

**Jay M. McDonald, MD**

**Robert and Ruth Anderson Professor and Chair**

### MESSAGE FROM THE CHAIR

The Department of Pathology faculty achieved significant success in the past year in fundamental and translational research and international health. Below are four notable breakthroughs.

**Moon Nahm** and colleagues discovered and named 6c, a pneumococcus in *Streptococcus pneumoniae*, a major achievement critical to the development of pneumococcal vaccines. The NIH selected this discovery as a major achievement in pneumococcal research for 2007. Their study appeared in the *Journal of Clinical Microbiology*.

**Rakesh Patel**, et al, reported in the *Journal of Clinical Investigation* that administering inhaled nitric oxide during liver transplantation decreases the risk of organ failure by limiting reperfusion injury, which may also improve heart, lung, kidney and pancreas transplant outcomes.

**Thomas Clemens**, et al, showed in the *Journal of Clinical Investigation* the importance of the key hypoxia-inducible factor alpha pathway that couples angiogenesis to osteogenesis during skeletal development.

**Casey Weaver** and his team were instrumental in defining, in *Nature*, a new lineage of T cells that promises to improve understanding of the mechanisms by which the adaptive immune system coordinates host defense and, when dysregulated, generates autoimmune disease.

Sincerely,

**Jay M. McDonald, M.D.**

### PATHOLOGY IN FOCUS EDITORIAL COMMITTEE

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### MESSAGE FROM THE PATHOLOGY FACULTY ADVISORY COUNCIL

The FAC has been active in promoting mentoring activities among faculty and trainees. Our faculty and trainees make this process work and keep us at the forefront of national recognition. This newsletter showcases many of the accomplishments of our faculty and trainees on a national level.

Since our last newsletter, we have received suggestions to increase interaction among our faculty. Two of the suggestions received from departmental colleagues and alumni are listed below.

1. Trainee Recruitment: Ensure that clinical and non-clinical faculty are represented on the Molecular and Cellular Pathology Graduate Program and Pathology Residency Program selection committees.
2. Encourage inter-divisional faculty participation in conferences and lectures. This has been very effective in the Advances in Molecular and Cellular Pathology Noon Seminar as well as the Translational Research Seminar in Anatomic Pathology.

Such suggestions are very productive, so keep them coming.

Please contact us at [pathinfo@uab.edu](mailto:pathinfo@uab.edu) with your ideas.

**Nirag C. Jhala MD**, MIAC, Chair  
**David Chhieng, MD**-Anatomic Path  
**William Benjamin, PhD**-Lab Medicine  
**Stephen Moser, PhD**-Lab Medicine  
**Gary Simmons, MD**-Forensic/Neuropath  
**Rakesh Patel, PhD** -Molecular & Cellular

### Department of Pathology Web Site

<http://www.path.uab.edu>

### KEEP IN TOUCH.....Newsletter

E-Mail: [PATHINFOCUS@uab.edu](mailto:PATHINFOCUS@uab.edu)

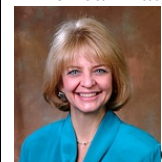
### FACULTY ACHIEVEMENTS



**Maaik Everts, PhD**, Assistant Professor, Molecular and Cellular Pathology, received the John R. Durant Award for Excellence in Cancer Research at the Comprehensive Cancer Center retreat.



**Gregory Davis, MD**, Associate Professor, Forensic Pathology, has been appointed to the Forensic Pathology Committee of the College of American Pathologists.



**Ona Marie Faye-Petersen, MD**, Associate Professor, Anatomic Pathology, has been appointed to the Editorial Board of *Obstetrical and Gynecological Survey*. She is Chair-elect of the Education Committee and a Councilor-at-Large for the Society for Pediatric Pathology.



**Robert Hardy, PhD**, Associate Professor, Laboratory Medicine, has been appointed to the American Board of Clinical Chemistry.



**Joanne Murphy-Ullrich, PhD**, Professor, Molecular and Cellular Pathology, has been elected Vice-Chair in 2010 and Chair in 2013 of the FASEB Summer research Conference and was the opening speaker at the SIBLING Gordon Conference in 2007.

## FACULTY ACHIEVEMENTS



**Ralph Sanderson, PhD**, Professor, Molecular and Cellular Pathology, has been appointed to the Editorial Board of the *Journal of Biological Chemistry*



**John Shacka, PhD**, Instructor, Neuropathology, has been appointed to the Editorial Board of *Autophagy* & a member of the Council for The Histochemical Society.



