

Message from the Chair:



Over one hundred years ago, Sir William Osler said “what the pathologist thinks today, the physician

does tomorrow” (Br. Med. J. 2 (2534):185-1899, 1909). Today, I’m thinking about cost-effective, evidence-based, molecular testing and the critical role that pathologists will play in personalized medicine. We are fortunate to be at a forward thinking institution that recognizes the increasing clinical utility of complex genetic testing and other novel proteomic, genomic and metabolomic laboratory tests. Determining the scientific validity, specificity and sensitivity of these tests requires our expertise and their advancement into clinical settings can only occur after a careful evaluation of the scientific evidence for their utility and cost effectiveness. We have many partners in this task, including UAB Hospital Laboratories, UAB Medicine physicians, the Department of Genetics, the newly created Informatics Institute, the Comprehensive Cancer Center, and our colleagues at HudsonAlpha Institute. To facilitate and coordinate our departmental efforts in the area of Genomic and Personalized Medicine, I

have appointed Dr. Thomas Winokur to a new departmental position, Interdivisional Section Head for Genomic Health.

Dr. Winokur will serve as the major liaison between the various Divisions in our Department in regards to personalized medicine and facilitate our interactions with the UAB Department of Genetics, HudsonAlpha Institute, and the Health Systems’ Offices of Genomic Health and Bioinformatics.

Tom has already been a key leader of the advanced testing and send-out committee for Anatomic Pathology and Neuropathology related services and he will actively work with the Laboratory Medicine Division to coordinate their efforts in this area. Although Dr. Winokur will head this effort, it is essential that all departmental faculty members participate in the process and that we work as a team with our partners throughout UAB Medicine to ensure appropriate laboratory testing is available and used to inform clinical management of UAB patients.

As new and more complex tests become part of our clinical laboratory arsenal, it will be critical to form a highly collaborative and effective working relationship between our Divi-

sion of Informatics, HSIS, the UAB Informatics Institute and our clinical divisions. We must be able to deliver complex genetic and other laboratory results to the patient’s electronic medical record in a maximally informative format. Drs. Reddy, Harada, Park and others in our department are already working with our clinical and informatics colleagues to develop a more integrative reporting structure for leukemia patient data and I hope to update you on their progress in the near future.

I will conclude by once again quoting Dr. Osler who in the same report cited above stated “As is our pathology so is our practice”. In my assessment, the practice of medicine at UAB has a bright future.

Best wishes,

Kevin A. Roth, M.D., Ph.D.

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Faculty Profile: Xinglong Zheng, M.D., Ph.D.



Dr. Zheng received his M.D. in Nanchang University, Nanchang, China and Ph.D. in

Cellular and Molecular Biology from the Medical University of Vienna, Vienna, Austria. He then completed two residencies and one fellowship. The first residency was in Obstetrics and Gynecology in Wuhan, China and the second in Laboratory Medicine at Barnes-Jewish Hospital, Washington University School of Medicine in St. Louis, Missouri. After completion of his fellowship in transfusion medicine at Washington University School of Medicine in St. Louis, Dr. Zheng was recruited to the Department of Pathology at the Children's Hospital of Philadelphia (CHOP) and the University of Pennsylvania (UPenn), Philadelphia. He served as the director of Hematology and Coagulation Laboratories at CHOP and an assistant professor between 2003 and 2010, and a tenured associate professor between 2011 and 2014 at UPenn. Dr. Zheng joined the faculty at UAB as a full professor in the division director of Laboratory Medicine in the Department of Pathology.

Dr. Zheng has published more than 70 research and review articles in highly reputable peer-reviewed journals. He has served on several editori-

al boards and American Heart Association (AHA), National Blood Foundation (NBF), and National Institute of Health (NIH) study sections (e.g., NHLBI). Dr. Zheng received numerous awards (e.g. Karl-Link New Investigator Award and Gift-Of-Life Award) and invitations to present his research related to Pathogenesis of Thrombotic Thrombocytopenic Purpura (TTP) and Structure-function of ADAMTS13 metalloprotease. He has been an NIH-funded Principal Investigator on multiple grants since 2003.

The research conducted in Dr. Zheng's laboratory focuses on advancing the understanding of the mechanism of a potentially fatal blood disorder, TTP. Dr. Zheng was among the first group of investigators who identified and cloned ADAMTS13 metalloprotease, which is deficient in patients with TTP. This work led to the uncovering of an 80-year long mystery about the pathogenesis of TTP. Since then, Dr. Zheng's lab has contributed significantly to our understanding of the structure-function relationship and cofactor-dependent regulation of ADAMTS13 function. More recently, Dr. Zheng and his team use a multidisciplinary approach to reveal the molecular link between inflammation and the onset of TTP. The objective of this research is to identify the mechanism of how inflammation triggers TTP.

