summer Research Conference: Protein Phosphatases.

Lawrence LeClaire: Ad hoc Journal Review: Cell Reports


This year was a year of revitalization for the Department. After an extensive national search, on April 1 Dr. Richard E. Honkanen was appointed Chair of the Department, replacing Dr. William Gerthoffer, who retired after serving as Chair for over 10 years. The department is in the process of updating equipment, with the goal of enhancing the research and teaching capabilities. In May, Dr. Erin Ahn joined the department as an Associate Professor and Dr. Aishwaraya Prakash joined as an Assistant Professor. Dr. Ssang-Taek (Steve) Lim was promoted to Associate Professor, with tenure, and a national search for three additional faculty is ongoing.

The department is a research-intensive academic unit that contributes primarily to undergraduate medical education, basic medical sciences graduate education and the service mission of the College of Medicine. In education the faculty contribute significant effort to the systems-based medical curriculum, contributing to the basic science (Foundation of Human Health), endocrine, cardiovascular, gastrointestinal, and musculoskeletal modules. In addition the faculty have a major commitment to multiple graduate science courses in the various tracks. Dr. Balczon served as the director of the endocrine module, and Dr. LeClaire served as co-director of the gastrointestinal module. Dr. Lim was the course director for IDL 580 and Dr. Honkanen served as the course director in IDL 577. This year one Ph.D. graduate student (Kevin Abney) graduated. Kevin is currently a postdoctoral fellow at Vanderbilt University. Currently eight students enrolled in the Basic Medical Science Ph.D. program and one MS student in the Environmental toxicology program are undergoing extensive small group training with faculty in the department. Five postdoctoral fellows in the department received intensive advanced training in the laboratories of Dr. Lim, Dr. Prakash and Dr. Ahn. Some faculty also contributes to undergraduate research training, acting as mentors for students enrolled in the BMD honors research programs.

The faculty continue to demonstrate excellence in research and scholarly activity, as is evident by their publications and presentations at national and international at scientific meetings, as listed above. This intensive research effort has been made possible by extramural grant support from NIH, AHA or JGA-foundation as well as internal funds supplied by the College of Medicine. Studies primarily performed by Dr. D’Arcy under the guidance of Drs. Swingle and Honkanen resulted in the introduction of a novel catabolic pathway into human cells that enabled cholesterol catabolism in human monocyte derived macrophages. US patents have been filed related to this potentially paradigm altering breakthrough, and the patent and related knowhow has been licensed to Repair Athero, Inc.
of LaFayette New York for further development. One of Dr. Lim’s manuscripts was highlighted and made the cover of Circulation Research.
2018-2019
Summary of Scholarly Activities
Department of Comparative Medicine

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS

II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

V. NATIONAL PROFESSIONAL RECOGNITION


VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The faculty and staff of the Department of Comparative Medicine participate in service, education, and research in the university’s animal care and use program. The department continues to upgrade equipment and maximize the use of facilities with the goal of enhancing research and teaching capabilities for the benefit of investigators throughout the university. The department supports the activities of the VEVO high resolution ultrasound imaging system from VisualSonics, the hypoxia core for the development of pulmonary hypertensive rodents, the Pseudomonas delivery core, the behavior core, the Kimtron, Inc. IC-320 irradiator, IVIS Spectrum Imaging System, the OEC-Diasomics C-Arm Fluoroscopic Imaging System, clinical skills activities of the Departments of Surgery and Obstetrics and Gynecology, and histology services.

The faculty continue formal and informal educational commitments within the department to technical staff, supervisors, and colleagues and outside the department to graduate students, postdoctoral fellows, and faculty. Dr. Schuler’s commitment to collaboration and education reaches broadly within the university with formal participation with research groups in the Dauphin Island Sea Lab, the Mitchell Cancer Institute, the Colleges of Arts
and Sciences and Engineering, and every department within the College of Medicine. She holds a joint appointment at the Associate Professor level in the Department of Microbiology and Immunology. Outside of the university, Dr. Schuler works with the Alabama Marine Stranding Network that collaborates with the NOAA’s National Marine Fisheries Service to provide veterinary care to stranded cetacean species. Dr. Scammell, who served as Interim Chair of the Department of Biochemistry and Molecular Biology, continues his collaboration with Dr. Donna Cioffi in the same department to study the role of the immunophilin FKBP51 in endothelial cell function. Members of the department play significant roles in other aspects of college and university life as well. Dr. Schuler serves as a standing member of Institutional Animal Care and Use and Biosafety Committees and is a member of the Safety and Environmental Compliance Committee. In 2019, she took on the directorship of the introductory graduate level course on Fundamentals of Basic Medical Sciences (IDL 580). Dr. Scammell serves as Assistant Dean for Admissions, member of the Endocrinology and Reproduction Module and Clinical Pharmacology teaching staff, and chairs the MD with Research Honors Committee. Outside of the college, Dr. Scammell serves on the University’s Committee on Standards in the Conduct of Research, the Scholarship and Financial Aid Committee, the University Committee on Diversity and Inclusion, the Committee on Prehealth Advising, and the USA Health Branding Advisory Team.
2018-2019
Summary of Scholarly Activities
Department of Emergency Medicine

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


Mellick L. An interview with Dr. Larry Mellick [video]. Youtube, USA Health Medical Education Videos. 2018 Nov 3. Available from: https://www.youtube.com/watch?v=NTjGLW_PFHE


Mellick L. Ten ways to reduce a dislocated shoulder [video]. Youtube, USA Health Medical Education Videos. 2018 Nov 15. Available from: https://www.youtube.com/watch?v=Fe9i55XSOsE

Mellick L. Bowing fracture of fibula and midshaft tibia fracture [video]. Youtube, USA Health Medical Education Videos. 2018 Nov 19. Available from: https://www.youtube.com/watch?v=0eRkr1W9EK0

Mellick L. Pediatric rib fracture emergency [video]. Youtube, USA Health Medical Education Videos. 2018 Dec 5. Available from: https://www.youtube.com/watch?v=Ntf0wAAaTUE0

Mellick L. Atomized tranexamic acid for epistaxis control [video]. Youtube, USA Health Medical Education Videos. 2018 Dec 5. Available from: https://www.youtube.com/watch?v=PZUxRY3As-s


Mellick L. Nosebleed emergency and tranexamic acid treatment [video]. Youtube, USA Health Medical Education Videos. 2018 Dec 10. Available from: https://www.youtube.com/watch?v=en0EQ0xuew


Mellick L. Croup diagnosis management and treatment [video]. Youtube, USA Health Medical Education Videos. 2019 Feb 23. Available from: https://www.youtube.com/watch?v=8u1R92ez6T0

Mellick L. Enlarged baby breasts [video]. Youtube, USA Health Medical Education Videos. 2019 Apr 30. Available from: https://www.youtube.com/watch?v=59HSkcXuxSw

Mellick L. MicroBVM and preoxygenation trial [video]. Youtube, USA Health Medical Education Videos. 2019 Apr 30. Available from: https://www.youtube.com/watch?v=YP3QNDYAgN


Mellick L. Cardioinhibitory malignant vasovagal syncope [video]. Youtube, USA Health Medical Education Videos. 2019 Sep 3. Available from: https://www.youtube.com/watch?v=f0CA6CF5TOs


II. PUBLISHED ABSTRACTS

Sternberg ML, Goodloe TB, Towns JR, Cortopassi J. Oh cric-ey, that’s a swollen tongue; case of recurrence of ACE inhibitor angioedema. 2019 EMerald Coast Conference; 2019 June 3-6; Miramar Beach, FL.

Sternberg ML, Young TW, McGill TH. So you’re telling me IV drug use is bad-case of infective endocarditis with septic pulmonary emboli. 2019 EMerald Coast Conference; 2019 June 3-6; Miramar Beach, FL.
Sternberg, ML Gibson BW, McRae CT. You should have seen the other guy, case of facial trauma in hemophilia A. 2019 Emerald Coast Conference; 2019 June 3-6; Miramar Beach, FL.


Sternberg ML, Gibson BW. Ogilvie’s syndrome. Society of Academic Emergency Medicine (SAEM) Annual Session; 2019 May 14-17; Las Vegas, NV.

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Henning P. Invited speaker. Trauma in Soweto –murder capital of the world. 10th Annual Gulf Coast Acute Care Surgery Symposium; 2019 Mar 4; Mobile, AL.

Kalra S. Invited speaker. Sedation for procedures in trauma. 10th Annual Gulf Coast Acute Care Surgery Symposium; 2019 Mar 4; Mobile, AL.

Mellick L. Invited speaker. Pediatric c-spine and airway in trauma. 10th Annual Gulf Coast Acute Care Surgery Symposium; 2019 Mar 4; Mobile, AL.

Panacek EA. Invited speaker. Pretest/introduction to workshop. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 5; Dallas, TX.


Panacek EA. Invited speaker. Research questions. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 5; Dallas, TX.

Panacek EA. Invited speaker. Research hypotheses, objectives. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 5; Dallas, TX.


Panacek EA. Invited speaker. Introduction to study design. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 5; Dallas, TX.
Panacek EA. Invited speaker. Practicum: your study design. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 5; Dallas, TX.

Panacek EA. Invited speaker. Discuss your questions. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 5; Dallas, TX.

Panacek EA. Invited speaker. True experimental design. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 6; Dallas, TX.


Panacek EA. Invited speaker. Case control and other designs. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 6; Dallas, TX.

Panacek EA. Invited speaker. Recognizing design. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 6; Dallas, TX.


Panacek EA. Invited speaker. Survey research. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 6; Dallas, TX.

Panacek EA. Invited speaker. Qualitative studies. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 6; Dallas, TX.

Panacek EA. Invited speaker. Practicum: selecting your study design. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 6; Dallas, TX.

Panacek EA. Invited speaker. Elements of a study protocol. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 7; Dallas, TX.
Panacek EA. Invited speaker. Practice discussion. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 7; Dallas, TX.

Panacek EA. Invited speaker. Sample size calculations. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 7; Dallas, TX.

Panacek EA. Invited speaker. Elements of a study protocol. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 7; Dallas, TX.

Panacek EA. Invited speaker. Instructions for between-session requirements. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 7; Dallas, TX.

Panacek EA. Invited speaker. Practicum: developing your study protocol. American College of Emergency Physicians Emergency Medicine Basic Research Skills Workshop; 2018 Nov 7; Dallas, TX.

Panacek EA. Invited speaker. Untold stories of the ER (I’m a doctor and play one on TV). Mobile Optimist Club; 2019 Jan 30; Mobile, AL

Panacek EA. Invited speaker. Emergency Room Trauma “Moderator”. 10th Annual Gulf Coast Acute Care Surgery Symposium; 2019 Mar 04, Mobile, AL.

Panacek EA. Invited speaker. Role of Ketamine in the management of vaso-occlusive crisis in sickle cell disease. Sickle Cell Disease Practical Issues XVII; 2019 May 18, Mobile, AL.

Panacek EA. Invited speaker. What I learned being a TV doctor. University of South Alabama Medical Alumni Association Reunion Weekend; 2019 July 07; Pensacola, FL.

V. NATIONAL PROFESSIONAL RECOGNITION

Panacek EA. Director, EMF Emergency Medicine Basic Research Skills Course (EMBRS); Moderator, Research Forum Research Abstract (ACEP); Moderator, Research Forum Research Abstract (SAEM); Moderator, EMS, 10th Annual Gulf Coast Acute Care Surgery Symposium; Moderator, Emergency Room Trauma, 10th Annual Gulf Coast Acute Care Surgery Symposium; Senior Oral Examiner and Oral Case Reviewer, American Board of Emergency Medicine; Editorial Board member, Western Journal of Emergency Medicine; Editorial Board member, International Journal of Emergency Medicine; Peer Reviewer for 8 different journals. Editorial panel member “StatPearls” USA National Alumni Association Distinguished Alumni Award.

Sternberg ML. Red Sash Award, COM, University of South Alabama; Faculty AOA Inductee; Board of Directors Mobile Medical Museum; Board of Directors Alabama
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Departmental goals - list key goals accomplished and/or innovative programs initiated by the department during the report year in education, research/scholarship and/or service:

- Drafted full application for new Emergency Medicine Program, and submitted to ACGME.
- Took over administrative responsibility for the Evaluation Center at Children’s and Women’s Hospital. Restructured that unit and rededicated to a pure pediatric emergency department.
- Further expanded and refined the role of APP’s in the USAMC Emergency Department.
- Established a new 4th year medical student elective in the department. (EMM411)
- Achieved relatively successful role out implementation of the CERNER electronic health record in the emergency department. That process was substantially smoother and more successful in the ED than in nearly any other clinical area.
- Continued and expanded faculty involvement in scholarship.
- Recruited a new “Research Director” EM faculty.

Summarize student feedback on faculty teaching during this report year. What steps are you taking and/or what faculty development strategies are you using to address any weaknesses?

- We currently do not have a process to collect student feedback on the faculty or quality of teaching in the emergency department. That will be initiated next year.

List specific departmental goals for the next academic year

- Continue quality faculty recruitment at both hospitals (USAMC & C&WH) for the emergency departments, with focus on specific academic needs.
- Achieve successful initial (provisional) accreditation of the emergency medicine residency program and enroll first class of interns.
- Further improve and refine educational processes for all student learners rotating through the emergency departments.
- Initiate a clinical research program in emergency medicine have (not had an EM specific research program in the history of the department). Increase faculty participation in scholarship.
- Break ground on a new emergency department at USAMC.
- Secure additional funding for redevelopment of a new pediatric emergency department.
- Further refine and improve efficiency of the CERNER electronic health record in both ED’s.
- Increase EM faculty involvement in service and administration within the USAHS.
- Obtain national certification for the Pediatric Emergency Department at CWH.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


Trimmier M, Linder M, Assad S, Warner A, Pfleeger J. What populations are at most risk of rhabdomyolysis because of high-intensity workouts? Evidence-Based Practice. 2018 Dec;21(9):77.

II. PUBLISHED ABSTRACTS


Daniel CL, Vickers M, Green CL, Pierce JY. Mapping HPV vaccination and rates of associated cancers in the state of Alabama. O’Neal Comprehensive Cancer Center 20th Annual Research Retreat; 2018 November 16; Birmingham, AL.


McLendon L, Pierce J, Daniel CL. Developing a survey of knowledge, attitudes, and intended practices regarding the human papillomavirus (HPV) and its vaccine among health professional students. 16th Annual American Medical Association Research Symposium; 2018 Nov 9; National Harbor, MD.


Pierce JY, Vickers M, Green CL, Beasley M, Scalici JM, Daniel CL. HPV vaccination uptake associated with HPV-related cancer incidence but not rurality in the Deep South. Annual Mid-Atlantic Gynecologic Oncology Society Meeting, 2018 Oct 26-28; Columbus, OH.

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Daniel CL. Invited speaker. Partnering with oral healthcare providers to increase HPV vaccination in Alabama. Association of State and Territorial Health Officials HPV ECHO Telehealth Meeting; 2019 Jul 23; Mobile, AL.

Daniel CL. Invited speaker. Cancer prevention through HPV vaccination: the role of dental healthcare providers. Mobile Area Dental Society; 2019 Apr 5; Mobile, AL.

Daniel CL, Coyne-Beasley T, Ladinsky M. Invited speakers. Increasing HPV vaccination rates in Alabama. Blue Cross Blue Shield Circle of Care Annual Summit; 2019 Mar 1; Birmingham, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

R. Allen Perkins: was elected President of the Association of Departments of Family Medicine; Member of the Family Medicine Leadership Consortium and the Council of Academic Family Medicine

Ehab A. Molokhia: continues to serve as a member of the United States Medical Licensing Examination (USMLE) Step 2 Clinical Skills (CS) Test Material Development Committee (TMDC).

Casey L. Daniel: was elected Chair of the Alabama Comprehensive Cancer Coalition and was appointed to Executive Committee of the Alabama Adolescent Vaccination Task Force as well as Leader of the Data Work Group for this organization

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The department completed the move to the Strada Patient Care Center and successfully transitioned patient care to this location.

Dr. James Toldi was added to the faculty and is practicing Primary Care Sports Medicine. He is the team physician for 5 local high schools. He has implemented a county wide concussion protocol for student-athletes.

Dr. Allen Perkins was awarded a $4.1 million dollar grant from HRSA to create medical student training opportunities in rural Alabama.

Dr. Casey Daniel was awarded a $200,000 grant in collaboration with Dr. Isabel Scarinci of UAB to conduct a feasibility mixed methods study examining the effectiveness of a theory-based, multi-level intervention coupled with a school-based vaccination program (SBVP), compared with a SBVP alone, compared with no intervention in three rural Alabama counties.
2018-2019
Summary of Scholarly Activities
Department of Internal Medicine

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


Hanjar A, Fahmawi Y, Ousley J, Humphrey K, Blair-Elortegui J, Ludvik N. As if peritonitis were not spontaneous enough: an under recognized complication of cirrhosis. American College of Physicians, Internal Medicine Meeting; 2019 Apr 11-13; Philadelphia, PA.

Humphrey K, Hanjar A, Fahmawi Y, Blair-Elortegui J, Ludvik N. A case of radiation toxicity warranting an oncology consultation. Alabama and Mississippi Chapters of the American College Physicians Scientific Meeting; 2019 May 31-Jun 1; Jackson, MS.

Fahmawi Y, Abdalhadi H, Blair-Elortegui J, Ludvik N, Al Jaber E. Recalcitrant hypokalemia associated with under recognized phenotype of colonic pseudo-obstruction. Alabama and Mississippi Chapters of the American College Physicians Scientific Meeting; 2019 May 31-Jun 1; Jackson, MS.


Ousley J, Ahmed Y, Blair-Elortegui J, Ludvik N. When treatment causes the ailment: Disseminated mycobacterial infection following mitral valve replacement. Alabama and Mississippi Chapters of the American College Physicians Scientific Meeting; 2019 May 31-Jun 1; Jackson, MS.

Parker LL, Well K, Hudson MR, Bonner CM, Crook ED, Arrieta, MI. Experts speak: community members on the context of inequity. Xavier University of Louisiana 12th Health Disparities Conference; 2019 Apr 8-10; New Orleans, LA.


Siow M, Hamid S, Blair-Elortegui J, Ludvik N. A case series: West Nile virus in Mobile County. Alabama and Mississippi Chapters of the American College of Physicians Scientific Meeting; 2019 May 31-Jun 1; Jackson, MS.

### III. PUBLISHED BOOKS

### IV. INVITED PRESENTATIONS

**Arrieta M.** Invited speaker. Community engagement: is there any value for translational researchers? University of Alabama at Birmingham Center for Clinical and Translational Science Training Program; 2019 May 8; Birmingham, AL.

**Crook ED.** Invited speaker. Identifying and overcoming roadblocks that limit the translation of research findings to the achievement of health equity. Second Conference on Bioethics Issues in Minority Health and Health Disparities Research; 2019 January 23; Tuskegee, AL.

**Crook ED.** Invited speaker. A discussion around health disparities in African Americans and the march toward health equity. Tulane University School of Medicine, Student National Medical Association, Black History Month Presentation; 2019 February 25; New Orleans, LA.

**Crook ED.** Invited speaker. The challenges of inequities in health. Legacy Leadership Institute of University of South Alabama Gerontology Center; 2019 March 14; Mobile, AL.

**Crook ED.** Invited speaker. The social determinants of health: a focus on poverty. University of South Alabama College of Medical Alumni Association Reunion Weekend; 2019 June 8, 2019; Pensacola, FL.


**Hundley TJ.** Invited speaker. From sisyphus to the phoenix: burnout and resiliency in physicians – an update. University of South Alabama Medical Alumni Association Reunion Weekend; 2019 June 8; Pensacola, FL.

**Schilthuis A.** Invited speaker. Teaching panel management in an internal medicine residency program. Society of General Internal Medicine Southern Regional Meeting; 2019 Feb 15; Houston, Texas.

**Tyler S.** HIV update 2018. Jaguar Symposium; 2018 Oct 5; Mobile, AL.

**Tyler S.** HIV update. Mobile County Health Department Providers Meeting. 2019 Feb 13; Mobile, AL.

### V. NATIONAL PROFESSIONAL RECOGNITION

**DiPalma, J.** Foundation Board Member and Secretary – Treasurer of World Gastroenterology Organization.


Fagan, K. Chair, Board of Trustees, Pulmonary Hypertension Association, 2018-2020.

Fagan, K. ABIM Pulmonary Exam Committee Member, 2019-2020.


VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Education

The department has continued to receive excellent evaluations from medical students and residents for its educational activities. The College of Medicine Class of 2019 recognized the Department for its efforts voting the third year internal medicine clerkship as the best clerkship in the 3rd year. The department has received this honor from graduating classes for 20 of the last 21 years.

Several of the department’s faculty were recognized with the red sash award for their educational efforts and the graduating Class of 2019 again selected an Internal Medicine faculty member, Dr. Terry J. ("TJ") Hundley as the best teacher in the clinical years. Dr. TJ Hundley, who is also our Clerkship Director, has been recognized with this honor for 4 consecutive years. Department members continue to contribute significantly to the medical school curriculum over all four years. In addition to the third year clerkship mentioned above several departmental members serve as co-directors for the modules for the first and second year COM classes. The module voted as best in the first 2 years by the Class of 2019 as the Respiratory Disease module co-led by Dr. Brian Fouty, a Professor in the Department. Our courses for COM 4th year students remain popular with the Acting Internship in inpatient medicine and the MICU rotation receiving high praise.

Our faculty also make important contributions to the education of students in Allied Health and Nursing. For example, Dr. Shannon Tyler serves as the Medical Director for the Department of Physician Assistant Studies in the College of Allied Health Professions where she plays a large role in the education of the PA students. Several of the PA students take clinical rotations in general internal medicine and all of our subspecialty areas. Students pursuing the Nurse Practitioner degree often spend time with members of the department on their clinical rotations.
The Department puts forth considerable effort educating its internal medicine residents, internal medicine - pediatric residents, and fellows in Gastrointestinal Diseases, Cardiovascular Disease, and Pulmonary Critical Care. Dr. Judy Blair, Director of the Internal Medicine Residency Program, continues to make innovative improvements to the way we do residency education. The Grand Rounds Series is well received and is an important educational tool for the community. Several members of the faculty have been recognized as educational leaders in their subspecialty area.

**Scholarly Efforts**

The department has continued to be productive in scholarly achievements. The Divisions of Gastroenterology, Pulmonary and Critical Care, and Cardiology continue to have robust clinical studies portfolios. GI continues to involve its fellows, internal medicine residents and medical students in its research efforts with several of these trainees presenting their work at regional and national meetings. Cardiology also involved several internal medicine residents in their scholarly activities over the past year.

The Division of Pulmonary – Critical Care has continued its partnership with the Center for Lung Biology and has continued clinical, basic and translational studies in pulmonary hypertension. Infectious disease continues its efforts in care of the HIV patient through a grant funded by the Health Resources and Services Administration. Members of the Division of General Internal Medicine led patient safety and quality projects.

Dr. Johnson Haynes has continued his efforts in leadership of the Comprehensive Sickle Cell Center. The Center is collaborator on a PCORI grant focused on advancing care of patients with sickle cell disease through the transition period of adolescence to adulthood. In addition, Dr. Haynes and his team continue to hold a well-attended annual Sickle Cell Conference to educate providers on the most advanced methods for caring for patients with sickle cell disease.

Dr. Meir Mizrahi, Assistant Professor, organized a conference for Gastroenterologists that was well attended and brought in several thought leaders from around the world. In addition, many or our own faculty were featured speakers. Dr. Mizrahi and Dr. Nicholas Ludvik, Instructor /Chief Medical Resident, where recognized for their great efforts in leading scholarly projects involving our internal medicine residents.

**Service**

The Department continues to deliver excellent clinical service. The Department has grown along with the growth in USA Health. This academic year resulted in the highest levels of clinical billing in the Department’s history. The department has met considerable increases in clinical services at the USA Health University Hospital and in our ambulatory practices. The Division of Gastroenterology has continued to grow its services for all endoscopy procedures. These advancements have enhanced partnerships with the Mitchell Cancer Institute and the Division of Colorectal Surgery. The Department
expanded its Hospitalist faculty and partnered with University Hospital to improve patient flow through our hospital. Lastly, we have been able to reestablish our Endocrine Section under the guidance of Dr. Wilburn Bolton. This service grew quickly with both inpatient and ambulatory activities.

Departmental faculty continue to serve on editorial boards, as journal reviewers, on advisory boards, and on grant review panels. Several faculty play key roles in their subspecialty societies. Dr. Karen Fagan, Professor in the Division of Pulmonary and Critical Care, has notable leadership roles with the American Thoracic Society and the Pulmonary Hypertension Association (see National Professional Recognition above). Likewise, Dr. Jack DiPalma and Dr. Jorge Herrera, Professors in the Division of Gastroenterology, serve their national societies at high levels.

Several Department of Medicine faculty are on key committees within USA Health. An example is Dr. Sabrina Bessette, Division Chief of Nephrology, who continues as President of USA Health University Hospital Medical Executive Committee. In addition, our faculty has contributed significantly to the University as a whole and the Greater Mobile Community. Our faculty serve on several school related, community based, philanthropic, and service organizations in the region. In these roles they proudly represent The University of South Alabama and USA Health.
2018-2019
Summary of Scholarly Activities
Department of Microbiology and Immunology

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


Schmale E, Rayner JO. Development of immunologic assays to support clinical trials of new vaccines for Venezuelan equine encephalitis virus. ASM Biothreats Meeting; 2019 Jan 29-31; Arlington, VA. Abstract 131.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Barrington RA. Invited speaker. Eye research report: evaluation and progress of trainees. Lions Eye Research Board Meeting; 2019 Feb 13; Mobile, AL.

Barrington RA. Invited speaker. Eye research report: significance of the ARVO conference for development of future eye research. Lions Eye Research Board Meeting; 2019 May 2019; Mobile, AL.

Rayner JO. Invited speaker. Virus classification and structure. Biomedical & Health Sciences (BHS) 503 Microbiology & Immunology, University of Alabama at Birmingham; 2019 Aug 6; Birmingham, AL.

Rayner JO. Invited speaker. Vaccines and vaccination. Biomedical & Health Sciences (BHS) 503 Microbiology & Immunology, University of Alabama at Birmingham; 2019 Aug 7; Birmingham, AL.

Rayner JO. Arthropod-borne infectious diseases and surveillance efforts in the State of Alabama. 30th Annual Alabama Vector Management Society Meeting; 2019 Mar 7-8; Orange Beach, AL.

V. NATIONAL PROFESSIONAL RECOGNITION


VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The 2018-2019 academic year for the Department was marked with substantial transition. Major changes included the retirement of Dr. David Wood on December 31, 2018. Dr. Wood served USA for 40 years and will transit to emeritus status in the Department. Dr. Jonathan Audia served as interim Chair for the department while a new Chair was identified. Dr. Audia took on this leadership role while continuing to serve as the Module Director for the Foundations of Human Health 2 (FHH2) course and overseeing the graduate student teaching by coordinating the Infectious Diseases and Host Defense Track (IDHD). Dr. Audia continued with community outreach by contributing to St. Luke’s Episcopal basic science instructional activities and by mentoring a senior student from St. Paul’s Episcopal in the laboratory. These activities are considered essential to our service mission. Dr. Audia continues his collaborative research with Dr. Alvarez on their NIH-funded research on Caspase-1, the microvascular endothelium, and infection. Additionally, Dr. Audia was part of a research team that submitted a new P01 program project grant in collaboration with Dr. Stevens and investigators at UAB. Dr. Robert Barrington continues the mission to educate and mentor students, oversee the flow cytometry core facility, and expand his research activities by independent and collaborative efforts. Dr. Barrington remains actively involved with Lions Club which supports components of his research program. Dr. Jin Kim continues to advance his research program focusing on influenza virus and the development of a universal influenza vaccine. Dr. Kim became the Faculty Advisor for the departmental journal club and research forum and continues to serve the educational mission by mentoring high school, undergraduate, and medical students during summer programs. Dr. Jonathon Rayner has established both tick- and mosquito-borne infectious disease surveillance programs supported through grants from the State of Alabama and the Mobile County Health Department, respectively. Research efforts have been directed towards development of a mouse model of chikungunya virus (CHIKV) infection which has been employed to evaluate the antiviral properties of annexin V through contract with the biotechnology company,
Immunomodulation. Data from these preliminary studies were used to support a R21 application to the NIH. The CHIKV mouse model is also being utilized to evaluate the efficacy of a new DNA vaccine platform and assess gender-dependent aspects of vaccination. Dr. Rayner has mentored undergraduate and medical students in the laboratory, providing training opportunities in a high-containment laboratory setting.

Dr. Kevin Macaluso was recruited to become the new Chair for the Department and began in that role in August 2019.
2018-2019
Summary of Scholarly Activities
Department of Neurology

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS

Lammle M, Rusyniak WG; **Darbin O, Naritoku D, Ochoa J.** Hippocampal DTI changes in patients with temporal lobe epilepsy 105th Scientific Assembly and Annual Meeting, RSNA. Dec 1 – Dec 6, 2019, Chicago.

**W. Kilgo.** A multiple sclerosis-like presentation coincident with myasthenia gravis and autoimmune hepatitis successfully treated with rituximab. ACTRIMS Forum; 2019 Feb 28 Mar 2; Dallas, TX.

**W. Kilgo.** A case of cadasil with positive CSF oligoclonal bands initially misdiagnosed as multiple sclerosis. Consortium of MS Centers Meeting; 2019 May 28 Jun 1; Seattle, WA.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Bassam BA. Invited speaker. Resident-Fellow JumpStart Workshop. AANEM Annual Meeting; 2018 Oct 10; Washington, DC

Bassam BA. Invited speaker. ALS emerging therapies and treatment journey. AANEM Annual Meeting; 2018 Oct 10; Washington, DC

Bassam BA. Invited speaker. Emerging therapies in neuromuscular disease. AANEM Annual meeting; 2018 Oct 12; Washington, DC


Bassam BA. Invited speaker. ALS Treatment Journey. Neurology Grand Rounds, Wayne State University; 2018 Nov 30; Detroit, MI.

Dees D. Invited speaker. Live. Learn. Connect. Parkinson’s disease. Parkinson’s and Movement Disorders Alliance; 2018 Oct 26; Mobile, AL

Dees D. Invited speaker. Parkinson’s disease public awareness. Parkinson’s Moving Day; 2019 Apr 23; Mobile, AL

Kilgo, W. Invited speaker. Comprehensive care in multiple sclerosis. MS News and Views; 2018 Oct 16; Spanish Fort, AL.


Kilgo W. Invited speaker. Introduction to MS care. Mississippi Gulf Coast MS Society Support Group; 2019 Mar 23; D’Iberville, MS.

Kilgo W. Invited speaker. Introduction to MS Care; Eastern Shore MS Support Group; 2019 Apr 10; Fairhope, AL.

Kilgo W. Faculty Mentor. Foundation of CMSC Mentorship Forum. Faculty Mentor; Consortium of MS Centers Meeting; 2019 May 28; Seattle, WA.
Kilgo W. Invited speaker. Research Update; Pathways to a Cure” Program; National MS Society; 2019 Aug 1; Pensacola, FL

Kilgo W. Invited speaker. Wellness and Lifestyle Solutions in MS; Pathways to a Cure” Program; National MS Society; 2019 Aug 1; Pensacola, FL

Maertens PM. Invited speaker. AES Annual Meeting; 2018 Dec 1-3; New Orleans, LA.

