THE UNIVERSITY OF ALABAMA AT BIRMINGHAM

PATHOLOGY IN FOCUS

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Dept. of Pathology Website:
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Newsletter E-Mail:
pathinfocus@uab.edu

Message from the Chair

At the start of another academic year and my fifth year as Chair, I would like to take a moment to thank all of you who make the UAB Department of Pathology such a special place to work and train. It seems that virtually every day presents new challenges in meeting our clinical, research, and teaching missions. Despite reduced state support for higher education, an extremely difficult research funding climate, and increasing demands on clinical faculty and trainees, our department continues to excel.

Our faculty members hold numerous leadership positions in national and international societies and our residents, fellows and graduate students continue to receive accolades and career advancing opportunities. Departmental commitment to excellent clinical care and quality research and education remains unquestionable. In addition to the hard work of our faculty and trainees, I am very appreciative of our divisional and departmental support staff who despite increasingly complex university, hospital, state, and federal regulations and multiple demands on their time, daily provide assistance to our faculty and trainees so that they can be productive. In total, it is the team work and spirit of co-operation in the UAB Department of Pathology that defines us and will assure our continued success.

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

Faculty Profile: William H. Benjamin, Jr., Ph.D.

Dr. William Benjamin is Professor in the departments of Pathology and Microbiology. He was born and raised in the Pacific Northwest and attended Washington State University for his Bachelor of Science, Montana State University for his Master of Science and UAB for his Ph.D.

Dr. Benjamin is actively involved in teaching residents, medical students, and graduate students. He has also mentored a number of PhD students throughout the years. He was a Laboratory Medicine representative in the Faculty Advisory Committee of our department from 2006-2012 and has served on the Research Use Only Test Approval Committee since 2008.

Nationally, he is a member of the Editorial Board of Microbial Methods, the Journal of Clinical Microbiology and the Journal of Clinical Microbiology. He's performed several CAP inspections and has more than 70 published abstracts/ poster exhibits, 80 manuscripts, and 9 book chapters.

His research interests focus on the epidemiology of *Mycobacterium tuberculosis* and how it can be used toward elimination of tuberculosis in Alabama and the United States. He is one of only a few UAB faculty members involved in the utilization of diagnostic procedures for tuberculosis control in sub-Saharan Africa (Namibia and Zambia). In addition, he also collaborates on the use of serology/ molecular typing to evaluate the many new vaccines now on the market for the prevention of diseases caused by *Streptococcus pneumoniae*.

In 2006, Dr. Benjamin was part of a team from the American Society for Microbiology's International Laboratory Capacity Building Program that travelled to Namibia. He spent two months collaborating with the Namibian Institute of Pathology and the Centers for Disease Control and Prevention on tuberculosis diagnostics. While there, his team proposed a strategic plan for expanding the Namibian Institute of Pathology's tuberculosis laboratory system. The priority for the laboratory system expansion was to improve the quality of acid-fast bacilli (AFB) smear microscopy at all levels, with long-term goals being to increase AFB culture capacity; to

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Faculty Profile: William H. Benjamin, Jr., Ph.D., Cont'd...

improve AFB smear microscopy procedures; and to introduce fluorescence microscopy at the Central TB Laboratory. Dr. Benjamin has been married to Sarah for 40 years. They have 2 grown children, Heather and Adam. In his free time, he likes to garden, bicycle, and travel. In his 20 years as a faculty member in our department in the Section of Microbiology, he is our expert on parasites and mycobacteria and has taught hundreds of residents with patience and enjoyment. The residents truly appreciate his quiet and friendly demeanor and willingness to be called to the hospital any time of day or night to help review a malaria smear. Everyone knows he can be counted on and will still have a smile on his face. More recently, he became involved in diagnostic molecular biology and his deep knowledge of the intricacies and pitfalls of the assays help ensure we provide our UAB patients with state-of-the-art diagnostic services.

Faculty Profile: James Robinson Hackney, M.D.

