For the second year in a row, Academic Analytics has ranked the UAB Department of Pathology third in the country for Faculty Scholarly Productivity in the scientific discipline of Pathology. This year, UAB trailed only the University of Washington and Harvard University in this independent ranking based on a variety of productivity metrics including publications, citation frequency, grant funding and academic awards. Locally, the Department of Pathology was one of six School of Medicine departments recognized by Dean Robert Rich for quality performance over the last academic year. Such recognition spotlights the outstanding performance of our faculty, staff and students over this past year.

Although the difficult economic times have necessitated a careful review of all departmental operations, we have been able to continue our support of a variety of faculty, graduate student and housestaff initiatives. New faculty recruitment efforts are underway in several divisions and the American Recovery and Reinvestment Act has provided financial support to multiple investigators in our department. We are exploring new opportunities to expand our clinical operations and our faculty continues to compete successfully for NIH, VA and other grant funding. By operating efficiently, investing in high priority scientific foci, and expanding selective clinical operations, we will be well positioned to meet future financial challenges.

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

I am pleased to announce the appointment of Victor Darley-Usmar, Ph.D., as Vice Chair for Research in the Department of Pathology, effective October 1, 2009. While assuming new responsibilities in his role as Vice Chair for Research, Dr. Darley-Usmar will continue to serve as Interim Division Director for the Division of Molecular and Cellular Pathology until a new Division Director is appointed.

Dr. Darley-Usmar was trained as a biochemist at the University of Essex in England and then moved to the University of Oregon to pursue his interests in the structure and function of mitochondrial proteins in human disease. After a period as an Assistant Professor in Japan, he joined the Wellcome Research Laboratories as a Research Scientist in the drug discovery program. While there, he developed programs in redox biology with a particular focus on cardiovascular disease, nitric oxide and mitochondria. In 1995, Dr. Darley-Usmar joined UAB to establish his own research group in the Department of Pathology. He is presently a Professor of Pathology and Director of the Center for Free Radical Biology at UAB. He now combines his major research interests in mitochondriology and reactive oxygen and nitrogen species with the aim of understanding the mechanisms of cell death in pathophysiology. Since joining UAB he has served in a number of leadership roles including Director of the Molecular and Cellular Pathology Graduate Program, Associate Dean for Postdoctoral Education and Chair of the Conflict of Interest Review Board.

Dr. Darley-Usmar was recently named President of the Society for Free Radical Biology and Medicine and was a 2009 recipient of the Dean’s Award for Excellence in Mentorship at UAB. As Vice Chair, he will assist in developing graduate and postgraduate training programs, recruiting outstanding faculty and building the research infrastructure in the Department of Pathology.

Please join me in welcoming Dr. Darley-Usmar to this new role.

— Dr. Kevin A. Roth
Professor & Chair
Faculty Profile: Nicole N. Balmer, M.D.

Dr. Nicole Nabors Balmer recently joined the UAB pathology faculty. Dr. Balmer should be a familiar face to many in the department. She is a native of Gadsden, Alabama, first moving to Birmingham in 1994 to attend Birmingham-Southern College, where she was a Phi Beta Kappa graduate. Dr. Balmer then went on to medical school at UASOM, where she was first introduced to pathology while working on an NIH summer scholar grant in Dr. Jay McDonald’s lab. The rest is history, so to speak.

After having a couple of excellent elective experiences in pathology at UAB as a medical student, Dr. Balmer left Alabama and headed west to the University of Colorado Health Sciences Center for her Anatomic and Clinical Pathology residency. While in residency she served as the president of the Housestaff Association, and discovered an affinity for dermatopathology and downhill skiing. Dr. Balmer returned to UAB for a surgical pathology fellowship in 2007-2008, prior to leaving again for a dermatopathology fellowship at Wake Forest Baptist Medical Center in Winston-Salem, North Carolina this past 2008-2009 academic year. She recently passed her dermatopathology boards, and is looking forward to not thinking about boards again until recertification time comes around.