Minto E. Invited speaker. Pathways to a cure. MS Society of AL/MS; 2019 Apr 12; Mobile, AL

Naritoku DK. Invited speaker. Epilepsy MiniFellow Network. Wake Forest University School of Medicine; 2019 Jan 25; Winston-Salem, NC

Naritoku DK. Invited speaker. Current treatment in epilepsy; 2019 CMAATL Annual Conference; 2019 Apr 27; Atlanta, GA

Naritoku DK. Invited speaker. Diagnosing the patient with epilepsy. Epilepsy MiniFellow Network, Wake Forest University School of Medicine; 2019 May 15; Winston-Salem, NC

Naritoku DK. Invited speaker. Identification and management of non-epileptic seizures. Epilepsy MiniFellow Network, Wake Forest University School of Medicine; 2019 May 15; Winston-Salem, NC

Naritoku DK. Invited speaker. Seizure mechanisms & experimental models. Epilepsy MiniFellow Network, Wake Forest University School of Medicine; 2019 May 15; Winston-Salem, NC

Naritoku DK. Invited speaker. Pharmocokinetics & interactions of AEDs. Epilepsy MiniFellow Network, Wake Forest University School of Medicine; 2019 May 16; Winston-Salem, NC

Naritoku DK. Invited speaker. The art of AED management. Epilepsy MiniFellow Network, Wake Forest University School of Medicine; 2019 May 16; Winston-Salem, NC


V. NATIONAL PROFESSIONAL RECOGNITION

Steve M. Cordina: Peer reviewer for Stroke, Neurocritical Care, Journal of NeuroInterventional Surgery, Clinical Case Reports, Interventional Neurology and Journal of Neuroimaging. Society of Neurointerventional Surgery (SNIS), Society of Vascular and Interventional Neurology (SVIN), American Society of Neuroimaging (ASN), American Heart Association/ American Stroke Association, American Academy of Neurology (AAN), Neurocritical Care Society (NCCS) Medical Association of Malta (MAM), Member, Alabama Office of Emergency Medical Services Statewide Trauma and Health Systems Advisory Council Stroke Workgroup, Board Member At Large 2016-2019, SVIN Board of Directors, Member, SVIN Stroke Life Support – Basic and Advanced Educational Initiative

Oliver Darbin: Frontier Human Neuroscience (Guest editor), Biomed Research /international (editorial board), International Journal Neural System, Brain Research, Clinical Neurophysiology, Frontier Human Neuroscience, Frontier Physiology, Frontier Neurology

Daniel Dees: Frontiers in Neurology Journal Peer Reviewer, Parkinsonism & Related Disorders Journal Peer reviewer, Movement Disorders Society, Young members Committee

William Kilgo: Action based council of regional providers of MS care in AL/GA/MS to address gaps in care, Community of local business leaders committed to advancing MS care locally via fundraising, Advocating for Neurology with legislative visits to House and Senate in Washington D.C. and at home offices, Faculty Mentor for Mentorship Forum with residents and fellows from across the country, Formal training from AAN for advocacy issues related to neurology

Paul M. Maertens: Journal of Neuroimaging: editorial board member, Journal of Neuroimaging: reviewer, Examination committee at the American Society of Neuroimaging, Program committee at the American Society of Neuroimaging: Board Member

Elizabeth Minto: Board of Directors, AL-MS Chapter of the National Multiple Sclerosis Society, Medical Association of the State of Alabama: College of Counselors (2017-present) & Council on Medical Service (2017-present)

Dean K. Naritoku: President and Board Member – Southern Epilepsy and EEG Society, Board Member – American Board of Clinical Pharmacology, Board Member – J. Kiffin Penry Mini Fellowship Program, Fellow - American Academy of Neurology, Fellow – American Epilepsy Association, Member – American Epilepsy Society, Member – American Society of Clinical Pharmacology and Therapeutics, Member – American University Professors of Neurology

Juan Ochoa: Reviewer, Journal of Clinical Neurophysiology, Epilepsy and Behavior, ACNS, EEG reporting guidelines, Treatments Committee AES, CME Committee ACNS
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Neurology at the University of South Alabama continues its expansion of clinical, educational and research efforts. The addition of our second neurointerventionalist, has enabled the USA Health Hospital to provide 24/7 comprehensive stroke center services. The Department has provided the infrastructure for multiple interdisciplinary programs including deep brain stimulation, epilepsy surgery and neuroimmunology. Important research collaborations between the Department Neurology and other University departments have resulted in multiple publications in neuroimaging, neuroimmunology, epilepsy and stroke. We have implemented many changes to provide quick and convenient referrals to improve access to our many patients. For FY’20 we anticipate further growth and development of programs providing services unique to the Gulf region.
2018-2019
Summary of Scholarly Activities
Department of Neurosurgery

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Martino A. Invited speaker. Concussion management. Be Better, Be Greater, Be Extraordinary in Pediatric Care Symposium. 2019 Jan 18; Mobile, Al.

V. NATIONAL PROFESSIONAL RECOGNITION

Anthony M. Martino: Chair Neurosurgery, USAMC Medical Executive Committee, Clinical Chairs Committee, Operation Committee, Infection Control Committee, The Student Promotion and Evaluation Committee, Surgery Committee, Chartis Dyad Strategic Leader Development, Red Sash, Promoted to Professor.

George Rusyniak: USA Stroke Committee.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The department of neurosurgery has continued the development of subspecialty services in epilepsy and brain stimulation. We have added a new department member, Dr. R. Menger. His fellowship is in complex spine surgery and will be spearheading that effort. We have also successfully recruited a 4th partner who will be joining the department in 2020.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Rizk B. Invited speaker. Development of assisted reproductive technology in the United States. Southeast University; 2018 Dec 22; Nanjing, China.

Rizk B. Invited speaker. Ultrasound: before, during & after ART. First International Citmer Symposium; 2019 Jan 18; Monterrey, México.


Rizk B. Invited speaker. Is there a different stimulation protocol for PCOS patients? First International Citmer Symposium; 2019 Jan 18; Monterrey, México.

Rizk B. Invited speaker. Ultrasound: Before, during and after ART. 2nd Conference of Mastery & Excellence; 2019 Feb 1; Bengaluru, Karnataka, India.

Rizk B. Invited speaker. Ultrasound: SIS & hysteroscopy in IVF cases. 2nd Conference of Mastery & Excellence; 2019 Feb 1; Bengaluru, Karnataka, India.

Rizk B. Invited speaker. Endometriosis & IVF. 2nd Conference of Mastery & Excellence; 2019 Feb 2; Bengaluru, Karnataka, India.

Rizk B. Invited speaker. Is there a different stimulation protocol for PCO patients? 2nd Conference of Mastery & Excellence; 2019 Feb 2; Bengaluru, Karnataka, India.

Rizk B. Invited speaker. New frontiers for fertility preservation, vitrification & ovarian transplant. 2nd Conference of Mastery & Excellence; 2019 Feb 2; Bengaluru, Karnataka, India.

Rizk B. Invited speaker. Keynote address. Personal journey – past, present & future in ART. 2nd Conference of Mastery & Excellence; 2019 Feb 1; Bengaluru, Karnataka, India.

Rizk B. Invited speaker. Fertility preservation: present and future. 20th Annual Conference of the Department of Obstetrics & Gynaecology; 2019 Mar 21; Cairo, Egypt.
Rizk B. Invited speaker. Ultrasound, sonohysterography and hysteroscopy in failed difficult IVF cases. 20th Annual Conference of the Department of Obstetrics & Gynaecology; 2019 Mar 22; Cairo, Egypt.

V. NATIONAL PROFESSIONAL RECOGNITION

Rizk B. President of Middle East Fertility Society. Honorary President, Egyptian Society for Reproductive Medicine; 2018 Sep 13-14, 2018; Cairo, Egypt. President, Middle East Fertility Society; 2018 Nov 2-3; Beirut, Lebanon. Keynote Speaker, Personal journey – past, present & future in ART. 2nd Conference of Mastery & Excellence; 2019 Feb 1; Bengaluru, Karnataka.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Mary B. "Mimi" Munn, M.D., has been appointed Professor and Chair of Obstetrics and Gynecology at the University of South Alabama College of Medicine.

We are implementing a new state-of-the-art software system for ultrasound structured reporting and image management Centering Pregnancy Program for our patients. This program utilizes patient centered group prenatal model to foster education among the participants and obstetric provider; Centering has been shown to improve pregnancy outcomes (maternal and neonate) and increase breastfeeding rates. This program is supported for three years through a grant administered by the Alabama Department of health.

Carey Winkler, MD, has been appointed as an adjunct faculty member in Maternal Fetal Medicine.

Jennifer Pierce, MD has been appointed as the Graduate Medical Education Program Director.

Our OB/GYN Conference will be held this year at the Battle House Hotel on Oct 10 and 11. This year’s program features a wide spectrum of topics including: Maternal Mortality: Overview and potential areas for improvement, Workup for Vulvovaginal Complaints, All Mouths Matter: An oral link to saving lives.

We are implementing a new state-of-the-art software system for ultrasound structured reporting and image management Centering Pregnancy Program for our patients. This program utilizes patient centered group prenatal model to foster education among the participants and obstetric provider; Centering has been shown to improve pregnancy outcomes (maternal and neonate) and increase breastfeeding rates. This program is supported for three years through a grant administered by the Alabama Department of health.

We welcomed four new residents this year: Alexandra Berger, MD, Meharry Medical College, Nashville, TN, Ashley Easterwood, MD Texas Tech University Health Sciences
Center School of Medicine, Chelsea Nelson, MD University of Texas School of Medicine
San Antonio, San Antonio, TX and Taylor Twiggs, MD Indiana University School of
Medicine, Indianapolis, IN.

Megan Missanelli, MD was selected to be the Administrative Chief and Katherine Grette,
MD was named our Education Resident this academic year.
2018-2019
Summary of Scholarly Activities
Department of Orthopaedic Surgery

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


Pearce SS, Manci E, Nimityongskul P. Distal tibial chondroblastoma with intra-articular penetration treated with gelatin foam sponge and bone grafting. Orthopaedics. 2019 Jul 1;42(4):e391-e394. Available at: https://doi.org/10.3928/01477447-20190624-06

II. PUBLISHED ABSTRACTS


Pearce SS, Honeycutt MW, Cutchen W, Tillman M, Nimityongskul P. Predicting pediatric distal forearm fracture remodeling: does Friberg’s equation really work? 23rd Annual G. Dean MacEwen Lectureship in Pediatric Orthopaedics; 2018 Nov 13; New Orleans, LA.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Brewer J. Invited speaker. Current treatment strategies. 10th Annual Gulf Coast Acute Care Surgery Symposium; 2019 Apr 4; Mobile, AL.

Nimityongskul P. Invited speaker. Pediatric orthopaedics: interesting case discussion and update from University of South Alabama. Department of Orthopaedics, Queen Sirikit Children’s Hospital; 2018 Dec 12; Bangkok, Thailand.

V. NATIONAL PROFESSIONAL RECOGNITION


VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Brewer, Jeffrey. In 2018-2019 Dr. Brewer coordinated and participated in numerous research projects with Orthopaedic Surgery residents and medical students. Dr. Brewer conducted/coordinated weekly resident conferences. Dr. Brewer actively participated on committees for the Department of Orthopaedic Surgery. Additionally, he served on the Burn/Trauma Operational Committee and Peer Review Committee at University Hospital. Dr. Brewer served as a coordinating committee member for the Gulf Coast Acute Care Surgery Symposium held in Mobile, April 2019.

Nimityongskul, Prasit: In 2018-2019 Dr. Nimityongskul served as a summer research supervisor at the University of South Alabama College of Medicine. Dr. Nimityongskul traveled to Thailand in December 2019 and gave several visiting profession lectures at hospitals and clinics.

Pearsall, Albert: In 2018-2019 Dr. Pearsall mentored numerous medical residents as well as surgical residents. He attended the International Society for Knee and Arthroscopic Surgery in Cancun, MX where he participated in panel discussions and hosted a discussion on “Fresh and Cryopreserved platelet rich plasma have equivalent constituents and growth factors”. Proceeds from the discussion will be published in the Journal of ISAKOS in the
fall. Dr. Pearsall continued his ongoing work with university athletes and sports teams and serves as the team physician for USA Athletics Dept. Dr. Pearsall attended the Sunbelt Team Physicians meeting in New Orleans in May 2019.

Perry, Mark: In 2018-2019 Dr. Perry participated in a capstone project for Dhalanjay T. Tambe, PhD, “Validation of smart drill for orthopaedic surgery” with the University of South Alabama Department of Mechanical Engineering. Dr. Perry successfully coordinated the Annual Southeastern Foot Club Conference which hosted educational presentations and posters from residents and orthopaedic medical professionals in the southeastern United States. The conference was held in Destin, FL in May 2019. Dr. Perry is well underway with plans for the 31st annual meeting which will take place at the Grand Hotel in Point Clear, AL in April 2020. Dr. Perry attended a professional development conference regarding the evaluation of total ankle arthroplasty hosted by Wright Medical in November 2018. Dr. Perry provided medical coverage for the 15th Annual Publix Grandman Triathlon in Fairhope, AL in May 2019.
2018–2019
Summary of Scholarly Activities
Department of Pathology

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


Kanchanapalli R, Deshmukh SK, Chavva SR, Tyagi N, Srivastava SK, Patel GK, Singh AP, Singh S. Drug-loaded exosomal preparations from different cell types exhibit distinctive loading capability, yield, and anti-tumor efficacies: a comparative analysis.


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II. PUBLISHED ABSTRACTS


Chavva SR, Deshmukh SK, Kanchanapally R, Tyagi N, Coym JW, Singh AP, Singh S. EGCG-gold nanoparticles exhibit superior anti-tumor activity than conventional gold nanoparticles or EGCG. 12th Annual College of Medicine Research Forum, University of South Alabama; 2018 Nov 9; Mobile AL. Abstract no 35.


Khan MA, Patel GK, Srivastava SK, Zubair H, Carter JE, Singh S, Singh AP. Dual targeting of CXCR4 and hedgehog pathways enhances chemotherapeutic outcome in pancreatic cancer. O’Neal Comprehensive Cancer Center at University of Alabama at Birmingham 20th Annual Research Retreat; November 16; Birmingham, AL.

Miree OC, Srivastava SK, Singh S, Carter JE, Rocconi RP, Scalici J, Singh AP. MYB: a novel molecular target in ovarian cancer. O’Neal Comprehensive Cancer Center at University of Alabama at Birmingham 20th Annual Research Retreat; 2018 Nov 9; Birmingham, AL.


Xu H, Herrera GA, Wei E. The important role of pathology in the diagnosis of hemophagocytic lymphohistiocytosis. CAP18 Annual Meeting. 2018 Oct 20-24; Chicago IL.

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Singh AP. Exosomes in pancreatic cancer: potential applications in diagnosis and therapy. International Conference on Future Diagnostic, Prognostic and Theranostic Modalities, Aligarh Muslim University; 2018 Dec 31; Aligarh, India.

V. NATIONAL PROFESSIONAL RECOGNITION

Guillermo A. Herrera, M.D.: Vice President/President-elect – International Kidney Monoclonal Gammopathy Society (IKMG); Editor-in-chief – Ultrastructural Pathology Journal; Treasurer, Society for Ultrastructural Pathology (SUP); Editorial Board Member: Archives of Pathology and Laboratory Medicine Section Editor/Renal Pathology; Applied Immunohistochemistry and Molecular Morphology; Stem Cells Research and Therapy; Journal of Cell Biology and Cell Metabolism (CBCM); Ad Hoc Grant Reviewer – American Diabetes Association; Member of New York Academy of Sciences, Sigma Xi – the Scientific Research Society, Alpha Omega Alpha, National Veterans Administration Electron Microscopy Ad Hoc Review Group – Department of Veterans Affairs.

Andrea Kahn, M.D.: President-elect, Alabama Association of Pathologists, 2018-Present.


Ajay Singh, M.D.: Outstanding Achievement Award by the Society of American Asian Scientists in Cancer Research (SAASCR); Appointed as Guest Editor for Cancers Journal (MDPI Publishers), special issue on prostate cancer; Associate Editor for Cancer Medicine – Cancer Biology Section – John Wiley & Sons Publisher;

Elizabeth Manci, M.D.: Serving as Councilor, for District One, for the Medical Association of the State of Alabama.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Three residents completed the residency program this year. Dr. Shante Hill has entered a forensic pathology fellowship at the Tarrant County Medical Examiner’s Office in Fort Worth, TX. Dr. Leo Maldonado has entered into an oncologic surgical pathology fellowship at Memorial Sloan Kettering Cancer Center, in NYC, NY; second year at Breast and Gynecologic Pathology at New York University (NYU), NYC, NY. Dr. Jonathan Newsom has entered into a forensic pathology fellowship at Miami Dade County Medical Examiner’s Office, Miami, FL.

Once again, the department had a successful residency recruiting year with three residents joining the department: Dr. Sarah Anderson from Alabama College of Osteopathic Medicine, Alabama, Dr. Vindhya Bellamkonda from Gandhi Medical College and Hospital, Secunderabad, India, Dr. Ekim Kilinc from Istanbul Universitesi Cerrahpasa Tip Fakultesi, Turkey.

The following two faculty members moved from the Department of Pathology to other departments within the University: Dr. Kelly Roveda, Assistant Professor and Assistant Dean of Medical Education and Student Affairs moved from the department of pathology to become the Associate Dean of Student Affairs for the USA College of Medicine. Dr. Carole Boudreaux, Associate Professor, moved from the department of pathology to become the DIO (Designated Institutional Official) for the Residency Programs at USA Health University Hospitals. Dr. Andrea Kahn was promoted to Professor.

Dr. Elliot Carter was named Director of the Division of Clinical Pathology. Drs. Seema Singh, Associate Professor, and Ajay Singh, Professor, from MCI joined the Department of Pathology. Dr. A. Singh became the Director of the Research Division in the Department of Pathology. Dr. S. Singh obtained additional grant funding from the NIH, with a 5-year grant to study the impact of social factors on the biology of breast cancer. Overall Dr. S. Singh and Dr. A Singh, currently have 6 active grants dealing with breast, prostate, ovary and pancreas cancer.

The Department of Pathology welcomed several new faculty members: Dr. Guillermo A. Herrera, as Locke Eminent Scholar, Professor and Pathology Chair. Dr. Herrera comes from LSU Health-Shreveport and brings a wealth of knowledge in renal and genitourinary pathology as well as ultrastructural pathology. Kurt Knowles, MD joined faculty from LSU Health-Shreveport to work as an Assistant Professor in dermatopathology, cytopathology, and surgical pathology. Professor Elba Turbat-Herrera, MD has an appointment with the MCI and will be performing ROSE (rapid onsite specimen evaluations) at that facility. Dr. Turbat-Herrera has trained 29 cytopathology fellows who are practicing throughout the U.S.A. Jiamin Teng, MD,
PhD has joined the research ranks in the department as an Associate Professor and has a shared laboratory with Dr. Guillermo A. Herrera, on the main campus, where Immunoglobulin monoclonal light chains pathology and glomerular repair is the research focus. Luis del Pozo-Yauner, MD, PhD is an Assistant Professor from LSU Health-Shreveport who will be in charge of Clinical Chemistry. Mingxia Shi, MD adds additional surgical pathology and cytopathology expertise as an Assistant Professor from LSU Health-Shreveport.

A new one year fellowship training program to begin July 1, 2020 was approved by the Institutional ACGME Committee. The fellowship program will be in Genitourinary and Renal Medical Diseases.

New staff added to Pathology include Nancy Lamborn as Pathology Outreach Coordinator, Nancy Merrill as Secretary V, Jennifer Russell as Director of Operations, Susan Magliato as an Electron Microscopy Technician, and Jane Ross as a sales rep for Pathology Outreach.

The Department of Pathology began an outreach program to provide pathology services throughout the United States. Originally starting with renal biopsies, the service will expand to include muscle and nerve biopsies, electron microscopy and genitourinary biopsies, among others. To support this new mission The Department of Pathology purchased a new transmission electron microscope and new microscope cameras. Additionally, the software purchases of Vital Access, Apollo and Athena will allow physicians, away from our institution, to have access to USA pathology as well as enhanced surgical pathology reports.

Furthermore, the pathology residents selected, Dr. Andrea G. Kahn and Dr. Gary E. Carnahan, as the 2019 Faculty Recognition Award recipients and Adrian Hoff, as the recipient of the 2019 Pathology Staff Recognition Award for excellence in and dedication to teaching. The Pathology faculty and house staff published 12 peer-reviewed journal articles in the medical literature, and the Pathology faculty participated as co-investigators in 7 NIH-funded grants.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS

Bhat R, Phaltas R, Jha OP, Eyal F. Elective high-frequency jet ventilation versus conventional mechanical ventilation in periviable preterm infants with respiratory distress syndrome. Pediatric Academic Societies Meeting; 2019 Apr 27-30; Baltimore MD.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Turner, C. Invited speaker. Engaging the next generations of physicians in the business of healthcare. HFMA Annual Conference 2019; 2019 Jun 24; Orlando, FL.

Trammell, K. Invited speaker. The bridge between pediatricians and school nurses in Alabama. Annual meeting, Alabama Chapter, American Academy of Pediatrics 2019; 2019 Sep 29; Birmingham, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Stephanie Anderson: Member, American Academy of Pediatrics, Council on Children with Disabilities & Section on Developmental and Behavioral Pediatrics; Member, Society for Developmental and Behavioral Pediatrics, Education Committee; Member, Alabama Interagency Autism Coordinating Council (AIACC) Standards of Practice Committee, Diagnostics and Health Work Group.

Lynn Batten: Fellow, Section on Cardiology, American Academy of Pediatrics; Member, Council on Cardiovascular Disease in the Young, American Heart Association; Member, Adult Congenital and Pediatric Cardiology Section, American College of Cardiology; Member, Council on Medical Student Education in Pediatrics (COMSEP); Annual Survey and Meeting Workshop Committees, COMSEP; Reviewer: MedEd Portal.

Roger Berkow: Member, American Academy of Pediatrics; American Pediatric Society, American Society of Pediatric Hematology/Oncology, Association of Pediatric Program Directors, Children’s Oncology Group, Editor-in-Chief: AAP PREP-SA, Alabama task force on Pediatric Palliative and End of Life Care, Reviewer: Pediatrics, Pediatrics in Review, Pediatric Blood and Cancer.

Ramachandra Bhat: Member, American Academy of Pediatrics; Member, Southern Society of Pediatric Research; Member, American Medical Association. Reviewer: Pediatrics, Pediatric Quality and Safety and Abstract reviewer for Pediatric Academic Societies Meeting 2019.

Samar Bhowmick: Fellow, American Academy of Pediatrics; Member, American Association of Clinical Endocrinologists; Fellow, American College of Endocrinology; Member, American Diabetes Association; Member, The Endocrine Society; Member, The Lawson Wilkins Pediatric Endocrine Society. Reviewer: Pediatrics, Clinical Pediatrics, Journal of Southern Medical Association, Asian Journal of Andrology.
Kari Bradham: Member, Educational Scholars Program, Academic Pediatric Association; Fellow, American Academy of Pediatrics; Fellow, Alabama Early Hearing Detection; Fellow, Intervention Champion. Review: MedEd Portal.

Jennifer Cole: Fellow, American Academy of Pediatrics; Member, American Academy of Pediatrics, Alabama Chapter; Member, Medical Association of the State of Alabama.

LaDonna Crews: Member, Academy of Breastfeeding Medicine; Member, Academic Pediatric Association; Fellow, American Academy of Pediatrics; Board, American Academy of Pediatrics, Alabama Chapter; Member, American Medical Association; Member, Medical Association of the State of Alabama; Member, Mobile Pediatric Society; Member, Regional Perinatal Advisory Committee; Member, Society for Adolescent Medicine.

Karen Crissinger: Member, American Academy of Pediatrics; Member, American Gastroenterological Association; Member, North American Society for Pediatric Gastroenterology, Hepatology, & Nutrition; Member, Society for Pediatric Research; Member, Southern Society for Pediatric Research. Reviewer: Journal of Pediatric Gastroenterology & Nutrition.

Haidee Custodio: Member, American Academy of Pediatrics; CME Chair, Alabama Chapter, American Academy of Pediatrics; Member, Infectious Diseases Society of America; Member, Pediatric Infectious Diseases Society; Member, Association of Pediatric Program Directors. Reviewer: Pediatric Academic Societies Meeting, Clinical Pediatrics, MedEd Portal, Global Pediatric Health.

Nita Davis: Fellow, American Academy of Pediatrics; Member, Mobile Pediatric Society.

Kalsang Dolma: Member, American Academy of Pediatrics; Member, Indian Academy of Pediatrics; Member, American Thoracic Society.

Benjamin Estrada: Member, Alpha Omega Alpha Medical Honor Society; Fellow, American Academy of Pediatrics (AAP); Member, Association of American Medical Colleges (AAMC); Institutional Representative, COMSEP task force on curriculum development; Member, Council on Medical Student Education in Pediatrics (COMSEP); Member, Gold Humanism Honor Society; Member, Infectious Diseases Society of America (IDSA); Fellow of the Pediatric Infectious Diseases Society (PIDS); Member, Society for Healthcare Epidemiology of America (SHEA); Institutional Representative, Southern Society for Pediatric Research (SSPR); Member, Team-Based Learning Collaborative. Reviewer: Infectious Diseases in Clinical Practice.

Fabien Eyal: Member, Alabama Committee on the Fetus and Newborn; Member, Alabama Society of Neonatology; Member, Alpha Omega Alpha Medical Honor Society; Member, American Academy of Pediatrics, Member, American Medical Association; Clinical Champion, Coordinator of Neonatal Monitoring, Office of Rural Health; Member, Southern Society for Pediatric Research; Member, Southeastern Association of
Neonatologists; Member, Vermont Oxford National Data Base.

Sheryl Falkos: Member, Advisory Board, Penelope House Domestic Violence Shelter; Fellow, American Academy of Pediatrics; Member, Critical Care Section, Society of Critical Care Medicine.

Cristina Gavrilita: Member, Alabama Baby Coalition; Fellow of the American Academy of Pediatrics; Member, Board of Directors, Ronald McDonald House; Member, Society of Critical Care Medicine; Member, Mobile Pediatric Society.

Sophia Goslings: Member American Academy of Pediatrics, AAP Section on Hospital Medicine; Member, Association of Pediatric Program Directors; Member, Mobile Pediatric Society; Workshop Co-Leader: Beyond Tell Me About Yourself – Using Multiple Mini Interviews to Overcome Interview and Selection Challenges; ACGME Annual Education Conference; Workshop Co-Leader: Changing Resident Assessment Experiences Implementing the Pediatric Milestones Assessment Collaborative.

David Gremse: Executive Board, American Academy of Pediatrics, Alabama Chapter; Member, American Academy of Pediatrics, Subcommittee on Apparent Life Threatening Events; Member, American Board of Pediatrics (ABP); Member, Strategic Planning Committee, American Board of Pediatrics Foundation; Medical Editor, ABP Subboard of Pediatric Gastroenterology Exam Committee; Member, ABP Long-Term Investment Committee; Member, ABP Credentials Committee; Fellow of the American College of Gastroenterology; Member, ACG Pediatric Gastroenterology Committee; Member, American Gastroenterological Association; Member, American Medical Association; Member, American Pediatric Society; Member, Association of Medical School Pediatric Department Chairs (AMSPDC); President, Gulf Coast Total Care; Member, Mobile Pediatric Society; Member, North American Society of Pediatric Gastroenterology, Hepatology, and Nutrition (NASPGHAN); Member, Society for Pediatric Research; Member, The Gold Humanism Honor Society; Member, Alpha Omega Alpha Medical Honor Society; Editorial Board, Pediatric Drugs; Reviewer: Pediatric Drugs; Digestive Diseases and Sciences; Pediatrics; Journal of Pediatric Gastroenterology and Nutrition, Clinical Pediatrics

Rashmi Gulati: Fellow, American Academy of Pediatrics; Member, American Medical Association; Member, Indian Academy of Pediatrics; Member, Vermont Oxford National Data Base; Member, Society for Pediatric Research; Abstract Reviewer: 2019 Eastern Society of Pediatrics Research Meeting. Reviewer: Journal of Neonatology and Clinical Pediatrics.

Charles Miles Harmon: Member, American Academy of Pediatrics; Fellow, American Academy of Pediatrics Section on Perinatal Pediatrics; Member, Palliative Care Research Cooperative Group; Member, Society for Pediatric Research.

Chibuzo Ilonze: Member, American Academy of Pediatrics; Member, American Society of Pediatric Hematology-Oncology; Member, Children's Oncology Group (COG);
Member, American Society of Hematology (ASH); Member, American Society of Clinical Oncology (ASCO).

Hamayun Imran: Member, American Academy of Pediatrics; Member, American Society of Hematology; Member, American Society of Pediatric Hematology-Oncology; Member and Principal Investigator, Children’s Oncology Group; Member, Advisory Board, Kedrion Pharmaceutical; Speakers Bureau, NovoNorDisk Pharmaceuticals.

Om Jha: Fellow, American Academy of Pediatrics; Member, American Medical Association; Member, Indian Academy of Pediatrics; Member, Vermont Oxford National Data Base. Reviewer: Journal of Medical Devices

Anne-Marie Kaulfers: Fellow, American Academy of Pediatrics; Member, American Diabetes Association; Member, The Endocrine Society; Member, The Medical Association of the State of Alabama; Member, The Lawson Wilkins Pediatric Endocrine Society; Board, Southeastern Diabetes Education Services (SDES). Reviewer: Clinical Pediatrics.

Myria Mack-Williams: Fellow, American Academy of Pediatrics; Member, Mobile Pediatric Society; Member, Association of Pediatric Program Directors.

Preethi Marri: Fellow, American Academy of Pediatrics; Member, American Society of Pediatric Hematology-Oncology; Member, American Society of Clinical Oncology; Member and Co-PI, Children’s Oncology Group.

Jose Martinez: Fellow, American Academy of Pediatrics; Fellow, American College of Medical Genetics; Fellow, American Society of Human Genetics.


Brandy Merritt: Member, American Academy of Pediatrics; Member, Mobile Pediatric Society; Member, Society of Critical Care Medicine.

Keith Peevy: Member, Alabama Baby Coalition Task Force; Member; Member, Alabama Society of Neonatology; Member, Alabama State Medical Society; Member, Alpha Omega Alpha Medical Honor Society; Member, American Medical Association; Affiliate Member, European Society for Pediatric Research; Member, Medical Society of Mobile County; Member, Medical Association of the State of Alabama (MASA); Member, Southern Society for Pediatric Research; Member, Southeastern Association of Neonatologists, Inc.; Member, Southern District of Alabama Human Trafficking Task Force Committee.

Melody Petty: Member, American Academy of Pediatrics, Member, Alabama Chapter, American Academy of Pediatrics; Member, Advancing Pediatric Educator Excellence (APEX) Teaching Program 2020 Educator Class, Member Section on Pediatric Hospital Medicine, American Academy of Pediatrics
Anand Ponnambalam: Fellow of the American Academy of Pediatrics (FAAP); Member, American College of Gastroenterology (ACG); Member, American Gastroenterological Association (AGA); Member, North American Society for Pediatric Gastroenterology Hepatology and Nutrition (NASPghan). Reviewer: *Journal of Pediatric Gastroenterology Hepatology and Nutrition*.

Daniel Preud’Homme: Member, Quality Improvement Coach and Faculty, Alabama Child Health Initiative Alliance (ACHIA); Fellow, American Academy of Pediatrics; Reviewer: *Clinical Pediatrics*.

Renee Roca-Garcia: Member, American Academy of Pediatrics, Pediatrics Section on Hospital Medicine; Member, College of Surgeons and Physicians of Guatemala; Member, Mobile Pediatric Society.

Omar Sanchez: Member, American Academy of Pediatrics, AAP Section on Critical Care; Member, College of Surgeons and Physicians of Guatemala; Member, Mobile Medical Society; Member, Pediatric Society of Critical Care Medicine; Member, Society of Critical Care Medicine; Member, Mobile Pediatric Society.

Mukul Sehgal: Member, American Academy of Pediatrics; Member, Society of Critical Care Medicine; Reviewer: *Journal Club at PedsCCM.org*.

Kamal Sharma: Member, American Academy of Pediatrics, Society of Critical Care Medicine, Permanent Member Nepal Medical Association; Member, Mobile Pediatric Society.

Supatida Tengsupakul: Member, American Academy of Pediatrics; Member, Pediatric Infectious Diseases Society. Certificate of Knowledge in Clinical Tropical Medicine and Travelers’ Health (CTropMed®).

Katrina Roberson-Trammell: Fellow, American Academy of Pediatrics; Board, Gulf Regional Early Childhood Services (GRECS); Member, Medicaid Quality Assurance Committee; Member, Medical Association of State of Alabama; Member, Mobile Bay Area Medical Association; Member, Mobile Medical Society; Member, Mobile Pediatric Society; Medical Director, Gulf Coast Total Care; Member, Pediatric and Adult Workgroup, Regional Care Organization-Region E.

Curtis Turner: Member, American Academy of Pediatrics; Member, Children’s Oncology Group.

Rosa Vidal: Member, Section on Critical Care, American Academy of Pediatrics; Member, Mobile Pediatric Society; Member, Society of Critical Care Medicine; Member, Pediatric Society of Critical Care Medicine.