Rob Hackney, M.D. joins us as Instructor in the Division of Neuropathology, having just completed a "late-life" fellowship in neuropathology here at UAB under the guidance of Dr. Cheryl Palmer and Dr. Steven Carroll. Rob graduated from the University Of South Alabama College Of Medicine back in 1979, followed by training in AP/CP at Ochsner Clinic in New Orleans and a fellowship in hematopathology at the University of Pennsylvania. Following a stint as Director of the Hematology Laboratory at Ochsner Clinic from 1985-1989, Rob returned to Birmingham to practice surgical pathology and hematopathology at St. Vincent's Hospital, Birmingham, serving as Chief of Pathology from 2002 until 2010. While at St. Vincent's, Rob was heavily involved in St. Vincent's breast cancer program and robotic prostatectomy program. The latter was for several years one of the 3 or 4 largest robotic prostatectomy programs in the world. In 2010, Rob moved to UAB to undertake a two year fellowship in neuropathology. Rob spent his fellowship research year with Jonas Almeida, PhD, in the Department's new Division of Informatics, tackling projects in diagnostic image analysis. Rob's ongoing research interests are in the area of web-based applications for image analysis, including pattern analysis and quantification of immunohistochemical markers for diagnosis and prognosis. He also has a developing interest in bridging the gap between surgical neuropathology and general surgical pathology, especially with regard to the training of surgical pathologists, pathology Residents and Fellows, and others in the unique perspectives of the surgical neuropathologist. Since we are training neurosurgeons at a much greater rate than neuropathologists, much front-line neuropathology will continue to be done by general surgical pathologists. While their general diagnostic acumen is more than equal to the task, the low volume of neuropathology cases that they are likely to see can lead to an erosion of skills over the years. This is being partially addressed by newer, creative publications by neuropathologists designed to aid the surgical pathologist in the domain of neuropathology. However, it may be the case that the entire approach of the neuropathologist is different from the surgical pathologist, with much greater emphasis on detailed patient history, review of prior material, review of radiographic scans, and a collaborative approach involving multiple subspecialties.

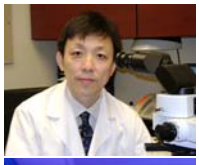
Rob is married with six grown children and ten grandchildren. His interests outside of work include electric guitar (he favors German-made Duesenberg guitars), sports (especially running and swimming), and spending time with family.

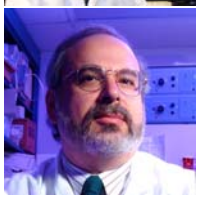
Accolades:

C. Bruce Alexander, M.D. was awarded the Gerald T. Evans Award at the 2012 Academy of Clinical Laboratory Physicians and Scientists meeting. This award is presented annually to a member for outstanding leadership and/or service to the society.

John C. Chatham, D.Phil. Was invited to serve as the American Physiological Society representative to the FASEB Science Policy Committee.

Michael G. Conner, M.D. is now serving as a member of the Society of Gynecological Oncology (SGO) Membership Committee and the SGO Education Committee. The SGO is the national society of American and International specialists involved with treating gyn malignancies. Dr. Conner is working with the SGO to put Pathology lectures on the society's website to be used as a part of the educational outreach program nationally and internationally.





Drs. Shi Wei and Gene Siegal have had a book published entitled "Frozen Section Library: Bone". A description of the book, given by the publisher Springer is "Frozen sections are performed while a patient is undergoing surgery as a basis for making an immediate diagnosis that will impact treatment decisions. Frozen section diagnosis is often a highly demanding situation for the pathologist who must render a diagnosis quickly for the patient and surgeon."

2012 Pritchett Lecture Details New Fundamental Mechanisms in Cell Proliferation

This year our endowed lecturer for the Paulette Shirey Pritchett Lecture in experimental pathology was Sir Salvador Moncada, M.D., Ph.D, D.Sc., University College London. His major discoveries include identifying the mechanisms through which prostaglandins and nitric oxide modulate vascular function and mitochondrial metabolism. Professor Moncada has received numerous honors and is a Fellow of the Royal Society and a Foreign Associate of the National Academy of Science of the USA and in 2010 he received a Knighthood for his services to Science. Dr. Moncada spent the morning with UAB researchers and participated in a mini symposium highlighting metabolism and bioenergetics research at UAB. After lunch with the students he described his exciting new research to a capacity audience in the Spain auditorium defining the key checkpoints in the cell cycle that integrate mitochondrial function with cell metabolism. These seminal findings give new insight into the mechanisms through which cancer cells adapt their metabolism to sustain proliferation. At the reception following his lecture he received a plaque from the Pritchett family in appreciation of his contribution to the lecture series and generous participation with the faculty and trainees at UAB (include pic).