Shortly after arriving at UAB, Dr. Zheng got himself busy with setting up his research laboratory and learning how to run the division of Laboratory Medicine while writing and submitting his research results for publications. His recent article "Platelet-delivered ADAMTS13 inhibits arterial thrombosis and prevents murine models of thrombotic thrombocytopenic purpura" published in *Blood* has attracted public attention in UAB news and national media.

Outside of work, Dr. Zheng cherishes time with his wife Han and daughter Lucy, as well as his friends, and enjoys traveling, hiking, fishing, photography, listening to music, and playing flute.

Faculty Profile: Ona Faye-Petersen, M.D.



Dr. Ona Faye-Petersen is a tenured Professor of Pathology and

Obstetrics and Gynecology who has been a UAB faculty member since January 1992. She has recently been named President-Elect of the Society for Pediatric Pathology and as one of two North American Councilors-at-Large (and Educational Faculty) to the International Pediatric Pathology Association, the organization for certification in pediatric pathology for nations without formal fellowships. Dr. Faye-Petersen earned her MD from the University of Colorado, completed residency training in AP/CP at Presbyterian-St. Lukes Hospital System in Denver, Colorado, and, then, two fellowships in NY, in Surgical Pathology at Memorial Sloan Kettering and in Pediatric Pathology at Mt. Sinai Medical Center. Following her fellowships, she was recruited to Primary Children's Medical Center, in Salt Lake City, UT in 1987, and to Children's of Alabama in Birmingham, in 1990. For Dr. Faye-Petersen, a large part of the recruitment draw was the potential to provide support to UAB Pathology's Autopsy Service, which evaluated many cases of perinatal death and to develop a regional referral center for perinatal pathology. In, 1992, Dr. Faye-Petersen joined UAB as a full time, clinical tenure track faculty with joint appointment in the Department of Obstetrics and Gynecology.

Since joining the faculty, "Dr. Faye" has served as the UAB perinatal pathologist supervising residents in the performance of perinatal autopsies and evaluations of infants with complex congenital cardiovascular malformations (CCVM) and placental examinations. In 1995, she achieved her goal of establishing a regional reference diagnostic and research supporting service for the evaluation of recurrent pregnancy loss and fetal and placental pathology, the UAB Microdissection Laboratory (MDL). The MDL has grown to nearly 1700 cases/yr, and a growing number of regional consults. "Dr. Faye" has also served/serves on many other UAB Hospital or UAB School of Medicine (SOM) Committees, including the UAB Distinguished Faculty Lecturer Selection Committee, UAB Commission for the Status of Women, and, since 2012, on the SOM Admissions Interviewing Committee. Dr. Faye-Petersen has served on many SPP committees including Strategic Planning, Website, Research, and ten years on the Education Committee itself including as Chair, and as Councilor at Large, twice. She also belongs to USCAP, the IAP, American Society of Human Genetics, Society for Maternal Fetal Medicine, and the International Society for the Study and Prevention of Perinatal and Infant Death, along with several other professional organizations.

Dr. Faye-Petersen is a world recognized leading pathologist and educator, but her commitment to UAB has been her priority. She gave the lectures on

Genetic Disorders, the labs in congenital cardiovascular malformations, and placental pathology and gestational trophoblastic disease lectures. This year, she gave hands-on laboratory sessions for placental pathology and new lectures on the placenta and GTD. In 1995, she recruited a UAB medical student, Ms. Lauren Kidd-McCallister and Benigno Soto, MD, a renowned UAB cardiopulmonary radiologist, to help her catalogue some 550 (now >650) CCVM specimens at UAB to support educational sessions for cardiothoracic surgeons, neonatologists, nurse practitioners, and medical students. The Soto Registry continues to be a valuable resource for physician and student education. For more than 20 years, Dr. Faye-Petersen has given lectures to fellows in Maternal Fetal Medicine, Neonatology, and Medical Genetics, many Grand Rounds and introductory sessions to residents on the autopsy services and has mentored several residents at least 3 in the last 6 years have gone on to complete fellowships in pediatric pathology. One of her mentees, Dr. Matthew Cain, presented at the Spring Meeting the Society for Pediatric Pathology won the coveted Award for Outstanding Presentation. The corresponding article is about to be published in Pediatric and Developmental Pathology, was just recently chosen as the featured article.

Outside of UAB, Dr. Faye-Petersen has given numerous lectures, been the perinatal pathology lecturer at board review courses for Neonatology/

Cont'd...

Faculty Profile: Ona Faye-Petersen, M.D. Cont'd...

Perinatology and an invited lecturer at many international meetings and courses. She has been a featured speaker at the IAP and various World Congresses of Pathology. In the SPP she spearheaded the development of annual multidisciplinary perinatal pathology symposia. She established the Perinatal Section and the first, free-standing and multidisciplinary, SPP sponsored Course in Perinatal Pathology.