Richard Whitehurst: Member, Alabama Physicians Wellness Committee; Member, Alabama Society of Neonatology; Member, American Academy of Pediatrics; Member,
American Medical Association; Member, Medical Association of the State of Alabama (MASA); Member, Medical Society of Mobile County; Member, Southeastern Association of Neonatologists, Inc.; Member, Southern Society for Pediatric Research.

Felicia Wilson: Member, Prevention, Early Detection Subcommittee, Alabama Comprehensive Cancer Control Coalition; Fellow, American Academy of Pediatrics, Member Section on Hematology/Oncology; Member, American Society of Hematology; Board Member, Camp Rap-A-Hope; Member, Medical Association of the State of Alabama; Member, Mobile Pediatric Society; Speaker’s Bureau, Novartis Pharmaceuticals Corporation; Laboratory Medical Director, Sickle Cell Disease Association of America, Mobile Chapter; Member, Southern Society for Pediatric Research; Co-Chair, Hemoglobinopathy Subcommittee, State of Alabama Newborn Screening Advisory Committee; Member, Alabama Sickle Cell Oversight and Regulatory Commission; President, Aubreigh’s Army Foundation 328 Board of Directors; Member, Children’s Oncology Group.

Michael Zayek: Member, Alabama Society of Neonatology; Member, American Academy of Pediatrics (AAP); Member, Southeastern Association of Neonatologists, Inc.; Member, Southern Society for Pediatric Research (SSPR).

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Pediatrics was delighted to welcome new faculty members. Dr. Nita Davis joined the faculty as Assistant Professor of Pediatrics in the Division of Pediatric Critical Care in March 2019. Dr. Davis received her medical degree from the University of the West Indies in Mona, Jamaica in 2008. She completed her Pediatrics Residency at University of Miami/Jackson Memorial Hospital in Miami, Florida in 2014. Dr. Mukul Sehgal joined the faculty as Assistant Professor of Pediatrics in the Division of Pediatric Critical Care in July 2019. Dr. Sehgal received his medical degree from Seth GS Medical College in Mumbai, India in 2012. He completed his Pediatrics Residency at Saint Peter’s University Hospital in 2016 and completed his Pediatric Critical Care fellowship at Nicklaus Children’s Hospital in June 2019. Dr. Kalsang Dolma joined the faculty as Assistant Professor of Pediatrics in the Division of Neonatology in August 2019. Dr. Dolma received her medical degree from the Maulana Azad Medical College in Delhi, India in 2008. She completed her Pediatrics Residency at University of South Alabama in 2016 and completed her Neonatology fellowship at UAB in June 2019. Dr. Chibuzo C. Ilonze joined the faculty as Assistant Professor of Pediatrics in the Division of Pediatric Hematology/Oncology. Dr. Ilonze received his medical degree from the University of Nigeria College of Medicine in Nigeria, Nsukka in 2008. He completed his Pediatrics Residency at Woodhull Medical and Mental Health Center in Brooklyn, New York in 2016 and completed his Pediatric Hematology Oncology fellowship at Jimmy Everest Center for Cancer and Blood Disorders in Children, University of Oklahoma Health Sciences Center in June 2019. Dr. Brian S. Gavan joined the faculty as Assistant Professor of Pediatrics in the Division of General Pediatrics in September 2019. Dr. Gavan received his medical degree from University of Medicine and Health Sciences in Basseterre, St. Kitts in 2014. He completed his Pediatrics Residency at University of South Alabama in June 2018.
Drs. Lynn Batten, Benjamin Estrada, Anna Foust, David Gremse, Melody Petty and Daniel Preud’Homme were recognized by the USACOM Class of 2019 as Distinguished Faculty at the Honors Convocation. The twenty-first recipient of the Hollis J. Wiseman Award for Excellence in Pediatrics during the Pediatric Clerkship for the Class of 2019 was Natalie Carlisle. Thirteen of the graduating medical students in the USACOM Class of 2019 chose residencies in Pediatrics or combined Medicine-Pediatrics. Of the pediatric housestaff completing residency training in 2019, two entered private practice, seven entered into fellowship training, and two remained in the department as Pediatric Chief Resident. The two graduating Medicine-Pediatrics residents entered private practice. Thirteen new first year residents and one third year resident entered the pediatric residency program, and two first-year residents entered the combined Medicine-Pediatrics Residency Program. Drs. Brian Gavan and Awab Ibrahim Ali Ibrahim completed their terms as Pediatric Chief Residents and Drs. Laurie McCann and Phillip Nehls took over duties as the Pediatric Chief Residents for the 2019-2020 academic year.

The scholarly activities by the faculty of the Department of Pediatrics this year included 11 original articles and 11 published abstracts. Departmental faculty were active in mentoring pediatric residents in clinical research. There were 8 abstracts presented at regional and national meetings by pediatric residents who were the first authors with senior authorship by members of the pediatric faculty.

Quality improvement efforts to advance patient care for the 2018-19 academic year included the approval of the first Quality Improvement Project awarded for MOC Part 4 Credit by the American Board of Pediatrics through the Department of Pediatrics as an ABP Portfolio Sponsor of Quality Improvement Activities. This approval was the makes the University of South Alabama the first medical school in the State of Alabama to approve a project as an ABP Portfolio Sponsor. Dr. Daniel Preud’Homme, who Chairs the Quality Improvement Team Leadership Committee, deserves credit for leading the effort for the successful application.

Dr. LaDonna Crews became Medical Director of the Complex Care Pediatrics Clinic January 2019. Dr. Crews practice is a model for the state, with the largest concentration of medically complex children of any clinic in Alabama. The clinic receives grant support from the Complexity Collaborative Improvement and Innovation Network (COIIN). Dr. Miles Harmon is Medical Director of the BRIDGE program that provides medical care, counseling, and a network to support families with high risk/complicated pregnancies or deliveries to assist these families as their infants transition from inpatient care to coordinate their care in the outpatient setting. The Hollis J. Wiseman Neonatal Intensive Care Unit opened a new Small Baby Unit, the first in the region. The unit was dedicated to Dr. Fabien Eyal.

The Pediatric Residency Program introduced a new curriculum introducing X+Y Immersion Scheduling beginning in the 2019-2020 academic year. In an X+Y scheduling model, residents work on their block rotation such as wards uninterrupted by clinic responsibilities for “X” weeks, followed by a “Y” week, when the resident only works in
clinic with no hospital coverage responsibilities. This schedule is currently not part of the program requirements for ACGME accredited pediatric residencies, so USA applied for a waiver through a program sponsored by the Association of Pediatric Program Directors. Thanks to Roger Berkow, MD, FAAP, our residency program director, and the Pediatric Residency leadership team for introducing this new innovation into our residency training program.

The University of South Alabama Department of Pediatrics and the Office of Continuing Medical Education hosted the 2019 Pediatric Symposium, "Be Better, Be Greater, Be Extraordinary in Pediatric Care," that convened at the Strada Patient Care Center at the USA Children’s and Women’s Hospital campus on January 18, 2019. Dr. Haidee Custodio, organized and was the CME Chair for the event.
2018-2019
Summary of Scholarly Activities
Department of Pharmacology

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


Microscopy: Image Acquisition and Processing XXVI. 2019 Feb 21;108831A. doi: 10.1117/12.2510562. [Subscription required].


II. PUBLISHED ABSTRACTS


Daly G, Francis CM, Andrews JA, Pastukh VM, Absher D, Langley RJ, Gillespie MN. Rapid redistribution of oxidative base damage in DNA regulatory sequences accompanies transcriptional modulation by hypoxia in the human endothelial cell genome. Am J Respir...


Ijaz Z, Borchert GM. SdRNA contributors to prostate cancer. 2018 American Medical Association Interim Meeting; 2018 Nov 8-13; National Harbor, MD.


Rachek LI. Targeting DNA repair enzyme hOGG1 to mitochondria by a TAT-protein transduction system as a novel therapeutics for breast cancer. 1st Southern Genome Maintenance Conference; 2018 Oct 20; Mobile, AL. p. 53. Abstract no. 20.


III. INVITED PRESENTATIONS

Gillespie MN. Invited speaker. Three new faces of oxidative DNA damage: more than mutagenic. University of Alabama at Birmingham, Department of Anesthesiology; 2018 Oct 15; Birmingham, AL.

Gillespie MN. Invited speaker. The mitochondrial genome in endothelial injury and its propagation. University of Florida, Department of Surgery; 2018 Dec 11; Gainesville, FL.

Gillespie MN. Invited speaker. New faces of oxidative DNA damage in cardiovascular disease: more than mutagenic. University of Florida, Department of Surgery; 2018 Dec 12; Gainesville, FL.

Gillespie MN. Invited speaker. New genomic threats in cardiovascular disease: more than mutagenic. University of Pittsburgh School of Medicine; 2019 Apr 24; Pittsburgh, PA.

Gillespie MN. Invited speaker. Mechanisms of multi-organ failure after trauma. Gulf Coast Trauma Symposium; 2019 Apr 22; Mobile, AL.

Keeton AB. Invited speaker. Novel RAS inhibitor MCI-062 potently and selectively inhibits the growth of KRAS mutant pancreatic tumor cells by blocking GTP loading of
Migaud M. Invited speaker. Green chemistry meets biological chemistry and drug discovery: new entities to probe cell metabolism. University of Alabama at Birmingham Department of Chemistry; 2019 Sep 20; Birmingham, AL.

Migaud M. Invited speaker. Can NAD go rogue? The NAD+ Metabolism and Signaling Conference; 2019 Jun 27; Dublin, Ireland.

Piazza GA. Invited speaker. A chemical-biology approach using the sulindac indene scaffold to identify novel inhibitors of β-catenin or RAS signaling in cancer cells. Giessen University/Max Planck Institute; 2019 Jun 17; Giessen, Germany.

Piazza GA. Keynote speaker. Novel PDE10 inhibitors with anticancer activity that suppress Wnt-induced β-catenin transcription by activating cGMP/PKG signaling. cGMP: Generators, Effectors and Therapeutic Implications; 2019 Jun 15; Mainz, Germany.

Piazza GA. Invited speaker. Discovery and characterization of a novel class of Ras inhibitors. Fox Chase Cancer Center; 2019 May 30; Philadelphia PA.

Piazza GA. Invited speaker. Chemical-biology approach for the discovery of novel anticancer drugs. City University of Hong Kong; 2019 Dec 2; Kowloon Tong, Hong Kong.


Sobol RW. Invited speaker. Base excision repair - a functional node in the crosstalk between DNA repair and metabolism. Florida State University Department of Biomedical Sciences; 2018 Oct 3; Tallahassee, FL.

Sobol RW. Invited speaker. Base excision repair - a functional node in the crosstalk between DNA repair and metabolism. University of Texas Southwest Medical Center; 2018 Oct 9; Dallas, TX.

Sobol RW. Invited speaker. Base excision repair - a functional node in the crosstalk between DNA repair and metabolism. NIEHS Training Program in Environmental Health Sciences at UC Davis; 2019 Dec 20; Davis, CA.

Sobol RW. Invited speaker. Advancing base excision repair mechanistic insight to reveal new targets in cancer treatment. Georgetown-Lombardi Comprehensive Cancer Center; Oncology Grand Rounds Lecture series; 2019 Mar 1; Washington, DC.

Sobol RW. Invited speaker. From post-doc to professor in a cancer center – a path of research and discovery. ASBMB 2019 Career Development Program for Graduate Students and Postdoctoral Fellows; 2019 Apr 6; Orlando, FL.
Sobol RW. Invited speaker. Advancing base excision repair mechanistic insight to reveal new targets in cancer treatment. Basic and Translational Seminar Series; UPMC Hillman Cancer Center; 2019 Apr 23; Pittsburgh, PA.

IV. NATIONAL PROFESSIONAL RECOGNITION

Abu-Bakr Al-Mehdi: Faculty Reviewer and Question Writer, USMLE Rx and First Aid.


Adam B. Keeton: Grant Reviewer, Al-Jalila Foundation. Journal Reviewer, OncoTargets and Therapy.


Marie E. Migaud: Editor, Medicina. Expert Grant Reviewer, European Commission Chemistry Panel. Journal Reviewer, PNAS, PLOSOne. Chair Elect, American Chemical
Society, District IV. Member, American Chemical Society. Organizer, Federation of American Societies for Experimental Biology Conference.

Gary A. Piazza: Grant Reviewer, NCI SBIR Cancer Biotherapeutics Study Section, VA Oncology C Study Section, DoD Breast and Ovarian Cancer Study Section, NCI R01 Molecular Oncology. Chair, NCI R21 Drug Development, NCI PREVENT.


Mykhaylo Ruchko: Journal Reviewer, Amino Acids, American Journal of Physiology Lung Cellular and Molecular Physiology.


Victor Solodushko: Journal Reviewer, BMC Research Notes, BMC Microbiology, Molecular Pharmaceutics, Nucleic Acids Research.


V. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS
This year a few of our colleagues moved on to retirement. Dr. June Ayling, along with her associate, Dr. Steve Bailey, both inventors and developers of the widely used vitamin supplement, Metafolin®, retired while continuing their work on new intellectual property development projects. Dr. Ayling served as Professor in the Department of Pharmacology for thirty-seven years and has worked in research for over fifty-two years. She achieved international recognition for her work on folate metabolism.

Dr. Wiltz Wagner, who taught one of the most successful graduate classes on professionalism in biomedical sciences, retired from his fourteen years as Professor of Pharmacology at USA and fifty-eight years of teaching and research. Among numerous contributions to understanding lung biology and pathology, Dr. Wagner pioneered the use of intra-vital microscopy to study the pulmonary microcirculation. He was among the first to discover pulmonary capillary recruitment and collateral ventilation, which are two critical physiologic determinants of gas exchange efficiency, and retired as an icon in the field. Another outstanding accomplishment of Dr. Wagner is unrelated to his career as a biomedical scientist; he was recently inducted into the American Motorcycle Association’s Hall of Fame for his many contributions over the past four decades, which included his founding of the North American Trials council to promote and internationalize the sport of motorcycle trials competition. He also was a national champion in the international sport of motorcycle ice racing. Finally, in collaboration with his daughter, Belen, Wiltz was responsible for over 50 motorcycle world land-speed records. Dr. Wagner is truly a “renaissance man”.

The department also added new faculty members. Dr. Glen Borchert joined us as Associate Professor of Pharmacology. Dr. Borchert served four years as a Pharmacology joint appointee while his primary appointment was in the Biology Department at USA. Dr. Borchert brings to the Department nearly twenty years of research expertise in genetics, structural biology, and immunology.

The Department of Pharmacology grew this summer with the addition of several new faculty members from the Mitchell Cancer Institute, including Dr. Marie Migaud, Dr. Gary Piazza, and Dr. Robert Sobol, along with their staff, postdoctoral fellows, and students. Dr. Migaud is a Professor with an international recognized chemical biology program focusing on vitamin B3 and its role in health and disease. Her findings allow biologists to test specific NAD-dependent biological events that control cell survival, DNA repair and gene regulation. Dr. Migaud’s work has opened the door to detailed analyses of a number of NAD metabolism processes and helped correlate how vitamin supplements impact health status and recovery following chemotherapy and radiotherapy treatment. Dr. Piazza is the Institute’s Leader of the Drug Discovery Research Center and Abraham A. Mitchell Distinguished Investigator. Dr. Piazza is the inventor of record for numerous University-held patents on novel anti-neoplastic drugs that are in various stages of pre-clinical development. Dr. Sobol, the Point Clear Charities Professor of Oncologic Sciences and an Abraham A. Mitchell Distinguished Investigator, is Chief of the Molecular & Metabolic Oncology Program. The Sobol lab focuses on the mechanism of base excision repair, PARP and NAD+ metabolism in human cells and the convergent role of these enzymes and pathways in response to environmental genotoxins and chemotherapy. All of these...
senior investigators bring to the Department distinguished records of publication, extramural funding, graduate education, and service to the scientific community. We are delighted to have them as colleagues and look forward to a productive association.

A number of Department faculty were recognized this past year in the form of awards for education and research. Dr. Al-Mehdi, Professor of Pharmacology, was recognized with the Best Pre-Clerkship Educator Award by the 2019 graduating M.D. class and was selected to wear the “Red Sash” at the College of Medicine Honors Convocation. Dr. Natalie Bauer, who was appointed Associate Professor of Pharmacology with tenure this past year, was awarded an NIH R01 grant for her outstanding work in the area of intercellular communication in pulmonary hypertension by endothelial cell-derived micro-particles. Dr. Gillespie, the Department Chairperson, along with his collaborators, Drs. Langley and Borchert in Pharmacology, and Dr. Jon Simmons in Surgery, was the recipient of two NIH R01 awards for research on mechanisms of trauma-related multiple organ dysfunction syndrome. Finally, multiple Department faculty continued to serve as manuscript reviewers for the world’s best biomedical journals, as grant reviewers for the NIH and other prestigious organizations supporting medical research, and on national-level committees establishing new standards for medical education and care delivery.
2018-2019
Summary of Scholarly Activities
Department of Physiology & Cell Biology

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


McFarland SJ, Taylor MS, Weber DS. Chronic low flow leads to altered vascular reactivity and endothelial Ca^{2+} dynamics. 16th Annual AMA Research Symposium; 2018 Nov 9; National Harbor, MD.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Gassman NR. Invited speaker. Defective base excision repair in triple negative breast cancer. National Institute of Environmental Health Sciences Dr. Robert London Symposium; 2019 May 28; Research Triangle Park, NC.

Lin MT. Invited speaker. Hospital-acquired pneumonia impairs cognitive function. Loma Linda University Integrated Biomedical Science Seminar; 2018 Nov 8; Loma Linda, CA.

Lin MT. Invited speaker. Research is hard – persevere. Loma Linda University Center for Perinatal Biology Seminar; 2018 Nov 9; Loma Linda, CA.

Stevens T. Invited speaker. Infectious proteinopathy of the lung. Brown University; 2019 Nov. 7; Providence, RI.

Taylor M. Invited speaker. Symphony gone rogue: calcium pattern shifting in endothelial dysfunction. University of Nevada; 2019 Sep 19; Reno, NV.

Zha XM. Invited speaker. Acid-sensing ion channel trafficking and ischemia-induced neuronal injury. University of South Carolina; 2018 Dec 11; Columbia, SC.

Zha XM. Invited speaker. Molecular mechanisms underlying acidosis-induced spine remodeling and neuronal injury. Louisiana State University; 2019 Jan 23; New Orleans, LA.

Zha XM. Invited speaker. Acid-sensing ion channel trafficking and ischemic-induced neuronal injury. Tulane University; 2019 Feb 1; New Orleans, LA.

V. NATIONAL PROFESSIONAL RECOGNITION


Mike Lin: Member, American Physiological Society, Society of Neuroscience. Editorial Board Member, *Scientific Reports*. Reviewer, *International Journal of Biological Sciences, JOVE.*


VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Department of Physiology & Cell Biology continually strives to contribute to the College of Medicine’s mission of education, research and service. The faculty actively submit and receive grants at a nationally competitive level. Dr. Alexeyev has received funding for a National Institutes of Health S10 Shared Instrumentation grant to purchase a XFe24 extracellular flux analyzer. Dr. Cohen has also received funding from NIH for a Small Business Innovation Research grant entitled “cardioprotection by inhibition of coagulation and inflammation in myocardial infarction.” Dr. Zha has been awarded an NIH Center for Clinical and Translational Science (CCTS) Vouchers Program award for his project entitled “exploratory gene expression analysis on proton-sensitive GPCRs and ischemic injury”.

The department faculty continue to contribute to medical education. Several faculty members serve as module/course directors, lecturers, facilitators of active learning sessions and mentors. The faculty significantly contributed to the Cardiovascular and Urinary modules for M1 as well as Respiratory, Digestive, Endocrine/Reproductive, Musculoskeletal and Neuroscience/Behaviors modules for M2. Bradley Schuler, a sophomore medical student received the Clyde G. Huggins Award for Summer Research for his work in Dr. Michael Francis lab. Stuart McFarland, a third year medical student mentored by Drs. Taylor and Weber presented his work at the 16th Annual AMA Research Symposium.

Drs. Alexeyev, Lee, Lin and Stevens served as mentors for the South Med Prep Scholars who are sponsored by the Office of Diversity and Inclusion. Many of the faculty also served as mentors for the Medical Student Summer Research Program and the Center for Healthy Communities Undergraduate Research Program, respectively.

The faculty are actively involved in teaching within the Basic Medical Sciences Graduate Program. Drs. Francis and Taylor were co-course directors for a new course IDL640 “Statistics and Experimental Design in Biomedical Research”. Dr. Gassman was course director of IDL667 “Cancer Biology Research Seminar” and Dr. Lee was co-course director of IDL631 “Lung Pathobiology”, respectively. Many of the faculty taught extensively in various graduate courses.

Dr. Mark Taylor, Director of Basic Medical Sciences Graduate Program, held a fall retreat to identify key areas of focus for the graduate program including a new comprehensive assessment plan. Griffin Wright, a second year graduate student in Dr. Gassman’s lab received the Edwin R. Hughes Memorial Award for 2018-2019.
Dr. Stevens developed a novel transgenic rat model within his lab. This animal will harbor a knockout of the gamma secretase activating protein which is believed to impact production of both antimicrobial and cytotoxic amyloid beta. The animal will be broadly relevant to Dr. Steven’s group of ongoing lung, vascular and neural studies. Dr. Gassman received first place for the John R. Durant Award for Excellence in Cancer Research from the University of Alabama at Birmingham Comprehensive Cancer Center.

Several faculty delivered lectures to professional societies and international meetings this year. Dr. Cohen was an invited speaker at the 4th EU-Cardioprotection COST Action MC and WG meeting in Kragujevac, Serbia. Dr. Gassman gave a seminar entitled “Defective base excision repair in triple negative breast cancer” at the Robert London Symposium held at the National Institute of Environmental Health Sciences in North Carolina. Dr. Zha was an invited speaker at LSU in New Orleans presenting a seminar entitled “Molecular mechanisms underlying acidosis-induced spine remodeling and neuronal injury”.

The Department of Physiology & Cell Biology continues to recruit new faculty and strives to contribute to the College of Medicine’s mission of education, research and service.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS

II. PUBLISHED ABSTRACTS


Lee P, Chastain L, Brooks WB. Assessing barriers to mental health care and the necessity of mental health screening in Mobile, AL. Institute of Psychiatric Services Annual Meeting; 2018 Oct 4-8; Chicago, IL.


III. PUBLISHED BOOKS
IV. INVITED PRESENTATIONS

V. NATIONAL PROFESSIONAL RECOGNITION

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Departmental Educational Accomplishments:

The Department’s third year clerkship continues to score very well on the NBME subject exams, averaging ~70th percentile when compared to national norms. Likewise, on Step II of the USMLE, the students have consistently scored at 0.2-0.5 S.D. above the national norm in psychiatry and behavioral science over the past five years. The residency and Child Fellowship continue with maximum years of accreditation. In July, 2020, the Department will start its first fellows in its addiction fellowship program, one of the first in the country and the first in Alabama. It will be an interdisciplinary program with Family Medicine.

Clinical Programs:

Maintained the psychiatric services at Student Health two afternoons per week, with demand for even greater services as the stigma associated with mental issues continues to lessen among the student body.

Education:

The Department continues with its strong emphasis on education. The NBME and Step II scores continue to be well above average when compared to national norms as outlined above. The students’ satisfaction with the second year neuro-behavioral module and the third year clerkship continues to be very positive with the number of students matching in psychiatry residencies exceeding the national average by two to three-fold. This success is primarily due to the faculty teaching of the students while they also serve as effective role models and mentors.

At the graduate level, the residency has seen a remarkable increase in the number of qualified applicants. The residency continues to be reviewed without any citations. The Child Fellowship likewise continues with maximum years of accreditation and welcomes its new program director, Aneek Shoemaker. The vast majority of graduates from both the residency and fellowship remain in Alabama, which has a severe shortage of psychiatrists, especially child psychiatrists. We are proud to be beginning our Addiction Fellowship in July, 2020. One of the first in the country, it will use an interdisciplinary approach to educating our fellows in comprehensive and collaborative approaches to prevention and treatment of addiction disorders.

Research

Dr. Billett, Research Director for the Department, in collaboration with Dr. Mark Gillespie of Pharmacology, together with faculty from Nursing and Psychology, has shown that mitochondrial DNA is released during psychological stress in a sub-population of subjects, similar, but not to the same degree, as it is in those suffering from physical trauma. Tests
are now being proposed for patients hospitalized with bipolar disorder. Should this prove positive, newer models for drug development may follow for the treatment of stress related disorders. Other research efforts are focused on case reports and small clinical case studies involving students and residents to acquaint them with research methods in psychiatry.

**Clinical Activity**

Our unique partnership with AltaPointe has brought together academic and clinical programs to enhance the comprehensive mental health services available to patients from early childhood to the elderly. Increasing partnerships with mental health centers from around the state have resulted in expanded use of tele-psychiatry to improve access to psychiatrists in underserved areas, especially rural communities. Added to this has been the merger of the MARC program in Mobile with AltaPointe, thereby expanding services to those with cognitive disabilities. In addition, AltaPointe is one of the first programs in the country to initiate collaborative care, which is psychiatric services integrated with primary care services in the same clinic, the first being in Bayou La Batre. AltaPointe will soon be adding transcranial magnetic stimulation to its clinical offerings for the patients with treatment resistant depression; the first such offering in this region. The Department continues to offer psychiatric services to undergraduate and graduate USA students through the Student Health Clinic. The Chair continued to offer psychiatric services to specific to the needs of medical students.

**Leadership**

Dr. Luke Engeriser continued as President of the Alabama Psychiatric Physicians Association. In that capacity he has been instrumental in obtaining support from the Alabama Physicians Health Program to modify the disclosure form for physicians renewing their medical licenses each year. The change would require physicians only to disclose those psychiatric disorders that are currently active and would impair their ability to practice medicine. This change is in keeping with standards across the country and with legislation related to disclosing disabilities. A PGYIII resident was chosen for a “fellowship” experience, working with the leadership of the American Psychiatric Association (APA) to improve access to psychiatric services, especially in rural communities. An adjunct faculty was elected as Vice-Speaker to the APA Assembly.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Abdul-Rahim O. Invited speaker. IR management of metastatic colorectal cancer. American College of Surgeons Alabama and Mississippi Chapters 2019 Annual Conference; 2019 Jul 26; Gulf Shores, AL.

Abdul-Rahim O. Invited speaker. From the perspective of interventional radiology: uterine artery embolization for abnormal uterine bleeding. University of South Alabama Med School Cafè; 2019 Jul 12; Mobile, AL.

Abdul-Rahim O. Invited speaker. Uterine artery embolization. Fox 10 News Medical Highlight Segment; 2019 May 16; Mobile, AL.

Figarola M. Invited speaker. Fetal MRI: practical approach and pictorial review. University of South Alabama Ob/Gyn Resident Research Day; 2019 May 3; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Maria Figarola: Manuscript Reviewer, American Journal of Radiology; Member, Alpha Omega Alpha Honor Society.
VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Dr. Osama Abdul-Rahim remains the section chief of interventional radiology and is a member of the cancer committee for the Mitchell Cancer Institute. In addition to his regular teaching duties, Dr. Abdul Rahim has provided grand round lectures for multiple departments on the types of IR services he can provide. He is the lead interventional radiologist for our ESIR teaching program (early specialization interventional radiology). Once again Dr. Abdul Rahim has provided leadership for trauma level one minimally invasive services, which has experienced significant growth over the last year. His help in recruitment has resulted in two new hires for his section.

Dr. Gregg Delgado recently joined the department of diagnostic radiology in January 2019. He serves as the section chief of musculoskeletal radiology, a subspecialty area required for ACGME residency training and accreditation. He gives regular resident lectures in musculoskeletal radiology. He has served as the radiology representative to the Emergency Department Committee.

Dr. Shikha Gupta is chief of the nuclear medicine section, and has excelled in providing unique clinical services in advanced imaging including high-quality PET-CT interpretations as well as expertise in cross sectional imaging of liver, prostate and colorectal cancer. These skills and expertise allow her to work closely with the MCI oncologists, hepatologists and surgeons to provide a team approach to oncology diagnosis and treatment. Dr. Gupta chairs the Radiation Safety Committee and is a member of the COM Curriculum Committee and Medical School Admission Committee. She is co-director for the radiology rotation for M3 and M4 medical students. New practice based initiatives that she has introduced includes the initiation of GA 68 Dototate PET scans to diagnosis and stage neuroendocrine tumors. She is also certified to perform Xofigo injections for evaluating disseminated osseous metastases.

Dr. Zeiad Hussain joined our department as a fellowship trained interventional radiologist in November 2018. He has hit the ground running providing outstanding minimally invasive services for our patients. His additional skillset working alongside Dr. Rahim has contributed to department growth with increased clinical volume and billing. He has assisted in outreach and education to further clinical referrals. In addition, Dr. Hussain is providing lectures on interventional radiology to our residents and teaching in the IR rotation. He is an essential part of our ESIR (early specialization in interventional radiology) education program which requires a minimum number of interventional radiology faculty.

Dr. Ian Malcolm remains section chief of chest radiology, a subspecialty area required for ACGME residency training and accreditation. He gives regular resident lectures in
cardiothoracic radiology. He continues to work with an interdisciplinary team at MCI to establish a high-resolution CT lung cancer screening program.

**Dr. Brett Martin** has completed his first year as the new section chief of neuroradiology. As a fellowship trained neuroradiologist, Dr. Martin has brought a new set of resident lectures, an updated curriculum and new imaging protocols to the department. In addition, he became the associate program director for the radiology residency program. Dr. Martin gives regular lectures on neuroradiology to our residents and represents radiology at the multidisciplinary radiology, neurology and neurosurgery weekly meetings. He was the major advisor for two of our residents who presented national exhibits. He also received the 2018 –19 diagnostic radiology teacher of the year award. Dr. Martin’s service contributions include participating in the competency curriculum committee, program evaluation committee and MRI safety committee for the department of radiology. He also serves on the peer review committee for the USA health system.

**Dr. Sam McQuiston**, associate professor, provides invaluable contributions to the education, service and leadership in the department of radiology in addition to his service and leadership to the College of Medicine as the assistant dean of GME. As program director for the department of radiology, Dr. McQuiston continues to provide excellent guidance and leadership for the residents, ensuring that the residency program meets all of the ACGME standards required for accreditation. He is also very active in mentoring medical students and has received the Red Sash award recognizing his outstanding teaching. Dr. McQuiston’s scholarly activity includes grand rounds and workshops for multiple clinical departments. He has also mentored many residents and medical students. He has been a major contributor to many service activities including numerous committee assignments for the department and College of Medicine. He also chairs the GMEC and GME subcommittee on Quality Improvement. Nationally, Dr. McQuiston is a question writer for the Rad exam (ACR in-training exam) and has a three-year term on the Angoff committee for the American Board of Radiology.

**Dr. Margaret Mowry** remains a great asset to the department. In particular, she provides expertise in interpreting studies and teaching in many areas where we have a faculty shortfall including breast imaging, body imaging, and PET-CT. As our only body fellowship trained radiologist, she provides resident lectures in this area. She also continues to provide contributions to MRI teaching and supervision. She is one of our radiology representatives for MCI Oncology Tumor Boards.

**Dr. Elizabeth Park**, our fellowship trained breast imager, has played a key role in her contributions to the department and women’s imaging center over the last year. She continues to provide excellent clinical service and resident education with increased efforts after the resignation of the prior section chief a year ago. The clinical volume and billing has increased significantly over the last year under Dr. Park’s leadership. She is part of the multidisciplinary breast cancer treatment team made up of USA surgeons and oncologists. Dr. Park’s teaching contributions include providing a monthly mammography lecture to the residents. She is also a member of the departmental program evaluation committee and clinical competency committee for the residency program. Dr.
Park was a speaker at the USA annual breast conference last fall giving a lecture titled Explanation of Risk Factors. She has also played an advisory role for the NAPBC national breast accreditation process.

Dr. Patrick Patten joined our department as an Assistant Professor in the summer of 2019. He graduated from our USA radiology residency program in 2018 and then completed a fellowship in interventional radiology at UAB in Birmingham, Alabama. Dr. Patten contributes to both interventional and diagnostic radiology. He has assisted in outreach and education to further clinical referrals. In addition, Dr. Patten is proving lectures on interventional radiology to our residents and teaching in the IR rotation. He is an essential part of our ESIR (early specialization in interventional radiology) education program which requires a minimum number of interventional radiology faculty.