Dr. Kevin Roth, Dr. Salvador Moncada, Dr. Robert Pritchett

New Course Director for Schools of Dentistry & Optometry, "Fundamentals"

Robert W. Hardy, Professor of Pathology and Section Head, Clinical Chemistry, will be the course director for the schools of Dentistry and Optometry, "Fundamentals". This first year course consists of 160 teaching hours and 8 exams given by 20 faculty members from the Joint Basic Health Science departments to approximately 110 combined students. It is composed of Fundamental I and Fundamentals II. Fundamentals I is a multi-track, basic science course that primarily teaches the biochemical, genetic and immunological principles of human biology. Fundamentals II builds on Fundamentals I by teaching the basics of pathology, microbiology, histology, and pharmacology. Fundamentals is designed to give students a basic education in the life sciences which is necessary to understand how essential organs of the body function and how they are related to each other.

FASEB's 2012 Capitol Hill Day

L to R: Eduardo Rosa-Molinar, Karen Mowrer, Lynn Wecker, Nancy Denslow, John Chatham

On May 16, John Chatham participated in FASEB's 2012 Capitol Hill Day. On this day more than 40 members of FASEB Societies participated in about 70 meetings with Congressional Aides and where possible with members of the House of Representatives and Senate to provide information about NIH and NSF budgets for 2013. Shown in the photo (from left) **are Ed Rosa-Molinar**, University of Puerto Rico - Rio Piedras, *FASEB Board Member*; **Karen Mowrer**, *FASEB Legislative Affairs Officer*; **Lynn Wecker**, University of South Florida College of Medicine, *FASEB Treasurer-Elect*; **Nancy Denslow**, University of Florida, *FASEB Board Member*; and **John Chatham**, University of Alabama at Birmingham, *FASEB Science Policy Committee*. This group met with aides from the offices of: Sen. **Richard Shelby** (R-AL), Sen. **Jeff Sessions** (R-AL) , Sen. **Marco Rubio** (R-FL) , Rep. **Cliff Stearns** (R-FL), Rep. **Terri A. Sewell** (D-AL), Del. **Pedro Pierluisi** (D-PR) and Rep. **Kathy Castor** (D-FL). Such meetings are part of FASEB's ongoing strategy to build support for sustained and predictable funding for biomedical research; such advocacy efforts are especially important in the current economic and political environment.

International Organization for Mycoplasmology Award

Ken B. Waites, M.D., Professor of Pathology was the co-recipient along with Professor John I. Glass of the J. Craig Venter Institute of the 2012 Board of Directors Award given by the Board of Directors of the International Organization for Mycoplasmology (IOM) during the 19th IOM Congress held in Toulouse, France in July, 2012. This award, normally given every two years recognizing up to two individuals chosen by a majority vote of the Board members recognizes sustained and outstanding service to the IOM as an elected officer, committee chairperson or member and noteworthy contributions to the advancement of the science of mycoplasmology. Dr. Waites has been a member of the IOM for thirty years. He has served the organization as Secretary-General and as well as Chair of the International Research Program on Comparative Mycoplasmology and the Chemotherapy Working Team. The IOM is an international scientific professional organization with members throughout the world who have a common interest in the study of mycoplasmas which are the smallest free-living microorganisms and cause a variety of diseases in humans, animals, and plants.

New Endowed Professorship in Experimental Cancer Therapeutics

The Department of Pathology is pleased to announce the appointment of Dr. Selvarangan Ponnazhagan as the inaugural Endowed Professor of Experimental Cancer Therapeutics.

Dr. Ponnazhagan's research is focused on identifying novel anti-cancer targets and developing gene- and cell-based therapeutics to treat a variety of cancers including metastatic breast and prostate cancer. Dr. Ponnazhagan has an international reputation as an outstanding scientist with his research focusing on developing adeno-associated virus (AAV)-mediated gene therapy for cancer and metabolic bone disease, including development of targeted AAV for human gene therapy. Dr. Ponnazhagan has an outstanding record of continuous and substantial extramural support for his research and serves on the editorial boards of multiple scientific journals including *Genes*, *Gene Therapy*, *Journal of Hematotherapy and Stem Cell Research*, and *Technology in Cancer Research and Treatment*.

Dr. Ponnazhagan is a Professor of Pathology in the UAB Department of Pathology, Senior Scientist at the UAB Comprehensive Cancer Center, Center for Metabolic Bone Disease, Center for Structural Biology, Nephrology Research and Training Center, and the BioMatrix Engineering and Regenerative Medicine Center. He is a member of the American Association for the Advancement of Science, the American Association for Cancer Research, the American Society of Gene Therapy, and the American Society of Microbiology. He was recently recognized as an outstanding mentor for his contribution to teaching and mentoring by the Dean of the UAB Graduate School. Dr. Ponnazhagan's expertise in cancer immunology, metabolic bone disease, and cancer metastasis and osteoimmunology research provides him unique insights into the development of novel therapeutic strategies for a variety of human diseases. We look forward to his continued success at UAB.