Dr. Faye-Petersen is also well published and scholarly; she has co-authored some 65 peer reviewed publications, 8 book chapters, including serving as Section Editor for the placental pathology segment in the online publication, Pathobiology of Human Disease: A Dynamic Encyclopedia of Disease Mechanisms. She is on the Editorial Board of Pediatric and Developmental Pathology and Perspectives in Pediatric Pathology, and a reviewer for 10 other peer-reviewed pathology and clinical medicine journals. She has been a funded, co-investigator in 9 NIH funded research studies of sequelae of intrauterine infection and maternal systemic diseases; currently, she is co-investigator on 2 NIH grant applications on intrauterine cytomegalovirus infection and effects of placental microbiome alterations in development of bronchopulmonary dysplasia.

Dr. Faye-Petersen's educational and service efforts have enabled her to receive many prestigious awards from UAB and professional societies. These have included UAB Medical School Argus Teaching awards and induction into Alpha Omega Alpha, in 2010. She was the 2007 UAB Outstanding Woman Faculty, an award recognizing her leadership, successes as an academician and teacher, and for community service by establishing UAB's annual women's Suits for Success clothing drive for disadvantaged women. She's been twice named recipient of the SPP President's award for Distinguished Service, listed as one of UAB's Best Doctors in America since 1996, and among the Top 1% of physicians in the U.S., in U.S. News and World Report, since 2012. When not pursuing her professional passions, Dr. Faye-Petersen enjoys hiking, white water canoeing (since that is how she met her husband, Kerry Nivens, a Fox6 photojournalist), spending time her family. Her younger daughter, resides at Glenwood campus for autism and her oldest daughter, will start UAB medical school, in the fall. Finally, she has recently endowed a teaching award in the Department to recognize outstanding teaching by housestaff.

Accolades



Shannon Bailey with her student Uduak Udoh; Jianhua Zhang with her student Matthew Dodson; Aimee Landar with her student Stephanie Wall at the Doctoral Hooding ceremony, April 25th, at the Alys Stephens Center.



Doug Hurst, Ph.D.— Students: Monica Lewis (Cancer Biology

theme) and Emily Falk Libby (Nutrition Sciences), won first and second place awards respectively at the 2015 Graduate Student Research Days.

Monica Lewis is the recipient of a Bertram M. Marx travel award to attend the 2015 AACR annual meeting.

Emily Falk Libby received the best trainee poster award at the American Society for Preventive Oncology 39th Annual Conference, and the Howarde E. Sauberlich Endowed Award for Excellence in Research from the Department of Nutrition Sciences.



Yang Yang, Ph.D. was invited to speak about bone micro-environment in multiple myeloma in

the 2nd ICMRS-ASBMR International Musculoskeletal Research Conference, held in China in April 2015. Dr. Yang was also selected as the AACR-MICR Minority-Serving Institution Faculty - Cancer Center Collaboratives during the AACR Annual Meeting 2015.



John C. Chatham, D.Phil.— Helen Collins, Post-Doc fellow, Chaired Session at

Experimental Biology 2015 sponsored by the American Physiological Society entitled “The role of Store Operated

Calcium Entry in Cardiovascular Physiology and Disease”

Helen also received a travel award from the Physiological Society of the UK to attend Experimental Biology 2015.

John Chatham was invited to be a member of the UAB General Fellowships Committee.



Dr. Rajasekaran Namakkal-Soorappan was invited to serve on the 2015 (Indian Association for Biomedical Sciences (IABS) Annual Meeting as a Co-Chair for Cardiovascular Diseases session in Hyderabad, India in Jan 2015. He co-chaired the session with Prof. Dr. Paolo Di Nardo, University of Role, Italy. The session included very interesting topics related to cardiovascular diseases: Engineered Tissues for Heart Mending, Cardiac Regeneration in the Injured, Myocardium, ‘Sense & Sensibility’ of Oxygen in Acute, Myocardial Infarction and Protection, Reductive Stress and Pathological Cardiac Remodeling and Therapeutic Potential of cannabinoid agonist in experimental model of ischemic heart disease.

Dr. Raj was also invited to present on “Genetic Basis for Cardiomyopathy: Reductive Stress
Cont’d...

Accolades: Cont'd...

and Pathological Cardiac Remodeling" in the International Conference on Recent Advances in Research and Treatment of Human Diseases and 4th Annual Meeting of Indian Academy of Biomedical Sciences CSIR-IICT Auditorium, Hyderabad (India), January 9-11, 2015.



Dr. Raj was invited by the Department of Biotechnology at Indian Institute of Technology-Madras, Chennai, India to present a guest lecture on "Reductive Stress – New Paradigm in Pathophysiology: Biochemistry, Genetics and Transcriptional Mechanisms of Human Heart Disease". Date: January 06-08, 2015.

Dr. Raj was invited by the Department of Biotechnology, Anna University, Chennai, India. He delivered a seminar talk on "Reductive Stress and Pathological Cardiac Disease: Basics, Genetics and Transcriptional Mechanisms". Date: Jan 28-29, 2015.