Dr. Todd Standley is an outstanding fellowship trained pediatric radiologist with an added Certificate of Additional Qualification. His contributions to the pediatric radiology department at Children's and Women's hospital have been vital in clinical service and resident education. As one of the few subspecialty certified pediatric radiologists in the region, Dr. Standley provides higher level interpretations on all pediatric imaging studies performed in the USA Health System. Dr. Standley is the pediatric radiology faculty advisor at the monthly Pediatric Tumor Board and Children with Special Needs conferences. He is the director for the pediatric radiology rotation for the M3 and M4 medical students. He is also a member of and advisor for the Quality Improvement Committee for the radiology department.

Dr. Brad Steffler provides excellence in teaching, education and clinical service to the radiology department as the chief of body imaging section. His background in interventional radiology has provided expertise in overseeing arthograms and other basic interventional procedures. He is also a key instructor for fluoroscopic procedures and has led efforts to improve the curriculum and services in ultrasound. He provides monthly resident lectures in body imaging and has been mentoring a resident research project regarding retrograde urethrography. His administrative duties include a three-year term on the CME Committee for the College of Medicine.

Diligent efforts at faculty recruitment have finally paid off for the Department of Radiology. We are excited to announce our new faculty members. Dr. Brett Martin, who joined the USA College of Medicine in July as an Assistant Professor of Radiology and the division chief of Neuroradiology. Prior to joining our department, Dr. Martin completed his radiology residency at USA and a subsequent fellowship year in neuroradiology at Georgetown University Medical Center in Washington DC. Dr. Zeiad Hussain joined our department as an Assistant Professor in the division of Interventional Radiology in the fall of 2018. He completed a 5 year diagnostic and interventional radiology residency program at Guys and Saint Thomas Hospitals in London, UK. He then finished an interventional radiology fellowship at the University of Miami Jackson Health System in Miami, Florida. In January 2019, the radiology department welcomed Dr. Gregg Delgado as an Assistant Professor and the division chief of Musculoskeletal Radiology. Dr. Delgado completed a radiology residency at Garden City Hospital,
Garden City, MI as well as fellowships in neuroradiology at the University of Texas Health Science Center, San Antonio, TX and musculoskeletal radiology at Birmingham Radiological Group in Birmingham, Alabama. He was a former Assistant Professor at the University of Texas Health Science Center and has over a decade of experience in private practice. Finally, we will be welcomed Dr. Patrick Patten into our department as an Assistant Professor in the summer of 2019. Dr. Patten graduated from our USA radiology residency program this year and completed a fellowship in interventional radiology at UAB in Birmingham, Alabama.

Our senior residents matched in prestigious and highly competitive fellowship programs that include the University of Alabama in Birmingham, Medical Center of South Carolina, UT Southwestern in Texas, Vanderbilt in Tennessee and University of Florida in Gainesville. We have also had great success in our residency recruitment, with six new residents who joined us in July.

We have also had many successes in the department overall this year. We have improved faculty scholarly activity since the previous academic year with multiple publications, funded research projects, as well as national and regional presentations. Radiology remains a leader in the Cerner implementation and ACR Clinical Decision Support thanks to the outstanding service of key people including Greg House our head of IT and technical directors Tessie Johnson, Eduardo Rel and Joey Baggett. Our new Director of Operations, Barry Porter has provided outstanding support in recruitment, credentialing and department finances. Our Assistant Administrators Alice Johnson and Elizabeth Kirby also greatly facilitate meeting the radiology departments’ needs as we continue to grow. A new 1.5 Tesla Philips Ingenia will soon be operational. We continue our space planning collaboration with University Hospital administration as well as plans for additional imaging services. We have begun new and innovative clinical practices/protocols in multiple areas including nuclear medicine, neuroradiology and musculoskeletal radiology.

In addition, we have selected our first class for the accredited Early Specialization in Interventional Radiology training program. We continue working towards final accreditation by the National Accreditation Program for Breast Centers. We anticipate further growth in the coming year with our new faculty hires and look forward to new opportunities to advance our clinical service, teaching and research missions.
I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS


Mansour TW, Richards WO. Heller myotomy and dor fundoplication for functional esophagogastric junction outflow obstruction: a video case report. Southeastern Surgical Congress 2019 Annual Scientific Meeting; 2019 Feb 23-26; Charlotte, NC.


Mudyanadzo TA, Hunter JD III, Rider PF, Richards WO. Robotic ventral hernia repair improves outcomes compared to laparoscopic ventral hernia repair. Southeastern Surgical Congress 2019 Annual Scientific Meeting; 2019 Feb 23-26; Charlotte, NC.


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Bright A. Invited speaker. The sandwich technique: cadaveric allograft overlay for split thickness skin grafting of challenging posterior burns. 31st Annual Southern Region Burn Conference; 2018 Nov 10; Mobile, AL.

Brooks RM. Invited speaker. Management of full thickness wounds using a hyaluronic acid based bilayer matrix. 31st Annual Southern Regional Burn Conference; 2018 Nov 10; Mobile, AL.

Ding L. Fall prevention initiative: a fall screening pilot study in the ambulatory setting. 32nd EAST Annual Scientific Assembly; 2019 Jan 17; Austin, TX. p. 92-93. Abstract no. 21.

Ding L. Invited speaker. Project THRIVE: building a trauma-informed community. Gulf Coast Trauma and Acute Care Surgery Symposium; 2019 Apr 4; Mobile, AL.


Dyess L. Invited speaker. Inequality of breast cancer. Satellite Conference; 2019 Jun 26; Montgomery, AL.

Dyess L. Invited speaker. Continuing education breast disease. Poarch Creek Tribal Health Clinic, 2018 Nov 28; Atmore, AL.

Grimm L. Invited speaker. Colorectal cancer awareness month the importance of getting screened; Live on air interview for colon cancer awareness month, Fox 10 News; 2019 Mar 26; Mobile, AL.
Richards WO. Invited speaker. Magnetic sphincter augmentation. Minimally Invasive Surgery Symposium; 2019 Feb 26; Las Vegas, NV.

Richards WO. Invited speaker. Surgical treatment of Barrett’s Esophagus. Minimally Invasive Surgery Symposium; 2019 Feb 27; Las Vegas, NV.

Richards WO. Invited speaker. Managing EGJ outlet obstruction, Minimally Invasive Surgery Symposium; 2019 Feb 27; Las Vegas, NV.


Simmons J. Invited speaker. Unintended consequences of newer massive transfusion protocols. Surgical Grand Rounds; University of Arkansas; 2019 Mar 26; Little Rock, AK.

Simmons J. Invited speaker. Use of infrared thermography for burns. Gulf Coast Trauma Symposium; 2019 Apr 3; Mobile, AL.

Simmons J. Invited speaker. Cellular contamination of stored plasma. Gulf Coast Trauma Symposium; 2019 Apr 4; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Hannah Alemayehu: Mastery Minimally Invasive Skills Cours, International Pediatric Endosurgery Group, March 20, 2019


Linda Ding: EAST Injury Control and Violence Prevention Committee; Firearm Injury Prevention Taskforce Co-Chair 2019-2020

Lynn Dyess: Governor, Alabama Chapter American College of Surgeons, 2018-2019

Leander Grimm: Young Surgeons Committee - American Society of Colon & Rectal Surgery, invited member, 2016-2019; CREST Committee - American Society of Colon & Rectal Surgery, invited member, 2015-2019; Judge Medical Student Poster Presentations, American College of Surgeons Annual Meeting, Oct 21, 2018, Boston, MA; Invited Examiner - Mock Oral Exams for Colon & Rectal Fellows and Young Surgeons, American Society of Colon & Rectal Surgeons Annual Meeting, June 1, 2019, Cleveland, OH

Charles Hartin: SAGES- Pediatric Committee, 2013-2019

Spencer Liles: Society of Surgical Oncology – Brand Development, Southeastern Surgical Congress - Young Surgeons Committee, 2018-2019

William O. Richards: President Elect Southeastern Surgical Congress, 2018-2019; Executive Council Alabama Chapter American College of Surgeons; American College of Surgeons Video Based Education Executive Committee; Subcommittee on “ICONS” in Surgery; Producer and Moderator, for the “Icons” in Surgery videos presented at the meeting, American College of Surgeons Clinical Congress; 2018 Oct 24; Boston, MA.

Paul F. Rider: Alabama State Chair Commission on Cancer, 2016-2019; President Elect Alabama Chapter American College of Surgeons, 2018-2019; ASCRS Self-Assessment Committee, invited member, 2018-2019; ACS Video-based Education Committee, invited member, 2017-2019; Alabama District #2 Committee on Applicants, American College of Surgeons, 2016-2019

Jon D. Simmons: AAST Publications Committee; Alabama Statewide Trauma & Health Systems Advisory Council (STAC), Alabama Dept. of Public Health; Region 6 RAC, Alabama Dept. of Public Health; Chair, Trauma Outcomes Subcommittee, Alabama Dept. of Public Health; Alabama State Emergency Medical Control Committee (SMECC), Dept. of Public Health; Mississippi Coastal Trauma Care Region Medical Control/Performance Committee, Dept. of Public Health

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Overview: This past year the Department of Surgery excelled in clinical services (outcomes, volume, and expertise), education (resident, medical student, and graduate medical education) and academics (publications, research grants, and impact). The Department of Surgery has expanded clinical services dramatically this past year and has broken records for the highest amount of charges (>2.5 million/month) highest number clinic visits (1,781/month), highest number of operations at University Hospital (310/month), and work RVU’s (>17,00/month). Academically the Department has increased the number of publications (15 Peer-reviewed publications, 17 abstracts, 2 book chapters) and impact of publications (4 multi-center national clinical trials, 4 publications resulting from faculty serving as the principal investigator), and grant support (9 industry funded, 3 federally funded grants). Graduates from the General Surgery residency program matched into very competitive fellowship programs in Pediatric, Cardiothoracic, Vascular, Critical care, Minimally Invasive/Laparoscopic, Colorectal, and Plastic/reconstructive Surgery. Medical Students have had a good match into surgical specialties including a record number of general surgery applicants.

Medical Student Education: The Department of Surgery continues to have a leadership role in all aspects of student education. The graduating medical students voted the Surgery clerkship as the best junior student clerkship at the University Of South Alabama College
Of Medicine in 2018 during the last year that Lee Grimm, MD, was the Surgery Clerkship Director. Linda Ding, MD, and John Hunter were appointed as Co-Directors of the Surgery Clerkship and the new clerkship coordinator Jenneice White were instrumental in continuation of a very positive learning environment for the medical students.

Lee Grimm, Spencer Liles, John Hunter, Ron Brooks, Jon Simmons and William Richards, were awarded the red sash award by the senior medical students for their significant contributions to the graduating medical students’ education. In addition, many faculty including Sid Brevard, MD, Lee Grimm, MD, Marcus Tan, MD, William Richards, MD, and Paul Rider, MD participated in the active learning sessions for the first and second year students under the new system based curriculum.

Students continued to perform well on the NBME while participating in the Team-based learning modules designed by the faculty of the DOS. The students on average are performing at the 62%ile, which is better than average compared to national performance. We attribute the excellent performance on the NBME scores and the 100% match into general surgery residency programs to the curriculum implemented by Drs. Ding and Hunter and the faculty of the DOS.

**General Surgery Residency Training:** In June 2018, Dr. Simmons relinquished his position as Program Director of the General Surgery Residency program. Dr. Lee Grimm took over as Program Director General Surgery Residency Program. Paul Rider, M.D. relinquished his role as Chair of the Clinical Competency Committee and handed it off to Harrison Howard, M.D. Lee Grimm, M.D., FACS in his first year as Program Director along with associate program director Paul Rider, MD, FACS has provided outstanding leadership for resident education. Many of the continued excellence in academics, ABSITE performance, and educational activities of the Department of Surgery can be attributed to Drs. Grimm and the dedicated faculty of the Department of Surgery. The graduating residents continue to match into competitive fellowship programs or to successfully transition to private practice in general surgery. Dorothy Dickinson has provided outstanding leadership in her role as the General Surgery Residency and Surgical Critical Care Fellowship Program Coordinator. She also serves on the Executive Committee for the Association of Administrators in Surgery.

**Recruitment:** The Department was able to recruit several outstanding surgeons to continue the clinical, academic, and educational missions of the Department. Harrison Howard, MD was appointed as an Associate Professor of Surgery Division of Surgical Oncology and has interest in treatment of sarcomas and melanomas. He has started several clinical trials investigating treatment of cancer this past year and has taken over the leadership of the Clinical Competency Committee of the General Surgery Residency Program. Annabelle Fonseca, MD, was recruited to the Division of Surgical Oncology as a Hepatobiliary-Pancreatic specialist after finishing her training as a surgical oncologist at MD Anderson Cancer Center. Both Drs. Howard and Fonseca enabled the Division to increase the number and variety of cancers being treated. A major recruitment to the health system was Mike Chang, M.D., FACS who was recruited to be the Chief Medical Officer for the USA Health
System. Dr. Chang was appointed as Professor of surgery in the Division of Traumatology/Surgical Critical Care/Acute Care Surgery.

**Division of Traumatology/Surgical Critical Care/Acute Care Surgery:** Sidney B. Brevard, M.D., F.A.C.S., continued his leadership role as the program director of the surgical critical care fellowship program, but stepped down from being the Chief of the Division. Dr. Brevard directed multiple courses of Advanced Trauma Life Support Training, and hosted the regional competition the Alabama Chapter of the American College of Surgeons Committee on trauma resident paper competition. Jon Simmons, M.D., FACS was named the Chief of the Division in June 2018 after a national search conducted by Paul Rider, MD.

Under the able direction of Dr. Simmons and with the entire skilled faculty recruited to the division, we have seen an improvement in quality of care delivered. This past year was also marked by the renovation of the University Hospital 8th floor to be the trauma unit with a corresponding decrease in the hours of trauma diversion. Admissions to the level 1 trauma service has increased dramatically.

**Division of Burn Surgery:** Steve Kahn, MD continued his leadership of the Arnold Luterman Regional Burn unit until April 2019 when he stepped down to leave for a new position. Dr. Chang along with Andrew Bright MD assistant Professor continued the excellence in burn care as evidenced by the substantially better than average O/E mortality in 2018 of 0.45 which places USA burn unit in the top 10 Mortality O/E ratio in the Vizient Clinical outcomes report. Moreover, USA had substantially more cases than eight of the top 10 burn units did, which is a tribute to all of the burn surgeons, critical care faculty, residents, nurse practitioners, physician assistants and staff, who worked in the burn unit. Burn research and presentations to regional and national meetings were much increased from the previous year.

**Pediatric Surgery:** Chip Hartin, M.D. FACS, a USA COM graduate took over the responsibilities as Chief of the Division in July 2016. Dr. Hartin was able to recruit John Gosche, MD into part time practice and set about to recruit more full time pediatric surgical faculty. Hanna Alemayehu, M.D. joined the faculty in Pediatric surgery after completion of her fellowship training in September 2018. Dr. Alemayehu immediately established herself as an excellent surgeon while creating the USA Chest Wall Reconstruction Program using minimally invasive techniques to reduce postoperative pain, which led to a reduction in hospital stays and improved postoperative recovery. She has taken over the Research and Education program for pediatric surgery and started several clinical trials. Drs. Hartin and Alemayehu has also reinvigorated medical student and resident teaching on the pediatric surgery service achieving high levels of resident and medical student satisfaction with their educational experience. Oluyinka O. Olutoye, M.D., Ph.D., F.A.C.S., Professor of Surgery, Co-Director, Pediatrics and Obstetrics, Fetal Center, Texas Children’s Hospital presented the Randall W. Powell, M.D., F.A.C.S. Endowed Memorial Lectureship in Pediatric Surgery, in September 2018. Dr. Randall Powell, M.D., FACS established this Lectureship in Pediatric Surgery. Dr. Powell was an Alpha Omega Alpha medical honor
society graduate who joined the department of Surgery as an Assistant Professor in 1984 and was promoted to Professor in 1991 and served in that role until he retired in 2009.

**Colorectal Surgery:** Dr. Rider in his fifth year as the Chief of the Division of Colorectal Surgery continued the development of the colorectal surgery division. Drs. Grimm and Rider developed the multidisciplinary colorectal cancer multidisciplinary tumor conference (MDT) in collaboration with radiation and medical oncologists in order to provide improved cancer care in the region. Since establishment of the colorectal cancer MDT in October 2015, this multi-disciplinary team has treated 204 patients. More than 1/2 of the patients came to USA from outside Mobile to obtain expert care for their colorectal cancer. With the recruitment of the third colorectal surgeon John Hunter, MD, the USA Department of Surgery is increasingly recognized for its clinical expertise in colorectal and gastro-intestinal surgery. Much of the credit for the general surgery improvement in observed to expect mortality (O/E=0.37) in 2019 is related to the superior care the colorectal service delivers while performing major small and large bowel resections. Dr. Hunter in particular has been instrumental in implementing the robotic surgery program using simulation training on the simulation console and assisting in the training of other surgeons on the robotic platform.

**General Surgery:** The Charles and Mary Rodning endowment for the educational activities of our residents has proved to be instrumental in funding travel for surgical residents and faculty to present their scientific work at regional and national meetings. Dr. Rodning has retired from active practice but continues to coordinate the Departments’ conferences and academic activities until his retirement in September 2018. Dr. Rodning was awarded the Red Sash award for significant contributions to the graduating medical students’ education 38 years in a row. One of the major improvements in resident autonomy and education was creation of a Chief Resident Clinic, which is run by the PGY 5 Chief Resident with close attending supervision. This allows the chief residents to run their own clinic and increase their decision-making in preparation for complete autonomy. There has been substantial improvement in quality of general surgical services, which includes our Gastrointestinal, colorectal, and oncologic surgery divisions as measured by the Vizient observed to expected mortality for (0.37) that was substantially better than expected and ranked 18th percentile for the last year. This better than average performance has been consistent for the entire last 4 quarters and is an accomplishment made possible through excellence in provision of patients care by all the surgeons, residents, and clinical staff of the DOS. There has been a continual increase in patients’ referrals to the surgical service from the community recognizing the improvement in surgical expertise and care of colorectal, cancer, gastrointestinal, and bariatric patients. The increase in the number and complexity of the patients being referred to the USA surgical service has led to improvements in education for the students, and residents. John Hunter, MD was named the director of the Robotic Surgery at USAMC, and quickly trained Paul Rider, MD, William Richards, MD and Linda Ding, M.D. Dr. Hunter established robust training for the residents on the robot system using the simulator and developed a competition and prizes for the residents. This proved to be highly entertaining while increasing resident technical skills and participation in simulation training. One of the prizes given to the
winners of the robotic competition was a Charles Rodning bobble head doll complete with red beret, green scrubs, glasses and long locks of hair.

**Breast and Endocrine:** Spencer Liles, M.D. completed his fourth year providing surgical oncology expertise in breast, melanoma and endocrine cancer. Over the course of the past year, he has passed his boards in Complex General Surgical Oncology and has expanded the faculty expertise in oncology with special emphasis on Breast/endocrine and Melanoma. He was elected to the Arnold P. Gold Humanism Society. Drs. Liles and Lynne Dyess, MD serve as co-directors of the Breast cancer multidisciplinary conference, and both Drs. Liles and Dyess have moved to the Strada Patient care center where they have increased their clinical load substantially. Nurse practitioner clinics were added so that they can provide long-term care for breast cancer patients as well as starting a new thyroid clinic for evaluation and treatment of thyroid lesions. Additionally Dr. Dyess serves as the Governor representing the State of Alabama Chapter of the American College of Surgeons (ACS) to the National ACS Organization.

**Plastic and Reconstructive Surgery:** Ron Brooks, M.D. in his third year as faculty member established himself as an expert plastic and reconstructive surgeon who was able to collaborate with many of our faculty in the care of trauma, cancer, and infectious wounds. He has added very valuable expertise in the reconstruction after breast cancer, melanoma, and rectal cancer surgery. Dr. Curtis Harris continues to provide expert care of patients needing plastic and reconstructive surgery. Drs. Harris and Brooks have created a highly rated elective rotation for senior students in Plastic Surgery.

**Gastrointestinal and Bariatric surgery:** The Bariatric surgery program continues to increase the number of operative cases and has less than 0.1% operative mortality rate, while continuing to operate on patients who have a host of co-morbidities. A new surgical procedure was performed for the first time in the upper Gulf coast and Dr. Richards is one of only 245 surgeons who have been trained to perform the procedure in the US. The LINX procedure treats severe GERD through laparoscopic implantation of custom fitted magnetic beads to augment the Lower Esophageal Sphincter. This procedure is part of the Digestive Health Center collaborative treatment of GERD and Barrett’s esophagus with Gastroenterology. The initiation of this innovative surgical procedure continues the tradition of collaboration, and multidisciplinary care between the Department of Surgery and the Department of Medicine to improve the care of patients with GI disorders. A new monthly conference on gastrointestinal disorders was started to increase the collaborative efforts between Gastroenterology and surgery.

**Surgical Oncology:** Spencer Liles, MD is in his fourth year as a faculty member has increased the number of breast, melanoma, and endocrine cancer patients seen in his clinic. Dr. Liles is boarded in Complex General Surgical Oncology and provide specialized surgical oncology care. During the past year, Dr. Liles has re-written the consent process and increased enrollment in the program, and improved the storage techniques and protocols. Two surgical Oncologists (Annabelle Fonseca, MD Harrison Howard, MD), were recruited to take joined the Department in September 2018 and immediately increased
the number of cancer patients being seen and treated by the multidisciplinary team at the Mitchell Cancer Institute.

**Humanitarian Efforts:** Drs. Simmons, Grimm, and Bright led a group of USA surgery residents and USA medical students to Rwanda in 2019 on mission trips to provide medical care. Dr. Lynne Dyess went on Mission trip to rural Honduras in 2019. Spencer Liles, MD was inducted into the Gold Humanism in Medicine Honor Society and gave an invited talk entitled “Compassionate Care in the Medical Field” to first and second year medical students.

**Research:** The research collaboration between Jon Simmons, MD and the Chair of Pharmacology Mark Gillespie, PhD. has been very fruitful. Dr. Jon Simmons is in the fourth year of a 4 year K08 Mentored Clinical Scientist Award from the NIH directed at a surgeon in the early stages of their career who shows promising development as a surgeon scientist. The grant entitled “mtDNA DAMPS: A Pharmacologic Target in Multi-Organ System Failure” aims to explore a potential pharmacologic treatment that addresses the underlying etiology of remote organ failure in trauma and sepsis. Amazing science is coming from this collaborative effort, which is also incorporating surgical residents such as Dr. Richard Rieske a PGY2 resident in surgery who has taken a year away from clinical training to work in Dr. Simmons’ lab. Collaboration between Luda Rachek, PhD in department of pharmacology and William Richards, M.D., F.A.C.S. was very fruitful and resulted in submission of NIH grants to investigate the link between insulin resistance and Mitochondrial DNA DAMPS. Paul Rider, M.D., F.A.C.S. Dr. Rider was also able to execute several clinical studies investigating “The Efficacy of Post-OP Pain Management: Does the addition of Long Acting TAP Block Decrease Hospital Stay?” Dr. Rider also served as co-investigator on the MCI research “Molecular predictors and Prognosticators of Response to Neoadjuvant Therapy for Rectal Cancer”. This very important study will help physicians who treat rectal cancer determines the best neoadjuvant therapies for treatment of rectal cancer. Lee Grimm, M.D., FACS involved a medical student during the summer research program to study the impact of the development of the Multidisciplinary Rectal Cancer Center on referrals and found there was an increase in referrals from the surrounding area. This research also helps to identify the best practices for complex medical and surgical care and outcomes for the patients with rectal cancer. Spencer Liles, M.D. has developed collaborations within MCI, and COM basic scientist to study genetic defects in melanoma and has been awarded a USA Faculty Development Award titled “Investigation of DNA repair Mechanisms in Invasive Melanoma”. This avenue of research is an exciting collaboration between Dr. Liles and Mark Gillespie Ph.D. Chair of Pharmacology and additionally Dr. Liles rewrote the IRB proposal for biobank repository for storage of biologic specimens for USA Health and the Mitchell Cancer Institute. These collaborative efforts in oncologic surgical research with colleagues at the MCI show the expanding clinical translational research that is going on within our surgical oncology division and within the Department of Surgery.

William Richards, M.D., F.A.C.S. was a co-investigator in The Caliber Study, a randomized clinical trial investigating the outcomes after LINX or magnetic sphincter augmentation verses double-dose PPI for Reflux Disease. The study found that magnetic sphincter augmentation was much better at objective and subjective improvement of GERD
symptoms compared to increasing doses of PPI. The one-year follow-up study was accepted for publication in September 2019. Annabelle Fonseca, M.D. initiated a research project “Quantitative Imaging Analysis of Pancreatic Cystic Neoplasms” funded by COM Research Grant Award to stratify the degree of dysplasia in pancreatic cysts in radiographic imaging.

In summary, the Department of Surgery faculty is collaborating with basic scientists at the MCI, the University and with the College of Medicine basic science departments in a wide range of research activities. Multiple grant proposals have been submitted which has resulted in funding for several projects and with many promising reviews. These research projects, which are primarily clinical translational research, demonstrate the wide range of clinical expertise in critical care, shock; the faculty in the Department has developed gastrointestinal physiology, cancer, and wound healing. Increasingly the Department of Surgery is recognized for our expertise in the care of trauma, burns, colorectal cancer, hepatic-pancreatic-biliary cancer, breast cancer, melanoma, and esophageal disorders.
2018-2019
Summary of Activities
USA Center for Lung Biology

General Operations

The CLB’s mission is to provide state-of-the-art scientific development in lung biology that advances the understanding of human health and disease, to improve patient care, and to serve as the foundation for outstanding graduate, post-graduate, and fellowship training. More than 40 faculty members and 47 graduate students, postdoctoral fellows and pulmonary fellows 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 offices are located in the Medical Sciences Building in Rooms 3340 on the main University campus. Ms. Jennifer Collins serves as support staff for the CLB and is responsible for clerical duties for the administrative office and research laboratories. Our annual report is available in the CLB office.

Research Activities

The CLB was well represented at national and international scientific meetings with a number of faculty, postdoctoral fellows, and graduate students presenting their work at multiple forums, including the American Heart Association, Federation of American Societies for Experimental Biology, XXIX Congress of the International Society for Advancement of Cytometry, American Physiological Society, Southern Biomedical Engineering Conference, Gordon Conference, and the International American Thoracic Society.

Our Critical Care Conference series in conjunction with the Pulmonary Division hosted five speakers. This conference focuses on translational research and acute lung injury, and is held monthly on Fridays at 2:00 pm. CLB faculty members presented this year’s series. Dr. Brian Fouty, Professor, Department of Internal Medicine, presented Vaccines; Dr. Mike Lin, Assistant Professor, Department of Physiology and Cell Biology, presented Hospital-acquired pneumonia impairs cognitive function; Dr. Thomas Rich Professor, Department of Pharmacology, presented cAMP Signaling Pathways: What You Didn’t Learn in Medical School; Dr. Sarah Sayner, Associate Professor, Department of Physiology and Cell Biology presented cAMP in the pulmonary endothelium: how many compartments are there?; Dr. Donna Cioffi, Associate Professor, Department of Biochemistry, presented A Role for the Immunophilin FKBP51 in Acute Respiratory Distress Syndrome?

Extramural Funding

In the past year, CLB principal investigators submitted 53 grant applications to the American Heart Association (AHA), National Institutes of Health (NIH), and other foundations/industries. This fiscal year, CLB funding exceeded $7.2 million.
New awards in this fiscal year included: Dr. Mark Gillespie, Professor and Chair, Department of Pharmacology received the following two awards an NIH R01 (Madigan Army Medical Center (MAMC)) entitled *mtDNA damage and DAMPs in multiple organ dysfunction syndrome*, and NIH U54 CCTS Competitive Renewal entitled *University of South Alabama Translational Research Service Center*. Dr. Raymond Langley, Assistant Professor, Department of Pharmacology received an NIH R21 subcontract with Florida International University entitled *Novel Long noncoding RNAs in the airway mucous response*. Dr. Thomas Rich, Professor, Department of Pharmacology received an NIH R01 Competitive Renewal subcontract with Thomas Jefferson University entitled *G Protein-Coupled Receptor Regulation in Airway Myocytes*. Meredith Gwin, Graduate Student, Department of Physiology and Cell Biology (Mentor Dr. Troy Stevens) received an AHA Predoctoral Fellowship entitled *Gamma Secretase Activating Protein is Necessary for Endothelial Production of Cytotoxic Beta Amyloid*. Joshua Deal, Graduate Student, Department of Pharmacology (Mentor Dr. Thomas Rich) received a travel award from the Office of Research and Economic Development entitled *Hyperspectral imaging fluorescence excitation scanning (HIFEX) microscopy for detection of calcium signals in single cells*. Sarah Voth, Graduate Student, Department of Physiology and Cell Biology (Mentor Dr. Troy Stevens) received an NIH F31 Predoctoral Fellowship grant entitled *Cytotoxic Lung Endothelial Amyloids*. Dr. Mikhail Alexeyev, Professor, Department of Physiology and Cell Biology received an NIH S10 award entitled *Seahorse XFe24 Extracellular Flux Analyzer*.

We had three faculty receive Intramural Research grants through the College of Medicine, Dr. Lyudmila Rachek, Assistant Professor, Department of Pharmacology entitled *Effect of bariatric surgery on mtDNA DAMPs, inflammation and diabetes outcome*; Dr. Brian Fouty, Professor, Department of Internal Medicine entitled *Novel DNA Vaccine Against Chikungunya Infection*; and Dr. Donna Cioffi, Associate Professor, Department of Biochemistry entitled *Effects of IgG glycosylation on endothelial barrier function*.

We had three graduate students receive Dean's Predoctoral Fellowships through the College of Medicine: Meredith Gwin, Department of Physiology and Cell Biology (Mentor Dr. Troy Stevens) entitled *Bacterial Infection Increases Gamma Secretase Activity In Pulmonary Microvascular Endothelial Cells*; Lina Abou Saleh, Department of Biochemistry (Mentor Dr. Wito Richter) entitled *Targeting PDE4 as a therapeutic approach in cystic fibrosis, declined to accept NIH T32 appointment*; and Abigail Boyd, Department of Biochemistry (Mentor Dr. Wito Richter) entitled *Activation of endothelial PDE4 during P. aeruginosa-induced lung injury, declined to accept NIH T32 appointment*.

**Education**

The CLB’s NIH-funded T32 training grant on *Cell Signaling and Lung Pathobiology*, directed by Drs. Thomas Rich and Troy Stevens, is currently in its 16th year of funding. This T32 supports 6 pre-doctoral trainees in the Lung Biology track per year.

During this academic year, 21 predoctoral fellows trained in the laboratories of CLB faculty and affiliated with the Lung Biology track in the Basic Medical Sciences Doctoral Program. One Lung Biology trainee completed requirements for the Ph.D. within this academic year (Annamdevula).
2018-2019
Summary of Scholarly Activities
Center for Healthy Communities

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS

Hanks RS, Wraight S, Lio S. From Contemporary Art to Collard Greens: Multiple Pathways for Community Health Advocates to Message Social Justice and Health Equity. Paper presented at the: annual meeting of the Southern Sociological Society; April 11, 2019; Atlanta, GA


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Crook ED. Panel Presenter: Title: “Identifying and Overcoming Roadblocks that Limit the Translation of Research Findings to the Achievement of Health Equity.” Conference on Bioethics Issues in Minority Health and Health Disparities Research; 2019 January 23; Tuskegee University.

Crook ED. Invited Speaker. A Discussion Around Health Disparities in African Americans and The March Towards Health Equity. Tulane University School of Medicine, SNMA, Black History Month Presentation; 2019 February 25. New Orleans, LA.

Crook ED. Invited Speaker. The Challenges of Inequities in Health. Legacy Leadership Institute of USA Gerontology Center; 2019 March 14, University of South Alabama.


Crook ED. Invited Speaker. The Social Determinants of Health: A Focus on Poverty” USA COM Medical Alumni Assoc Meeting 19; 2019 June 8.
V. NATIONAL PROFESSIONAL RECOGNITION

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

Led by Dr. Errol Crook, the University of South Alabama Center for Healthy Communities continues to foster partnerships with community and academic partners as well as other stakeholders. The Center completed the second 5-year cycle of the P-20 grant funding from NIH’s National Institute for Minority Health and Health Disparities in February 2019. The Center is in the 2nd year of the 5-year subcontract award with UAB on the All of US Research program funded by NIH. In addition, the Center has received a 5-year sub-award on the 5-year project investigating DNA damage and repair capacity in partnership with Dr. Robert Sobol at the USA Mitchell Cancer Institute. The Center’s efforts are focused on research and community engagement. We have continued membership in a consortium of similar academic centers in Alabama, Mississippi, and Louisiana organized under the UAB CCTS. The Center had taken a leadership role as a partner of the CTSA community engagement efforts. A brief summary of our research and community engagement efforts are outlined below.