Photo Session for Physician Directory—Clinical Faculty

Professional photosessions for clinical faculty will be held from 7 a.m. to 6 p.m. Wednesday, Aug. 22 in the West Pavilion Conference Center and from 11:30 a.m. to 6 p.m. Thursday, Aug 23 in the Kirklin Clinic fourth floor conference room. To secure an appointment time, contact Kathryn McKelvey at kmckelvey@uabmc.edu or 934-7804; walk-ins are welcome.

New Endowed Professorship in Cancer Pathobiology

The Department of Pathology is pleased to announce the appointment of Dr. Ralph Sanderson as the inaugural Endowed Professor in Cancer Pathobiology.

Understanding the role that the tumor microenvironment plays in the regulation of tumor growth and progression has become a major focus of cancer research. Dr. Sanderson's laboratory has shown that heparan sulfate proteoglycans promote tumor growth and metastasis of multiple myeloma and breast cancer, two tumors with a propensity to metastasize and grow within bone. The long-term goal of the Sanderson laboratory is to determine how tumor-stromal interactions mediated by heparan sulfate and heparanase regulate the tumor microenvironment and to use this knowledge to design new cancer therapies. The foundation of this Endowed Professorship in Cancer Pathobiology is in recognition of the importance of basic cancer pathobiology research and supports leadership in this area in the Department of Pathology and UAB.

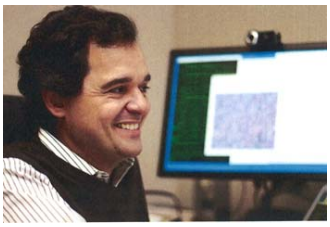
Dr. Sanderson is a Professor of Pathology in the UAB Department of Pathology and Senior Scientist and Co-Leader of the Cancer Cell Biology Program at the UAB Comprehensive Cancer Center. He is an internationally recognized leader in tumor microenvironment and myeloma research and received the

Cont'd...

New Professorship in Cancer Pathobiology, Cont'd...

Distinguished Faculty Award in 2003 at the Arkansas Cancer Research Center, the Outstanding Faculty Award from the Molecular and Cellular Pathology Graduate Program in 2008, and the Neufeld Memorial Research Award (jointly with his collaborator, Dr. Michael Vlodarsky) in 2010. He held the Drs. Mae and Anderson Nettleship Endowed Chair in Oncologic Pathology at the University of Arkansas prior to his recruitment to UAB in 2006. In addition to his many scientific accomplishments, Dr. Sanderson is a dedicated teacher and institutional leader in graduate education. We look forward to his many future successes at UAB.

New Tools From UAB for Doctors' Virtual Black Bags—Cloud Computing, Apps and Bioinformatics?



Doctors and medical researchers are dealing with increasingly large sets of data.

Genetic sequences, images from pathology biopsies and lab tests, and information about how patients respond to treatment, to name just a few.

Along with this data are the bewildering names of new disciplines that try to make sense of this information overload — genomics, proteomics, immunoproteomics, metabalomics, transcriptomics. And overarching all of this is an effort commonly called bioinformatics, which tries to use computing to find better ways to coordinate the data, make sense of it all and mine it for valuable discoveries.

Which brings us to Jonas Almeida.

Almeida is a recent addition to the University of Alabama at Birmingham medical center, recruited away from the prestigious University of Texas-MD Anderson Cancer Center in January 2011 to launch a newly formed Division of Informatics in the med school's pathology department.

At MD Anderson as a professor of bioinformatics, Almeida was deeply involved in the Cancer Genome Atlas, a shared site for cancer data started with the help of National Cancer Institute funding in 2006. Its utility was seen just last week in a TCGA study of gene mutations in colon and rectal cancers.

Researchers used the shared data to show that the patterns in colon and rectal cancers were the same, regardless of where they came from. This means the two are actually a single type of cancer. The discovery is considered an important step in understanding the foundations of that disease.

An effort like the Atlas, Almeida said, takes advantage of "the cloud" — a web-based set of programs and standardized data formats that allows researchers to build interactive masses of data. Almeida likened this use of the cloud to the popular pastime FarmVille, a farming simulation social network game.