Dr. Balmer will be working in both surgical pathology and dermatopathology. She is excited about working with fellows, residents and medical students, and will be assisting in teaching the medical student courses this year. When not working, Dr. Balmer can be found spending time with her children, Isabella, 4 years, and Little Dan, 1 year; and her husband Dan, a structural engineer at the Southern Company.

Faculty Profile: Dr. John Shacka, Ph.D.

Dr. John Shacka is a newly appointed Assistant Professor in the Pathology Division. John arrived at UAB in 2000 after receiving his Ph.D in Pharmacology and Toxicology from VCU in Richmond, VA and subsequent NIH postdoctoral fellowship. John originally joined the Pathology faculty as Instructor in 2005 following a postdoctoral fellowship in the laboratory of Dr. Kevin A. Ruth. John has received numerous grants and has published over 25 peer-reviewed manuscripts, and currently serves on the Editorial Board for the journal Autophagy. John is active in the Histochernical Society, a national organization where he sits on Council and is the present Chair of the Membership and Awards Committee. At UAB John is the current Chair for the Dept. Pathology Faculty Advisory Council and volunteers on several other committees and as a judge for scientific sessions. John plays an active role in graduate teaching here at UAB and runs the weekly Autophagy journal club with fellow Neuropathology Division faculty member Dr. Jianhua Zhang. John plans to offer an advanced level Cell Death graduate level course in the future, following the switch to the new theme-based graduate curriculum.

Dr. Shacka is currently busy establishing his independent laboratory which is focused on studying the regulation of neuron death following acute injury and in neurodegenerative disease. In particular, John’s research program focuses on the role of the autophagy lysosome pathway (ALP) in regulating neuron death and survival. The ALP is an important intracellular degradation pathway for cytoplasmic contents that works along with the ubiquitin proteasome system (UPS) to recycle damaged cytoplasmic contents. The ALP has been shown to be altered following acute neuronal injury and in early stage neurodegenerative disease, possibly as an initial survival response. However persistent alteration of the ALP has been shown to induce neuron death in several experimental models. The ALP may be ultimately inhibited following a period of persistent activation as in late stage neurodegenerative disease, possibly due to the accumulation of undigested lipoproteins that further compromise lysosome function and their resultant clearance. Dr. Shacka is actively seeking molecular targets that work to preserve lysosome function and in turn maintenance of the ALP, which may lead to enhanced neuronal survival following acute or chronic insult. John’s current projects focus on the role of ALP in Parkinson disease and in traumatic brain injury using in vivo (mouse) and in vitro (cell culture) methods.

John’s wife of 10 years, Sonya Heath is an Assistant Professor in the Dept. of Medicine, Infectious Diseases Division here at UAB. They live in Homewood with their two boys (Ben who will turn four on Christmas Day and Henry, 15 months) and a Welsh Corgi named Jake. In his spare time John enjoys running, playing racquetball and watching Virginia Tech Football with his family.
In 2007, she moved to the Molecular and Cellular Pathology Division to provide administrative support for Dr. Tom Clemens, the Division Director until 2009. During this time, she worked closely with the ASBMR assisting Dr. Clemens with his duties as the Journal of Bone and Mineral Research Editor-and-Chief.

“The Pathology Faculty and Staff are a wonderful group of people who take great pride in their work. I learn a variety of new things every day. I love working with grants and feel a great sense of accomplishment when they are funded. Working here has opened many doors and allowed me opportunities to further my career and I am very thankful.”

