Message from the Chair

Last month’s Pathology Graduate Student Research Day once again reminded me of how talented and dedicated our students are and how important mentorship plays in the development of one’s scientific career. Although highly accomplished, few students enter graduate school with extensive research experience or a full appreciation of the hard work and perseverance required to succeed in the highly competitive world of scientific investigation. The challenge to our faculty mentors is to carefully and incrementally introduce graduate students to the rigors and demands of scientific research while maintaining the student’s enthusiasm and spirit of discovery. Mentoring graduate students is hard work and the rewards for doing a good job are often delayed and subtle. The commitment of our faculty to graduate student mentorship is significant and their willingness to support the students in their respective laboratories is impressive. I’ve attended the last four graduate student research days as Chair of the Department and each year it reinforces my belief that we have some of the finest graduate students and mentors in the country. The UAB Department of Pathology offers graduate students an excellent opportunity to develop the skills necessary to succeed in scientific research and I look forward to our graduates becoming national leaders in experimental pathology.

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

Faculty Profile: Richard E. Powers, M.D.

Dr. Richard Powers is a professor in the Division of Neuropathology who arrived at UAB in 1988 when neuroscience was just beginning to rapidly expand at the university. He is a pathologist and a geriatric psychiatrist who has just recently retired as the Medical Director of the Alabama Department of Mental Health. Dr. Powers began the UAB Brain Resource Program that supported efforts to develop an Alzheimer’s Disease Research Center at the University. He has practiced medicine in three UAB departments: pathology, neurology and psychiatry. He was the clinical neuroscience course master for over a decade, during which, that teaching program won numerous educational awards. His work as the Medical Director has required him to help build or run psychiatric hospitals as well as work with the Alabama legislature and consult with numerous state agencies. Dr. Powers has been very active in addressing public mental health challenges in Alabama. He helped establish the DETA program with funds provided by the Alabama Legislature to provide local training and support for family caregivers of persons with dementia. He managed the public mental health response to several major disasters including Hurricane Katrina and the BP oil spill. At the national level, he helped to start the Alzheimer’s Foundation of America which is the second largest Alzheimer advocacy organization in the nation. His efforts at AFA focused on expanding federal funding for aging research and promoting national programs to support family caregivers.

Dr. Powers is retiring from UAB and from the Alabama Department of Mental Health but he is not retiring from medicine, teaching or public advocacy for older individuals especially those with cognitive disabilities. Dr. Powers intends to continue some educational efforts in the university system and practice geriatric psychiatry in Tuscaloosa. He also plans to expand his medical educational collaboration

Cont’d...
Faculty Profile: Richard E. Powers, M.D., cont’d.

with colleagues in Ghana. Over the coming years, he hopes to develop educational materials on behavioral neuropathology that were accumulated over the last two decades to improve the quality of medical education on clinical behavioral neurosciences for residents and fellows.

The retirement from the Department of Mental Health and the Alzheimer’s Foundation should provide some additional time over the coming years to enjoy the family home on the Fort Morgan peninsula at the gulf coast as well as spend more time visiting with children and grandchildren.

Alpha Omega Alpha Honor Medical Society:

At the 2011 Annual Meeting of the AOA Board of Directors on September 24, 2011 in Chicago, Illinois, Dr. C. Bruce Alexander was elected President-Elect of this National Honor Society.

AOA is a medical honor society which was founded in 1902 and currently distributes over $500,000 a year to medical students and faculty promoting their professionalism, teaching service, and research. There are currently 120 chapters in medical schools in the United States, and more than 150,000 members. Fifty-one Nobel Prize winners in Physiology or Medicine and Chemistry are members of AOA. About 75% of the Deans of Medical Schools are members of AOA. In the course of a year, the national AOA office includes the following programs and awards:

- Robert J. Glaser Distinguished Teacher Award
- Edward D. Harris AOA Professionalism Award
- The Carolyn L. Kuckein Student Research Fellowships
- AOA Medical Student Service Awards
- AOA Visiting Professors
- AOA Volunteer Clinical Faculty Awards
- Helen H. Glaser Student Essay Awards

The Alabama Alpha Chapter (UAB) is led by Faculty Councilor, Dr. Stephanie Reilly and elected student officers. AOA has as its official journal, The Pharos, since 1938. Its motto is “Be worthy to serve the suffering.”