Dr. Raj was honored by a major/popular social media (SUN-TV) in south India to address the updates on Cardiovascular Research in the USA. The Sun-TV is expected to have over 40 million audiences across the globe. Raj was asked to perform this interview in a regional language (TAMIL) to reach the layman understanding the actual state of cardiovascular research and impacts of exer-

cise based benefits as a preventive and/or therapeutic medicine for various forms of cardiovascular complications. Following to broadcast on Jan 13, 2015, the interview was uploaded on You-Tube (<https://www.youtube.com/watch?v=G8krkv2SiFQ>) and this link has been watched by over 2600 people so far and receiving nice feedback on the concepts pointed out by Dr. Raj



during the interview. In fact, Dr. Raj has highlighted the significance of the environment at the UAB and its impact on education, research, training and healthcare. Majority of his comments were related to (1) pathological cardiac remodeling, (2) impact of genetic models of human heart diseases, (3) effect of exercise and its role as a preventive/therapeutic medicine for cardiovascular diseases, (4) department of pathology and Center for Exercise Medicine in the UAB and (5) critical aspects of sophisticated resources, cutting edge technology, advanced research and opportunities to interact with the physician scientists in the USA.



William Grizzle, M.D., Ph.D.
– Received the 2015 ISBER Award for Out-

standing Achievement in Biobanking. This award, sponsored by Taylor-Wharton, is designed to recognize individuals who have made outstanding contributions to the field of biobanking.



Jianhua Zhang, Ph.D.'s student Matthew Dodson defended his thesis entitled:

"Metabolic and Oxidative Regulation of Neuronal Autophagy and Survival" and has been chosen to be recognized as the recipient of the Department of Cell, Developmental, and Integrative Biology Outstanding Student Award for 2015.

Louise Theraud Brasher—published an article entitled "Guiseppe Moretti in Newport" in *The Alabama Review*, 2015, 68:2, 135-167. Louis is an attorney in private practice and is also an Office Associate II in the Division of Laboratory Medicine.

UAB Creates First US PCR Test for a Forgotten Bacterium that is the Cause of Many Severe Sore Throats in Young Adults

New research from the [University of Alabama at Birmingham](#) suggests that *Fusobacterium necrophorum* more often causes severe sore throats in young adults than *Streptococcus pyogenes* (Group A streptococcus)—the cause of the much better known strep throat. The findings, published February 17 in the [Annals of Internal Medicine](#), suggest physicians should consider *F. necrophorum* when treating severe sore throat, known as pharyngitis, in young adults and adolescents that worsens.

In an analysis of 312 college students at UAB's Student Health Clinic, investigators found that *F. necrophorum* was detected in more than 20 percent of patients with sore-throat symptoms, against only 10 percent for Group A strep and 9 percent for Group C or G strep.

"This is the first study in the United States that shows that *F. necrophorum* causes a significant number of cases of pharyngitis in this young adult population," said Robert M. Centor, M.D., professor in the [Division of General Internal Medicine](#) in the UAB [School of Medicine](#) and the study's lead author. "It is also the first to show that *F. necrophorum* pharyngitis and streptococcus pharyngitis share similar clinical signs. This study bolsters our understanding that this condition is common in the U.S. and very closely resembles strep throat."

Centor says that *F. necrophorum* pharyngitis is the leading

cause of a rare but potentially very dangerous condition known as the Lemierre's syndrome. The syndrome affects mostly adolescents and young adults and is seen rarely in pre-adolescents. It often causes long, complex hospitalizations requiring intensive care, and about 6 percent of those contracting the Lemierre's syndrome die.

Group A strep can also cause a serious disease, rheumatic fever, which remains common in many parts of the developing world, but is now rare in the U.S. The rapid test for strep and aggressive treatment with antibiotics have contributed to rheumatic fever's decline in this country. Centor says *F. necrophorum* warrants the same consideration.

"It is not just about strep throat in this 15-30 age group," said Centor. "Physicians have to consider *F. necrophorum*, which in our study caused more sore throats than streptococci. And *F. necrophorum* is itself associated with a potentially devastating complication, which while rare, is a more common side effect that acute rheumatic fever."

The issue for physicians is that *F. necrophorum* pharyngitis is hard to recognize. Its signs and symptoms are very similar to those of strep throat. There is a rapid test for strep; but there is not a routine, commercially available rapid test for *F. necrophorum*. UAB investigators had to create their own research assay especially for this study — a real-time polymer-

ase chain reaction or PCR test.

"We began work on the PCR test in 2009 in my research laboratory in the UAB Department of Pathology, and it was four years before we were confident that this test was accurate and sensitive enough to be able to begin data collection for this study," said Ken Waites, M.D., a professor in the Division of Laboratory Medicine in the UAB [Department of Pathology](#). "To our knowledge, ours is the first PCR test for *F. necrophorum* to be created in the United States."