Before UAB, Traci worked as a Hospital Services Supervisor for the American Red Cross in Huntsville, AL. She returned to Birmingham in 2001 to assist in her mother’s recovery from breast cancer. She and her husband, Daryl, have been married 7 years and live in Tuscaloosa County with their two children. She enjoys gardening, watching old movies, and spending time with her family.
From the Pathology Residency Program

Amy C. Gruszecki, D.O.
Dr. Amy Gruszecki completed her residency training at UAB in June of 2005. She had received her D.O. degree from Lake Erie College of Osteopathic Medicine in Erie, Pennsylvania in 1999. Before attending medical school, she obtained a Master of Science in Forensic Science (MSFS) from UAB. Dr. Gruszecki began her AP/CP residency in 2000. In 2003-04, she took a year to complete a Forensic Pathology Fellowship, and then finished her last year as Chief Resident. Currently, Dr. Gruszecki is a Medical Examiner in Dallas, Texas. She works for the Southwestern Institute of Forensic Sciences as one of 10 Forensic Pathologists with jurisdiction or consultation on over 4 thousand cases a year. Additionally, she is an Assistant Professor of Pathology at University of Texas Southwestern Medical Center in Dallas, Texas, where she teaches Forensic Pathology to residents and fellows. Dr. Gruszecki says, “I was very lucky to train (at UAB) with such talented faculty and staff. The Forensics faculty and staff, in particular, gave me all the tools, training and the tremendous encouragement I needed to succeed in my current profession.” She is active in the American Academy of Forensic Sciences (AAFS) and the National Association of Medical Examiners (NAME). Dr. Gruszecki and her husband, David Leavitt, live in Dallas, where she finds time in her busy schedule to be an active sports Team Mom for her 6-year old son, Matthew.

From the Pathology Graduate Program

Shuting Bai, M.D., Ph.D.
Dr. Shuting Bai obtained his Ph.D. degree in Pathology from UAB in 2002. He received his M.D. degree from Beijing Medical University in Beijing, China in 1990 and was an orthopaedic surgeon in the Department of Orthopaedic Oncology at Beijing Ji Shui Tan Hospital from 1990-1996. Dr. Bai entered the UAB Pathology Graduate Program in 1997. He studied in the laboratory of Dr. Xu Cao, focusing on bone biology and metabolism. His discovery that Smad6 has a role in the nucleus as well as the cytoplasm of bone was the subject of a paper which resulted in the Young Investigator Award for Dr. Bai from the American Society of Bone and Mineral Research in 1999. After obtaining his Ph.D., Dr. Bai went to Washington University School of Medicine in St. Louis as a post-doctoral fellow/Research Associate from 2002-2006 to study osteoclast differentiation mechanisms. His research papers were published in peer-reviewed journals including Nature Medicine, Journal of Clinical Investigation, Journal of Biological Chemistry, and EMBO Report. In 2007, Dr. Bai returned to UAB as a Pathology Resident. He maintains his interest in research, and under Dr. Siegal’s instruction, worked on a project investigating the expression of CXCR4 in relation to the metastatic capability of chondrosarcoma. This work was presented at the 2009 USCAP conference along with research he is doing with Dr. Hameed on the clinicopathological characteristics of renal cell carcinoma arising from autosomal dominant polycystic kidney disease. When rotating through hematopathology, Dr. Bai worked with Dr. Reddy investigating differences in stromal cell markers in myelodysplastic disease. Most recently, Dr. Bai presented a poster session with Dr. Huang of a case report of rapid improvement of congestive heart failure with therapeutic plasma exchange at the 2009 annual meeting of the American Association of Blood Banks in New Orleans. Dr. Bai will finish his residency training in 2011, and plans to follow it with a fellowship in surgical pathology, focusing on GI pathology and tumors of bone and soft tissue.
The holiday season is quickly approaching! As Dr. Cheryl Palmer leads us into a new (and busy) recruitment season as the Recruitment Committee Chair, we’d like to say thanks in advance to all the residents and faculty for donating your time to recruit great residents and continue our tradition of a strong clinical residency program. Also, we appreciate Karen for all her hard work coordinating the visits by all the resident candidates.