Research:
The Research Core, led by Dr. Martha Arrieta, has continued to focus on providing support to the research projects within the Center. In October 2018, the Research Core launched participant recruitment within the All of Us Research Program as a member of the Southern All of US Network, thus transitioning into the active recruitment phase of this national initiative to gather data from one million or more people living in the United States to accelerate research and improve health.

In keeping with its engaged research approach, the Core also instituted a Community Advisory Board to advise and assist with the development of recruitment and informed consent materials for the project addressing DNA damage and repair. Further, on July 10, 2019, the Core hosted a luncheon with elected officials from the cities of Prichard and Mobile for the purpose of formally informing them of the objectives of the DNA study, so as to initiate a bi-directional dialog between community and researchers.

The Center also continued promoting community engaged research with two events focused on expanding health disparities research and community partnerships. The Community Engagement Institute Livestream, held in October, connected USA with the resources from the event hosted by the UAB CCTS. In January 2019, the Center hosted its third forum on community-engaged research which focused on the key elements of community engagement that foster progression to health equity and encouraged interconnections between researchers and community-based organizations.

Community Engagement:
Roma Hanks, PhD, directs the Community Engagement Core. The two main components of this core are The Community Health Advocate (CHA) Program and The Pipeline Program. Our CHA program continues with many of the CHAs providing long-term service and leadership in their community in the form of health advocacy through
education and health initiatives. In this reporting year, CHAs have continued activities related to cancer education, heart health, and healthy eating. In May of 2019, CHA Barbara Hodnett opened an exhibit at the USA Archaeology Museum chronicling the development of a food desert in the 36603 zip code of Mobile. This exhibit was an offshoot of a previous art exhibit at the Alabama Contemporary Art Center in Mobile AL developed out of a photovoice project chronicling health disparities in the Mobile area.

The Pipeline component focuses its efforts on high school students from underserved communities. It aims to reinforce STEM courses, expose students to the health professions, and influence their choice of health professions career. This year, fifteen area high school rising juniors and seniors were selected to participate in the two arms of the program, Students Training for Academic Reinforcement in the Sciences (STARS) and Special Training to Raise Interest and Prepare for Entry into the Sciences (STRIPES). The program provided enrichment in math, sciences, language arts, and test-taking. It also includes activities focused on retention throughout the school year. We continue our partnership with the USA College of Education and the Mobile County Summer Youth Internship Program (STEP). High achieving and motivated graduates of STRIPES are eligible for the Undergraduate Research Program after their first year in college.

**Research Training and Mentoring:**

Dr. Crook continues to lead this core. We have been successful in continuing the pipeline from our high school programs, mentioned above, to undergraduate studies and research efforts. Students who have demonstrated great promise in our high school programs have worked during the summer in research projects of the Center. In addition, we offer opportunities to medical students and additional undergraduate students with an interest in health disparities. During the summer of 2019, two students participated in the summer research program. Each student presented their work in poster presentations at the College of Medicine Research Day on July 26, 2019.
Summary of Scholarly Activities
Center for Strategic Health Innovation

I. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Center for Strategic Health Innovation (CSHI) continues to serve as a leader in innovative healthcare technology applications and solutions. CSHI continues; 1) our long partnership with innovative programs with the Alabama Medicaid Agency, 2) health technology development and application, 3) applied informatics and healthcare analytics services, 3) technical assistance for meeting Meaningful Use requirements, 4) innovation programs with Medicare for value based payment programs. Susan Sansing, Assistant Dean of the College of Medicine Finance and Administration for the University of South Alabama serves as CSHI’s acting Director. CSHI actively promotes collaboration on projects with the USA School of Computing, USA Department of Family Practice, the USA College of Nursing, the USA Department of OB/GYN, the University of Alabama at Birmingham, the Mobile County Health Department, and other Regional Extension Centers (REC’s) in the southeast US. We are excited about our new partnership with four (4) of Medicaid’s new Alabama Coordinated Health Networks (ACHN) to serve as their Heath Information Management System (HIMS) vendor. The ACHNs will provide coordinated consolidated case management services to Medicaid Eligible Individuals across Alabama. RMEDE case management system will be the tool used by My Care Alabama and North Alabama Community Care to record, analyze and report care coordination data to the Alabama Medicaid Agency.

Medical Informatics and Healthcare Technology: RMEDE™, our in house developed Realtime Medical Electronic Data Exchange platform, continues as our platform from which to develop diverse projects tailored to our client’s individual needs. CSHI utilizes innovative health technologies to improve the care, quality, cost and access to healthcare throughout Alabama. RMEDE™ is a secure web-based life-state management system that supports our Medicaid programs: 1) in-home monitoring of patients with chronic disease; 2) Health Homes case management program; 3) data and an interventional informatics reporting system for the maternity program, and 4) a Primary Medical Provider (PMP) Portal. We have continued our partnership with Alabama Medicaid to support the now statewide Health Home Case Management Program (which began as the Patient Care Networks of Alabama (PCNA)). This is a primary care case management program which establishes regional networks of care in Alabama designed to improve the delivery of health care services to Medicaid recipients, with complex chronic medical conditions. RMEDE™ serves as the framework used for data management, patient case management, aggregation of Medicaid medical and pharmacy claims data, and program reporting needs. CSHI currently manages over 2 million Medicaid patient records. There are currently over 1,100 active Medicaid Pt 1st patients participating in our in-home biomonitoring project. This program is a unique partnership between Medicaid, The Alabama Department of Public Health (ADPH) and USA’s CSHI. Patient referrals are received from their primary medical provider (PMP) with the chronic disease diagnoses’ of hypertension, diabetes and
congestive heart failure for in home monitoring. Patients are monitored for significant changes by using an innovative Interactive Voice Response (IVR) system. Patients are instructed to dial-in their key physiologic parameters, and an ADPH Biomonitoring Nurse is assigned to monitor the results and submit reports to the patient’s provider. An ROI on 2015 data showed a decrease in Emergency Department visits and hospitalizations as compared with pre program data. Pharmacy use increased as well as provider office visits. CSHI is a valuable partner with the Medicaid Maternity Program in their quest for Better Birth Outcomes and lower Infant Mortality rates. RMEDE™ is the platform for the data collection system with reporting capabilities utilizing recipient information gathered from enrollment activities to evaluate compliance with accepted national standards of practice. RMEDE™ provides Medicaid and their contractors the ability to enter and view the data online. Data is utilized by Medicaid to determine benchmarks for compliance and comparisons. CSHI developed and maintains a Primary Medical Provider (PMP) Portal as a web based health information system developed to support Alabama Medicaid's Patient 1st Primary Medical Providers (PMPs). Using the system, PMPs are able to track their patient’s progress by examining reports created from claims data. The PMPs can use these reports to make decisions regarding improving the quality of care of patients while reducing the cost of care.

The Alabama Regional Extension Center (ALREC) continues to operate within the Center for Strategic Health Innovations at the University of South Alabama (USA). Since the ONC grant has ended, as part of its sustainability model, ALREC continues to offer its fee for service line providing assistance to Providers throughout the multiple stages of Meaning Use and MIPS attestations. As Medicaid’s Meaningful Use program begins to sunset, and the number of Practices/PCPs still eligible for MU incentive payments has decrease, thus causing REC memberships to decrease, as well. ALREC is currently consulting with over 25 medical practices throughout Southern Alabama working directly with 286 physicians, nurse practitioners, and physician assistants. Approximately $125,000 was received in revenue from ALREC’s membership service line. ALREC continue to work with USA’s Medical Center to monitor 140 physicians helping them to complete Meaningful Use attestations, which can result in over $1M in incentive payment. Throughout the year, ALREC published quarterly newsletters and hosted webinars to discuss MIPS, Chronic Care management, and other relevant healthcare topics.
2018-2019
Summary of Scholarly Activities
Center for Disaster Healthcare Preparedness

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS

II. PUBLISHED ABSTRACTS


III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS


Wallace D. Invited speaker. Developing an assessment, training, planning, and coordination program for healthcare coalitions. 2019 International Conference on Disaster Medicine & Hurricane Resiliency; 2019 Mar 11; St. Maarten, Caribbean.

V. NATIONAL PROFESSIONAL RECOGNITION

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The Center for Disaster Healthcare Preparedness (CDHP), since 2004, continues to serve as a leader in healthcare disaster preparedness and response training. David Wallace, DVM, serves as the Director, CDHP. CDHP manages the Alabama Incident Management System (AIMS) and the CDHP Training programs through a cooperative agreement with the Center for Emergency Preparedness (CEP), Alabama Department of Public Health from the Department of Health and Human Services, Assistant Secretary for Preparedness and Response (ASPR).

ALABAMA INCIDENT MANAGEMENT SYSTEM (AIMS)

AIMS is the information management web-based tool designed by CDHP for the State of Alabama to capture healthcare system situational awareness on both a daily basis and during disasters. Critical data such as available beds, supplies, staffing, equipment, patient tracking and resource requests are entered into a database at each participating healthcare
facility and then displayed in a dashboard view for all to see--both healthcare facilities and local or regional Emergency Operations Centers (EOC). The information entered into AIMS is utilized to make emergent decisions regarding information and resource coordination for healthcare organizations throughout the state during an event. Revisions and upgrades to enhance AIMS have been completed.

Throughout the year, there was a total of 170 AIMS Notifications which included over 2,450 messages between facilities during real events, exercises and general messaging. Thirty-one of those notifications were sent in response to real events with potential impact on the delivery of healthcare: 1. Transportation event of charter bus accident in Baldwin County, 2. Industrial chemical leaks in Birmingham and Dothan and 3. Weather events including Tropical Storm Gordon, Hurricane Florence, Hurricane Michael, winter weather advisories, deadly tornadoes in Lee County (Beauregard, AL) and severe weather warnings throughout the state (heavy rain, flooding and tornadoes).

During the 2019 grant year, AIMS experienced a growth in utilization in both the number and organizational types of users. At the end of the 2019 grant year, there were 2,369 user accounts. Throughout the state, 98% of the 124 hospitals and 78% of the 234 nursing homes have active accounts. Additional organizational users include Public Health, Emergency Medical Services, Community Health Centers, Emergency Management Agencies, and other users which include Home Health, Hospice, Assisted Living, Dialysis, Durable Medical Equipment Suppliers and more. Through AIMS, healthcare facilities and Healthcare Coalitions were able to provide updates on patient bed availability, resource requests and communications for ongoing situational awareness throughout the duration of the events.

Eighty-one notifications were sent in response to exercises and training. The notifications were sent predominantly from individual Healthcare Coalitions, followed by healthcare facilities and ADPH-CEP, to evaluate and monitor user capabilities to access and input information; and to conduct redundant communication drills and coalition-wide patient surge tests, in addition to healthcare facility specific exercises.

After Action Reports from real events and exercises identified opportunities to enhance operational features within AIMS, which led to improved situational awareness and overall healthcare response during events. Coding changes include enhancements such as development of several report forms completed by Hospitals and Nursing Homes during Hurricane Florence and Hurricane Michael which provided the state associations and federal agencies with inpatient capacities for potential evacuee and patient transfers from affected neighboring states. Another report implemented and currently utilized by various Hospitals throughout the state is the Emergency Department (ED) Psych Reporting Form. This innovative tool was requested by the Mobile Healthcare Coalition in response to the increasing issue of limited resources to evaluate, stabilize and treat mental health patients as the number of inpatient facilities throughout the state has decreased. The report form collects and captures: total number of patients seen in ED; total number of psychiatric patients seen in ED; total number of hours psychiatric patients are held in ED; total number of sitter/manpower used; ages of psychiatric patients (total number <18; total number 19-
59 and total number >60) and total number of workplace violence incidences. At the end of the year, among the 11 hospitals reporting, they saw 12,894 psychiatric patients which required 116,458 hours of care for 3,915 patients 18 years and younger, 7,615 patients 19-59 years of age and 1,364 patients 60 years and older.

**CDHP TRAINING**

Now in its sixteenth year, CDHP is a regional response training center designed to teach effective collaborative healthcare community response to all disasters, natural or man-made. This program is made possible by a grant from the Alabama Department of Public Health, Center for Emergency Preparedness through a cooperative agreement from ASPR. The total number of students attending CDHP training from 2005 to 2019 is 19,889. This year, CDHP offered training on-site in Mobile (Basic Course, Simulation Course and Healthcare Emergency Preparedness Professional Certificate Course) and throughout the State as requested by healthcare coalitions and facilities (Road Show Courses).

CDHP Basic is a two-day course designed to provide core disaster response training. Ten sessions were scheduled this year, and, as a subset of the Basic Course, one session was provided for ADPH Center for Emergency Preparedness (Administrative staff and Emergency Preparedness Teams) and one Administrative session, the Healthcare Emergency Preparedness Symposium was presented. The Administrative session targets Chief and Administrator level personnel charged with emergency response leadership for their organizations. This course featured eight nationally recognized speakers who shared their experience and expertise on disaster medicine. Topics included: Better in Crisis makes us Better Today; Healthcare Coalitions in the Preparation of the Medical and General Community for Response to Nuclear and Radiological Incidents; Outbreaks of Highly Infectious Diseases: Dealing with Biological Risk and Mathematical Myths; How AHEPP Helps Practitioners Manage Changes in CME, ASPR and Policy; Healthcare Coalitions: Family Reunification and Assistance Integration Between Healthcare Facilities and Community Centers, Managing Supply Chain Shortages; Hurricane Michael: A Health Ministry’s Response and Story of Healing; Regulatory Compliance and Sustaining Effective Communication During Disasters and Emergencies; and Emergency Preparedness–CME Final Rule and Implementation. Attendance for the Basic courses totaled 547 students, a 22.9% increase over the previous year.

Ten CDHP Simulation sessions were offered, each comprised of a one-day interactive training in the form of simulated clinical scenarios for clinicians charged with disaster response in their organizations. Class size is limited due to the hands-on nature of the course and this year 158 students participated, an increase of 32% over the previous year.

Thirty-six CDHP Road Show courses were conducted, each consisting of a one-day session which takes healthcare preparedness training to healthcare facilities across the state. Road Show courses allow greater participation of staff, and participation of regional neighbors/response partners for the purpose of establishing and enhancing a common knowledge of the basics of disaster response for healthcare facilities. Road Show course content was designed by each facility/Healthcare Coalition District from a menu of topics.
to reflect the specific needs of each facility/Healthcare Coalition District. Road Show enrollment included 950 students in this reporting period.

Two Supplemental Trainings were conducted during the 2018-2019 project year. Alabama Healthcare Coalition Workshops on February 5-6, 2019, encompassed Healthcare Coalitions in Alabama: Stronger Capabilities for Readiness; and Capabilities for Healthcare & Medical Readiness: Special Pathogens. The Southwestern Healthcare Coalition Workshop on April 11-12, 2019, focused on Capabilities for Healthcare & Medical Readiness: Special Pathogens. Total attendance for both workshops was 60.

The CDHP Healthcare Emergency Preparedness Professional Certificate Course (HEPP) is an online course consisting of more than 250 hours of instructional material and interactive assignments engaging students in and outside of their healthcare facilities including meetings with their Healthcare Coalition, Emergency Management Agency and attendance at the USA-CDHP. This reporting period was the fifth program year, with eleven students receiving certificates of completion. Participants represented Healthcare Emergency Management planning considerations and requirements (local, State, and Federal) of Hospitals, Nursing Homes, Federally Qualified Health Centers and Outpatient Clinics. The HEPP course is designed to provide the opportunity to gain the knowledge, skills and capability to prepare and manage a healthcare facility’s Emergency Management program. Overall, the students’ pre-post assessment scores increased five points, with an average score of 40 out of 50 on the final assessment. One hundred percent of graduates indicated the course met their expectations and provided the foundation for serving as Healthcare Emergency Preparedness Planner.
2018-2019
Summary of Scholarly Activities
USA Comprehensive Sickle Cell Center

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS


II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Haynes J. Pathophysiology and medical management of sickle cell disease. Sickle Cell Disease Educator /Counselor Certification Program; 2019 April 1; Mobile, AL.

V. NATIONAL PROFESSIONAL RECOGNITION

Johnson Haynes Jr: Listed: America’s Top Doctors; Voting Member, Association of American Medical Colleges (AAMC) – Group on Diversity and Inclusion (GDI); Panelist: Data and Safety Monitoring Board (DSMB) for Montelukast Trial in Sickle Cell Anemia; American Society of Hematology Sickle Cell Disease Guideline Panel, Panel on Sickle Cell Disease – Related Cardiopulmonary and Kidney Disease; Sickle Cell Disease Council for Change, Pfizer Inc.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

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

Education: The Center faculty provides a broad series of lectures throughout the academic and private medical community and continues to support the Counselor /Educator Certification Program, which takes place at the Sickle Cell Disease Association of America, Mobile Chapter and provides lectures on sickle cell disease for Pediatric, Medicine and Family Medicine residents and pulmonary fellows. The USA Sickle Cell Center has sponsored a clinical based conference on practical issues involving sickle hemoglobinopathies for the last 17 years.

The 2019 annual sickle cell conference, Sickle Cell Disease Practical Issues XVII: New & Emerging Therapies & Approaches to Management, was held May 18, 2019. This year, 90
participants registered for the conference of which 58 received 7.5 inter-professional continuing medical education (CME) credits or CME credit equivalents. This year’s conference boasted the largest physician participation in its 17 year history, with 23 physicians. This CME activity was supported by unrestricted educational grants and exhibitor support. This support was appreciated by all involved and allowed its organizers to provide an affordable registration cost without compromising quality of the educational experience. Attendees included physicians, nurses, social workers, pharmacists, students and sickle cell clients. In 2008 when the Dr. Cecil L. Parker, Jr., Sickle Cell Disease Distinguished Lecture Endowment was established to support the educational agenda of the Center, it was difficult to fathom the growth now seen in support of the annual conference. Over the past 11 years, the Center has been able to invite one nationally recognized expert to speak at the conference. The 2019 conference featured three nationally recognized experts on sickle cell disease, three local experts and a patient panel. The topics addressed at this year's conference were, "Drug Therapies for Sickle Cell Disease: Beyond Hydroxyurea," "L-glutamine in the Management of Sickle Cell Disease: Benefit in Combination with Hydroxyurea?," "Improving Emergency Department Assessment and Management of Vaso-occlusive Crisis in Sickle Cell Disease," "Role of Ketamine in the Management of Vaso-occlusive Crisis in Sickle Cell Disease," "Proteinuria in Sickle Cell Disease: Diagnosis and Management," and "Indications and Use of Hydroxyurea in Children with Sickle Cell Disease." The learning objectives at the conclusion of this activity were that participants should be able to:

1) Employ a framework that addresses a more efficient approach to assessment and management of pain crisis in the emergency department;
2) Better understand the use and indications of hydroxyurea in the pediatric population with sickle cell disease;
3) Better understand the role of angiotensin-converting enzyme inhibitor/ angiotensin receptor blocker use in the management of proteinuria complicating sickle cell disease;
4) Better understand new and emerging therapies for the management of sickle cell disease.

The patient panel was a new feature of the annual conference and clearly brought a meaningful perspective that heightened the awareness of implicit biases fostered by healthcare providers. The patients openly expressed the negative feelings derived from being referred to by providers as a “sickler,” healthcare provider bias when suggesting they are drug addicts when in pain, and contrary to what some believe, they do not want to come to the emergency room when having a pain crisis, but when severe enough, they have no other choice. This discussion proved to be empowering for the patients and served as an eye-opener for the organizers and attendees. By providing a forum for those directly affected by sickle cell disease, it was resoundingly clear there is a need for healthier communication between providers and patients.

The Dr. Cecil L. Parker, Jr. Sickle Cell Disease Distinguished Lectureship Endowment is in its 12th year and continues to provide funding to support the USA Comprehensive Sickle Cell Center educational agenda in perpetuity. We will continue the clinical operations with the same determination and sincerity as we have previously. We continue to seek the necessary grant support to maintain all clinical and research activities as well as continue requesting the necessary financial support currently made available by the University of South Alabama, College of Medicine.
Research: Ongoing research projects include:
1. A pharmaceutical sponsored research trial, “A Phase 3, Double-blind, Randomized, Placebo-controlled, Multicenter Study of GBT440 Administered Orally to Patients with Sickle Cell Disease”. An open-label extension for GBT-440 (Voxelotor) is also now under way since July 2018.

2. Comparative Effectiveness of Peer mentoring vs Structured Education Based Transition Programming for the Management of Care Transitions in Emerging Adults with Sickle Cell Disease (Sub-Contract with Carolinas Healthcare System, Standard (STE) Arm, Patient-Centered Outcomes Research Institute). Participation in this study now affords the Center to employ a full-time coordinator for the Pediatric to Adult Transition Program

Clinical Operations / Services: The Adult Sickle Cell Clinic has operated as a subspecialty clinic for over 20 years. This clinic serves over 200 clients and continues to grow. The pediatric clinic provides services to over 150 clients. The primary objectives of these clinics are 1) to serve as a positive educational experience for primary care residents in the Departments of Medicine, Family Medicine, and Pediatric Medicine at the University of South Alabama; and 2) to be a resource for practicing physicians in the University and private community. The adult clinic is staffed by Dr. Johnson Haynes Jr.; Ms. Ardie Pack-Mabien, Nurse Practitioner; Ms. Jessica King, Nurse Practitioner; Ms. T'Shemika Perryman, RN and Ms. Aisha Davis, Case Manager. The pediatric clinic is staffed by Drs. Felicia Wilson, Hamayun Imran, Preethi Marri; Ms. Ardie Pack-Mabien, Nurse Practitioner, and Ms. Aisha Davis, Case Manager. Family Medicine, Internal Medicine, and Pediatric residents rotate on a monthly basis through the Sickle Cell Clinics.

Ms. Pack-Mabien, Ms. Perryman and Ms. Davis support the pediatric outpatient clinical operations and serve as liaisons when transitioning patients from pediatric to the adult services. The Pediatric to Adult Care Transition Program (PACT) is now in its eighth year. In the PACT Program, a Learning Resource and Development Center (LRDC) is available and serves clients 13-19 years old. The LRDC is located in the Moorer Clinical Sciences Building in room 1515.

Adult hematology support for adult operations remains lacking and there is no proposed solution to this deficit of overall clinical operations in sight. Urology support is now in place.

Other Activities: Dr. Haynes continues to serve as Vice President of the Alabama Sickle Cell Oversight Regulatory Commissioner. The Center’s newsletter, “Sickle Cell Today” is distributed across the State of Alabama to physicians, legislators, clients, client’s families, administrators, and community sickle cell foundations in April and September of each year. Dr. Haynes is now in his eighth year as Assistant Dean of Diversity and Inclusion in the USA College of Medicine. The Center is now in its 13th year as a collaborator with Alpha Phi Alpha Fraternity, Franklin Primary Health Center, Inc., and the Sickle Cell Disease Association of America, Mobile Chapter in the annual blood drive, which is in September of each year.
The community-based, Sickle Cell Center Development Council established in 2016 continues to grow. The current Chair is Cheryl Franklin, D.N.S. Other members include: Kerry Cohen, Chris Cox, M.D.; Karlos Finley, J.D.; Father John George, Art May, Becky Tate, Primus Ridgeway, Yolanda Turner, PhD, Reverend John Dees and Ardie Pack-Mabien. This council facilitates the sickle cell center community education and outreach, public relations, event planning and fundraising. The Council is currently working on its signature event, “Tricycle for Sickle Cell.”
Representing 42 graduating classes (1976-2019), the total number of M.D. graduates of the USA College of Medicine is 2,770 (not including former USAMC housestaff or graduates of the Ph.D. program).

**2018-2019 Medical Alumni Association Board of Directors**

**Officers**
- Dr. John Todd ’88, President
- Dr. Christopher Semple ’85, Vice President
- Dr. Brandi Trammell ’02, Secretary/Treasurer
- Dr. Edward Panacek, ’81, Chair, Alumni and Student Services Committee
- Dr. William Blaylock ’89, Immediate Past President

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- Dr. Jason Dyken, ’91
- Dr. Matthew Cepeda, ’03
- Dr. Amy Morris ’92
- Dr. Ed Panacek, ’81
- Dr. Wes Pickard, ’88
- Dr. Brandi Trammell, ’02
- Dr. Juan Rondeos, ’85
- Dr. Russell Goode, ’10
- Dr. Bibb Lamar, ’98
- Dr. Steve Kinsey, ’89

During the 2019 Annual Meeting of the Board of Directors, 3 new members were appointed to the Board of Directors and will begin their term with the 2019-2020 year:

- Dr. Stacey Wing, ‘10
- Dr. Druhan Howell, ’89

Additionally, the following 3 members of the Board ended their terms; the Association recognized these members for their support and involvement over their tenure:

- Dr. Oscar Almeida, Jr. ’85
- Dr. Lamar Duffy ’84
- Dr. Matthew McIntyre, ’06
- Dr. Grace Hundley, ’04
Scholarship Recipients for the 2018-2019 Academic Year

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Scholarship Received</th>
<th>Amount of Scholarship</th>
</tr>
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<tbody>
<tr>
<td>Sarah Bignault</td>
<td>2019 Medical Alumni Association Scholar</td>
<td>$10,000</td>
</tr>
<tr>
<td>Madeline Tucker</td>
<td>2019 Medical Alumni Association Scholar</td>
<td>$10,000</td>
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<td>Christopher Roberts</td>
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<tr>
<td>John David Roveda</td>
<td>2019 Medical Alumni Leadership Award</td>
<td>$500</td>
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$30,500

2019 Medical Alumni Reunion Weekend


The USA Medical Alumni Association has expanded its Alumni Awards program to include 3 separate distinctions, recognizing various commitments to the USA College of Medicine, the constituents it serves and the communities it supports. The following awards were developed and award recipients honored at the 2018 Reunion Weekend:

2019 Distinguished Medical Alumni Award Recipient
David Adkison, M.D. '84,
The Distinguished Medical Alumni Award is presented to an alumnus whose career has illustrated a commitment to leadership within the medical field; either in academics, business, government, or other unique positions. Such careers are usually distinguished by major leadership positions or respected national reputations.

2019 Medical Alumni Humanitarian Award Recipient
Steven Kinsey, M.D. '89
The Medical Alumni Humanitarian Award is presented to an alumnus who has made a significant impact on the medical care of the public, uniting medical service and public benefit on a local, national, or international scale.

2019 USA COM Distinguished Service Award Recipient
Susan LeDoux, PH.D. '86
The College of Medicine Alumni Service Award is presented to an individual who has made a significant contribution improving the quality and reach of the College of Medicine, as well as service that substantially benefits or enhances the reputation of the College.
As part of the Medical Alumni Reunion Weekend, Continuing Medical Education (CME) courses are offered for those attendees who are interested in earning credits while attending the Reunion. This year, 8.5 Continuing Medical Education credits were available for attendees to earn and included the following topics:

- **David Adkison, M.D.**, *Adventures in Medicine: Practicing in China*
- **Mike Ledet, M.D.**, *Update on Lipids*
- **Ed Panacek, M.D.**, *What I Learned from being a TV Doctor*
- **Shelia Ross, D.N.P.**, *Success of a Collaborative Certified Stroke Program*
- **Anne Schott, M.D.**, *Cancer Advances Since the 2016 USA Alumni Reunion*
- **T.J. Hundley, M.D.**, *From Sisyphus to the Phoenix: Burnout and Resiliency in Physicians*
- **Amy Boone, M.D.**, *HPV Vaccination: What can you do?*
- **Errol Crook, M.D.**, *The Social Determinants of Health: A Focus on Poverty*
- **John V. Marymont, M.D., M.B.A.**, *State of The College*
- **Franklin Trimm, M.D.**, *Unconscious Bias*

**Student Events Sponsored**

The Medical Alumni Association contributed funds to the following student events and activities:

- Class of 2022 Freshman Orientation Lunch
- Student Career Exploration Mixer
- Class of 2021 White Coat Ceremony
- 2019 Match Day

**2018-2019 Annual Fund and Membership Drive and MAA Scholarship Endowment Initiative**

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<tr>
<th>Description</th>
<th>Amount</th>
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<td>Annual Fund Contributions</td>
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<tr>
<td>Amount Raised via Memberships</td>
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<td>MAA Scholarship Endowment Commitments</td>
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<td><strong>Total Amount Raised</strong></td>
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The Division of Medical Education and Student Affairs is responsible for all undergraduate education programs in the College of Medicine. Activities in the Division of Medical Education and Student Affairs are accomplished through offices in the Medical Sciences Building and Mastin Building, USA Health University Hospital. Students in the clinical years of undergraduate medical education rotate at all USA Health Campus sites including University Hospital and Children’s and Women’s Hospital with the possibility of clinical interaction and research opportunities at USA Health Mitchell Cancer Center. USA College of Medicine students have the opportunity to see patients in the out-patient settings at Stanton Road Clinic and Strada Patient Care Center.

**Student Affairs**

The Medical Association of the State of Alabama, Medical Society of Mobile County, University of South Alabama Medical Alumni Association, and ProAssurance sponsored Match Day festivities which were held at the Mobile Convention Center in downtown Mobile on March 15, 2019. Dr. John Marymont, Vice President for Medical Affairs and Dean of the College of Medicine, faculty from the College of Medicine, and families of the students were on hand to watch as the Class of 2019 excitedly learned of their residency placements. The match results were impressive including five students in Ophthalmology, one student in Dermatology, one student in Neurosurgery, one student in Otolaryngology, one student in Radiation Oncology, three students in Anesthesiology, four students in Emergency Medicine, one student in Neurology, three students in Orthopedic Surgery, three students in Radiology, and two students in Pathology. With respect to primary care fields, the following were the match results: twelve students in Internal Medicine, ten students in Family Medicine, seven students in Psychiatry, and six students in Pediatrics. Regarding General Surgery, four students matched into categorical programs and five into preliminary programs. Regarding OB/Gyn, seven students matched into categorical programs and one student into a preliminary program. Seventy five percent of students matched into out of state residency programs with the remaining twenty five percent staying in Alabama programs. Twelve USA COM students choose to continue their graduate medical education in the USA Health Hospitals. Students from USA COM were placed into programs spanning the entire United States including but not limited to representation in Massachusetts, Illinois, Ohio, South Carolina, North Carolina, Virginia, Tennessee, Texas, Missouri, Washington, and California.

Honors Convocation for the College of Medicine Class of 2019 was held Friday evening May 3, 2019, in the Mitchell Center on the USA Campus. The Class chose Dr. Susan LeDoux, Associate Dean for Medical Education and Student Affairs, as their faculty speaker and David Roveda to represent the class response. This recognition was especially poignant for Dr. LeDoux as this event was her last official class graduation in her capacity as the Associate Dean thus retiring from her position July 1, 2019. During Honors Convocation, the graduates were recognized for academic and other achievements, academic hoods were bestowed, and the Hippocratic Oath was administered. Graduation was held the following day May 4, 2019, at the USA Mitchell Center.
The White Coat Ceremony for the College of Medicine Class of 2021 was held at the USA Mitchell Center on June 15, 2019. Michael Chang, M.D., Chief Medical Officer and Associate Vice President for Medical Affairs, USA Health, delivered the charge to the Class and Zachary White, Class President, delivered the response. The Class of 2021 received not only their White Coats but also personalized messages from the Alumni Association and their own reflective writings which they had penned during their M1 orientation two years prior. Student, resident and faculty members were also inducted into the Gold Humanism Honor Society. A reception was held at the Globe in the Mitchell Center.
The number of visiting medical students who participated in senior elective courses at USACOM is outlined below:

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<tr>
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</table>

*We joined the AAMC VSAS in 2014 and no longer rotate foreign students*
Letters of evaluation (Dean’s Letters) were written for each of the 80 seniors who graduated in May, 2019. Students applied to 3,376 residency programs through the AAMC Electronic Residency Application Service (ERAS).

Seventy-eight (78) students matched for residency positions. Seventy-one (71) of the May graduates used the NRMP as their primary means of obtaining residency and four (4) graduates participated in a specialty match.