Another approach in informatics is seen in a paper Almeida and colleagues published Friday about a new app they created for image bioinformatics. This app, called ImageJS, is like one version of Angry Birds, because it operates inside a Google Chrome web browser.

ImageJS started with a common pathology problem — a patient has had a brain biopsy, and a slice of the brain has been put on a slide and stained with one dye to color the nuclei of cells and with another dye to create a different color in nuclei that are replicating.

Normally a pathologist will look at an image of the stained cells and through individual skill and possible help from image processing software, figure how much replication is going on. A high amount means cancer.

"Pathologists face two major problems that have been insoluble for many years," Almeida said in a telephone interview from Germany.

First, they would run into difficulties about patient privacy if they had to send the images off to some other computer site to be analyzed, and any software they might want to put on their own hospital computers would create a security question.

Cont'd...

New Tools From UAB Cont'd....

Second, if they wished to make any changes to the algorithms used to analyze images, they would need to get the software rewritten by its producer, and then go through the long and tedious process of getting that software cleared by the information technology folks.

ImageJS, a simple and fast program written in JavaScript, sidesteps both of those problems.

It lets the pathologist work at his or her own computer but avoids adding any new programming files to the computer. The ImageJS app does this by operating in a Google Chrome browser which acts as a "sandbox where code is executed without direct access to the machine's file system," Almeida, pathologist Dr. James Hackney and four other division of informatics colleagues wrote in their Journal of Pathology Informatics paper.

Free code

Furthermore, the code is freely available from hosting services such as GitHub and Google Code. Users will be able to write a few lines of code to slightly alter the image algorithms, something akin to an Angry Birds player being able to change the colors of the birds, Almeida said.

While ImageJS addresses a pathology problem, it also doubles as an experiment in informatics. Almeida said he hopes to see it lead to interactions where researchers use and modify the app's simple architecture to build a collaborative computational ecosystem.

To see a demonstration of ImageJS, as well as other work by Almeida, look for "jalmeidamathbiol's channel" on YouTube.

At UAB, the Portuguese-born Almeida has hired five faculty and now has about 15 researchers and staff in the informatics division.

UAB pathology chairman Dr. Kevin Roth was the key to luring Almeida to UAB.

"He offered me something that is special — a strategic vision about the future," Almeida said. "He sees biostatistics and bioinformatics to be part of the tools of select medical centers."

Almeida gave another example of the potential use of bioinformatics for clinicians — shared cancer databases in the cloud where oncologists can find answers to questions that could improve patient care.

Such questions, Almeida said, include, "What patients have been seen before that were like the one that I'm seeing? What happened to those patients? What drugs did they respond to?"

—reprinted with permission from Jeff Hansen at the Birmingham News.

Where Are They Now?:

Dr. Diane Peterson received her residency training in Pathology at UAB from July 2005 to June 2009. Previously, she received her M.D. degree from The University of Kansas School of Medicine in 2005 and her BS degree in Microbiology from Kansas State University in 2000. Dr. Peterson was the AP Chief Resident in 2008-2009, and in 2009-2010, she completed a Forensic Pathology Fellowship at UAB. She became Board Certified in AP/CP in 2009 and in Forensic Pathology in 2010.

Currently, Dr. Peterson is a Deputy Medical Examiner in the Office of the Jackson County Medical Examiner in Kansas City, Missouri, where she has performed over 400 autopsies since her appointment in August 2010, and testified in court 10 times. She is the Infectious Disease and Biosafety Officer for the Jackson County Medical Examiner Office and also educates local physicians on death certification.

In addition, Dr. Peterson is a Clinical Assistant Professor of Pathology at the University of Missouri-Kansas City School of Medicine and at the Department of Pathology and Laboratory Medicine at the University

Cont'd...

Where Are They Now? Cont'd...

of Kansas Medical Center. Beginning this year, she is an Adjunct Instructor on forensic toxicology in the Division of Pharmacology and Toxicology at the University of Missouri-Kansas City School of Pharmacy.

Some of Dr. Peterson's favorite memories of her time at UAB are her days as a Forensic Fellow in the courtroom listening to her attendings testify, and "performing" in Mock Trials with Dr. Greg Davis at the Cumberland School of Law at Samford University. She says that these experiences helped her tremendously to be a better court witness and gave her confidence on the stand. Remembering her residency at UAB, she found the wide variety of electives and excellent education invaluable in her current role of teaching and helping medical students and residents. The clinical pathology rotations at UAB provided a wealth of knowledge and experience, which she has used extensively in her profession and her academic career. She appreciates her residency autopsy rotation, which provided her with insights for teaching residents the basics of autopsy technique.