CAP Meeting
Several of our residents attended the 2009 CAP meeting in Washington, DC during October. UAB was represented at the Residents Forum by Meiklejohn McKenzie and Kathrina Alexander. The Residents Forum meets twice a year, at both the CAP and USCAP meetings to discuss issues we face as both residents and soon to be practicing pathologists. Liz Kerr presented two posters at the meeting: “Clinicopathological Correlation and Microvascular Density Counts in Sinonasal Melanomas” (Mentor: Dr. Nasser Said-Al-Naief) and “The use of HPV PCR in the Histopathologic Diagnosis of Florid Oral Papillomatosis associated with Malignant Acanthosis Nigricans versus Multifocal Epithelial Hyperplasia.” (Mentor: Dr. Patricia Devillers)

Also, Marian Kraemer attended the CAP meeting as a Junior Committee member for Histotechnology. As a committee member, Marian is expected to attend four meetings per year with the next taking place in San Diego at the end of October.

AABB Meeting
Shuting Bai presented “Rapid Improvement of Left Ventricular Ejection Fraction (LVEF) by Plasma Exchange in a Patient with Congestive Heart Failure” (Mentor: Dr. Shu T. Huang) at this year’s AABB meeting at New Orleans. Our Transfusion Medicine Fellow, Jose Lima, also presented at AABB. His poster title was “Experience in solving nonspecific reactions in Gel antibody screen test.” (Mentor: Dr. Shu T. Huang)

ASCP Meeting
Several of our residents celebrated Halloween in Chicago this year. UAB was well represented at the ASCP meeting, including the following presentations:

Xiaojun Wu – “Epithelial-mesenchymal transition in resected pancreatic carcinoma.” (Mentor: Dr. Nirag Jhala)

Virginia Lee Dailey – “The role of free light chains in plasma cell leukemia: A single institution study.” (Mentor: Dr. Vishnu Reddy)

Elizabeth H Kerr – “Pitfalls of Human Papilloma Virus Diagnostic Tests for Oral and Pharyngeal Epithelial Dysplasia and Squamous Cell Carcinoma.” (Mentor: Dr. Patricia Devillers)

Emily S Reisenbichler – “Reduced membranous b-catenin expression in solid papillary carcinoma of the breast: a marker of defective E-cadherin/b-catenin signaling?” (Mentor: Dr. Omar Hameed and Dr. Nirag Jhala)

Meiklejohn McKenzie – “Can a cytokeratin antibody cocktail be used to stratify cases of atypical ductal hyperplasia of the breast?” (Mentor: Dr. Omar Hameed)

Shaoying Li – “Gastric Injury After Microspheres Radioembolization of Hepatocellular Carcinoma.” (Mentor: Dr. Nirag Jhala)

Kathrina Alexander – “Report of a mysterious chronic illness in a family of six and the importance of the pathologist in the diagnostic process.” (Mentor: Dr. Kenneth Waites and Dr. Andrew Robinson)

In addition, congratulations to Shaoying who will also be presenting “Expression of AIF and HtrA2/Omi in CLL/SLL and DLBCL” (Mentor: Dr. Yongsheng Ren) as both an oral presentation and poster as one of the top finalists for the AJCP Resident Research Symposium.

As a new member of the ASCP Resident Council, Amberly Nunez will represent UAB in the council. The Council provides 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.
Inspections

Laboratory inspections help laboratories achieve the highest standards of excellence to positively impact patient care by ensuring laboratories meet or exceed regulatory requirements. Three of our residents recently participated in a lab inspection of another institution. Marian Kraemer, Emily Gorman, and Jose Lima attended the CAP lab inspection in Salt Lake City during October.

All work and no play....

Once a month, the residents get together after work in order to promote friendship and camaraderie. Families are always welcome and a good time is had by all....

AABB Meeting

Current and former UAB residents and fellows attended the AABB annual meeting in New Orleans recently.

Shaoying Li, Kathrina Alexander, Emily Reisenbichler, Virginia Dailey, Amberly Nunez, Liz Kerr, and Xiaojun Wu at ASCP in Chicago.