Dr. Alexander will assume the Presidency in October of 2012.

Department of Pathology Graduate Travel Awards:

This past year, the Department of Pathology implemented a travel award policy for both students and postdocs. The travel awards that have been presented from August—October, 2011 are as follows:

Students:
- Jason Ashley
- Matthew Dodson
- Samantha Giordano
- Niroop Kaza
- Latkia Kohli
- Philip Kramer
- Benjamin Owusu
- Lonnie Schneider
- David Scott
- Ryan Stapley
- Kurt Zimmerman

Postdoctoral Fellows:
- Qiuli Liang
- Tanecia Mitchell
Spotlight on Administration: Kenya Rampersant

Kenya Rampersant is an Office Service Specialist II in the Pathology Finance Office located in the John Whitaker building. She started working with Pathology in 2007 as a Student Assistant and has since worked her way up by taking on more duties and more advanced responsibilities. During her tenure with us, her duties have involved the probationary and annual employee evaluations; the yearly employee service awards; assisting with processing I9’s to ensure timely appointments of new employees and she also takes on various special projects for Financial Officers, Personnel Manager and Executive Administrator.

In addition to being a full time UAB employee, she is also a full time graduate student at UAB pursing a MAEd in Community Health Education and a CRM Certification in Nursing. Her career goal is to help stop the growing epidemic of youth obesity.

Kenya received her B.S. degree in Community Health Education and a concentration in Spanish in 2009 at UAB. In addition to being a diligent student and employee, Kenya also serves as an advisor for two well known health organizations in Alabama, and in her spare time, she volunteers with the weight management clinic at children’s hospital for obese children.

Kenya has played the flute since the 3rd grade and has a huge interest in writing marching band music. “I get a thrill out of listening to a song on the radio, then going home and transposing stanzas for that song for every instrument to play. I used to write band music for my high school all of the time”. Kenya has also danced since the age of 6. She has practiced ballet, jazz, and is currently taking hip hop. “I have set high aspirations for myself. I have always been told that I can achieve anything I want and I strive to do that every day”.

Accolades:

Walter C. Bell, M.D. was invited by the Association of Indian Pathologists in North America to present at the recent ASCP meeting in a session which they sponsored entitled “Head and Neck Pathology: Challenges and Opportunities”.

John C. Chatham, D. Phil was asked to serve on the Board of Directors of the UAB Research Foundation, which is for a three year, potentially renewable term. Dr. Chatham was also asked to serve on the Search Committee for the new Provost.

Gregory G. Davis, M.D. was appointed to the position of Executive Editor of the Check Sample Education Series of the American Society of Clinical Pathologists.

Silvio Litovsky, M.D. was asked to become a Consulting Editor for Cardiovascular Pathology.

Robin Lorenz, M.D., Ph.D. was named Chair of the Graduate Research, Education, and Training (GREAT) Group, M.D., Ph.D.

Section Steering Committee for the AAMC.

Gene P. Siegal, M.D., Ph.D. was the co-editor of Laboratory Administration for Pathologists, a book recently released by the College of American Pathologists (www.cap.org/cappress).
2011 Promotion & Tenure Awards:

Congratulations to those Pathology faculty who received Promotion & Tenure awards this year.

- Scott Ballinger, Ph.D. — Promotion to Professor, tenured.
- Zdenek Hel, Ph.D. — Promotion to Associate Professor, tenure earning.
- Silvio Litovsky, M.D. — Award of Tenure
- Upender Manne, Ph.D. — Promotion to Professor, tenured.
- Yang Yang, Ph.D. — Promotion to Associate Professor, non-tenure earning.
- Majd Zayzafoon, M.D., Ph.D. — Award of Tenure
- Jianhua Zhang, Ph.D. — Promotion to Associate Professor, tenure earning.

Where Are They Now? William L. Bennett, M.D., Ph.D.