Li Xiao, Ph.D., an instructor in the [Division of Clinical Immunology and Rheumatology](#), and a member of Dr. Waites' research laboratory took the lead in the development of the PCR test. The UAB Department of Pathology is known for its work with *Mycoplasma pneumoniae*, a bacterium that causes walking pneumonia. Resources and methods originally developed by Dr. Xiao for the study of *M. pneumoniae* infections were integral to the development of the *F. necrophorum* test.

"We have a critical mass of knowledge, highly trained technical staff, and excellent facilities to do this kind of cutting-edge work," said Waites. "And we are fortunate to have a blend of expertise from multiple disciplines such as pathology, microbiology, and immunology, along with clinical expertise from pediatrics and internal medicine."

Cont'd...

UAB Creates First U.S. PCR Test... Cont'd...

One of the time-consuming factors was the need to find a gene to use as a PCR target that was present in all *F. necrophorum* strains, but was not present in any other microorganisms likely to cause sore throats. Xiao and the team tested hundreds of strains of bacteria and viruses to be sure that the test was specific to detect *F. necrophorum*.

"*F. necrophorum* is difficult to culture because it is an anaerobic bacterium requiring special methods to grow it in a lab, making it an expensive and labor-intensive process," Waites said. "Therefore, culture is not widely used for its detection because turnaround time for results takes up to several days. We did not believe culture was a practical way to test for *F. necrophorum*, so we chose to develop the PCR method instead".

While clinicians might like to have a rapid test for *F. necrophorum*, similar to the existing test for Group A streptococcus, Waites doesn't anticipate that happening soon. Waites says the UAB PCR test could be adapted by a commercial company as a basis to create a viable product that could be employed in hospital laboratories, but it would not likely be suitable as a point-of-care test due to the inherent complexity of nucleic acid amplification tests. An antigen-based test similar to rapid tests for Group A streptococcus

might be a better alternative for use in physician offices. The key would be convincing clinicians that such a test would be beneficial to their practices and to convince a diagnostics company to develop and sell such a test.

In the absence of a viable test for the presence of *F. necrophorum*, Centor suggests that treating with antibiotics empirically may be the best course of action. He says that those patients who have clinical symptoms, and score high on the Centor Score (a set of criteria used to identify the likelihood of a bacterial infection of adult patients with sore throat, named after Dr. Centor) should be considered for antibiotic treatment.

"This is the first step in a series of studies that need to be done to define the prevalence and extent of *F. necrophorum* and how it presents clinically," Centor said.

The study was funded by UAB and the Justin E. Rodgers Foundation. In addition to Drs. Centor, Xiao and Waites, coauthors of the study published in *Annals of Internal Medicine* were T. Prescott Atkinson, M.D., Ph.D., Carlos Estrada, M.D., Michael Faircloth M.D., Walid Khalife, Ph.D., Jeremy Hatchett, M.D., Lisa Oestreich, D.O., Amy Ratliff and Donna Crabb.

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New Lab Medicine Steering Committee...

Led by X. Long Zheng, M.D., Ph.D., Professor and Director of the Division of Laboratory Medicine, the Laboratory Medicine Steering Committee (LMSC) was formed on April 2, 2015. This committee will be responsible for, but not limited to:

- 1) approve a new laboratory test to be performed on-site or referred to outside reference laboratories;
- 2) help select sites for the referring tests and consolidate the reference test sites. Currently, the same test may be sent to different laboratories with a clear reason;
- 3) develop a formulary for

ordering a "right test" for a right patient. This ensures the proper utilization of laboratory tests;

- 4) finally, evaluate, change, and propose the "critical values".

The committee consists of incredible faculty members from various departments/divisions within the UAB-School of Medicine. These include: Dr. Vishnu Reddy, Dr. Steven Moser, Dr. Rob Hardy, Dr. Moon Nahm, Dr. Lance Williams, and Dr. Huy Pham from the Division of Lab Medicine; Dr. Leslie Nabell from the Division of Hematology, Department of Medicine; Dr. James Willig from Division

of Infectious Diseases; Sherry Polhill, Jonathan Gidley, and Joyce Wilson in the Hospital Laboratories; Dr. Bruce Alexander who represents TKC clinics; Steve Croom from Hospital Information, and the Chief Resident Dr. Jessica Tracht.

We are so fortunate to have full support from Dr. Kevin Roth, the Chair of Department of Pathology and Jordan DeMoss, the Associate Vice President of UAB Hospital. The committee is scheduled to meet for the first time on May 23, 2015.

By X. Long Zheng

Spotlight on Administration: Timothy Awtrey



Tim Awtrey is the System Administrator for Information Services for Pathology.

Tim first came to UAB in December of 1984, establishing the Electronic Service Facility, providing technical support for the 6 academic schools. Because computers had yet become an integral part of our daily lives, this was a part-time position. The other half of Tim's time was spent as an electronics technician supporting all teaching and research lab equipment in the Department of Civil and Environmental Engineering.

Computers ultimately demanded enough time that Tim transferred to the Dean's Office of the School of Engineering to support all their computing needs for the remainder of his first twenty years with UAB.