**Ken Waites, MD**, Professor, Laboratory Medicine, has been selected to present the Division G "Mycoplasmology" Lecture at the 2008 American Society for Microbiology General Meeting.



**Omar Hameed, MD**, Assistant Professor, Anatomic Pathology, has been inducted into Alpha Omega Alpha, the national medical honor society.



**Gary Simmons, MD**, Assistant Professor, Forensic Pathology, has been elected to the Board of Directors of the National Association of Medical Examiners.

**Peter Anderson, PhD, DVM**, Professor in Molecular and Cellular Pathology has been appointed Chair of the National Board of Medical Examiners Pathology Committee, and to the USMLE Step 1 Test Material Development Committee for Pathology.

## WELCOME NEW FACULTY



**Marla C. Troughton, M.D.**  
**Assistant Professor of Pathology**  
**Division of Laboratory Medicine**

Prior to joining UAB, Dr. Troughton served as Medical Director for the Carolinas Blood Services Region of the American Red Cross. The largest of the American Red Cross blood regions, it is headquartered in

Charlotte, North Carolina. She was Adjunct Assistant Professor at the University of North Carolina Hospital and Duke University Medical Centers.

Dr. Troughton received her undergraduate degree at Austin Peay State University and her medical degree at James H. Quillen College of Medicine, East Tennessee State University. After completing Pathology Residency at the University of South Alabama and a Fellowship in Transfusion Medicine at the University of North Carolina, Dr. Troughton practiced surgical pathology in Knoxville, Tennessee before transferring to the American Red Cross in 2004.

Dr. Troughton serves as an AABB Assessor of hospital transfusion services and blood donor centers. She also serves the AABB and American Society for Apheresis (ASFA) as a member of various committees.



**Klaus F. Sellheyer, MD**  
**Associate Professor of Dermatology & Pathology, Division of Anatomic Path**

Dr. Sellheyer comes to UAB from the Cleveland Clinic where he served as a staff Dermatopathologist since 2003. Dr. Sellheyer has trained extensively internationally and in the United States. In 1985 he received his MD from the University of Gottingen in Germany and completed his residency in dermatology there also. He completed his Anatomic Pathology residency at Mount Sinai College of Medicine in NY. He then completed a Dermatopathology fellowship at New York University followed by a Dermatopathology fellowship at the University of Chicago. He is board certified in dermatology, anatomic pathology and Dermatopathology.

Dr. Sellheyer has a primary appointment in Dermatology and a secondary appointment in Pathology. He will serve as Head of the Dermatopathology service and have general Dermatology clinic service.

In addition to his clinical expertise, Dr. Sellheyer has extensive research experience including a postdoctoral fellowship in electron microscopy and a research fellowship in molecular dermatology at Baylor College of Medicine. His current research focuses on skin and hair follicle development. Dr. Sellheyer has identified a novel protein that is asymmetrically expressed in hair papilla and may be responsible for directing the orientation of hair growth.

## FACULTY PROFILE



**Xu Feng, PhD**  
**Associate Professor of Pathology**  
**Div. of Molecular and Cellular Pathology**

Dr Xu Feng received his PhD in Zoology/Molecular Biology from the University of Vermont in 1994 under the mentorship of Dr. George Happ. He pursued his postdoctoral research training in the laboratory of Dr. Steven Teitelbaum at Washington University School of Medicine where he was transformed from an entomologist into a bone biologist. In 2000, Dr Feng joined the UAB Department of Pathology as an assistant professor and was promoted to associate professor in 2005. Dr Feng received an individual National Research Service Award (NRSA) from the National Institutes of Health (1997-1999) and was a recipient of the John Haddad Young Investigator Award from Advances in Mineral Metabolism (AIMM) and the American Society for Bone and Mineral Research (ASBMR) in 2000.

Since coming to UAB, Dr Feng has focused on investigating the molecular mechanism of osteoclast differentiation and function and understanding the regulatory role and signaling mechanism of the receptor activator of nuclear factor kappa B (RANK) and its cognate ligand (RANKL) in osteoclasts. His laboratory has recently identified numerous RANK cytoplasmic motifs that mediate osteoclast formation, function and survival in *in vitro* assays. The potency and specificity of these RANK motifs in osteoclast biology have convinced him to expand his research programs into translational research. He is currently developing innovative cell-based assay systems for identifying compounds through high throughput screening (HTS). Upon completion of the assays, he will seek collaboration with NIH HTS screening centers or pharmaceutical companies to develop the next generation of antiresorptive drugs with higher efficacy and specificity. In addition, his laboratory has just begun to investigate the molecular mechanism of tumor (breast and prostate) bone metastasis. He is specifically interested in addressing how breast cancer cells are attracted to the prospective bone metastasis sites. A better understanding of the molecular mechanism by which breast cancer cells are attracted to bone may facilitate the revelation of better therapeutic targets/strategies for the devastating disease.