Dr. William L. Bennett obtained his Ph.D. degree in Pathology from UAB in 2004, after receiving his B.S. degree in Microbiology from the University of Alabama (Tuscaloosa). Dr. Bennett performed research focused on insulin signal transduction pathways and insulin regulated gene expression in the laboratory of Dr. Joseph L. Messina in the division of Molecular and Cellular Pathology. His dissertation work characterized the role of insulin and pro-inflammatory cytokines in the regulation of growth hormone receptor gene expression, and the molecular mechanisms involved. Following completion of his Ph.D. in 2004, Dr. Bennett returned to medical school, completing the M.D. portion of the combined M.D./Ph.D. program in 2006. During his tenure at UAB, Dr. Bennett received the following honors:

- Kochakian Award for Excellence in Endocrinology Research
- Endocrine Society Travel Award
- Mineral District Medical Society Scholarship Award
- Comprehensive Minority Faculty and Student Development Fellowship
- Association of Black Cardiologist’s Dr. Richard Allen Williams Scholarship Award
- Eastern Student Research Forum Travel Award
- National Medical Association Fellowship
- National Institutes of Health Summer Research Fellowship
- Southern Medical Association Scholarship Award
- Student Intern of the Year Award

From 2006-2009, he completed internship and residency training in internal medicine at Louisiana State University Health Sciences Center in New Orleans, LA. He was selected as Intern of the Year in 2006, and was the recipient of the Southern Society for Clinical Investigation Resident Award in 2008. From 2009-2010, he served as Chief Medical Resident.

In 2010, Dr. Bennett moved to Stanford University in Palo Alto, CA, and began fellowship training in both cardiology and vascular medicine, where he is now a second year fellow. His current research focuses on understanding the molecular mechanisms involved in the pathogenesis of diabetes induced cardiovascular disease, and resultant effects on the vascular endothelium. Dr. Bennett’s future plans include continued work as a physician scientist, with research in the area of diabetes induced cardiovascular disease. His clinical work will involve managing patients with cardiovascular and peripheral vascular disease, and performing cardiac and peripheral interventions.

Dr. Bennett is a member of the American College of Cardiology, the American Heart Association, the American College of Physicians, the Association of Black Cardiologists, and the Endocrine Society.

He has good memories of his colleagues and friends in the Pathology graduate program, especially the excellent guidance he received from his mentor, Dr. Joseph L. Messina, and dissertation committee. He resides near Stanford University in the Palo Alto, CA area, where he enjoys playing the trumpet and violin, and running.
Blood Management at UAB a Success:

Everyone that works in a transfusion service knows the challenges to adequately supply blood products whenever they are needed. As a country, we have learned from the Agency for Healthcare Research and Quality (AHRQ), that “The number of hospital stays for patients who received blood transfusions increased by 140 percent (from 1.1 million to nearly 2.7 million) between 1997 and 2007.” This increase was parallel to what we observed at UAB despite many outcomes studies demonstrating that a restrictive transfusion approach was as safe and perhaps better than transfusing to maintain a hemoglobin at or above 10 g/dL. Such studies started in the 1990s and have continued to confirm previous results. Since 2007, we embarked on a campaign to decrease blood utilization at UAB through a culture change and ongoing education about the risks and benefits of transfusion in patients who are hemodynamically stable and not experiencing acute blood loss. Our program fits what is being called “blood management”, defined as the optimal use of blood products in order to ensure patient safety with every unit of transfusion. This topic has recently been the focus of the Advisory Committee on Blood Safety and Availability of the Department of Health and Human Services (HHS) which unanimously recommended that the agency find ways to obtain data on patient blood management, transfusion utilization and patient outcomes associated with transfusion.

Thanks to the efforts of dozens of UAB individuals from hospital administration, clinical services, laboratory, nursing staff, and many others, the total number of red blood cell units transfused at UAB has steadily decreased since 2007 when we reached a peak of more than 40,000 units (Figure 1). For the most recent fiscal year of 2011 which ended on September 30, our usage was just below 30,000 units, a decrease of 25%. Had we continued on the trajectory we were going prior to 2007, we would have transfused between 45,000 and 50,000 units! That is an incredible difference and has undoubtedly been translated into better outcomes for patients based on the overwhelming published evidence favoring fewer transfusions. On a discharge basis, we went from a ratio of 0.96 units of red blood cells per patient discharged in 2007 to 0.55 for the quarter of April to June of 2011. As pathologists, we are stewards of the blood supply and must actively engage with our clinical colleagues to make them aware of the proper utilization of the precious and limited resource which is human blood products. Our experience reducing demand for red cells and increasing local collections of whole blood at UAB is going to be published in Transfusion in the near future.