Coming to the Department of Pathology in March of 2005, Tim has enjoyed these last 10 years taking care of all the faculty and staff computing challenges. He says "Pathology has some of the friendliest people he has had the opportunity to serve while at UAB."

In his off hours Tim enjoys doing projects around the house, dabbling in woodworking and keeping the cars going. (The two family cars have a com-

bined 475,000 miles!). One week each summer is devoted to volunteering at a youth camp for aspiring young leaders in the Lutheran church. Some 300-400 6th through 12th graders attend this annual event.

Tim's latest project is spending time with his first grandchild born this past August. Just ask him about her and he'll gladly share pictures! He says "Grandkids are **AWESOME!**"

Dr. Richard Friedberg Visits UAB



On March 10th, Dr. Richard Friedberg, Chair for Baystate Health's Pathology Department in Massachusetts and President-elect for the College of American Pathologists (CAP), visited UAB for the first time in more than 10 years. Prior to his appointment at Baystate, he served UAB for several years as a faculty member in Transfusion Medicine and was chief of Pathology and Laboratory Medicine Services at the Birmingham VA Medical Center. Dr. Friedberg has actively served on numerous committees and councils for the CAP, including the Government & Professional Affairs, Accreditation, Quality Practices, Technology Assessment, Transformation, Finance,

of those committees and councils. He has been elected to serve on the CAP Board of Governors twice and currently is the President-elect for CAP. Dr. Friedberg has given numerous lectures across the United States regarding the future of healthcare.

While at UAB, Dr. Friedberg met with faculty and residents to discuss the changing landscape of

Transfusion Medicine, Performance Measurement, and Patient Safety. For several years, he has served as Chair or Vice-Chair of many

medicine. He presented Pathology Grand Rounds and delivered an excellent talk on "Advancing and Securing our Future in the Evolving Health Care Landscape." His presentation gave a broad overview as to how pathologists will be reimbursed as medicine deviates from a "fee for service" structure. Afterward, he met with residents over lunch and further discussed changes in healthcare as well as career advice. His wisdom included fellowship/specialty guidance, securing the first job, and how to be more marketable in a competitive field.



Residency Program Director:

C. Bruce Alexander, M.D.

Residency Program Support:

Karen Lewis
934-4060

From the Chief Residents:

Thank you to our outgoing chief residents, Jason and Matt for doing a fabulous job. We are excited about the upcoming year and the new residents joining our program in July! Our six new residents are:

David Dorn—Univ. Alabama SOM

David Ullman—Florida State Univ. College of Medicine

Benjamin Saylor—Charles E. Schmidt College of Medicine at Florida Atlantic Univ.

Tao Guo—Jiamusi Univ. SOM

Tiffany Graham—American Univ. of the Caribbean SOM

Kai Wang—Zhengzhou Univ. Medical School

Brandi McCleskey & Jessica Tract
Chief Residents 2015–2016

Boards:

Good luck to everyone on the upcoming board exam. You have studied hard and will do great!

2015 Incoming Fellows:

Rance Chadwick Siniard—Transfusion Medicine

Rohini Chennuri—Cytopathology

From the Chief Residents... Cont'd...

Jessica Levesque—Molecular Genetics

Benjamin Hill—
Hematopathology

Bernadette Harris—
Hematopathology

Juan Mercado—
Neuropathology

Matt Cain—Forensic Pathology

Alex Hanna—Surgical Pathology

Evan Alston—Surgical Pathology

Ashley Tarasen—
Dermatopathology

National Meetings, Presentations, and Awards:

Association for Pathology Informatics (API)

Dr. Cain will deliver a platform presentation titled "*Constellation: A Web 2.0 Adult Autopsy Reporting and Analytics Platform*" with faculty mentor Dr. Park and fellow residents Joseph Drwiega and Zheng Ping.

ACLPS

Dr. Zheng Ping will deliver a platform presentation titled "Evaluation Of Aspirin Resistance In LVAD Patients Using Whole Blood Platelet Aggregometry" with faculty mentors Dr. Marques, Dr. Williams and Dr. Pham

USCAP Boston

Dr. Alston presented a poster titled "Poor Cell Block Adequacy Rate for Molecular Testing Improved with the Addition of Diff Quik Stained Smears: Need for Better Cell Block Processing" with faculty mentors Dr. Harada and Dr. Eltoun.

Dr. Ruby Ma presented a poster titled "Over-Expression of S100A4 as Regulated by β -catenin Is Associated with a Higher Risk of Metastasis in Patients with Signet-Ring Cell Carcinoma" with faculty mentor Dr. Wei.

Dr. Tiansheng Shen presented the following posters titled: "Prognostic factors in advanced breast cancer: Race and receptor status are significant after development of metastasis" with faculty mentor Dr. Shi Wei. "Characterization of estrogen receptor negative/progesterone receptor positive breast cancer" with faculty mentor Dr. Shi Wei.