Liz Kerr, Thuy Nguyen and her fiancé, Eric at a resident social.

Yara and Harry Park, Tad Cherry, and Marisa Marques

Tracy Rauch, Jose Lima, and Nancy Dunbar (UCSF TM Fellow)

Dr. Huang, his wife, and Shuting Bai

Mark Steciuk and Amanda Crowe, also at a resident social.
From the Graduate Students:

Awards:
- Thomas Bodenstine: Received the Betty Pritchett Spencer Travel Award at the PGSRD for his poster entitled “BRMS1 Restoration of Gap Junctional Intercellular Communication Involves Downregulation of Phosphoinositide 3-kinase (PI3k) in Multiple Cancer Models”. Tom also received 1st Place in Oral Presentations for his presentation with the same title.
- Tara Edmonds: Received 1st Place for her poster presentation at the PGSRD for her poster entitled “Infectious Molecular Clones of Transmitted/Founder HIV-1 Infect Monocyte-Derived Macrophages Less Efficiently Than Highly Macrophage-Tropic Viruses”.
- Jonathan Hensel: Received 2nd Place for his poster presentation at the PGSRD for his poster entitled “The Role of Antimicrobial Peptide LL-37/CRAMP in Cancer Progression and its Potential as a Novel Therapeutic Target”.
- Ashlee Higdon: Received 3rd Place for her poster presentation at the PGSRD for her poster entitled “Control of the Induction of Heme Oxygenase-1 by the Mitochondrially Targeted Antioxidant MitTocopherol”.
- Jessica Brenneman: Received 2nd Place at the UAB Vascular Biology and Hypertension Symposium for her poster entitled “Mouse Strains with Differential Cardiovascular Disease Susceptibilities Have Significantly Different Measures of Mitochondrial Function and Damage”. Jessica also received an American Heart Association Predoctoral Fellowship entitled “Mitochondrial Haplotype, Function, and Damage Play a Role in Cardiovascular Disease Susceptibility in C57 and C3H Mice”. Her mentor is Dr. Scott Ballinger.

Publications/Presentations:
- Joshua Baalwa was recently invited for the 5th Annual meeting of the Center for HIV/AIDS Vaccine Immunology (CHAVI) meeting that took place at the Sheraton Imperial Convention Center in Durham, North Carolina, October 4-7, 2009. Joshua gave an oral presentation and presented a poster on “Molecular Characterization of Transmitted/Founder HIV-1 in Acutely Infected Subjects with Subtype A and D Infection”. CHAVI is mainly funded by NIAID/NIH.
**UAB Comprehensive Cancer Center Retreat:**

The Department of Pathology was well-represented at the UAB Comprehensive Cancer Center Retreat on October 28, 2009. Several awards were won by pathology members:

- **Mick Edmonds:** Received 3rd Place for his poster entitled "BRMS1 Restoration of Gap Junctional Intercellular Communication Involves Down-regulation of Phosphoinositide 3-kinase (PI3k) in Multiple Cancer Models".

- **Thomas Bodenstine:** Received the John R. Durant Award for Excellence in Cancer Research (graduate student category) for his poster entitled "Regulates Metastasis-Associated microRNA Expression".

- **Benjamin Beck, Ph.D.:** Received the John R. Durant Award for Excellence in Cancer Research (postdoc category) for his poster entitled "Adoptively-transferred ex vivo expanded gamma-delta T cells mediate in vivo antitumor activity in preclinical mouse models of breast cancer".

**Pathology Faculty Recognized at 2009 ASCP Meeting:**

- **Gene P. Siegal, M.D., Ph.D.** presented the Arthur Purdy Stout Society address at the 2009 ASCP annual meeting. Dr. Siegal is immediate past-president of the Arthur Purdy Stout Society of Surgical Pathologists. His talk was titled, "KEY3 Fibrous Dysplasia of Bone: Paradigm Shifting in the Search for Its Pathogenesis," and was an in-depth overview of fibrous dysplasia of bone – including its epidemiology, sites of involvement, and clinical features.