—Marisa B. Marques, MD
UAB Researchers Bruce Julian, M.D., and Lea Novak, M.D., have co-authored a paper outlining a possible cause of IgA nephropathy, an inflammatory kidney disease that can lead to kidney failure.

The findings, published in the September issue of the Journal of Clinical Investigation, showed that IgA nephropathy — the most common form of glomerulonephritis, or inflammation of small blood vessels in the kidney — could be linked to an overzealous response against micro-organisms that normally live in the gut.

Individuals with IgA nephropathy, also known as Berger’s disease, have kidneys that leak blood and sometimes protein into the urine. The condition is caused by the over-accumulation of IgA — an antibody that helps rid the body of microbes — in the kidneys. It is not known what causes this.

The research team found that over-expression of a molecule called BAFF — also known as BLyS — helps IgA nephropathy develop in a way that is dependent on the immune response to particular gut micro-organisms called commensal flora. If those micro-organisms are eliminated, the researchers found, many features of the disease disappear.

This research not only provides clues to the cause of IgA nephropathy, but it also may lead to insights on how to treat the disease, investigators say.

The study was funded by the Canadian Institutes of Health Research, the Kidney Foundation of Canada and the National Institutes of Health. Institutions with co-authors on the paper include the University of Toronto; McMaster University, Hamilton, Ontario; University of Arkansas for Medical Sciences; and biotechnology company Biogen Idec, Cambridge, Mass.

—Reprinted from Oct. 3 issue of Synopsis.

Pathology Research Article:

Accolades/Awards:

Juan Rodriguez Barrantes—received the Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellows (F31).

Angela Gullard—was elected as President-elect Officer of the National Student Research Group of the American Association for Dental Research in May. She will serve as President from 2012-2013.

Publications/Presentations:

Scott Tanner—presented “Decreased regulatory T cell numbers in the intestine precede the development of colitis in the FVB.mdr1a-/- mouse”.


Juan Rodriguez Barrantes—presented at the International Conference on Bacillus Anthracis, B, cereus and B Thuringiensis, August 7-11, 2011. “C57/B16 C5 K0 mouse as mouse model for Bacillus anthracis Sterne strain and anti BclA protection studies”. Juan also gave this presentation at the Microbiology Research Day on September 24, 2011.

From the Graduate Students:
From the Graduate Students:


**General News**

2010-2011 MCP Graduate Program Student and Faculty Awards. Held May 6, 2011, Pittman Center for Advanced Medical Studies.

Rakesh Patel received the Most Outstanding Pathology Faculty Award, Tara Edmonds received the Award for Service as MCP President for 2010-2011, and Angela Gullard received the Most Outstanding Pathology Graduate Student Award and the Award for Service as MCP Vice-President for 2010-2011.

7th Annual PGSRD October 21, 2011

Oral Poster Winner: Scott Tanner
Posters Presentation Winners: 1st Place: Kimberly Dunham-Snary, 2nd Place: Angela Gullard, 3rd Place: Robert Bone. Angelina Londono Joshi won the Betty Pritchett Spencer Travel Award, presented to the most outstanding cancer related research conducted by a graduate student in the Department of Pathology.

Dr. Amy M. Denison, from CDC, Division of High-Consequence Pathogens and Pathology was the special seminar speaker.
From the Chief Residents...

Recruiting season for next year’s resident class is underway. Interviews are beginning in early November and will run through December. Thanks to all the residents who volunteered to take the applicants to breakfast and lunch. Please help us over the next couple of months in making the applicants feel welcome.

Amberly Nunez and Emily Gorman
Chief Residents, 2011-2012

UAB Pathology residents continue to be actively involved in research. Numerous residents and fellows authored and/or co-authored abstracts selected for presentation at several national meetings. They are listed below with their faculty mentors. Congratulations to everyone!