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*We joined the AAMC VSAS in 2014 and no longer rotate foreign students
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<th>Class of 2016</th>
<th>Class of 2017</th>
<th>Class of 2018</th>
<th>Class of 2019</th>
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<td>PRIMARY CARE:</td>
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<td>31 38%</td>
<td>31 44%</td>
<td>33 45%</td>
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<td>Internal Medicine</td>
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<td>15 12%</td>
<td>15 21%</td>
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<td>Family Medicine</td>
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<td>Pediatrics</td>
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University of South Alabama Seniors
Residencies Received by State

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<th>Out-of-State</th>
<th>Number of Different States</th>
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Seventy-seven seniors received the Doctor of Medicine degree at Commencement on May 4, 2019. On the evening of May 3, the College held its forty-fourth Honors Convocation which took place in the Mitchell Center. Dr. Susan LeDoux addressed the class and John David Roveda, Jr. responded for the graduates. Prior to hooding the graduates, the following awards were presented:

Dean's Award – Trevor Chalk Stevens
Merck Award – Ryan David Screven and Emily Morgan Smith
Glasgow-Rubin Achievement Citations – Christina Erin Artz, Emily Morgan Smith, and Kasey Amber Stoutin
Dr. Robert A. Kreisberg Endowed Award of Excellence – Trevor Chalk Stevens
Leonard Tow Humanism in Medicine Award – Trevor Chalk Stevens and Dr. Spencer Liles
Medical Alumni Leadership Award – John David Roveda, Jr.
Proassurance Award – Audrey Marie Murphy
Community Service Award – Natalie Brooke Carlisle and William Charles Gambla
SNMA Leadership Award – Hilda Antranette Watkins
Outstanding Student in the Pre-clerkship Curriculum – John David Roveda, Jr.
Award for Excellence in Teaching Clinical Skills – Ashleigh Mei Tomkovich
Clinical Pharmacology & Therapeutics Excellence Award – Trevor Chalk Stevens
Hollis J. Wiseman Award for Excellence in Pediatrics – Natalie Brooke Carlisle
Samuel Eichold Award – Dalton Thomas Patterson
The Orthopaedic Excellence Award – Joseph William Anderson
John W. Donald Memorial Award in Surgery – Christina Erin Artz
H. C. Mullins, M.D. Award – Christel Doiron Bowman and Charlotte Carolyn Linder
Obstetrics/Gynecology Award – Kristen Leigh Smith
Excellence in Emergency Medicine Award – Connor William Kimbrell
Society for Academic Emergency Medicine (SAEM) Award – Christopher Charles Musselwhite
Excellence in Psychiatry Award – Anna Williams Zampese
AAN Medical Student Prize for Excellence in Neurology Award – Vivek Hitesh Patel
### Grade Distribution 2018 - 2019 Academic Year

#### Freshman Courses

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#### Sophomore Courses

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<td>8</td>
<td>63</td>
<td>0</td>
</tr>
<tr>
<td>OSCE M2 – Fall</td>
<td>18</td>
<td>53</td>
<td>0</td>
</tr>
<tr>
<td>OSCE M2 - Spring</td>
<td>14</td>
<td>57</td>
<td>0</td>
</tr>
<tr>
<td>Multisystem Disorders</td>
<td>0</td>
<td>71</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Junior Clerkships

<table>
<thead>
<tr>
<th>Clerkship</th>
<th>H</th>
<th>P</th>
<th>F</th>
<th>Out of sequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Medicine</td>
<td>10</td>
<td>61</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>18</td>
<td>51</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Neurology</td>
<td>10</td>
<td>46</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>OB/GYN</td>
<td>17</td>
<td>52</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>4</td>
<td>63</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>12</td>
<td>55</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>General Surgery</td>
<td>22</td>
<td>44</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
### Academic Progress of Medical Students
Source: Part II of LCME Annual Medical School Questionnaire

<table>
<thead>
<tr>
<th>Initial Students in Class</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates</td>
<td>71</td>
<td>69</td>
<td>70</td>
<td>73</td>
<td>73</td>
</tr>
<tr>
<td>True Attrition (will not receive M.D. in any year)</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sophomores</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Juniors</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Seniors</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Sophomores</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Juniors</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Transferred to Another Medical School</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Withdrew</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Admitted with Advanced Standing or Re-entered from Graduate School</th>
<th>2014-15</th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

| Deceased         | 0       | 0       | 0       | 0       | 0       |

<table>
<thead>
<tr>
<th>Repeated All or Part of the Year</th>
<th>2014-15</th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minority Students (Black, Native American, Hispanic)</th>
<th>2014-15</th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>22</td>
<td>28</td>
<td>35</td>
<td>43</td>
<td>39</td>
</tr>
<tr>
<td>Freshmen</td>
<td>7</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>All Other Classes</td>
<td>15</td>
<td>19</td>
<td>25</td>
<td>32</td>
<td>29</td>
</tr>
</tbody>
</table>

127
United States Medical Licensure Examination (USMLE) Step 1
First Time Takers

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students</td>
<td>72</td>
<td>73</td>
<td>78</td>
<td>74</td>
<td>67</td>
</tr>
<tr>
<td>National Overall Mean</td>
<td>229</td>
<td>229</td>
<td>228</td>
<td>229</td>
<td>230</td>
</tr>
<tr>
<td>USACOM Overall Mean</td>
<td>230</td>
<td>229</td>
<td>228</td>
<td>234</td>
<td>232</td>
</tr>
<tr>
<td>Failure Rate – National</td>
<td>4%</td>
<td>5%</td>
<td>5%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Failures at USA</td>
<td>3%</td>
<td>4%</td>
<td>2%</td>
<td>1%</td>
<td>3%</td>
</tr>
</tbody>
</table>


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

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students</td>
<td>76</td>
<td>71</td>
<td>70</td>
<td>74</td>
<td>80</td>
</tr>
<tr>
<td>National Overall Mean</td>
<td>240</td>
<td>241</td>
<td>242</td>
<td>241</td>
<td>pending</td>
</tr>
<tr>
<td>USACOM Overall Mean</td>
<td>242</td>
<td>246</td>
<td>248</td>
<td>248</td>
<td>pending</td>
</tr>
<tr>
<td>Failure Rate – National</td>
<td>5%</td>
<td>4%</td>
<td>2%</td>
<td>4%</td>
<td>pending</td>
</tr>
<tr>
<td>Failures at USA</td>
<td>4%</td>
<td>3%</td>
<td>0%</td>
<td>3%</td>
<td>pending</td>
</tr>
</tbody>
</table>

Minimum passing score = 170 for Class of 1997-2000; 174 beginning with the Class of 2001; 182 beginning with the Class of 2004; 184 beginning with the Class of 2008; 189 beginning with the Class of 2011; 209 beginning with the Class of 2014

United States Medical Licensure Examination (USMLE) Step 3

<table>
<thead>
<tr>
<th></th>
<th>Class of 2012</th>
<th>Class of 2013</th>
<th>Class of 2014</th>
<th>Class of 2015</th>
<th>Class of 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Percentage Passing</td>
<td>97</td>
<td>98</td>
<td>98</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>USA Percentage Passing</td>
<td>93</td>
<td>97</td>
<td>98</td>
<td>99</td>
<td>99</td>
</tr>
<tr>
<td>USA Number of Students</td>
<td>67</td>
<td>66</td>
<td>62</td>
<td>69</td>
<td>69</td>
</tr>
</tbody>
</table>
Evaluation of Student Performance in the First Postgraduate Year

The questionnaire, adopted by the Curriculum Committee for assessment of graduates of the College of Medicine, was sent to the Program Directors of the PGY-1 programs of our 2018 graduates. A total of 36 responses were received out of 76 requests. Below is a summary of the responses to the major domains that were assessed. Rows may not add to 100% due to rounding.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Bottom Fifth</th>
<th>Lower Fifth</th>
<th>Middle Fifth</th>
<th>Upper Fifth</th>
<th>Top Fifth</th>
<th>Insufficient Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund of Information</td>
<td>6%</td>
<td>6%</td>
<td>39%</td>
<td>25%</td>
<td>25%</td>
<td>0%</td>
</tr>
<tr>
<td>Integration into Problem Solving</td>
<td>3%</td>
<td>8%</td>
<td>33%</td>
<td>33%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>Use of Diagnostic Tests</td>
<td>3%</td>
<td>8%</td>
<td>36%</td>
<td>31%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>History Taking</td>
<td>3%</td>
<td>11%</td>
<td>31%</td>
<td>33%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>Physical Examination</td>
<td>0%</td>
<td>8%</td>
<td>33%</td>
<td>42%</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td>Chart Documentation</td>
<td>3%</td>
<td>6%</td>
<td>25%</td>
<td>44%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>Patient Presentation</td>
<td>0%</td>
<td>14%</td>
<td>31%</td>
<td>39%</td>
<td>17%</td>
<td>0%</td>
</tr>
<tr>
<td>Identification of Patient Problems</td>
<td>3%</td>
<td>9%</td>
<td>27%</td>
<td>43%</td>
<td>17%</td>
<td>0%</td>
</tr>
<tr>
<td>Systematic Approach to Problem Solving</td>
<td>6%</td>
<td>8%</td>
<td>33%</td>
<td>25%</td>
<td>28%</td>
<td>0%</td>
</tr>
<tr>
<td>Rational Plan of Management</td>
<td>6%</td>
<td>6%</td>
<td>33%</td>
<td>36%</td>
<td>19%</td>
<td>0%</td>
</tr>
<tr>
<td>Use of Consultants</td>
<td>0%</td>
<td>3%</td>
<td>37%</td>
<td>34%</td>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td>Skills in Procedures</td>
<td>3%</td>
<td>0%</td>
<td>33%</td>
<td>25%</td>
<td>8%</td>
<td>31%</td>
</tr>
<tr>
<td>Overall Efficiency with Patient Care</td>
<td>6%</td>
<td>8%</td>
<td>31%</td>
<td>36%</td>
<td>19%</td>
<td>0%</td>
</tr>
<tr>
<td>Recognition of Own Limitations</td>
<td>0%</td>
<td>8%</td>
<td>31%</td>
<td>44%</td>
<td>17%</td>
<td>0%</td>
</tr>
<tr>
<td>Self-Directed Learner</td>
<td>6%</td>
<td>6%</td>
<td>19%</td>
<td>33%</td>
<td>36%</td>
<td>0%</td>
</tr>
<tr>
<td>Use of Literature to Answer Questions</td>
<td>3%</td>
<td>6%</td>
<td>46%</td>
<td>29%</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td>Professional Demeanor</td>
<td>0%</td>
<td>3%</td>
<td>17%</td>
<td>33%</td>
<td>47%</td>
<td>0%</td>
</tr>
<tr>
<td>Effective Interpersonal Skills</td>
<td>0%</td>
<td>3%</td>
<td>19%</td>
<td>33%</td>
<td>44%</td>
<td>0%</td>
</tr>
<tr>
<td>Works Effectively in Interprofessional Teams</td>
<td>0%</td>
<td>3%</td>
<td>22%</td>
<td>39%</td>
<td>36%</td>
<td>0%</td>
</tr>
<tr>
<td>Recognizes Error &amp; Advocates for Improvement</td>
<td>0%</td>
<td>0%</td>
<td>39%</td>
<td>38%</td>
<td>14%</td>
<td>8%</td>
</tr>
<tr>
<td>Practices High-Value Cost Effective Care</td>
<td>3%</td>
<td>0%</td>
<td>47%</td>
<td>25%</td>
<td>14%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Curriculum Committee

The Curriculum Committee met twice a month this past academic year. Meeting agendas consisted of subcommittee reports with recommendations for action and informational sessions updating committee members on national trends in medical education and changing expectations in the accreditation requirements for the undergraduate medical education (UME) program.

The Committee is charged with oversight of the UME curriculum in accordance with LCME standards. This encompasses the establishment of policies and practices for design, delivery, monitoring, mapping and assessment of educational content, and assuring that curricular problems are effectively addressed. The Committee was chaired by T.J. Hundley, MD.

Curriculum Committee subcommittees met regularly to perform the major workload of the parent committee in 2018 – 2019. The subcommittees and their chairs included:
A summary of Curriculum Committee activities and action for 2018 – 2019 follows:

Completion of the LCME Accreditation Site Visit
The Committee and its subcommittees completed a lot of hard work preparing and finalizing the necessary data for the LCME site visit. This work was done in conjunction with multiple faculty and departments across the institution. The LCME site visit was completed in October, 2018, with the final report arriving several months later. The overall report was positive with the College of Medicine receiving accreditation for a full eight year cycle. The Committee will continue to refine and improve design, delivery, and monitoring of the overall educational program as well as the individual modules, clerkships, and fourth year courses.

Educational Program Review
The Committee conducted its first comprehensive overall educational program. This report was a comprehensive collection of data related to student performance and outcomes as well as both faculty and student opinions. Multiple internal and external sources of data were used to compile the report. Overall the report was very positive which was indicative of all the hard work and dedication faculty commit towards the delivery of an effective educational program. The Committee used this information to guide further quality improvement efforts for the last academic year. The review was also an important piece of information utilized by the LCME site visit team during their time here.

Needs Assessment of Health System Science Curricular Content
The knowledge, skills, and attitudes necessary to practice medicine in the current healthcare environment continue to evolve. In addition to the content related to the domains of the basic and clinical sciences, the health system sciences has now been identified as a third domain of instructional content. This domain is defined as the fundamental understanding of how health care is delivered, how health professionals work together to deliver that care, and how the health system can improve health. The Committee recognized the importance of identifying where this content is currently taught in our curriculum in order to develop a plan on how to best teach this content. The Committee has begun conducting a needs assessment of our overall curriculum in the M1 to M3 years.

Review of Module Sequence in the M1 and M2 Years
The Committee conducted a review of the sequence of the M1 and M2 modules. The Module Directors subcommittee conducted the effort which was ultimately presented to the overall Committee. The Neuroscience and Behavioral module was moved before the Endocrine and Reproductive module in the M2 year to facilitate student wellness and better understanding of the material. The BCS and MSK modules were integrated into a new revised MSK module which will now occur in the M1 year. Biostatistics and malignant hematology and oncology content were
repositioned from the FHH2 module into other modules. This resulted in the FHH2 module becoming the Infectious Disease and Immunology module for 2019 – 2020. A new M2 module will be created around Hematology and Oncology in 2019 – 2020. A review of this resequencing will occur in 2019 – 2020 to further refine best practices.

Quality Improvement of the Selectives
The Selectives were a new initiative in 2017 – 2018 to allow students the opportunity to explore certain specialties prior to their M4 year. The experiences were in Emergency Medicine, Neurosurgery, Orthopedics, Pathology, and Radiology. The Committee used the opportunity to conduct continuous quality improvement of these courses in 2018 – 2019. Overall the students enjoyed the experiences and appreciated their inclusion in the M3 year. The enthusiasm of the course directors was pivotal in this process. As a result, the Committee continued the Selective course. Many of the Selectives implemented more robust means of assessment and evaluation. These included targeted case logs, feedback cards, reflective writing, independent learning activities, and simulation.

Creation of the Research Selective
The Committee reviewed the previously noted Selective experiences available to students. The Committee identified an opportunity to promote student engagement in research. This led to the development and approval of a research selective. This experience will allow students who are interested to commit four weeks towards the continuation or completion of a research project in the M3 year. The students are required to identify a mentor, outline the state of the project prior to starting the rotation, and develop a work plan. At the conclusion of the experience, the student will be assessed against the progress of the work plan and submission of a report in the format of a scientific publication.

USMLE and NBME Performance Review
Standardized test scores reviewed by the Committee during 2018 – 2019 continued their pattern of upward trending by meeting or exceeding national norms. Mean scores on NBME shelf exams for all seven clerkships continue to exceed national norms for the year. Final Step 1 data showed that USA students averaged 232 which was higher than the national average of 230. Step 2CK data demonstrated USA students averaged 248 which was above the national average of 243. On Step 2CS, data revealed USA students matched the national pass rate of 98% which was also above the national average of 95%.

AAMC Mission Management Tool Review
The Committee obtained and reviewed the most recent update from the AAMC Mission Management Tool. This resource provides an aggregate of three years of data to medical schools indicating how they performed compared to other medical schools in areas such as clerkships and practice patterns once our medical students enter the workforce. This data demonstrated an overall high satisfaction with many of the clerkships; we were at the 74th percentile for students reporting they received adequate basic science illustrations of clinical relevance. Most notable was that our medical school ranked at the 94th percentile for students stating they were satisfied with the quality of their medical education, 84th percentile for students practicing primary care, 81st percentile for students practicing in-state, 89th percentile for students practicing in rural areas, and 100th percentile for students practicing in underserved areas.
Development of Residents as Teachers
The Committee reviewed the processes and content utilized by the M3 clerkships to provide development to residents in their roles as teachers. In previous years, the Committee worked with clerkship directors to develop a process to ensure residents received fundamental information about the objectives, expectations, and assessment practices of the clerkship. During 2018 – 2019, the Committee identified the specific content provided to residents related to skills necessary to be effective teachers. Many clerkships delivered similar content such as giving effective feedback, understanding learning styles, and how to evaluate students. Using this data, the Committee developed a draft pocket guide to serve as a resource for residents. This guide will undergo further revisions to develop it into a useful tool for residents. In addition, the Committee will review opportunities to deliver this content to residents more efficiently.

Revision of the Assessment and Evaluation Process
The Committee continues its endeavors to continuously improve the assessment and evaluation process of the modules and clerkships. The Committee increased its focus in 2018 – 2019 on developing better methods of assessing courses against their stated educational objectives. The Assessment & Evaluation Subcommittee developed new tools to assist the Committee in further advancing this process when reviewing modules. The next phase will be to follow a similar process with the clerkships.

Collaboration with Student Affairs on Student Wellness
Student Affairs has been working diligently to continue to expand the infrastructure of the Wellness program for medical students. The Committee continues to collaborate with Student Affairs to develop and implement this content. The Clerkship Directors Subcommittee undertook the initiative this year to develop Wellness Forums for insertion into the M3 year. These forums will deliver important content to medical students in the realm of physician wellness while also allowing students to address their personal needs. The pilot will include five sessions. Most notable, these sessions will allow for large groups of students to come together in one setting to discuss these topics. If this structure is successful, it may provide opportunities for more innovative curriculum delivery in the M3 year.

Completion of Data Collection Entrustable Professional Activities Pilot
With the transition of GME training to a milestone-based evaluation system, Entrustable Professional Activities (EPAs) emerged as a new method of assessment of post-graduate trainees. An EPA has been defined as tasks or responsibilities to be entrusted to an unsupervised trainee once he or she has attained sufficient competence. The AAMC continues to investigate the use of EPAs as a means of UME assessment as well, if scaled appropriately. The Committee had previously endorsed the continuation of a prospective pilot of an EPA-based evaluation tool in 2018 – 2019. The data collection has concluded and an analysis will be performed to decide future directions in 2019 – 2020.

Approval of the first M4 Online Elective
The Committee approved its first entirely online elective for the M4 year. Medical schools nationally are increasing delivery of content in more innovative and flexible ways. As part of this trend, the development of online electives in the M4 year has increased. The residency interview season in the fourth year and utilization of away rotations by students resulted in the Committee
exploring opportunities to provide this flexibility in our M4 year. The Health and Wellness elective was created and approved as a direct result. This elective will be delivered online in a series of modules and students can select timing and order. Examples include modules on diet, exercise, burnout, and stress management. A large number of students enrolled in the course for 2019–2020. The Committee will review the results of the course next year to decide best practices for further development of online electives.

Executive Committee of Student Assembly

Meetings were held on the second Wednesday of every month in Mastin 209. Please note exceptions in the months of October, November, January, and March due to scheduling conflicts. Meetings took place at 4:15PM through October and then moved to 5:15PM. Meetings were not held in December, 2018, or June and July of 2019.

As set forth in the Student Handbook, Student Assembly addressed issue affecting student life. The officers were:

- President: William Nicolson
- Vice President: Whitney Smith
- Secretary/Treasurer: Patrick Young
- SGA Liaison: Travis Goodloe
- Faculty Advisors: Dr. Susan LeDoux, Dr. Linda Ding

1. Events funded by Student Assembly
   a. Halloween Party: October 20, 2018
      i. Student Assembly approved $300.00 for the event via electronic vote
   b. Christmas Party: December
      i. Student Assembly has previously funded the annual Christmas Party, but no request was made this year
   c. Gold Humanism Honor Society Solidarity Week
      i. Student Assembly approved $350 that was used to purchase items handed out during Solidarity week and doughnuts for Resident’s Day
   d. Asclepian Ball: March 23, 2019 at the USS Battleship
      i. Student Assembly approved $3500 for the event
         ii. $3000 came from the Medical Alumni Association
            iii. $500 came from the general Student Assembly account
   e. USACOM M3 Case Report Symposium: May 31, 2019
      i. Student Assembly Approved up to $725 to cover for plaques, catering, and thank you gifts for judges

2. Dates of Special Events were as follows:
   a. White Coat Ceremony for the Class of 2020 was held on June 16, 2018
   b. Honors Convocation for the Class of 2018 was held on May 4, 2018
   c. USACOM M3 Case Report Symposium was held on May 31, 2019 in the first floor conference room of the Strada Center
d. The Wellness Committee organized several events for the COM as a whole
   i. Individual house events were held in the fall semester at various times
   ii. Individual house events were held in the Spring Semester at various times
   iii. College-wide Crawfish boil at Dr. Gilbert’s house on March 20, 2019

e. Match Day was held on March 15, 2019 at the Mobile Convention Center

f. Volunteer Opportunities for M1-M4 students at the University of South Alabama
   Student Run Free Clinic were discussed on a monthly basis

3. Changes to Student Assembly
   a. Dr. Kelly Roveda and Dr. Haley Ballard were no longer able to participate as
      faculty advisors
      i. Dr. Ding was added as a new faculty advisor
   b. Dr. Susan LeDoux will retire at the end of the year; her position on Student
      Assembly will be filled by Dr. Kelly Roveda
   c. Decision to add a new class position
      i. Each first-year class will elect a student to act as Gumbo-Chili Cookoff
         Chair
      ii. Each class will have a Gumbo-Chili Chair
      iii. The purpose of this position will be to help plan and carry out the Annual
           Gumbo-Chili Cookoff
   d. New Student Assembly Officers were elected in April, 2019 for the 2019-2020
      school year
      i. The transitional meeting took place on May 8, 2019
      ii. President: Stuart McFarland
      iii. Vice President: Harold Brooks Lampkin
      iv. Secretary/Treasurer: Allen Mao
      v. SGA Liaison: Zachary White
Office of Financial Aid

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Financial Aid</td>
<td>$10,600,638</td>
<td>$10,189,089</td>
<td>$10,749,914</td>
<td>$10,517,598</td>
<td>$10,570,736</td>
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<tr>
<td>Students on Aid</td>
<td>270</td>
<td>263</td>
<td>272</td>
<td>256</td>
<td>270</td>
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<tr>
<td>Loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perkins</td>
<td>642,000</td>
<td>557,500</td>
<td>423,000</td>
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<tr>
<td>Direct Unsubsidized</td>
<td>7,878,086</td>
<td>7,172,789</td>
<td>7,828,125</td>
<td>7,674,811</td>
<td>7,623,544</td>
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<tr>
<td>Direct Grad Plus</td>
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<td>555,483</td>
<td>783,639</td>
<td>1,025,483</td>
<td>1,021,921</td>
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<td>Outside Private Loans</td>
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<td>Total Loans</td>
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<td>$8,300,755</td>
<td>$9,034,764</td>
<td>$8,700,294</td>
<td>$8,645,465</td>
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<tr>
<td>Scholarships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Sponsored</td>
<td>801,174</td>
<td>968,916</td>
<td>900,064</td>
<td>972,261</td>
<td>1,276,612</td>
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<tr>
<td>Outside Sponsored</td>
<td>150,146</td>
<td>185,549</td>
<td>138,201</td>
<td>138,866</td>
<td>58,614</td>
</tr>
<tr>
<td>Military – Army</td>
<td>28,256</td>
<td>86,551</td>
<td>153,282</td>
<td>93,654</td>
<td>189,522</td>
</tr>
<tr>
<td>Military – Navy</td>
<td>140,785</td>
<td>229,467</td>
<td>206,468</td>
<td>216,613</td>
<td>126,048</td>
</tr>
<tr>
<td>Military - Air Force</td>
<td>226,259</td>
<td>201,106</td>
<td>88,791</td>
<td>280,409</td>
<td>189,127</td>
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<tr>
<td>Alabama VA Benefits</td>
<td>83,046</td>
<td>86,703</td>
<td>94,840</td>
<td>61,442</td>
<td>31,440</td>
</tr>
<tr>
<td>Faculty Staff Reimbursement</td>
<td>53,862</td>
<td>130,042</td>
<td>133,504</td>
<td>54,059</td>
<td>53,908</td>
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<tr>
<td>Total Scholarships</td>
<td>$1,483,528</td>
<td>$1,888,334</td>
<td>$1,715,150</td>
<td>$1,817,304</td>
<td>$1,925,271</td>
</tr>
</tbody>
</table>

Average Indebtedness of a Graduating Senior

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$154,938</td>
<td>$155,019</td>
<td>$156,242</td>
<td>$160,870</td>
<td>$158,602</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, 2018, through July 31, 2019, two (2) emergency loans were approved for a total amount of $1,000.00. During that period, zero (0) loans were paid back into the loan account.
2018-2019
Summary of Activities
Office of Diversity and Inclusion

The Office of Diversity and Inclusion (ODI) within USA College of Medicine continually strives to develop policies and best practices directed at the outreach, recruitment and retention of a more diverse and inclusive student body, housestaff and faculty. This mission informs the efforts of this office within the communities of the USA College of Medicine and USA Health. It is through the support of these communities that the ODI has been able to strengthen and expand efforts throughout 2018 and 2019.

ODI-In-Numbers, 2018-2019
- 101 Participants Trained, Unconscious Bias Training
- 41 Participants Trained, Transgender and LGBTQ+ Staff Development Training
- 8 Diversity & Inclusion “Lunch and Learn” Sessions
- 10 High School/University Recruitment Visits
- 5 Student Affinity Groups
- 21 Collegiate Pipeline Program Participants

Two pipeline programs are coordinated through the ODI as part of the office’s outreach and recruitment initiatives. The DREAM Program, formally known as the BEAR Program, has been in existence since 1985 and continues to develop each year. The DREAM Program aims to prepare first-time college seniors or non-traditional students for the Medical College Admission Test (MCAT) and other elements necessary for medical school admissions. Students are recruited from colleges and institutions across the state of Alabama and USA service area. Facilitated over the course of an 8-week summer session, students are immersed in coursework, professional development sessions, and cultural immersion experiences led by university-level faculty members.

The second pipeline program, the South Med Prep Scholars (SMPS) Program, also aims to prepare high-achieving pre-medical students for the MCAT. SMPS occurs over two summers and recruitment begins during a student’s freshman year. Students in SMPS Phase 1 engage in shadowing experiences within the USA Health System and basic science research under the tutelage of investigators within USA College of Medicine. Students in Phase 2 have activities similar to DREAM. Students for this program are recruited from five historically Black colleges and institutions (HBCUs) in the region: Tuskegee University, Morehouse College, Spelman College, Dillard University, and Xavier University.

During the 2018-2019 recruitment cycle, over 50 applications were received for both programs. Seventeen students were chosen from this applicant pool and four students returned from last year’s program for a total of 21 students for both programs in 2019. The students represent the following institutions: Auburn University, University of South Alabama, University of Mississippi, Alabama State University, University of Alabama-Huntsville, Huntingdon College and Southern A&M University in addition to the five HBCUs mentioned above.

As an office, ODI understands that recruitment is only a small piece of the puzzle. Pride is taken to
support current medical students by celebrating what makes each student unique and how that uniqueness positively impacts everyone. The ODI supports several student-led groups that not only serve as safe spaces of community for medical students but also as means of peer support and education. Those groups include Student National Medical Association (SNMA), American Medical Women’s Association (AMWA), MedPride and Allies, Muslims in Medicine (MIM), and the Spanish Medical Interest Group. To date, these groups, in partnership with the ODI, have hosted and facilitated eight Diversity & Inclusion “Lunch and Learn” sessions. This office, led by Dr. Franklin Trimm, has also facilitated 14 Unconscious Bias trainings to audiences throughout the USA Health System.

As the year progresses, the ODI looks forward to continued growth and expanded reach for the purpose of impacting healthcare outcomes for the state of Alabama one student, faculty, or staff-person at a time.
2018-2019
Summary of Activities
Office of Admissions

Applicant and Acceptance Data

The University of South Alabama College of Medicine participates in the American Medical College Application Service (AMCAS). The period for receiving AMCAS applications to the College of Medicine for the class entering August 5, 2019, opened June 1, 2018, and closed November 1, 2018. The matriculating Class of 2019 represents twenty-seven (27) colleges and universities from the United States. Sixty-six percent (66%) of this year’s class, however, come from the four (4) largest universities in the state. Additional details of the 2018-2019 admissions cycle are shown in Table 1.

Recruitment and Retention Efforts

1. Undergraduate campus recruiting visits and sophomore interviews were implemented by “teams” of faculty and administration. The USACOM recruiting teams counseled over 300 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, review the application process, meet with medical students and faculty, and obtain information on financial aid, housing, and the community.

4. The following publication was approved by the Admissions Committee: Policies and Procedure Manual. The website was also updated and maintained by the Admissions Office.

5. Special admissions reports and correspondence were produced and distributed annually to in-state premedical advisors and selected out-of-state advisors.

6. A total of sixteen (16) Interview Day programs were conducted from September until February. The interviewers, primarily College of Medicine clinical and basic science faculty, serve as members of the Committee on Admissions and/or ad hoc members. These members interviewed one hundred ninety-eight (198) candidates; each interviewee was interviewed by three committee members, giving a total of five hundred ninety-four (594) interviews.

7. The following Admissions Committee subcommittees were active in 2018-2019: Scholarship Subcommittee, Wait List Subcommittee, Early Assurance Subcommittee, and the Interview Selection Subcommittee.
Early Acceptance Program

In 1990, the College of Medicine and the University's Health Pre-Professions Program established an Early Acceptance Program for highly 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 27 (or comparable SAT). Candidates selected for this program receive early acceptance from the University of South Alabama College of Medicine. The students enter the Health Pre-Professions Program and the Honors College at the University of South Alabama, and their curriculum includes the core requirements for their selected baccalaureate degree, the honors program and the prerequisites for entering medical school. Students in the Early Acceptance Program must maintain a specified GPA during college and take the MCAT, a minimum score of 504 being required. EAP participants must also meet all other requirements for entering medical school. Students participate in a variety of activities on an individual basis to provide broad exposure to medical education. Students participating in the program are expected to enter the College of Medicine following completion of the baccalaureate degree.