Dr. Peterson belongs to the College of American Pathologists, the American Society for Clinical Pathology, the Academy of Clinical Laboratory Physicians and Scientists, the American Academy of Forensic Sciences (where she presented a poster at the AAFS Annual Meeting this year), and the National Association of Medical Examiners.

Dr. Peterson lives with her husband, Dr. William Peterson (Nephrology private practice) and two children, a five-year-old daughter and a newborn son, in Overland Park, KS.

From the Chief Residents:

Congratulations to our residents! Dr. Bruce Smoller, Executive Vice President of USCAP announced that UAB has been recognized as top 5% of all medical institutions of first-authored scientific abstracts accepted for presentation at the 101st Annual Meeting of the USCAP in Vancouver, BC. This extends UAB's outstanding record another year.

We're off to a great start this year with six strong first year residents, twelve fellows (some new faces, and some previous UAB residents) and nineteen returning residents. As you will see below, we continue to have significant numbers of abstracts accepted for national pathology meetings, thanks to support from both the pathology department and from Adams grants. UAB was recently recognized as being in the top 5% of all medical institutions in terms of the number of scientific abstracts accepted for presentation at the last annual meeting of the United States and Canadian Academy of Pathology (USCAP) – a great accomplishment which we hope to repeat this year. Finally, the residents are looking forward to participating in the upcoming 8th Annual Department of Pathology Trainee Research Day in October.

Johnny Ross and Amy Treece
Chief Residents, 2012-2013

National Meetings:

The following abstracts have been accepted to the College of American Pathologists (CAP) meeting which will take place in San Diego from September 9th to 12th:

Anaplastic Large Cell Lymphoma (ALCL) Associated With a Breast Implant Capsule - Jie Xu, MD, PhD, Amberly Nunez, MD, Vishnu Reddy, MD, and Shi Wei, MD, PhD

A Giant Tubular Adenoma of the Breast in a Premenarchal Girl - Yaolin Zhou, MD; Shi Wei, MD, PhD; Heidi Umphrey, MD

An Autopsy Case Report of Terbinafine-Induced Liver Cirrhosis - Yaolin Zhou, MD; Clarethra N. Lyas, MD; Brendan M. McGuire, MD; D. Ralph Crowe, MD; Stephanie D. Reilly, MD

Strumal Carcinoid Masquerading as Adenocarcinoma- Taylor Deal, L Novak and M Conner

Anaplastic Lymphoma Kinase Positive Diffuse Large B-cell Lymphoma with Minimal Nodal Involvement – John Ross, Xiaojun Wu and Vishnu Reddy

The following abstracts have been accepted to The American Society of Dermatopathology (ASDP) meeting which will take place in Chicago from October 11th to 14th:

Aggressive digital papillary adenocarcinoma in an 11-year-old female - Caitie Halverson and Aleodor Andea

WT-1 Immunohistochemical Profile in Desmoplastic and Spindle Cell Melanoma – Taylor Deal and Aleodor Andea

The following abstracts have been accepted to the American Society of Clinical Pathology (ASCP) meeting which will take place in Boston from October 31st to November 3rd:

Cont'd...

From the Residents Cont'd...

Expression of Syndecan-1 (CD138) in Breast carcinomas with associated Distant Metastasis - Thuy Nguyen and Shi Wei

Highlighting the Need for Correlation of Clinical and Pathologic Features: Discovery of an Epithelioid Hemangioendothelioma Diffusely Involving an Explant Liver - Thuy Nguyen and Leona Council

A Case Report of T-Cell/ Histiocyte-Rich Large B-Cell Lymphoma Arising in the Background of Thymic Follicular Lymphoid Hyperplasia - Jie Xu, MD, PhD, Xiaojun Wu, MD, PhD, W. Ford Simpson, MD, Vishnu Reddy, MD

T Lymphoblastic Leukemia with t(9;22): Blast Phase of Chronic Myelogenous Leukemia or BCR -ABL-Positive T-Acute Lymphoblastic Leukemia? - Jie Xu, MD, PhD, Shaoying Li, MD (Vanderbilt University)

Noncirrhotic hyperammonemic encephalopathy in a liver/renal transplant patient with Enterococcus faecium sepsis: a case report – Caitie Halverson, Stephen Moser and Robert Hardy.