CAP Meeting
The annual meeting of the College of American Pathologists was held September 11-14th, 2011 in Grapevine, Texas. Chris Kragel and Thuy Nguyen attended the Residents Forum as UAB delegates. The residents’ forum meets twice a year, at both the CAP and USCAP meetings, to discuss issues we face as residents and soon-to-be practicing pathologists.

Chris Kragel: “Epiphysisal Chondromyxoid Fibroma with Prominent Adipose Tissue: Report of a Case with an Unusual Radiological and Histological Presentation.” (Dr. Shi Wei and Dr. Gene Siegel)

Thuy Nguyen and Xiaojun Wu: “Myofibroblastoma of the Breast: An ambiguous Tumor with Myofibroblastic and Smooth Muscle Differentiation.” (Dr. Shi Wei)

API Meeting
The annual meeting of the Association for Pathology Informatics was held October 4-7th in Pittsburgh, Pennsylvania.

Rob Hackney: “The Use of k-Nearest Neighbor Algorithm in the Classification of Peripheral Nerve Sheath Tumors.” (Dr. Jonas Almeida; electronic poster)

ASCP Meeting
The annual meeting of the American Society for Clinical Pathology was held in conjunction with the World Association of Societies of Pathology and Laboratory Medicine (WASPaLM) XXVI World Congress. The meeting was held October 19-22nd in Las Vegas, Nevada. Amy Treece attended the meeting as a member of the ASCP Resident Council, Alex Hanna as the UAB program liaison for ASCP, and Amberly Nunez as a member of the Cytology Non-GYN Assessment Committee.

Chris Kragel: “Fetomaternal Hemorrhage and Nonimmune Hydrops Fetalis: What can the Placental Examination Add?” (Dr. Oma Faye-Petersen and Dr. Vishnu Reddy)

Qian Dai: “Immunohistochemistry of Nucleophosmin in Residual Disease Detection of Acute Myeloid Leukemia.” (Dr. Yongsheng Ren)

Johnny Ross: “The Diagnostic Utility of Unusual Western Blot Banding Patterns for the Detection of Human Immunodeficiency Virus 2 (HIV-2) in Low Prevalence Populations.” (Dr. William Benjamin)

Zhiyong Ren: “Rupture of Hepatic Artery Pseudoaneurysm Following Liver Transplantation: A Case Report.” (Dr. Silvio Litovsky in conjunction with Drs. Derek DuBay and Devin Eckhoff, Department of Surgery)

ASDP Meeting
The 48th annual meeting of the American Society of Dermatopathology was held October 20-23rd, 2011 in Seattle, Washington.

George Garib: Hemophagocytosis is not a Specific Finding for the Diagnosis of Hemophagocytic Lymphohistiocytosis Associated with Subcutaneous Panniculitis-like T-Cell Lymphoma: A Study of 42 Panniculitis Cases.” (Dr. Aleodor Andea and Dr. Vishnu Reddy in conjunction with Dr. Lauren Hughey, Department of Dermatology)

George Garib: “Matrix-Producing Carcinoma: A Rare Variant of Metaplastic Breast Carcinoma with Metastasis to the Scalp in a 69-year-old Female: A Case Report.” (Dr. Aleodor Andea and Dr. Shi Wei)

Thuy Nguyen: “Mitotically Active Proliferative Nodule Arising in a Giant Congenital Melanocytic Nevus: A Diagnostic Pitfall.” (Dr. Aleodor Andea and Dr. David Kelly in conjunction with Dr. Amy Theos, Pediatric Dermatology; platform presentation)
From the Chief Residents Cont’d:

**ASC Meeting**
The 59th annual meeting of the American Society of Cytopathology will be held November 4-8th, 2011 in Baltimore, Maryland.

**Evan Alston:** "Trends in Pancreatic Pathology Practice Before and After Implementation of Endoscopic Ultrasound-Guided Fine-Needle Aspiration: An Example of Disruptive Innovation Effect?" (Dr. Isam Eltoum and Janie Roberson, CT(ASCP)). Paper accepted for publication in Archives of Pathology and Laboratory Medicine.