This year, one hundred nineteen (119) applications were received from students wishing to enter this program. After a screening process, fifty-three (53) of the applicants were selected for interviews and ten (10) were offered admission to the EAP.
<table>
<thead>
<tr>
<th>Total Applicants (Completed Secondary Applications)</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Applicants</td>
<td>1525 (719)</td>
<td>1521 (740)</td>
<td>1604 (767)</td>
<td>1554 (860)</td>
</tr>
<tr>
<td>Residence: Alabama</td>
<td>472 (404)</td>
<td>467 (407)</td>
<td>471 (409)</td>
<td>430 (387)</td>
</tr>
<tr>
<td>Out-of-State (OOS)</td>
<td>994 (284)</td>
<td>1003 (301)</td>
<td>1079 (322)</td>
<td>1059 (426)</td>
</tr>
<tr>
<td>Service Areas (FL &amp; MS)</td>
<td>59 (31)</td>
<td>51 (32)</td>
<td>54 (36)</td>
<td>65 (47)</td>
</tr>
<tr>
<td>Rural</td>
<td>82 (82)</td>
<td>63 (63)</td>
<td>101 (99)</td>
<td>67 (62)</td>
</tr>
<tr>
<td>Residence: Alabama</td>
<td>205 (173)</td>
<td>209 (183)</td>
<td>213 (188)</td>
<td>193 (179)</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>994 (284)</td>
<td>1003 (301)</td>
<td>1079 (322)</td>
<td>1059 (426)</td>
</tr>
<tr>
<td>AL Other Underrepresented Minorities*</td>
<td>27 (17)</td>
<td>30 (27)</td>
<td>28 (26)</td>
<td>22 (22)</td>
</tr>
<tr>
<td>OOS Other Underrepresented Minorities</td>
<td>150 (42)</td>
<td>157 (62)</td>
<td>148 (44)</td>
<td>150 (48)</td>
</tr>
</tbody>
</table>

| Total Applicants Interviewed                      | 215 | 211 | 224 | 198 |
| Residence: Alabama                                | 201 | 196 | 215 | 182 |
| Out-of-State                                      | 4 | 6 | 5 | 7 |
| Service Areas (FL & MS)                           | 10 | 9 | 4 | 9 |
| Rural                                             | 40 | 33 | 50 | 28 |
| Female                                            | 92 | 89 | 102 | 95 |
| Black (excludes DREAM)                            | 18 | 19 | 17 | 14 |
| Other Underrepresented Minorities                 | 12 | 10 | 17 | 14 |

| Total Applicants Accepted                         | 155 | 143 | 131 | 141 |
| Residence: Alabama                                | 144 | 132 | 123 | 127 |
| Out-of-State                                      | 4 | 5 | 6 | 8 |
| Service Areas (FL & MS)                           | 7 | 6 | 2 | 6 |
| Rural                                             | 32 | 21 | 31 | 23 |
| Female                                            | 72 | 66 | 67 | 76 |
| Black                                              | 17 | 15 | 16 | 17 |
| Black Regular Admissions                          | 13 | 14 | 14 | 13 |
| DREAM Program                                     | 4 | 1 | 2 | 4 |
| Other Underrepresented Minorities                 | 10 | 6 | 11 | 11 |

| Total Matriculants                                 | 74 | 72 | 74 | 74 |
| Average MCAT                                      | 507 | 508 | 508 | 508 |
| Average GPA                                       | 3.75 | 3.77 | 3.79 | 3.82 |
| Early Decision Program                            | 11 | 4 | 18 | 15 |
| Residence: Alabama                                | 69 | 67 | 69 | 65 |
| Out-of-State                                      | 2 | 2 | 3 | 4 |
| Service Areas (FL & MS)                           | 2 | 2 | 2 | 5 |
| Rural                                             | 18 | 12 | 18 | 8 |
| Female                                            | 31 | 32 | 35 | 42 |
| Total Black                                       | 9 | 8 | 5 | 8 |
| Black Regular Admissions                          | 5 | 6 | 3 | 3 |
| DREAM + SMP Programs                              | 4 | 2 | 3 | 7 |
| Other Underrepresented Minorities                 | 2 | 2 | 5 | 4 |

*Other Underrepresented Minority: Hispanic ethnicity, American Indian.
2018-2019
Summary of Activities
Office of Continuing Medical Education

I. NATIONAL PROFESSIONAL RECOGNITION

_Sharrrie Cranford:_ Editor of the Society for Academic Continuing Medical Education’s tri-annual report the INTERCOM, as well as a standing member of the Communications Committee. Founder and Chair of the Alabama Continuing Medical Education Coalition which includes members from most continuing medical education providers in Alabama.

II. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

The University of South Alabama (USA) Office of Continuing Medical Education (OCME) received a four-year accreditation as a provider of Interprofessional Continuing Education (IPCE). As a jointly accredited provider, USA OCME can now offer continuing education credits to physicians, nurses, and pharmacists, together or separately, through the Accreditation Council for Continuing Medical Education, the American Nurses Credentialing Center, and the Accreditation Council for Pharmacy Education.

During 2018-2019, the Office of Continuing Medical Education (OCME) provided numerous of educational activities that addressed the ever changing practice gaps of all healthcare providers including the healthcare team. The OCME coordinated CME activities provided by the clinical and university academic departments, the OCME, and outside agencies. There were approximately 35 regularly scheduled series (Grand Rounds), 33 conferences, 59 disaster preparedness seminars, and 3 online activities, all combining for 1070.75 CME hours of instruction and collaboration. In total 6727 physicians and 6422 non-physicians were awarded continuing education credits. Activities were jointly provided through the collaboration with the Coastal Trauma Care Region, Federal Bureau of Investigations, the Foundation for Sickle Cell Disease Research, Gulf Coast Patient Care Network, Gulf States Health Policy Center, Providence Foundation, Providence Hospital, Southeastern TeleHealth Resource Center, Springhill Medical Center, USA College of Business, Veterans Administration, and other organizations throughout our region.

III. SIGNIFICANT PROFESSIONAL AND CME ACHIEVEMENTS

- Awarded Joint Accreditation.
- Sharrrie Cranford selected as Chair of the Alabama Continuing Medical Education Coalition.

CME Plans for 2020
- Integrate Joint Accreditation criteria for commendations.
- Revise Policy and Procedure Manual to reflect changes in Joint Accreditation criteria.
- Implement aspects of five-year strategic plan created by the students of USA’s College of Business.
I. Organizational Structure

Dr. Carole Boudreaux serves as Assistant Dean for Graduate Medical Education (GME), Designated Institutional Official (DIO), and chair of the Graduate Medical Education Committee (GMEC) at the University of South Alabama. Dr. Boudreaux and the GME Office staff oversee all GME training programs at the institution.

The GME Office implements policies of the GMEC. The ACGME charges the GMEC with monitoring and advising on all aspects of residency education including compliance with ACGME requirements and creating a strong and supportive learning environment for the trainees. The GMEC is composed of program directors, teaching faculty, peer-selected residents and designated representatives of the major teaching hospitals. The GMEC is responsible for reviewing current issues facing residency and fellowship programs as well as for developing institutional policies and procedures to ensure quality of education and of the clinical learning environment. GMEC activities are reported by the Assistant Dean to the Vice President for Medical Affairs/Dean of the College of Medicine.

II. Overview of GME Programs and Accreditation

As detailed below, University of South Alabama Health sponsors 12 residency and 9 fellowship programs with a combined total of 274 training positions. During the 2018 – 2019 academic year, all residency positions were filled through the National Resident Matching Program (NRMP) with 71 physicians completing training during the 2018 – 2019 academic year.

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Program Director</th>
<th>Program Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine</td>
<td>Edward Panacek, M.D.</td>
<td>Jill Garcia</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>Ehab Molokhia, M.D.</td>
<td>Stacey Hartman</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>Judy Blair-Elortegui, M.D.</td>
<td>Leah Musgrove</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jessica Petro</td>
</tr>
<tr>
<td>Internal Medicine/Pediatrics</td>
<td>Grace Hundley, M.D.</td>
<td>Marley Harris</td>
</tr>
<tr>
<td>Neurology</td>
<td>Juan Ochoa, M.D.</td>
<td>Leigh Rowell</td>
</tr>
<tr>
<td>Obstetrics &amp; Gynecology</td>
<td>Jennifer Pierce, M.D.</td>
<td>Shavella Everett</td>
</tr>
<tr>
<td>Orthopedic Surgery</td>
<td>Jeffrey Brewer, M.D.</td>
<td>Rhonda Smith</td>
</tr>
<tr>
<td>Pathology</td>
<td>Elliot Carter, M.D.</td>
<td>Kathy Cannon</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>Roger Berkow, M.D.</td>
<td>Latasha Williams</td>
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<tr>
<td></td>
<td></td>
<td>Nicole Laden</td>
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<tr>
<td>Psychiatry</td>
<td>Luke Engeriser, M.D.</td>
<td>Bayleigh Andrews</td>
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<tr>
<td>Radiology</td>
<td>Samuel McQuiston, M.D.</td>
<td>Shunda Fakaha</td>
</tr>
<tr>
<td>Surgery</td>
<td>Leander Grimm, M.D.</td>
<td>Dorothy Dickinson</td>
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</table>
Fellowship Programs

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Program Director</th>
<th>Program Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Endoscopy Fellowship</td>
<td>Meir Mizrahi, M.D.</td>
<td>Tracy Terpening</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>Bassam Omar, M.D.</td>
<td>Donna Gregory</td>
</tr>
<tr>
<td>Child &amp; Adolescent Psychiatry</td>
<td>Aneek Shoemaker, M.D.</td>
<td>Bayleigh Andrews</td>
</tr>
<tr>
<td>Clinical Neurophysiology</td>
<td>Juan Ochoa, M.D.</td>
<td>Leigh Rowell</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>Jack Di Palma, M.D.</td>
<td>Tracy Terpening</td>
</tr>
<tr>
<td>Medical Oncology</td>
<td>David Clarkson, M.D.</td>
<td>Angela Carpenter</td>
</tr>
<tr>
<td>Pulmonary Disease &amp; Critical Care</td>
<td>Brian Fouty, M.D.</td>
<td>Ruth Hart</td>
</tr>
<tr>
<td>Medicine (FM) - Andrews</td>
<td>Josh Hackel, M.D.</td>
<td>Leah Johnsey</td>
</tr>
<tr>
<td>Surgery Critical Care</td>
<td>Sidney Brevard, M.D.</td>
<td>Tyronda Rogers</td>
</tr>
</tbody>
</table>

ACGME Accreditation

USA Health has maintained full accreditation as a sponsoring institution by the Accreditation Council for Graduate Medical Education (ACGME) with its most recent renewal of accreditation on January 14, 2019. The next institutional self-study is due on approximately October 1, 2026, and the next institutional 10 year site visit on approximately April 1, 2028. All eligible GME programs are accredited by the ACGME.

During the 2018–2019 academic year, ACGME accreditation site visits occurred for the following programs: Internal Medicine Residency Program, Cardiovascular Disease Fellowship Program, Gastroenterology Fellowship Program, and Pulmonary Disease & Critical Care Medicine Fellowship Program. Results of this site visit are pending. The Pathology Residency Program has submitted their ACGME self-study and will be hosting an ACGME accreditation site visit in October 2019. The Family Medicine Residency Program and its associated fellowship in Primary Care Sports Medicine Andrews Program, the Obstetrics & Gynecology Residency Program, and the General Surgery Residency Program and its associated fellowship in Surgical Critical Care Program have completed their self-studies with the anticipation of an ACGME site visit in the upcoming year. Emergency Medicine Program received initial ACGME accreditation effective January 7, 2019 with an anticipated full accreditation site visit to be in January 2021.

The annual ACGME online surveys were completed by 93% of residents & fellows and 83% of faculty. Results on all ACGME Resident and Faculty Surveys placed GME training programs at or above the national averages in compliance.

Residency Programs

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Training Positions</th>
<th>Trained Residents</th>
<th>Accreditation Status</th>
<th>Self-Study Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine</td>
<td>18</td>
<td>0</td>
<td>Initial Accreditation</td>
<td>TBD</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>18</td>
<td>17</td>
<td>Continued Accreditation</td>
<td>Submitted*</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>48</td>
<td>47</td>
<td>Continued Accreditation</td>
<td>Submitted</td>
</tr>
</tbody>
</table>
**III. Summary of GME Activities**

The Assistant Dean and GME Office communicate with each of the GME programs to maintain awareness of the requirements for the ACGME accreditation and the Clinical Learning Environment Review (CLER).

**Clinical Learning Environment Review (CLER)**

The third Clinical Learning Environment Review (CLER) site visit at USA was completed in May 2019 at the USA Health University Hospital campus and included Stanton Road Clinics and the Mastin Clinics. The final report from the CLER site visit was received on July 8, 2019. The report reflected awareness throughout the USA Health University Hospital of the CLER program.

*This GME program has submitted its self-study to the ACGME and is awaiting announcement of their accreditation site visit.*
foci and acknowledged programs that are in place throughout the USA Health System to support these foci.

GMEC Subcommittee on Quality Improvement and Patient Safety

The GMEC Subcommittee on Quality Improvement and Patient Safety developed a framework for patient safety education across USA Health, intended to meet the needs of the GME training programs as well as educate USA Health staff on the science of patient safety. USA Health has used the framework of the Institute for Healthcare Improvement (IHI) for quality and performance projects. Education in patient safety and quality improvement science is provided through the IHI modules, modules from the GME Competency Education Program, team-based learning activities and other educational resources. At orientation 75 new housestaff were introduced to patient safety and quality improvement programs across USA Health. Housestaff gain experience in promoting patient safety and quality improvement by engaging in projects guided by their GME programs.

GMEC Subcommittee on Wellness

In recognition of the importance of compliance with ACGME requirements, each program is charged with establishing a clinical learning environment that fosters compliance with the ACGME requirements. The GMEC assumes responsibility for the wellbeing of housestaff at USA and supports all GME program efforts toward this purpose. Each program and the institution have developed policies and procedures governing the clinical experience and education.

Residents log duty hours into New Innovations, the GME Office oversees duty-hour logging compliance, and the GMEC oversees duty-hour rule compliance. During the 2018 – 2019 academic year duty hour non-compliance represented less than 0.172% of entries for over 603,889 work hours by residents and fellows.

The USA Housestaff Council, composed of senior fellows and the chief residents from the 12 residencies, provides a platform for housestaff to address clinical and work-related concerns with USA Health administers and GME leadership, including patient care issues, improving efficiency in clinical workflow, workplace safety, and the safety of residents and fellows.

The GMEC Subcommittee on Wellness completed its annual “How Are You” Survey in June 2019. Responses on the survey came from 233 residents, fellows and faculty physicians. The data from the ACGME and internal survey demonstrated that in most GME training programs, residents, fellows, faculty physicians were above the national means on all levels of personal wellbeing. The GMEC works with the USA Housestaff Council and the USA Housestaff Association to promote the well-being of residents and fellows.
Faculty and Resident Professional Development

During the 2018 – 2019 academic year, the GME Office maintained the GME Speakers’ List, which includes 34 workshops by USA faculty and staff who can provide faculty and staff development in the following categories:
- Education, Teaching, and Curriculum
- Educational Technologies
- Human Dynamics in Medical Education
- Mentoring, Supervision, Assessment, and Feedback
- Patient Safety, Education, and Advocacy
- Personal Health and Wellness
- Quality Improvement Science

The GME Office facilitated faculty, staff and resident development through several methods, including workshops on Team-based Learning in Patient Safety, Innovation in Learning Center workshops for clinical faculty, and providing online resources through several USA Online project sites. These programs provided over 958 developmental hours to faculty, staff, fellows and residents.

Resident and Fellows Scholarship Exposition
The annual USA Resident and Fellow Scholarship Exposition, an opportunity for residents and fellows to display their scholarly activities from research projects, improvement projects, patient safety, and patient advocacy projects, was held on May 23, 2019. Residents and fellows displayed 28 scientific posters, which were evaluated by a panel of 9 judges from across USA Health and the COM. Dr. Anthony Todd et al. of the Family Medicine Residency Program authored the winning poster in the Patient Safety and Quality Improvement Category for their project on “Development of an Inappropriate Prescribing Protocol for Type 2 Diabetes Mellitus in a Family Medicine Clinic”, and Dr. Daniel Kim et al. in the General Surgery Residency Program in the Research Category for their work on “Outcomes Following Occipitocervical Fusion for Complex Suboccipital Spine Pathology”.

GME Competency Education Program (GCEP)

During the 2018 – 2019 academic year, the GME Competency Education Program (GCEP), a set of web-based modules from the AMA, was introduced to meet the training needs of housestaff, including patient safety, quality improvement, transitions in care, cultural competence, residents as teachers, and professionalism. All residents and fellows were required to complete modules on “Sleep Deprivation: Your Life and Your Work”, “Residents as Teachers” and “Cultural Competence in Healthcare”, and “Physician Health: Physicians Caring for Ourselves”.

Program Coordinators’ Professional Development

With the dynamics in GME at USA and across the country, the monthly GME Program Coordinators’ meeting has become vital for the program coordinators in maintaining currency with changes in the USA Health System, accreditation requirements, the NRMP, and New Innovations. To assist the program coordinators in meeting the changing needs of their programs,
the GME Office incorporates staff/professional development into the monthly program coordinators’ meeting, including the topics of CMS Reimbursement as it relates to Program Letters of Agreement and Non-Hospital Setting Agreements, the use of the Program Director's Work Station (PDWS) for the NRMP Match, the use of New Innovations to meet documentation requirements for ACGME accreditation, Program Coordinators as Leaders and Motivators in Medical Education, conflict resolution skills, and using software and online platforms for record creation, tracking, and retention for trainees. Beginning in the Spring of 2018, in alternating months, the GME program coordinators join together in a personal wellness event. Additionally, the GME Office held the Second Annual Program Coordinators’ Retreat on March 29, 2019, featuring Dr. Juanita Braxton, Surgery Administrator for the Department of Surgery at the University of California, who spoke on Total Coordinator Wellness and Coordinator Career Development. The Retreat also covered “Interview Season”, “GME Terminology, Resources, and Databases,” “Overview of Licensing and DEA,” “Developing Organizational Skills,” and “Improving the Health of the Community.”
The Forty-Sixth Annual Medical Student Research Day was held on Friday, July 26, 2019 hosting over 100 attendees in the Medical Sciences Building for both oral and poster presentations. Forty Eight first and second-year medical students participated in research projects with basic science and clinical faculty in the College of Medicine during the summer. A weekly seminar series introduced students to important research related topics. The program aims to highlight the relation between scientific discoveries and their application in clinical medicine.

Rose Marie Robertson, M.D., FAHA, Deputy Chief Science and Medical Officer, of the American Heart Association was the keynote speaker. Dr. Robertson’s seminar was entitled, “Research Careers: Reaching for the Heights”.

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

**ORAL PRESENTATIONS**

**ROLE OF TRPV4 CHANNEL SIGNALING IN SHEAR STRESS RESPONSES.** Kevin Aria, Rising Sophomore. Sponsored By Mark Taylor, Ph.D. and David Weber, Ph.D., Department of Physiology and Cell Biology.

**THE ROLE OF THE LONG NONCODING RNA GROWTH ARREST SPECIFIC 5 IN THE STEMNESS OF HEMATOPOIETIC CELLS.** Brittany Jackson, Rising Sophomore. Sponsored by Erin Ahn, Ph.D., Department of Biochemistry and Molecular Biology, Mitchell Cancer Institute.

**HOSPITAL REIMBURSEMENT FOR ABSCESESSE.** Blake Dunaway, Rising Sophomore. Sponsored By Hanna Alemayehu, M.D., Department of Surgery.

**THE IMPACT OF PHARMACY HPV VACCINATION ACCESS IN A RURAL SETTING.** Anna Robinson, Rising Sophomore. Sponsored by Casey Daniel, Ph.D., Department of Family Medicine.

**INHIBITION OF PDE4 INDUCES GASTROPARESIS IN MICE.** Will McDonough, Rising Sophomore. Sponsored By Lina Abou Saleh and Wito Richter, Department of Biochemistry and Molecular Biology.

**A RANDOMIZED TRIAL COMPARING ULTRASOUND-GUIDED TO LAPAROSCOPIC TRANSVERSUS ABDOMINIS PLANE BLOCKS.** Melody Zeidan, Rising Sophomore. Sponsored By Paul Rider, M.D., Department of Surgery.

**DEVELOPMENT OF A PROGRAM FOR BREAST CANCER PATIENTS.** Thomas Snead, Rising Sophomore. Sponsored By Donna Lynn Dyess, M.D., Department of Surgery.
CHARACTERIZATION OF PPP2R5D KNOCK-OUT CELLS GENERATED USING CRISPR-CAS9 TECHNOLOGY. Laurel Sharp, Rising Sophomore. Sponsored By Richard Honkanen, Ph.D., Department of Biochemistry and Molecular Biology.

POSTER PRESENTATIONS

P1 A ROLE FOR TAU IN FKBP51-MEDIATED MICROTUBULE POLYMERIZATION. Jessica Pham, Rising Sophomore. Sponsored by Donna Cioffi, Ph.D., Department of Biochemistry and Molecular Biology and Center for Lung Biology.

P2 THE EFFECT OF PPP2R5D MUTATIONS ON CELL MORPHOLOGY AND MICROTUBULE ARCHITECTURE. Regan Goocher, Rising Sophomore. Sponsored by Lawrence LeClare, Ph.D. and Richard Honkanen, Ph.D., Department of Biochemistry and Molecular Biology.

P3 ASSESSMENT OF CARDIOVASCULAR DISEASE RISK FACTOR CONTROL IN CANCER PATIENTS. Michelle Nguyen, Rising Sophomore. Sponsored by Christopher Malozzi D.O., Bassam Omar, M.D, Ph.D., and Farnoosh Rahimi, M.D., Department of Internal Medicine.

P4 MYOCARDIAL PERFORMANCE INDEX IN DIASTOLIC HEART FAILURE. Edward Leonard, Rising Sophomore. Sponsored by Farnoosh Rahimi, M.D., Christopher Malozzi D.O., Bassam Omar M.D, Ph.D., Department of Internal Medicine.

P5 EVALUATING THE USE OF THE TESTICULAR WORKUP FOR ISCHEMIA AND SUSPECTED TORSION SCORE IN A PEDIATRIC EMERGENCY ROOM SETTING. Chris Roberts, Rising Sophomore. Sponsored by Hanna Alemayehu, M.D., Department of Surgery.


P8 DNA REPAIR CAPACITY AND GENOTOXIC MODULATION BY METABOLIC EFFECTORS. Phillip Friedlander, Rising Sophomore. Sponsored by Robert W. Sobol, Ph.D., Department of Pharmacology, Mitchell Cancer Institute.

P9 DEVELOPING AN IN VITRO MODEL OF CORNEAL HSV-1 INFECTIONS. Brandon Rivers, Rising Sophomore. Sponsored by Robert Barrington, Ph.D., Department of Microbiology and Immunology.

P10 DNA ADDUCT MEASUREMENTS TO PREDICT THERAPEUTIC RESPONSE IN GYNECOLOGICAL CANCER. Elise Mann, Rising Sophomore. Sponsored by Natalie R. Gassman, Ph.D., Department of Physiology and Cell Biology.

P11 MCI-030, A NOVEL NON-COX INHIBITORY SULINDAC DERIVATIVE, IN THE LAYING HEN SPONTANEOUS MODEL OF OVARIAN CANCER. Meg Lyons, Incoming Freshman. Sponsored by Luciana Barnes, Ph.D., Gynecologic Oncology Research Team, USA Mitchell Cancer Institute.
P12 UNPRECEDEDNT CHARACTERIZATION OF PROINFLAMMATORY MITOCHONDRIAL DNA FRAGMENTS IN PLASMA FROM SEVERELY INJURED PATIENTS. Charles Aggen, Rising Sophomore. Sponsored by G.T. Daly, S.C. Groark, D. Housekova, R.J. Langle, V.M. Pastukh, G.M. Borchert, and M.N. Gillespie (Sponsor), Pharmacology. C.M. Francis, Physiology. J.D. Simmons, Surgery, M.E. Kutcher, Surgery, Univ. of MS School of Medicine.

P13 QUANTIFYING CANNABIS USE AMONG MULTIPLE SCLEROSIS PATIENTS IN A LEGALLY RESTRICTED POPULATION. Madeline Tucker, Rising Sophomore. Sponsored by William Kilgo, M.D., Department of Neurology.

P14 INSTRUMENTED EXAMINATION OF KNEE LAXITY IN PATIENTS WITH ANTERIOR CRUCIATE LIGAMENT DEFICIENCY. Alexander Tankersley, Rising Sophomore. Sponsored by Albert Pearsall, M.D., Department of Orthopaedic Surgery, and John Kovaleski Ph.D., Department of Health, Kinesiology, and Sport.


P17 PAIN MANAGEMENT USING VIRTUAL REALITY IN THE ORTHOPEDIC TRAUMA PATIENT. Kaitlin Pardue, Rising Sophomore. Sponsored by Jeffrey Brewer, M.D. Department of Orthopaedic Surgery.

P18 BICARBONATE REQUIREMENTS FOR RAT ENDOTHELIAL CELL PROLIFERATION. Daniel Warren, Rising Sophomore. Sponsored by Sarah Sayner, Ph.D., Department of Physiology and Cell Biology.

P19 QUALITY IMPROVEMENT MEASURES TO REDUCE SEPSIS EVALUATION AND ANTIBIOTIC UTILIZATION RATES IN WELL-BABY NURSERY: EVALUATION OF SUSTAINABILITY OF IMPROVED OUTCOMES. Katie Bonner, Rising Sophomore. Sponsored by Ramachandra Bhat, M.D., Department of Pediatrics, Neonatology Division.

P20 EVALUATION OF LOCALIZED CAMP SIGNALING DOMAINS. Hayden Gunn, Rising Sophomore. Sponsored by Thomas Rich, Ph.D., Department of Pharmacology, Center for Lung Biology.

P21 CHARACTERIZATION OF 475 NOVEL, PUTATIVE SMALL RNAS (SRNAS) IN CARBON-STARVED SALMONELLA ENTERICA SEROVAR TYPHIMURIUM. Donavon Dahmer, Incoming Freshman. Sponsored by Glen M. Borchert, Ph.D., Shivam V. Amin, Department of Pharmacology and Biology. Valeria M. King, Emmaline, C. Barnhill, Meghan A. Dean, Aline Crucello, Department of Biology. Michael P. Spector, Department of Biomedical Sciences. Dominika Housekova, Department of Pharmacology.

P22 CHARACTERIZATION OF NOVEL SMALL NONCODING RNA’S CONTRIBUTING TO PROSTATE CANCER PATHOLOGY. Sam Hutcheson, Rising Sophomore. Sponsored by Glen Borchert, Ph.D. Department of Pharmacology.
P23 VALIDATING NEW MICROSCOPY APPROACHES FOR FRET IMAGING. Malvika Lall, Rising Sophomore. Sponsored by Thomas Rich, Ph.D., Department of Pharmacology and Silas Leavesley, Ph.D., Department of Chemical and Biomolecular Engineering.

P24 FAK INHIBITION REDUCES INFLUENZA A VIRUS REPLICATION AND INFLAMMATORY SIGNALING. Yousef Omar, Rising Sophomore. Sponsored by Steve Lim, Ph.D., Department of Biochemistry and Molecular Biology.

P25 THE MAINTENANCE OF HUMAN MITOCHONDRIAL DNA IN HUMAN-MOUSE ρ° SOMATIC CELL HYBRIDic cell hybrids. Hannah Granger, Rising Sophomore. Sponsored by Dr. Mikhail Alexeyev, Ph.D., Department of Physiology and Cell Biology.

P26 MITOCHONDRIAL REACTIVE OXYGEN GENERATION WITH CYCLOOXYGENASE INHIBITION IN ENDOTHELIAL CELLS. Jordan Burlingame, Rising Sophomore. Sponsored by Abu-Bakr Al-Mehdi, M.D., Ph.D., Department of Pharmacology.

P27 REMARKABLE GENOMIC DIVERSITY IN PLASMA MITOCHONDRIAL DNA FRAGMENTS FROM TRAUMA PATIENTS AND ITS IMPACT ON MUTATIONAL DENSITY. Chris Groark, Rising Sophomore. C.Z. Aggen, G.T. Daly, D. Houserova, M.N. Gillespie, V.M. Pastukh, G.M. Borchert, R.J. Langley (Sponsor), Department of Pharmacology; C.M. Francis, Department of Physiology and Cell Biology; J. D. Simmons, Department of Surgery, USA College of Medicine; M. E. Kutcher, and Department of Surgery, University of Mississippi School of Medicine.

P28 ENDOTHELIAL CELL PHENOTYPE AND CALCIUM DYNAMICS IN PULMONARY ARTERIAL HYPERTENSION. Bradley Schuler, Rising Sophomore. Sponsored by Michael Francis, Ph.D., Department of Physiology and Cell Biology, Center for Lung Biology.

P29 THE EFFECT OF PSEUDOMONAS AERUGINOSA INFECTED LUNG ENDOTHELIAL CELL SUPERNATANT ON BRAIN ENDOTHELIAL CELL AMYLOID PRODUCTION. Sarah Bignault, Rising Sophomore. Sponsored by Mike Lin, Ph.D., Department of Physiology and Cell Biology, Center for Lung Biology.

P30 CASPASE-3 AND -7 DELETION MODIFIES PMVEC GROWTH AND PROTECTS PMVEC MONOLAYER INTEGRITY DURING PSEUDOMONAS AERUGINOSA INFECTION. Matthew O’Connor, Rising Sophomore. Sponsored by Phoibe Renema and Troy Stevens. Department of Physiology and Cell Biology, Internal Medicine, and the Center for Lung Biology.

P31 ROLE OF ENDOTHELIAL TRPV4 CHANNELS IN VASCULAR REMODELING FOLLOWING CHRONIC LOW FLOW. Catherine Taylor, Rising Sophomore. Sponsored by David Weber, Ph.D., Department of Physiology and Cell Biology.

P32 CARBONIC ANHYDRASE IX IS CRITICAL TO PULMONARY MICROVASCULAR ENDOTHELIAL CELL METABOLISM AND MIGRATION. Mary Kash, Incoming Freshman. Sponsored by Ji Young Lee, M.D., Ph. D., Department of Physiology and Cell Biology and Internal Medicine, Center for Lung Biology.

P33 THE OBLITERATION OF NON-GASTRIC PORTOSYSTEMIC SHUNTS FOR REFRACTORY HEPATIC ENCEPHALOPATHY; AN EVALUATION OF SAFETY AND EFFICACY. Colton Knight, Rising Sophomore. Sponsored by Osama Abdul-Rahim, M.D. & Zeiad Hussain, M.D., Department of Radiology.
P34 PANCREATIC ADENOCARCINOMA - VARYING RESPONSE TO RESECTION AND CHEMOTHERAPY. Turner Sankey, Rising Sophomore. Sponsored by Anabelle Fonseca, M.D., MHS. Department of Surgery.

P35 REGIONALIZATION OF RECTAL CANCER CARE AND THE ESTABLISHMENT OF A MULTIDISCIPLINARY TUMOR BOARD. Ryan Heslin, Rising Sophomore. Sponsored by Leander Grimm Jr., M.D., Department of Surgery.

P36 PREVALENCE OF SCURVY IN SURGICAL PATIENTS. Corey Phillis, Rising Sophomore. Sponsored by William Richards, M.D., Department of Surgery.

P37 QUANTITATIVE IMAGING ANALYSIS OF PANCREATIC CYSTS. Tyeler Rayburn, Rising Sophomore. Sponsored by Anabelle Fonseca, M.D., MHS, Department of Surgery.

P38 THE TREATMENT OF RIB FRACTURES: A SINGLE-CENTER COMPARISON. Farley Paige, Rising Sophomore. Sponsored by Christopher Kinnard, M.D., Department of Surgery, Division of Trauma and Acute Care Surgery.

P39 SOCIO-ECONOMIC STATUS AND STAGE PRESENTATION FOR CUTANEOUS MELANOMA ON THE GULF COAST. Lexie Hensley, Rising Sophomore. Sponsored by J. Harrison Howard, M.D., Department of Surgery.

P40 CHARACTERIZING PATIENT REPORTED OUTCOMES AS STANDARD OF CARE. Sophia Theodos, Rising Sophomore. Sponsored by Jennifer Pierce, M.D., Department of Interdisciplinary Clinical Oncology, Mitchell Cancer Institute.

The Clyde G. “Sid” Huggins Medical Student Research Awards were presented. Brittany Jackson, rising sophomore medical student, received the best oral presentation award. Four medical students were presented awards for best poster presentations: Jessica Pham, Corey Phillis, Brandon Rivers, and Bradley Schuler, all rising sophomores. Each winner was presented with a plaque of recognition and cash award.
2018-2019
Summary of Activities
Graduate Program in Basic Medical Sciences

Administration

Dr. Mark Taylor is currently serving as Director of the Basic Medical Sciences Graduate Program.

Admissions

The BMS Graduate Program Office continued using the UniCAS admissions application program for the 2018-19 Academic Year. Prospective student applications were accessed and processed within the Graduate Office. An Admissions Committee was formed with representation from all 6 tracks. Committee members reviewed all applications to determine who would be invited to interview, and then participated in the interviews. Interviews with eligible students were hosted both on campus and via Zoom video conferencing by the BMS Graduate Office.

The Basic Medical Sciences Graduate Program interviewed applicants for the Fall 2019 class between February and April 2019. A total of 19 applicants were interviewed. A summary is provided below.

<table>
<thead>
<tr>
<th>Admissions – BMS Graduate Program</th>
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</thead>
<tbody>
<tr>
<td>Applications</td>
</tr>
<tr>
<td>US</td>
</tr>
<tr>
<td>International</td>
</tr>
<tr>
<td>Acceptances</td>
</tr>
<tr>
<td>US</td>
</tr>
<tr>
<td>International</td>
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<tr>
<td>Matriculants</td>
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<tr>
<td>US</td>
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<tr>
<td>International</td>
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<tr>
<td>Average GRE</td>
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<tr>
<td>Avg. UG GPA</td>
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<tr>
<td>Avg. GR GPA</td>
</tr>
</tbody>
</table>

Curriculum

1. The twelfth annual COM Research Forum was held on November 9, 2018. First place winners Tyler Mattox (BMS Student award recipient) and Dr. Antonio Ward (postdoctoral fellow award recipient) were presented travel awards.