Expression of Receptor Activator of Nuclear Factor κβ Ligand (RANKL) in Breast Cancer, and Its Relations with Hormone Receptors and Distant Metastasis - Rong Li, Thuy Nguyen, WE Grizzle, K Zhang, O Hameed, GP Siegal and S Wei

Gastrointestinal ischemia as the initial presentation of thrombotic thrombocytopenic purpura - Yaolin Zhou, MD; Vishnu V. B. Reddy, MD; Stephanie D. Reilly, MD; Silvio H. Litovsky, MD; Marisa B. Marques, MD

A 12 year autopsy review of infective endocarditis - Yaolin Zhou, MD; Sean R. Wilkinson; Matthew D. Cain MD; Silvio H. Litovsky MD; Stephanie D. Reilly, MD

Neuroendocrine Dedifferentiation Post-Chemotherapy in a Patient with Severe Lung Injury - Yaolin Zhou, MD; D. Ralph Crowe, MD; Shantel Hébert-Magee, MD

Refractory Anemia with Ringed Sideroblasts and Thrombocytosis (RARS-T): a case study of emergent therapeutic intervention for life-threatening thrombocytosis – Taylor Deal, X Wu, V Reddy, J Adamski

Macrophage activation syndrome, ferritin, and the hook effect – John Ross and Robert Hardy

Committees:

Yaolin Zhou is joining Alex Hanna as an ASCP resident representative.

Caitie Halverson and Taylor Deal are joining Chris Kragel and Thuy Nguyen as CAP resident representatives.

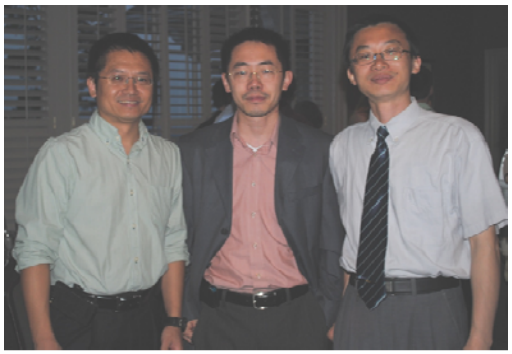
Evan Alston and Jason Brazelton are the new pathology representatives on the UAB house staff council.

Adams Grants:

Xiaoyan Cui, John Ross, and Zhiyong Ren have all been awarded Adams grants during the past quarter.

Pictures:

From the outgoing reception:



Residency Program Director:

C. Bruce Alexander, M.D.

Residency Program Support:

Karen Lewis
934-4060

From the Chief Residents Cont'd...

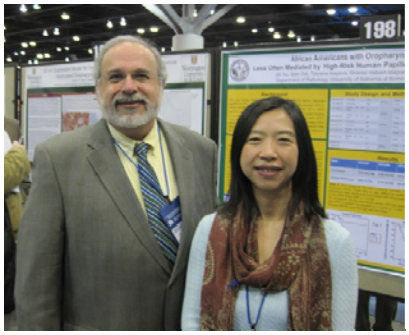
L-R: Dr. Lea Novak, Dr. Walter Bell, Dr. Amberly Nunez, and Dr. Charles Nunez

Our beloved outgoing chiefs—Emily Gorman and Amberly Nunez

Pictures from USCAP:

From left around table): Amy Treece, Rong Li, Taylor Deal, Qian Dai, Jessie Xu, Zhiyong Ren, Amberly Nunez, Dr Wei, Dr Reddy, Dr Pan, Dr Brandwein-Gensler and Dr Hebert-Magee

From left to right) Bethaney Vincent, George Garib, Dr Andea, Taylor Deal, and Caitie Halverson



Dr. Gene Siegal and Jessie Xu

Spotlight on Administration—Margaret Dotzler Cont'd...

Margaret Dotzler is an OAII in the Department of Pathology Chair's Office. She provides assistance and support to Dr. C. Bruce Alexander, Vice Chair and Autopsy Section Head. Before joining the Department of Pathology in 1996, Margaret was an Editorial Assistant in the Department of Surgery at Vanderbilt University Medical Center in Nashville for ten years.

She has a wide range of duties, reflecting Dr. Alexander's many areas of involvement. She arranges and organizes Dr. Alexander's extensive professional travel logistics and keeps his busy calendar. She functions as an editorial assistant for his manuscripts, white papers, and official correspon dence. She also oversees the Autopsy Call Schedule, and interfaces with Pulmonary Medicine and Surgical Pathology concerning pulmonary conferences and his consultations with pulmonary research. As Dr. Alexander is a Medical Examiner for Jefferson County and an Officer of the Court, Margaret is his liaison to the Medical Examiner's Office and the District Attorneys' Office concerning court appearances. In addition, she is a copy-editor/writer for the *Path In Focus* newsletter and writes the "Where Are They Now" column.