- **C. Bruce Alexander, M.D.** was elected Vice-President of the ASCP at the annual meeting. He has been on the ASCP Board of Directors since 2002, and was Treasurer from 2007 to 2009. Founded in 1922, ASCP is the largest Pathology & Laboratory Professional Society in the United States.

- **Jay M. McDonald, M.D.** received the 2009 ASCP Ward Burdick Award for Distinguished Service to Clinical Pathology at the ASCP Annual Meeting. This award recognizes an ASCP member who has made a significant contribution to pathology through sustained service to the profession and to ASCP.

**Medical Student Research Day**

- **Nicki Nguyen**, a talented third year UAB medical student won first place in the Neuropathology Category for her poster entitled "Characterization of the Autophagy-Lysosome Pathway in Traumatic Brain Injury", at Medical Student Research Day held in Volker Hall on October 27th. Nicki presented results of her studies from summer, 2009 when she rotated in the laboratory of Dr. John J. Shacka for her Scholarly Research Activity. Nicki’s research proposal focused on characterizing the roles of the tumor suppressor protein p53 and the autophagy lysosome pathway (ALP) in regulating neuronal cell death in an in vitro mechanical stretch injury model of traumatic brain injury. Nicki learned several new techniques and worked long hours to generate preliminary data that the Shacka laboratory will utilize for future publications and grant applications. More importantly, as a result of the newly formed Scholarly Research Activity, Nicki gained a new-found appreciation and confidence for basic science research. A skill set she can utilize for future research endeavors. The Shacka laboratory wishes to congratulate Ms. Nguyen for her accomplishments and we wish her every success during her clerkships here at UAB as well as for a successful residency.
Pathology Grant Awards

The following grants were recently awarded to pathology faculty:

**SCOTT BALLINGER**  
NIH  
Molecular Therapeutics for Anaplastic Gliomas (Brain SPORE) Tissue Core B  
$55,310  6/1/09-5/31/10

**WILLIAM GRIZZLE**  
NIH  
UAB Skin Disease Research Center—Core C  
$97,820  9/1/09-8/31/14

**ROBERT HARDY**  
UAB Breast & Pancreatic SPORE Career Development Award (CDA)  
Dietary Stearate Plus Chemotherapy in a Mouse Model of Breast Cancer Metastasis  
$25,000  9/1/09-8/31/10

**DOUGLAS HURST**  
UAB Breast Cancer SPORE CAREER DEVELOPMENT AWARD (CDA)  
Unraveling the Roles of SIN3 Complexes in Breast Cancer Metastasis  
$50,000  9/1/09-8/31/10

**JOANNE MURPHY-ULLRICH**  
JDRF  
Blockade of TSP1-Dependent TGF-beta Activation for Diabetic Complications  
$484,548  9/1/09-8/31/11

**MOON NAHM**  
NIH/NIAID  
Impact of a New Group 6 Serotype on Pneumococcal Vaccines (ARRA Admin Supplement)  
$12,969  9/1/09-1/31/10

**RALPH SANDERSON**  
MULTIPLE MYELOMA RESEARCH FOUNDATION  
Heparanase Inhibitors as Anti-Metastatic Therapy for Myeloma  
$75,000  9/1/09-8/31/10

**DANNY WELCH**  
NIH  
KISS1: Defining Mechanisms for Antimetastatic Therapy  
$1,562,572  9/1/09-5/31/14

**RAKESH PATEL**  
NIH  
RBC Age and Potentiation of Transfusion Related Pathology in Trauma Patients  
$1,465,000  9/18/09-7/31/13

**UPENDER MANNE**  
NIH/NCI  
Prognostic Molecular Markers of Colorectal Cancer (ARRA Admin Supplement)  
$85,908  9/30/09-9/29/10

**JOSEPH MESSINA**  
VA  
VA-IPA  
$114,495  10/1/09-9/30/11

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.