## FROM THE CHIEF RESIDENTS



Carrie Knight, M.D.

Anatomic Pathology



Meredith Lakey M.D.

Clinical Pathology

We are off to a great start this year with yet another recruiting season just around the corner. Resident candidates are scheduled for interviews starting in November. Current residents, together with faculty, will play a large role in our recruiting process.

### ASCP Meeting in New Orleans

Many UAB residents and faculty members recently attended the 2007 meeting of the American Society for Clinical Pathology. In addition to numerous abstract poster presentations, two UAB trainees, **Holly Burford, MD**, and **Carrie Knight, MD**, were chosen as finalists in the Resident Research Symposium.

**Jeremy Henderson, MD**, and **Liz Hanson, MD**, represent UAB on the ASCP Resident Council. Jeremy is one of nine members nationally of the ASCP Resident Council as well as a member of the ASCP eCourse Committee. Liz is our program's liaison to the Resident Council and was recently appointed as a member of the ASCP Finance Committee.



Liz Hanson (PGY1) and Jeremy Henderson (PGY4) at the ASCP Resident Council Luncheon.

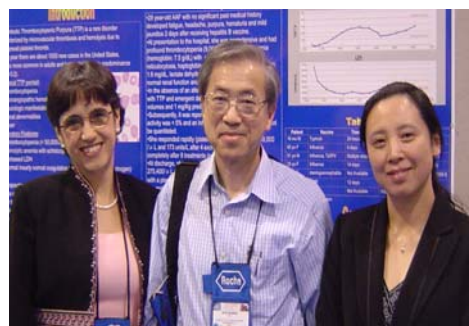
### Arthur Purdy Stout Award

An Arthur Purdy Stout Society of Surgical Pathologists Study Stipend for 2008 was awarded to **Shi Wei, MD, PhD**, a PGY4 resident who will be doing a Surgical Pathology Fellowship at UAB next year.

The Arthur Purdy Stout Study Stipends are designed to allow residents in pathology to spend a month at another institution to pursue study of a specific area of diagnostic surgical pathology. Shi's award will enable him to spend a month at Emory University studying Surgical Pathology/Soft Tissue Pathology under the supervision of Dr. Sharon Weiss, Vice Chair of Pathology and Associate Dean of Emory University School of Medicine.

### AABB Meeting in Anaheim

**Shaoying Li, MD**, and **Tad Cherry, MD**, presented posters at the recent American Association of Blood Banks Meeting. Shaoying's poster was entitled "Thrombotic Thrombocytopenic Purpura Following Hepatitis B Vaccination." Her faculty mentors were Drs. Huang and Marques. Tad's poster was entitled "Therapeutic Plasma Exchange in HIT Prior to Heparin Re-exposure." His faculty mentor was Dr. Marques.



Shaoying Li (PGY2) with Drs. Marques and Huang at the AABB Meeting.

### CAP Meeting in Chicago

**Meiklejohn McKenzie, DO**, and **Amanda Crowe, MD**, represented UAB at the CAP Residents' Forum which took place in October during the College of American Pathologists Annual Meeting. Topics discussed during the forum included the proposed Standardized Fellowship Application Form, the CAP Residents Online Community, and the Clinical Pathology Training Survey.

Residents presenting abstracts at the **CAP Annual Meeting** included:

**Shi Wei, MD, PhD**: Incidental Neuroblastoma *In Situ* in a 35-Day-Old Neonate Born at 23 Weeks of Gestational Age (Faculty mentor: Dr. Ona Faye-Petersen).

**Zhaohai Yang MD, PhD**: *Clostridium septicum* Aortitis Causing Aortic Dissection in a 22-Year-Old Man (Faculty mentor: Dr. Stephanie Reilly).