Margaret followed her husband's career move to Alabama and, in spite of living 75 miles south of Birmingham in Elmore County, she never considered any other place of employment. She made this commute for 10 years before moving to Chilton County 7 years ago and shortening her commute to 50 miles. Margaret and her husband, Tom, live on "God's Little Acre" amidst the peach orchards and pastoral landscape of Chilton County. They have two grown children, a daughter Elizabeth who lives in Shelby County and a son, Asa, who lives in California.

From the Graduate Students:

Awards:

Mengrui Wu—received the 2012 ASBMR President's Award, which is given to the highest-ranking abstract and awarded yearly. Mengrui is a visiting foreign graduate student in Dr. Yi-Ping Li's class.

Yanna Ding—received the AAI Trainee Award and gave an oral presentation titled "IL-17-induced Rgs16 is essential for follicular T helper cell localization in the germinal centers of autoimmune BXD2 mice " in 99th AAI annual meeting , Boston, May 2012. Yanna also received the UAB GSA Travel Grant for 2012 summer.

Qinglan (Helen) Liu—was awarded the UAB Diabetes Research Training Center (DRTC) travel award.

Angela Gullard—received the 2012 Hispanic Dental Association Foundation Scholars Award. The award is given in support of meritorious work by students who seek to advance their scientific and applied clinical knowledge as they enter into the oral health profession. Angela will receive a $1,000 scholarship, which she will use to help pay her dental school tuition and fees this fall.

Publications/Presentations:

Ryan Stapley—Stapley R, Owusu BY, Brandon A, Cusick M, Rodriguez C, Marques MB, Kerby JD, Barnum SR, Weinberg JA, Lancaster Jr JR, Patel RP. Erythrocyte storage increases rates of NO- and Nitrite scavenging: Implications for transfusion related toxicity. Biochem J. 2012 Jun 21.

Robert Bone—gave the oral presentation entitled "Autophagy during the Progression of Insulitis in the Non-Obese Diabetic Mouse" at the 3rd Annual UAB Diabetes Research Day held on May 1, 2012. One of only two students to receive an oral presentation.

Robert also presented a poster presentation entitled "Autophagy during the Progression of Insulitis in the Non-Obese Diabetic Mouse" at the 5th Annual Midwest Islet Club Meeting held May 23-24, 2012 at the University of Pittsburgh.

Robert also had the following publication: Zhang Y*, Zhang Y*, Bone RN, Cui W, Peng J-B, Siegal GP, Wang H, Wu H.

Cont'd...

From the Graduate Students Cont'd....

(2012) Regeneration of Pancreatic Non-β Endocrine Cells in Adult Mice following a Single Diabetes-Inducing Dose of Streptozotocin. PLoS ONE 7 (5): e36675. doi:10.1371/journal.pone.0036675

Qinglan (Helen) Liu— Presented a poster "Small molecule agonists of NR4A3 augment glucose transport system activity and AS160 phosphorylation in L6 skeletal muscle cells" at 72nd ADA (American Diabetes Association) Scientific Sessions annual meeting in Philadelphia, PA, June 2012.

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.

Pathology Grants Awarded:

JOHN C. CHATHAM
(Floyd, McMahon)
UAB/SOM
O-GleN Acylation as a Novel Therapeutic Strategy for Treatment of Traumatic Brain Injury
$415,981 03/15/12-02/28/14

MARGARET BRANDWEIN-GENSLER
UAB/CCC
HPV Oncoprotein Gene Therapy: A Novel Treatment Strategy for Non-HPV Mediated Carcinomas
$29,000 04/01/12-03/31/13

MARGARET BRANDWEIN-GENSLER
AstraZeneca/Vanderbilt
Predicting Response to Molecular Therapeutics Targeting ATR in Head and Neck Squamous Cell Carcinoma
$23,135 04/18/12-04/16/13

YABING CHEN
VA-IPA (Hong Li)
$92,750 07/01/12-06/13/14

YABING CHEN
American Heart Association
O-GlcNAc Modification in Diabetic Vascular Calcification
$50,360 07/01/12-06/30/14

JOHN SHACKA
VA-IPA (Tonia Tse)
$115,673 05/01/12-04/30/14