**Congratulations!**
Amy Treece was elected to a two year term on the ASCP Resident Council. She will be working with other members of the council to provide advice and recommendations to the ASCP Board of Directors through the Commission on Membership on ways in which the Society may best meet the professional and educational needs of the resident members.

**Representing UAB at National Meetings**

**CAP 2011** - Chris Kragel (top) and Jie (Jessie) Xu next to their posters at the annual CAP meeting.

**ASCP 2011** - Thuy Nguyen, Caitie Halverson, Taylor Deal and George Garib (from left to right).

**Amberly Nunez with Dr. Bruce Alexander at his ASCP Presidential Inaugural Reception.**

**Resident Social** - A group shot of the residents enjoying an evening of food and fun at Mellow Mushroom.

**Thuy Nguyen giving her platform presentation.**

**ASCP 2011** - UAB current and former residents, faculty and technologists with Dr. C. Bruce Alexander on the evening of his ASCP Presidential Inaugural Address. Congratulations Dr. Alexander!

**Zhiyong Ren, Amy Treece, Dr. Marisa Marques, Dr. Bruce Alexander, Johnny Ross and Patti Tichenor (front row). Laura Taylor, Chris Kragel, Dr. Aledor Andea, Dr. Meredith Lakey and Dr. Gene Siegal (back row).**
From the Chief Residents Cont’d:

Chris Kragel, Emily Borman, and Alex Hanna

Sam Borak, Amy Treece, Johnny Ross and Amberly Nunez

Taylor Deal, Yaolin Zhou, Jason Brazelton and wife, Lori Brazelton

Hazel Gore, MBBS Professorship:

On September 9, 2011, The UAB Department of Pathology held a reception at the Pittman CAMS Center to celebrate the establishment of the Hazel Gore, MBBS Endowed Professorship in Gynecologic Pathology. The Gore family, together with the UAB Department of Pathology and the UAB Division of Gynecologic Oncology, established the professorship in Dr. Gore’s honor. Dr. Hazel Gore began her medical career in Sydney, Australia in the early 1940s, and had a long and outstanding career at UAB.
YI-PING LI
NIH
The Role of AML1 in Osteoclastogenesis and Osteoclast Gene Expression
$380,141  10/01/10-8/31/12

DENNIS KUCIK
VA-IPA
Tao Yu
$52,095  01/01/11-12/31/12

WILLIAM GRIZZLE
NIH/Johns Hopkins University
Somatic Genetic and Epigenetic Changes as Predictors of Long-term Outcome in DCIS.
$25,000  04/01/11-03/31/13

VICTOR DARLEY-USMAR
SAIC/SRI
Task 3.2 Oxygen Consumption Rate (OCR) and Extracellular Acidification
$36,720  05/03/11-05/02/13

SCOTT BALLINGER
NIH
Mitochondrial-Nuclear Interactions and CVO Susceptibility
$2,243,446  07/19/11-04/30/15

JOSEPH MESSINA
VA-IPA
Tatyana Gavrikova
$108,007  08/01/11-07/31/12

AUDRA FROST
Susan G. Komen Foundation
Gli1 in the Development and Persistence of Micrometastases of Breast Cancer
$600,000  08/18/11-08/17/14

JOSEPH MESSINA
VA-IPA
John Franklin
$126,113  09/01/11-08/31/12

SELVERANGAN PONNAZHAGAN
NIH
Targeted Stem Cell Therapy Coupling Angiogenesis and Osteogenesis for Bone Defects
$1,648,125  09/01/11-08/31/16

SELVERANGAN PONNAZHAGAN
DOD
Regenerative Stem Cell Therapy for Breast Cancer Bone Metastasis
$549,376  09/15/11-08/14/13

UPENDER MANNE
NCI/NIH
Morehouse School of Medicine/ Tuskegee University/University of Alabama Cancer Center Partnership
$5,710,003  09/23/11-08/31/16

ROBERT HARDY
Siemens, Inc.
MCSA-Centaur-201001.pro.0
$25,943  10/04/11-10/03/12

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.