**Diane Peterson, MD**, will attend the **Academy of Forensic Sciences Annual Meeting** in Washington, D.C. in February 2008. Her poster presentation is entitled "Gas Chromatography of Postmortem Blood Revealing Sevoflurane in a Patient Six Hours Post-op". Her faculty mentor is Dr. Andrew Robinson, and co-authors include Dr. Gary Simmons and Dr. Robert Brissie.

### Resident Socials

The residents would like to thank Dr. Alexander for his continued support of UAB Pathology Resident Socials. The socials were instituted by last year's chief residents, Drs. Yara Park and Preeti Sharma, and have been well attended this academic year. Residents, fellows, and their families meet monthly after work to enjoy good eats and company. Recent venues have included Mellow Mushroom, Acapulco Mexican Restaurant, and Dave's Pizza.

## **PATHOLOGY GRADUATE PROGRAM**

**Scott W. Ballinger, PhD,**  
**Program Director**

The Molecular and Cellular Pathology Graduate Program is now accepting applications for Fall 2008. Please see the Graduate Program's website at <http://peir.path.uab.edu/pathgrad/> for more information

## **ACHIEVEMENTS**

Congratulations to **Scott Isbell** who successfully defended his thesis on October 31, 2007. "Nitrite Conversion to Nitric Oxide: Biological Mechanisms and Therapeutic Implications."

Congratulations **Saman Khaled**, one of only fifteen graduate students, post-doctoral fellows and working scientists from 11 different countries selected for the NASA Space Radiation Summer School at the U.S. Department of Energy's Brookhaven National Laboratory.

Congratulations to **Jason Ashley** and **Joel Jules** who were awarded ASBMR Annual Meeting Young Investigator Travel awards.

Congratulations to **Scott Isbell** for his selection by the Hughes Med-Grad Fellowship Program Steering Committee to represent UAB and the UAB Hughes Med-Grad Program at the national HHMI Meeting in Maryland, September 24-26.

Congratulations to **Ashley Preston** who received a travel grant from Cayman Chemical to attend the Society for Free Radical Biology and Medicine meeting in Washington, DC.

Congratulations to **Matthew Beatty** who was awarded a travel scholarship by the Susan G. Komen Foundation for the 2007 American Society of Gene Therapy meeting.

Congratulations to **Prithish Pawar** for receiving the AACR-Aflac, Inc. travel award.

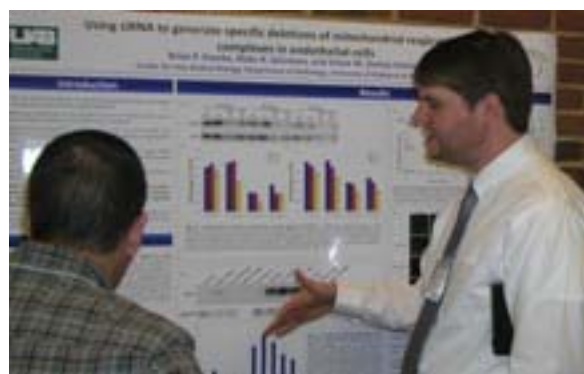
Congratulations to **Dario Vitturi** for 1) receiving a travel award to the NIH "Role of Nitrate in Physiology, Pathophysiology & Therapeutics meeting and 2) for his 2<sup>nd</sup> Place poster presentation award at the 18<sup>th</sup> Vascular Biology & Hypertension Symposium at UAB.

Congratulations to **Lakisha Moore** who received 1<sup>st</sup> place at the UAB Gene Therapy Symposium poster presentation.

## **Pathology Graduate Student Research Day** Friday, October 19, 2007

The Pathology Graduate Student Research Day was held on October 19, 2007 at the Great Hall in Hill University Center. This year's guest speaker was MCP Graduate Program Alumnus **Dr. Sruti Shiva**, Vascular Medicine Branch National Heart Lung Blood Institute, National Institutes of Health.

Pictures from Research Day



## **Oral Presentations Winners:**

- 1st Place **Joel Jules**
- 2nd Place **Thomas Bodenshtein**
- 3rd Place **Christopher Dodd**



## **Poster Presentations Winners:**

- 1st Place **Dario Vitturi**
- 2nd Place **Jason Ashley**
- 3rd Place **Brian Dranka & Lakisha Moore**

**Mr. Ralph Patterson** has been appointed as staff coordinator for the Pathology Graduate Program. He replaces Theresa Henson. Mr. Patterson can be reached at (205) 934-2445.

## **UPCOMING EVENTS:**

Christopher Dodd will present his Final Defense, December 14, 2007. Bevil Building, Room 170