2. The BMS Graduate Program presented its twelfth Edwin R. Hughes Memorial Award to Griffin Wright on August 15, 2019. The Award honors the first-year student with the best academic performance in the Basic Medical Sciences Graduate Program’s core curriculum (IDL 580 and IDL 581).
New Program Leadership

1. Dr. Natalie Gassman was named track coordinator for the Cancer Biology track on May 1, 2019.
2. Dr. Kevin Macaluso joined the University of South Alabama on August 1, 2019 as Department Chair for Microbiology and Immunology. He brought with him three students (included in the admissions count), one postdoctoral fellow, and a research assistant.

Financial Support for Graduate Training

1. The NIH Pre-Doctoral Institutional Training Grant on “Cell Signaling and Lung Pathobiology” continued to provide support for six Basic Medical Sciences graduate students.
2. BMS students received extramural grant awards through both the AHA and NSF during the 2018-19 academic year.
3. Joshua Deal and Sarah Voth were the 2019 recipients of the Samuel J. Strada Career Enhancement Travel Award. The award was established to provide funds to support student travel to conferences and short courses to enhance the educational and career development opportunities for graduate students in the BMS Graduate Program.
4. The COM Dean’s Predoctoral Fellowship program supported a Fellowship for Cinta Maria Papke this year.

Graduates

5 students officially completed all requirements during the academic year (August 2018 – July 2019):

Kevin Abney
DISSERTATION TITLE: “Genetic Disruption of PPP5C Reveals Novel Roles for PPP5C in IRS4 and AKT Signaling”
MAJOR PROFESSOR: Richard Honkanen, Ph.D.
TRACK: Cell and Molecular Biology

Naga Annamdevula
DISSERTATION TITLE: “Measurement of Agonist-Induced cAMP Spatial and Temporal Gradients Using 5-Dimensional Hyperspectral FRET Imaging and Analysis in Living Cells”
MAJOR PROFESSOR: Silas Leavesley, Ph.D., and Thomas Rich, Ph.D.
TRACK: Biomedical Engineering

Crystal Daniels
DISSERTATION TITLE: “Glycoproteomic Analysis of Gastrointestinal Lavage Fluid as a Source of Cancer Biomarkers”
MAJOR PROFESSOR: Lewis Pannell, Ph.D.
TRACK: Cancer Biology
Tyler Mattox
DISSERTATION TITLE: “Characterization of Novel Putative RAS Inhibitor MCI-062 as a Therapeutic for Pancreatic Cancer”
MAJOR PROFESSOR: Gary Piazza, Ph.D.
TRACK: Cancer Biology

Joshua Stone
DISSERTATION TITLE: “Regulation and Function of the Long Noncoding RNA MALAT1 in Breast Cancer”
MAJOR PROFESSOR: Erin Ahn, Ph.D.
TRACK: Cancer Biology
Summary of Extramural Support

Funding for the 2018-2019 academic year includes $18,627,866 and $531,994 in awards and revenue administered through the Office of Sponsored Programs and the South Alabama Medical Science Foundation, respectively. Note that MPI awards (awards with multiple principal investigators) are only counted once in the extramural fund totals.

Extramural Funds
Totals for Last 4 Years

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<th>Year</th>
<th>Amount</th>
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<tbody>
<tr>
<td>2016</td>
<td>$15,832,783</td>
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<tr>
<td>2017</td>
<td>$12,552,857</td>
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<tr>
<td>2018</td>
<td>$13,790,910</td>
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<tr>
<td>2019</td>
<td>$19,159,860</td>
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![College of Medicine Total Annual Extramural Funding From All Sources](image)

- **Fiscal Year**: 2016, 2017, 2018, 2019
- **Millions of Dollars**: $0 to $20
<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Agency</th>
<th>GrantID#</th>
<th>Title</th>
<th>Fiscal Year Funding</th>
</tr>
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<tbody>
<tr>
<td>AHN, ERIN</td>
<td>UNIVERSITY OF ALABAMA AT BIRMINGHAM</td>
<td>000520679-10</td>
<td>Targeting Radiation Resistant Glioblastoma by Inhibition of SON-mediated RNA Splicing</td>
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<td>HONKANEN, RICHARD</td>
<td>STATE OF CALIFORNIA</td>
<td>A19-3376-S003-02</td>
<td>PPP2R5D variants</td>
<td>$588,974</td>
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<td>HONKANEN, RICHARD</td>
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<td>A19-3376-S003</td>
<td>PPP2R5D variants</td>
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<tr>
<td>LIM, STEVE (Fellow RODRIGUEZ, YELITZA)</td>
<td>NATIONAL INSTITUTES OF HEALTH</td>
<td>3 R01 HL136432-03S1</td>
<td>Role of FAK in Vascular Inflammation</td>
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<td>LIM, STEVE</td>
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<td>Role of FAK in Vascular Inflammation</td>
<td>$378,750</td>
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<td>RICHTER, WITO (CoInvestigators ALEXEYEV, MIKHAIL; ALVAREZ, DIEGO; AUDIA, JONATHON)</td>
<td>NATIONAL INSTITUTES OF HEALTH</td>
<td>5 R01 HL141473-02</td>
<td>Regulation of Phosphodiesterases and cAMP Signaling During the Host-pathogen Interaction in the Pulmonary Endothelium</td>
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**Total** $2,019,373

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<td>WALLACE, DAVID</td>
<td>ALABAMA DEPARTMENT OF PUBLIC HEALTH</td>
<td>GC-19-337 (C90116215)</td>
<td>Alabama Healthcare Coalition Coordination Program</td>
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<td>ALABAMA DEPARTMENT OF PUBLIC HEALTH</td>
<td>GC 19-324 (C90116209)</td>
<td>CDHP Alabama Incident Management System (AIMS) 2020</td>
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<td>WALLACE, DAVID</td>
<td>ALABAMA DEPARTMENT OF PUBLIC HEALTH</td>
<td>GC 19-336 (C90116214)</td>
<td>Fiscal Agent for Alabama Healthcare Coalition Coordination Program</td>
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**Total** $1,649,429

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<th>Title</th>
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**EXTRAMURAL FUNDING**

October 1, 2018 - September 30, 2019
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<td>KALRA, SARATHI</td>
<td>ASEPTISCOPE, INC</td>
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<td>Acoustic Inferiority, A Necessary Evil for Infection Control? A Randomized Controlled Trial</td>
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**Emergency Medicine**

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**Family Medicine**

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<th>GrantID#</th>
<th>Title</th>
<th>Fiscal Year Funding</th>
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<tr>
<td>DANIEL, CASEY</td>
<td>BREAST CANCER RESEARCH FOUNDATION OF ALABAMA</td>
<td>A19-0064-001</td>
<td>Quantifying Breast Cancer Patient Preferences and their Association with Financial Toxicity During Treatment Decision-making</td>
<td>$5,000</td>
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<tr>
<td>PERKINS, ALLEN</td>
<td>ALABAMA FAMILY PRACTICE RURAL HEALTH BOARD</td>
<td>MP2019-10-05</td>
<td>Resident Curriculum</td>
<td>$40,000</td>
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<td>PERKINS, ALLEN</td>
<td>HEALTH RESOURCES AND SERVICES ADMINISTRATION</td>
<td>6 T99HP33560-01-01</td>
<td>Partnering to Improve Population Care</td>
<td>$1,177,247</td>
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<td>PERKINS, ALLEN</td>
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<td>5 T0BHP30027-04-00</td>
<td>Caring for the Complex Patient in the PCMH</td>
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<td>PERKINS, ALLEN</td>
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<td>Student Curriculum in Family Medicine</td>
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**Internal Medicine**

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<tr>
<td>ARRIETA, MARTHA</td>
<td>NATIONAL INSTITUTES OF HEALTH</td>
<td>5 U01 ES029518-02 Subfund</td>
<td>Measuring Genomic DNA Damage and DNA Repair Capacity in Longitudinal Population Samples - A Step Towards Precision Prevention</td>
<td>$180,773</td>
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<td>AWAN, GHULAM</td>
<td>BRIGHAM AND WOMEN'S HOSPITAL</td>
<td>PS# 107223-06</td>
<td>Cardiovascular Inflammation Reduction Trial (CIRT)</td>
<td>$350</td>
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<td>COHEN, MICHAEL</td>
<td>BOEHRINGER INGELHEIM PHARMACEUTICALS</td>
<td>63697</td>
<td>Gloria-AF: Global Registry on Long-term Oral Antithrombotic Treatment in Patients with Atrial Fibrillation</td>
<td>$3,873</td>
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<td>CROOK, ERROL, (CoInvestigators ARRIETA, MARTHA; PERKINS, ALLEN)</td>
<td>UNIVERSITY OF ALABAMA AT BIRMINGHAM</td>
<td>3OT20D026548-01S1</td>
<td>Alabama Precision Medicine Initiative</td>
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<td>CULPEPPER, MICHAEL</td>
<td>OTSUKA PHARMACEUTICALS</td>
<td>63730</td>
<td>A Phase 3b, Multi-Center, Open-Label Trial to Evaluate the Long Term Safety of Titrated Immediate-Release Tolvaptan (OPC 41061, 30 mg to 120 mg/day, Split Dose) in Subjects with Autosomal Dominant Polycystic Kidney Disease</td>
<td>$25,531</td>
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<td>DiPALMA, JACK</td>
<td>TAKEDA</td>
<td>63786</td>
<td>Entyvio (Vedolizumab) Long-Term Safety Study</td>
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<td>DiPALMA, JACK</td>
<td>MEDTRONIC</td>
<td>63833</td>
<td>Multicenter, Prospective, Randomized Study Comparing the PillCam Crohn's Capsule Endoscopy System to Ileocolonoscopy plus MRE (Magnetic Resonance Enterography) for Detection of Active CD in the Small Bowel and Colon in Subjects with Known CD and Mucosal Disease (the BLINK study)</td>
<td>$13,983</td>
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<td>DiPALMA, JACK</td>
<td>PFIZER</td>
<td>63838</td>
<td>Observational, Real-World Study of INFLECTRA in Patients with Inflammatory Bowel Disease</td>
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<td>DiPALMA, JACK</td>
<td>THERAVANCE BIOPHARMA</td>
<td>63861</td>
<td>A Phase 2 Multi-Center, Randomized, Double-Blind, Placebo-Controlled, Parallel -Group Study to Evaluate the Efficacy and Safety of Induction Therapy with 2 Doses of TD-1473 in Subjects With Moderately-to-Severely Active Crohn's Disease</td>
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<td>DiPALMA, JACK</td>
<td>THERAVANCE BIOPHARMA</td>
<td>63863</td>
<td>A Phase 2b/3 Multi-Center, Randomized, Double-Blind, Multi-Dose, Placebo-Controlled, Parallel -Group Set of Studies to Evaluate the Efficacy and Safety of Induction and Maintenance Therapy with TD-1473 in Subjects With Moderately-to-Severely Active Ulcerative Colitis</td>
<td>$7,000</td>
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<td>FAGAN, KAREN</td>
<td>UNITED THERAPEUTICS CORP</td>
<td>63836</td>
<td>An Open Label Extension Study of Inhaled Treprostinil in Subjects with Pulmonary Hypertension due to Parenchymal Lung Disease</td>
<td>$2,121</td>
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Comparative Effectiveness of Enhanced Peer Navigation versus Structured Education Based Programming for the Management of Care Transitions in Emerging Adults with Sickle Cell $59,977

An Open Label Extension Study of GBT440 Administered Orally to Patients with Sickle Cell Disease Who Have Participated in GBT 440 Clinical Trials $4,700

A Phase3, Multicenter, Double-Blind, Randomized, Placebo-Controlled, Parallel-Group Study to Investigate the Efficacy and Safety of CSL112 in Subjects with Acute Coronary Syndrome $20,368.6

A Randomized, Double-Blind, Placebo-Controlled Study to Investigate the Efficacy and Safety of Injectafer (Ferric Carboxymaltose) as Treatment for Heart Failure with Iron Deficiency (HEART-FID) $24,676.00

Automated MRI-based 3D Contractility (Strain) Analysis for Detecting Subclinical Cardiotoxicity in Breast Cancer Patients Undergoing Chemotherapy $55,190

University of South Alabama Family Specialty Clinic $336,948

Data 4 CARE Alabama Clinics Achieving Retention & engagement by Implementing CDC EBIs via the Alabama Regional Quality Group $151,515

USA Family Specialty Clinic $30,000

USA Family Specialty Clinic Ryan White Part B Supplemental Funds $20,000

Total $1,608,173

**Microbiology and Immunology**

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<td>AUDIA, JONATHON (MPI with ALVAREZ, DIEGO)</td>
<td>NATIONAL INSTITUTES OF HEALTH</td>
<td>5 R01 HL118334-05</td>
<td>Caspase-1, the Microvascular Endothelium and Infection</td>
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<td>CORDINA, STEVE</td>
<td>DAIICHI SANKYO</td>
<td>63814</td>
<td>A Phase 1B/2, Multi-Center, Double-Blind (Principal Investigator)</td>
<td>$11,917</td>
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<td>DEES, DANIEL</td>
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<td>Center of Excellence</td>
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<td>MINTO, ELIZABETH</td>
<td>NOVARTIS</td>
<td>63785</td>
<td>Long-Term, Prospective, Multinational, Parallel-Cohort Study Monitoring Safety in Patients with MS Newly Started with Fingolimod Once Daily or Treated with Another Approved Disease-Modifying Therapy</td>
<td>$2,231</td>
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<td>KILGO, WILLIAM</td>
<td>EMD SERONO RESEARCH &amp; DEVELOPMENT</td>
<td>63868</td>
<td>Cladribine tablets: Observational Evaluation of Effectiveness and Patient Reported Outcomes in Suboptimally Controlled Patients Previously Taking Injectable Disease-Modifying Drugs for Relapsing Forms of Multiple Sclerosis</td>
<td>$6,788</td>
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<td>NARITOKU, DEAN</td>
<td>SUNOVION PHARMACEUTICALS</td>
<td>63845</td>
<td>Efficacy and Safety of Eslicarbazepine Acetate as First Add-On to Levetiracetam or Lamotrigine Monotherapy or as Later Adjunctive Treatment for Subjects with Uncontrolled Partial-Onset Seizures: A Multicenter, Open-Label, Non-Randomized Trial</td>
<td>$2,120</td>
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<td>NARITOKU, DEAN</td>
<td>XENON PHARMACEUTICALS</td>
<td>63867</td>
<td>A Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Evaluate the Safety, Tolerability, and Efficacy of XEN1101 as Adjunctive Therapy in Focal-Onset Epilepsy</td>
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**Total** $35,206
### Obstetrics and Gynecology

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<td>BAKER, SUSAN</td>
<td>UNIVERSITY OF ALABAMA AT BIRMINGHAM</td>
<td>000503570-039 A01</td>
<td>Chronic Hypertension and Pregnancy</td>
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<td>BAKER, SUSAN</td>
<td>SEQUENOM</td>
<td>63719</td>
<td>SQNM-T21-107 - Collection of Whole Blood Specimen from Pregnant Women at Increased Risk for Fetal Chromosomal Abnormality for Use in Development of a Noninvasive Prenatal Test in the Detection of the Relative Quantity of Chromosomal Material in Circulating Cell-Free DNA Extracted from Maternal Plasma</td>
<td>$9,313</td>
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<td>RIZK, BOTROS</td>
<td>ABBVIE</td>
<td>63819</td>
<td>Extension Study to Evaluate the Efficacy and Safety of Elagolix in Premenopausal Women with Heavy Menstrual Bleeding Associated with Uterine Fibroids</td>
<td>$5,708</td>
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<td>RIZK, BOTROS</td>
<td>ABBVIE</td>
<td>63826</td>
<td>A Phase 3 Study to Evaluate the Safety and Efficacy of Elagolix in Combination with Estradiol/Norethindrone Acetate in Subjects with Moderate to Severe Endometriosis-Associated Pain</td>
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Total $48,678

### Pathology

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<td>SINGH, SEEMA (CoInvestigator SINGH, AJAY)</td>
<td>NATIONAL INSTITUTES OF HEALTH</td>
<td>1 R01 CA231925-01A1</td>
<td>Impact of Social Factors on Breast Cancer Biology in African-American Women</td>
<td>$618,241</td>
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<td>SINGH, SEEMA</td>
<td>NATIONAL INSTITUTES OF HEALTH</td>
<td>5 R01 CA204801-04</td>
<td>Molecular Causes and Mechanistic Underpinning of Breast Cancer Racial Disparity</td>
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Total $954,399

### Pediatrics

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<td>ANDERSON, STEPHANIE</td>
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<td>Regional Autism Network (RAN)</td>
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<td>BAUER, NATALIE (CoInvestigators ALEXEYEV, MIKHAIL; GILLESPIE, MARK)</td>
<td>NATIONAL INSTITUTES OF HEALTH</td>
<td>5 R01 HL133066-03</td>
<td>Circulating Microparticle Effects on Phenotypically Distinct Pulmonary Endothelium</td>
<td>$378,750</td>
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<td>GILLESPIE, MARK (CoInvestigators LANGLEY, RAYMOND; MULEKAR, MADHURI; PASTUKH, VICTOR)</td>
<td>UNIVERSITY OF ALABAMA AT BIRMINGHAM</td>
<td>UC 90631-3</td>
<td>UAB CCTS Fee for Service Agreement to Fund Voucher Awards mtDNA Repair: An Isolated Pharmacologic Target in Acute Lung Injury</td>
<td>$418,430</td>
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**Pharmacology**

**Total** $165,148
| **GILLESPIE, MARK**<br>(CoInvestigators: ARRIETA, MARTHA; FRUH, SHARON; LANGLEY, RAYMOND; MULEKAR, MADHURI; ROCCONI, RODNEY; TOWNSLEY, MARY) | UNIVERSITY OF ALABAMA BIRMINGHAM | 000520679-010 | University of South Alabama Translational Research Service Center | $193,978 |
| **GILLESPIE, MARK**<br>(CoInvestigators: MULEKAR, MADHURI; PASTUKH, VICTOR; LANGLEY, RAYMOND) | NATIONAL INSTITUTES OF HEALTH | 1 R01 GM127823-01A1 | mtDNA Damage and DAMPS in Multiple Organ Dysfunction Syndrome | $477,916 |
| **LANGLEY, RAYMOND**<br>(CoInvestigator: BORCHERT, GLENN) | NATIONAL INSTITUTES OF HEALTH | 800010905-01UJG | Novel Long Non-coding RNAs in the Airway Mucous Response | $70,000 |
| **MIGAUD, MARIE** | ELYSIUM HEALTH, INC. | A19-0143 | Design, Development and Chemical Syntheses of Tools and Processes to Explore the Landscape of B-vitamin in Health and in Disease | $405,555 |
| **MIGAUD, MARIE**<br>(CoInvestigator: GASSMAN, NATALIE) | NATIONAL INSTITUTES OF HEALTH | 5 R21 AT009908-02 | B-vitamins and NAD Metabolism, or when Vitamin B3's Bioavailability is not Enough | $192,500 |
| **PIAZZA, GARY** | FOX CHASE CANCER CENTER | 18038-01 | A Novel Non-COX Inhibitory Sulindac Derivative for Colorectal Cancer Chemoprevention with Selective PDE-10 and Wnt/-Catenin Inhibitory Activity | $123,910 |
| **PIAZZA, GARY** | NATIONAL INSTITUTES OF HEALTH | 5 R01 CA131378-11 | Novel Sulindac Derivatives for Colon Cancer Chemoprevention | $365,641 |
| **PIAZZA, GARY**<br>(Fellow: WARD, ANTONIO) | NATIONAL INSTITUTES OF HEALTH | 3 R01 CA197147-04S1 | Enhancing the Immune System by Targeting the RAS Signaling Pathway in Cancer: Immunotherapeutic Potential of a Novel RAS Inhibitor for Lung Cancer Treatment | $81,635 |
| **PIAZZA, GARY** | NATIONAL INSTITUTES OF HEALTH | 5 R01 CA197147-04 | Phosphodiesterase 10A, a Novel Target for Lung Cancer Chemoprevention | $336,158 |
| **RICH, THOMAS**<br>(CoInvestigators: LEAVESLEY, SILAS; RICHTER, WITO; SAYNER, SARAH) | NATIONAL INSTITUTES OF HEALTH | 5 P01 HL066299-17 PROJ 2 | Lung Endothelial Cell Phenotypes - Project 2: Cyclic Nucleotide Gradients Regulate the Balance of Mechanical Forces Underlying Endothelial Barrier Integrity | $350,168 |
RICH, THOMAS
AMERICAN HEART ASSOCIATION
18UFEL33900151-02
Undergraduate Summer Research Experience at USA
$16,000

RICH, THOMAS
THOMAS JEFFERSON UNIVERSITY
080-18007-S28201-1
Functional Diversity of Compartmentalized Calcium Signaling in Airway Smooth Muscle
$149,273

RICH, THOMAS
THOMAS JEFFERSON UNIVERSITY
080-18007-S11203
G Protein-Coupled Receptor Regulation in Airway Myocytes
$115,500

SOBOL, ROBERT
UNIVERSITY OF CALIFORNIA
A17-0212
A Systems Approach to Mapping the DNA Damage Response
$121,200

SOBOL, ROBERT
FLORIDA GULF COAST UNIVERSITY
17056-NSF-USA-MCI-02
To Assess and Minimize the Risk of Human Exposure to Ciguatoxins in a Changing Climate
$281,028

SOBOL, ROBERT
FLORIDA GULF COAST UNIVERSITY
17056-NIH-USA-MCI-02
To Assess and Minimize the Risk of Human Exposure to Ciguatoxins in a Changing Climate
$130,950

SOBOL, ROBERT
NATIONAL INSTITUTES OF HEALTH
5 U01 ES029518-02
Measuring Genomic DNA Damage and DNA Repair Capacity on Longitudinal Population Samples - a Step Towards Precision Prevention
$368,472

Total
$4,592,064

**Physiology & Cell Biology**

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<td>ALEXEYEV, MIKHAIL</td>
<td>NATIONAL INSTITUTES OF HEALTH</td>
<td>5 R01 OD010944-08</td>
<td>Mouse Models for Mitochondrial Disorders Caused by mtDNA Mutations</td>
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<td>ALEXEYEV, MIKHAIL</td>
<td>NATIONAL INSTITUTES OF HEALTH</td>
<td>5 P01 HL066299-17 CORE C</td>
<td>Lung Endothelial Cell Phenotypes - Core C: Gene Delivery</td>
<td>$289,411</td>
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<td>ALEXEYEV, MIKHAIL</td>
<td>NATIONAL INSTITUTES OF HEALTH</td>
<td>1 S10 OD025089-01A1</td>
<td>Seahorse XFe24 Extracellular Flux Analyzer</td>
<td>$164,092</td>
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<td>ALVAREZ, DIEGO (MPI with AUDIA, JONATHON)</td>
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<td>5 R01 HL118334-05</td>
<td>Caspase-1, the Microvascular Endothelium and Infection</td>
<td>$419,655</td>
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<td>COHEN, MICHAEL</td>
<td>EVAS TECHNOLOGIES, LLC</td>
<td>A18-0157-001-SUPP</td>
<td>Cardioprotection by Inhibition of Coagulation and Inflammation in Myocardial Infarction</td>
<td>$8,283</td>
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FRANCIS, MICHAEL
(CoInvestigator STEVENS, TROY)

LEAVESLEY, SILAS
(CoInvestigators PHAN, AHN-VU; RICH, THOMAS)

LIN, MIKE
(CoInvestigators AUDIA, JONATHON; BALCZON, RONALD; KIM, JIN; TAYLOR, MARK; ZHA, XIANGMING)

SAYNER, SARAH

STEVENS, TROY
(CoInvestigator LEE, JI YOUNG)

STEVENS, TROY
(CoInvestigators BALCZON, RONALD; SAYNER, SARAH)

STEVENS, TROY
(CoInvestigator ALEXEYEV, MIKHAIL)

STEVENS, TROY
(CoSponsor TAMBE, DHANANJAY; Fellow XU, NINGYONG)

STEVENS, TROY

NATIONAL INSTITUTES OF HEALTH

5 K25 HL136869-03
TRPC4-Mediated Calcium Signals Accelerate Vascular Remodeling In Pulmonary Arterial Hypertension

5 P01 HL066299-17 CORE D
Lung Endothelial Cell Phenotypes - Core D: Bioimaging and Biotechnology Implantation

3 R01 HL140182-02S1
Nosocomial Pneumonias Impair Cognitive Function

5 R01 HL140182-02
Nosocomial Pneumonias Impair Cognitive Function

5 R01 HL121513-05
Bicarbonate Regulation of the Pulmonary Endothelial Barrier Carbonic Anhydrase IX and Pulmonary Endothelial Cell Acidosis During Infection

5 P01 HL066299-17 PROJ 1
Lung Endothelial Cell Phenotypes - Project 1: Soluble Adenylyl Cyclases in Lung Endothelial Permeability

5 R37 HL060024-22
Store Operated Ca2+ Entry: Lung Endothelial Permeability

5 F32 HL144040-02
TRPC4-dependent Cytosolic Ca2+ Signals Interendothelial Contractile Forces that Elicit Gap Formation

5 P01 HL066299-17 CORE A
Lung Endothelial Cell Phenotypes - Core A: Administrative Core

NATIONAL INSTITUTES OF HEALTH

$159,548
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<tr>
<td>HAYNES JR., JOHNSON</td>
<td>Global Blood Therapeutics</td>
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<td>A Phase 3, Double-Blind, Randomized, Placeo-Controlled, Multicenter Study of GBT440 Administered Orally to Patients with Sickle Cell Disease</td>
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**SICKLE CELL**

**Surgery**

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<td>BREVARD, SIDNEY</td>
<td>POLYPHOR LTD</td>
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<td>A Multicenter, Open-Label, Sponsor-Blinded, Randomized, Active-Controlled, Parallel Group, Pivotal Study to Evaluate the Efficacy, Safety, and Tolerability of Murepavadin Given with Ertapenam Versus an Anti-Pseudomonal-B-Lactam-Based Antibiotic in Adult Subjects with Nosocomial Pneumonia Suspected or Confirmed to be due to Pseudomonas Aeruginosa</td>
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Total funding: $4,890,382
KAHN, STEVEN
MEDIWOUND 63732 A Multicenter, Multinational, Randomized, Controlled, Blinded Study, Performed in Subjects with Thermal Burns, to Evaluate the Efficacy and Safety of NexoBrid as Compared to Standard of Care (SOC) Treatment $3,639

KAHN, STEVEN
STRATATECH CORPORATION A17-0209-001-01 A Phase III Open Label, Controlled, Randomized, Multicenter Study Evaluating the Efficacy and Safety of Stratagraft Skin Tissue in Promoting Autologous Skin Tissue Regeneration of Complex Skin Defects due to Thermal Burns that contain Intact Dermal Elecme $35,624

KAHN, STEVEN
KINGSTON HEALTH SCIENCES CENTRE 2019-11-02/OSP-180547 Re-Energize Study $3,000

RIDER, PAUL
STATE UNIVERSITY OF NEW YORK/THD AMERICA 63820 THD Multicenter Trial: Multicenter, Non-Randomized, Prospective Observational Trial Comparing Ferguson Hemorrhoidectomy and Transanal Hemorrhoidal Dearterialization (THD) for Hemorrhoids in Terms of 1 Year Recurrence ( Award 75557, Project 1134020) $9,500

RIDER, PAUL
TREVENA, INC 63850 Retrospective Chart Review Study of Care Patterns and Outcomes in Patients Receiving IV Opioids for Acute Post-Surgical Pain in the Hospital Setting $19,933

RIDER, PAUL
MILLENIUM PHARMACEUTICALS/TAKEDA 63857 A Randomized, Double-Blind, Placebo-Controlled, Phase2 Dose Ranging Study to Evaluate the Efficacy and Safety of 2 Dose Regimens of Intravenous TAK-954 for the Prophylaxis and Treatment of Postoperative Gastrointestinal Dysfunction in Patients Undergoing Large and Small- Bowel Resection $9,000

SIMMONS, JON
NATIONAL INSTITUTE OF HEALTH 5 K08 GM109113-04 mtDNA DAMPS: A Pharmacologic Target in Multi-Organ System Failure $189,000

Total $278,940

MITCHELL CANCER INSTITUTE (SAMSF PROJECTS ONLY)

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<th>Title</th>
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<tr>
<td>FINAN, MICHAEL</td>
<td>CARIS LIFE SCIENCES</td>
<td>63689</td>
<td>A Registry of Caris Life Sciences Molecular Intelligence Service (Biomarker Assessment Results) Intended for Correlation with Cancer Clinical Outcomes</td>
<td>$4,100</td>
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<tr>
<td>KHUSHMAN, MOH’D</td>
<td>ELI LILLY</td>
<td>63787</td>
<td>Safety and Effectiveness of Ramucirumab in Patients with Advanced Gastric Cancer in the European Union and North America: A Prospective Observational Registry (I4T-MC-JVDD)</td>
<td>$10,980</td>
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<tr>
<td>Name</td>
<td>Organization</td>
<td>Trial Number</td>
<td>Description</td>
<td>Cost</td>
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<tr>
<td>NORDEN, CAROLE</td>
<td>GENENTECH INC</td>
<td>63721</td>
<td>A Multicenter, Multinational, Phase II Study to Evaluate Pertuzumab in Combination with Trastuzumab and Standard Neoadjuvant Anthracycline-Based Chemotherapy in Patients with HER2-Positive, Locally Advanced, Inflammatory, or Early-Stage Breast Cancer</td>
<td>$7,057</td>
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<td>NORDEN, CAROLE</td>
<td>ALLIANCE FOUNDATION/PFIZER</td>
<td>63799</td>
<td>A Randomized Phase III Trial of Palbociclib with Standard Adjuvant Endocrine Therapy Versus Standard Adjuvant Endocrine Therapy Alone for Hormone Receptor Positive (HR+)/Human Epidermal Growth Factor Receptor 2 (HER2)-Negative Early Breast Cancer</td>
<td>$26,130.00</td>
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<td>NORDEN, CAROLE</td>
<td>CASCADIAN THERAPEUTICS</td>
<td>63800</td>
<td>Phase 2 Randomized, Double-Blinded, Controlled Study of ONT-380 vs. Placebo in Combination with Capecitabine and Trastuzumab in Patients with Pretreated Unresectable Locally Advanced or Metastatic HER2+ Breast Carcinoma</td>
<td>$85,278.00</td>
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<td>ROCCONI, RODNEY</td>
<td>GRADALIS, INC</td>
<td>63752</td>
<td>Double-Blind, Placebo Controlled Phase III Trial of Maintenance FANG (bi-shRNA and GMCSF Augmented Autologous Tumor Immunotherapy) for High Risk Stage III/IV Ovarian Cancer</td>
<td>$28,216.00</td>
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<td>SCALICI, JENNIFER</td>
<td>ABBVIE, INC.</td>
<td>63761</td>
<td>A Phase 3 Placebo-Controlled Study of Carboplatin/Paclitaxel With or Without Concurrent and Continuation Maintenance Veliparib (PARP Inhibitor) in Subjects With Previously Untreated Stages III or IV High Grade Serious Epithelial Ovarian, Fallopian Tube, or Primary Peritoneal Cancer</td>
<td>$13,531.00</td>
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<td>SCALICI, JENNIFER</td>
<td>MERCK/UVA</td>
<td>63805</td>
<td>A Randomized Phase II Study of Chemoradiation and Pembrolizumab for Locally Advanced Cervical Cancer</td>
<td>$80,000.00</td>
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<td>TAYLOR, WILLIAM</td>
<td>HALOZYME, INC.</td>
<td>63778</td>
<td>A Phase 3, Randomized, Double-Blind, Placebo-Controlled, Multicenter Study of PEGylated Recombinant Human Hyaluronidase (PEGPH20) in Combination with nab-Paclitaxel Plus Gemcitabine Compared with Placebo Plus nab-Paclitaxel and Gemcitabine in Subjects with Hyaluronan-High Stage IV Previously Untreated Pancreatic Ductal Adenocarcinoma</td>
<td>$20,878.00</td>
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**Total**: $276,170