"Carbonic anhydrase IX in sinonasal renal cell-like adenocarcinoma and human sinonasal mucosa" with faculty mentor Dr. Margerat Brandwein-Gensler.

Association of Clinical Scientists (ASC)

Dr. Qian Dai will present an oral presentation titled "A One Year Experience of Developing a Molecular Tumor Board." with faculty mentors Drs. Eddy S. Yang, Edward E. Partridge, Gene P. Siegal and Shuko Harada.

International Society of Dermatopathology (ISDP) - March 2015. San Francisco, CA.

Dr. Vishwas Parekh presented a poster titled "Rickettsia parkeri rickettsiosis presenting with a papulovesicular rash and myopericarditis" with faculty mentors Dr. McKay and Dr. Beckum.

Dr. Vishwas Parekh presented a poster titled "Hyperkeratotic variant of porokeratosis in a patient with hepatitis C virus infection and a therapy-related immunosuppressed state" with Dr. Junkins-Hopkins, a faculty mentor during his external rotation at the Ackerman Academy of Dermatopathology, NY.

National Lab Week:

Dr. Brandi McCleskey presented a Laboratory Seminar entitled "Rapid Pathogen Identification Methods" for National Lab Week.

Manuscripts:

Dr. Alston published "Poor Cell Block Adequacy Rate for Molecular Testing Improved with the Addition of Diff Quik Stained Smears: Need for Better Cell Block Processing" in *Cancer Cytopathology* with faculty mentors Dr. Harada and Dr. Eltoun.

Dr. Cain published "Computer Extraction of Data from Autopsy and Toxicology Reports" in *Academic Forensic Pathology* with faculty mentors Dr. Davis, Dr. Park, and Dr. Robinson.

Cont'd....

From the Chief Residents... Cont'd...

Dr. Vishwas Parekh published "A Histologic Snapshot of Hypothetical Multistep Progression from Nevus Sebaceus to Invasive Syringocystadenocarcinoma Papilliferum" in American Journal of Dermatopathology with faculty mentor Dr. McKay.

Outgoing Reception:

Primary faculty and residents are invited to attend the 2015 outgoing reception on Thursday, May 14 from 6-8:00 PM at the Vestavia Hills Country Club. For more information, please contact Karen Lewis at 934-4060 or kflewis@uab.edu.



Resident **Scott Taylor** and his wife **Samantha** welcome baby **Hadley Grace Taylor**!



Residents **Katie Tumminello**, **Abha Soni**, **Gabe Koenig**, **Forest Huls**, **Tiansheng Shen**, and **Jason Brazelton** celebrate **Erik Kouba's** birthday!

Pathology Publications

Yang Yang—"Myeloma cell-derived Runx2 promotes myeloma progression in bone."

Timothy N Trotter, Mei Li, Qianying Pan, Deniz Peker, Patrick D Rowan, Juan Li, Fenghuang Zhan, Larry J. Suva, Amjad Javed and Yang Yang. Blood. 2015 Apr 10. pii: blood-2014-12-613968. [Epub ahead of print]

Raj Soorappan—Review published in Biochim Biophys Acta – "Molecular Basis of Disease: Reductive potential - a savior turns stressor in protein aggregation cardiomyopathy". Narasimhan M³, **Rajasekaran NS**^{1,2}. <http://www.ncbi.nlm.nih.gov/pubmed/25446995>

Original research paper published as a co-author with his clinical team back in University of Utah Salt Lake City in J Invasive Cardiology: Nickel elution properties of contemporary inter-atrial shunt closure devices. Verma DR, Khan MF, Tandar A, Rajasekaran NS, Neuharth R, Patel AN, Muhlestein JB, Badger RS. J Invasive Cardiol. 2015 Feb;27(2):99-104. <http://www.ncbi.nlm.nih.gov/pubmed/25661761>

Dr. Rajasekaran Namakkal-Soorappan (RAJ)—Published an abstract in Free Radical Biology and Medicine: "Nrf2-Mediated Reductive Stress Impairs Myoblast Differentiation", on which Sandeep Balu Shelar (postdoc in Raj's lab) is a first

author, has presented the paper in SFRBM-2014 Annual Meeting in Seattle, Washington. Details of the abstract: Sandeep Balu Shelar¹, Jennifer Hong², Nancy Atieno², Madhusudhanan Narasimhan³, **Rajasekaran Namakkal-Soorappan**^{1,2}. <http://www.sciencedirect.com/science/article/pii/S0891584914008168>

24th Annual Pritchett Lecture:

The 24th Annual Paulette Shirey Pritchett Lecture was held on April 22, 2015. The talk was well-attended and our speaker was Dr. Anthony Atala from Wake Forest. Dr. Atala's talk was entitled "Regenerative Medicine: New Approaches to Healthcare".



L-R: Drs. Anthony Atala, Ralph Crowe, Abha Soni and Deniz Peker



Drs. Jianhua Zheng and Yabing Chen



L-R: Dr. Kevin Roth, Dr. Anthony Atala, and Dr. Robert Pritchett



L-R: Dr. Long Zheng, Dr. Deniz Peker, Dr. Robin Lorenz, Dr. Stephanie Reilly, Dr. Virginia Duncan, and Dr. Abha Soni

Pathology Grants Awarded:

SHANNON BAILEY

UAB/DRTC

"Systems Genetics Approach in Understanding NAFLD"

\$35,000 4/1/15—3/31/16

DOUG HURST

American Cancer Society

"Composition of SIN3 Protein Complexes in Breast Cancer Metastasis"

\$50,000 7/1/14—6/30/15

CRAIG MAYNARD

UAB/CCC

"A Human Microbiota-Dependent Model of Colitis-Associated Colorectal Cancer"

\$40,000 4/1/15—3/31/16

MOON NAHM

NIH/Univ. of Rochester

"Serologic Analysis of VTEU Study 11-0034"

\$311,684 2/15/15—12/12/15

MOON NAHM

Glaxo Smith Kline

"Clinical Testing for Zoster-035"

\$422,680 4/2/15—12/31/16

SELVERANGAN PON-NAZHAGAN

NIH

"Targeted Therapy for Breast Cancer with Osteolytic Bone Damage"

\$321,211 3/1/15—2/29/20

SOORY VARAMBALLY

NIH

"Role of Transcriptional Corepressor CtBP1 in Prostate Cancer Progression"

\$305,025 1/6/15—4/30/17

LONG ZHENG

Answering TTP Foundation

"The Role of Complement Factor H Abnormality in Pathogenesis of Thrombotic Thrombocytopenic Purpura"

\$59,358 2/1/15—9/29/16

LONG ZHENG

Lee's Pharmaceuticals (Hong Kong) Limited

"Therapeutic Efficacy of Anfiba-tide in Murine Models of Thrombotic Microangiopathy"

\$106,140 3/1/15—1/31/16

If anyone has any news items, accolades, etc. to be put in the quarterly newsletter, please send it to the Path In Focus e-mail address at: pathinfocus@uab.edu.

Thank you.

Angie Schmeckebier

Dear UAB Department of Pathology Friends and Colleagues:

The UAB Department of Pathology is recognized nationally for excellence in biomedical research, undergraduate and graduate medical education, and diagnostic pathology. This rise to prominence has been accomplished through the hard work and dedication of numerous Department of Pathology faculty and trainees who have made UAB a phenomenal environment for pathology education and clinical practice. Several decades ago, the former Departments of Anatomic Pathology and Clinical Pathology of the University of Alabama School of Medicine merged into a single Department of Pathology of the UAB Health System. More than 250 residents have received their graduate training in Pathology at UAB and have gone on to populate the state, region and the nation. In fact, the vast majority of Pathologists in the state of Alabama have received some or all of their training here at UAB. This program of excellence in graduate medical education has been appropriately balanced by a world-class graduate program that has similarly trained generations of scientists who fill academia, industry and government service. Our department has been bolstered in recent years by an ever increasing number of post-doctoral fellows, clinical fellows and junior faculty members who have achieved academic, research, and/or clinical excellence, and ascended to leadership positions at UAB or other institutions.

Please consider making a gift to the Department of Pathology at UAB to support our missions of clinical practice, teaching, research and service. Any amount would be most gratefully received and would be fully deductible*. One could direct it to a particular area of need, to fund current and future endowed professorships or create new awards, prizes or similar recognition opportunities to honor yourself, a family member, a favorite professor, etc.

We would be pleased to assist you and your professional advisors in including the UAB Department of Pathology in your estate plan or in exploring other giving strategies. A simple tear off sheet is found below.

* One should always check with their tax advisor.

Thank you for your serious consideration of this request.

Please fill out each of the 3 Sections:

A1—Enclosed, please find my contribution to the UAB Department of Pathology in the amount of:

___ \$50
___ \$100
___ \$500
___ \$1000
___ Other: _____

Please make all checks payable to the UAB Department of Pathology and return them to Ms. Lynne Roden, Departmental Administrator, 500 22nd Street South; Suite JNWB 404, Birmingham, AL 35294-0500.

Cont'd...

A2—Please contact me to discuss further:

Name: _____

Address: _____

Telephone Number: _____

E-mail Address: _____

*Please indicate your preferred means of communication.

B—I wish to direct this gift to the Department towards:

___ Where the need is the greatest

___ Teaching

___ Research

___ Named Chairs or Professorships

___ Awards for teaching/research/clinical excellence

___ Naming opportunities (Rooms, collections, equipment, etc.)

C—Person(s) and complete address to be acknowledged for tax purposes:

Do you want this gift to be anonymous? Yes ___ No ___

Do you want to honor a particular person or event?

Specifics: _____

D—If you prefer to donate via credit card, please call the UAB Development office at (205) 975-5659.