

Message from the Chair

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In my first few months of being Chair of Pathology, I have attempted to meet with as many faculty, staff, residents, fellows and students as possible to assess the strengths and weaknesses of our department. It has been a pleasure to get to know many of you better and I have come

away from these meetings more impressed than ever with the commitment of our departmental personnel to academic, clinical, and research excellence.

A number of new initiatives will get underway in 2009 including the establishment of a Division of Informatics. This new division will be the academic home for several new faculty recruits and actively participate in a variety of UAB Medical Informatics and Bioinformatics ini-

tiatives. New faculty recruitment will also proceed in several other divisions as well and I look forward to welcoming five to ten new faculty members to our department in the next year. With your support and assistance, I am confident that our department will continue to grow and secure its position as one of the nation's leading Pathology departments.

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

Siegal Named Mowry Endowed Professor



UAB Professor of Pathology Gene P. Siegal, M.D., Ph.D., has been named the inaugural holder of the Robert W. Mowry Endowed Professorship in Pathology. The appointment was made by the University of Alabama System Board of Trustees.

Siegal is an international expert on the hormonal and nutritional factors that impact the cancer cell's ability to invade and metastasize. His lab is working with a first-of-its-kind model membrane to explore tumor migration through tissues. In addition to his pathology post, Siegal is a professor of cell biology

and surgery, and a senior scientist in UAB's Comprehensive Cancer Center, Center for Aging, Center for Metabolic Bone Disease, Gene Therapy Center and the BioMatrix Engineering and Regenerative Medicine Center.

Born in the Bronx, N.Y., Siegal earned his medical degree from the University of Louisville and his doctorate from the University of Minnesota in Minneapolis. He spent several years at the Mayo Clinic College of Medicine, and served as a pathophysiology research associate at the National Cancer Institute. He came to UAB in 1990 after nearly a decade at the University of North Carolina at Chapel Hill.

Siegal holds editorial board positions with multiple journals and is currently the editor-in-chief of *Laboratory Investigation*. His professional

honors span four decades and include a fellowship in the Royal Society of Medicine in London and a shared Farrell Prize from the International Skeletal Society, of which he is a member.

The endowed position is named for Robert W. Mowry, M.D., a UAB professor emeritus in the Department of Pathology who once directed the anatomical pathology laboratory and the pathology graduate program. Mowry is former professor of health services administration and a past visiting scholar to the University of Cambridge in England.

—Article by Troy Goodman UAB Media Relations

Pathology In Focus
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Faculty Profile: William J. Cook, M.D., Ph.D.



Dr. Cook attended the University of Alabama and UAB School of Medicine. Following medical school he

decided to continue his research training and earned a Ph.D. in biochemistry prior to beginning his internship in Pathology at UAB. Dr. Cook joined the UAB Pathology Department faculty in July 1978 following a two-year residency in Anatomic Pathology at the National Cancer Institute. He initially provided coverage on the Autopsy Service, because his main focus was basic research in protein structure and function, using protein crystallography. He was introduced to renal pathology by Dr. Guillermo Herrera in 1988, but Dr. Herrera left for a private practice opportunity in Mi-

ami several months later, so he became the only renal pathologist at UAB after very little formal training. Fortunately, the service was much smaller at that time, and he made it through the sink-or-swim period without killing anybody (as far as he knows). He eventually became Associate Director of the Center for Macromolecular Crystallography and spent about 2/3 of his time in that activity until a temporary stint in private industry during 1994-95, when he left UAB to become Vice-President for Research and Medical Director at BioCryst, a local biotechnology company focused on structure-based drug design. After 16 months in industry, Dr. Cook decided that he really preferred an academic setting that allowed him to remain in anatomic pathology as well as continue to do some research. He returned to UAB in 1996 as Professor of Pathology, and since then has focused primarily on ex-

panding the renal biopsy service. The service has more than doubled since 1996, and he now provides almost all of the coverage.

Dr. Cook's research projects are varied and included collaborative efforts with faculty in the Nephrology Division as well as protein crystallography projects in collaboration with other faculty at UAB. Dr. Cook teaches in the SDM, having served as the Coursemaster for the Urinary System Segment of Correlative Pathology for the past twelve years. He will have a reduced role in the Renal Module of the new medical school curriculum.

Outside of work, Dr. Cook and his wife Suzanne spend much of their time playing with their two perfect grandchildren. When they're not available, he likes to work in his yard or play classical piano music.

Alpha Omega Alpha Robert J. Glaser Distinguished Teacher



Peter G. Anderson, D.V.M., Ph.D.— Professor of Pathology at UAB, has received the Alpha

Omega Alpha (AOA) Robert J. Glaser Distinguished Teacher Award, from the Association of Medical Colleges. The AOA Award provides national recognition to faculty members who have distinguished themselves in medical student education.

Anderson is the creator of the Pathology Education Instructional Resource (PEIR), an online repository of more than 40,000 medical images. PEIR has become a popular

resource for teaching the "image-rich" discipline of pathology and is now used by most medical schools, as well as users in 150 countries.

Anderson is a proponent of electronic teaching methods and distance learning. He is the creator of a Web site geared at fostering pathology education called GRIPE (Group for Research in Pathology Education). In the same vein as PEIR, GRIPE is an image database offering peer-reviewed testing materials for instructors.

Anderson serves as director of undergraduate pathology education at UAB and is the coordinator of the pre-clerkship phase of the School of Medicine's new curriculum. He is

also a founding member of the International Association of Medical Science Educators and serves on its board of directors.

Anderson earned his Ph.D. in experimental pathology at UAB, after earning his D.V.M. at Washington State University. He is the author of many research articles, textbook chapters, and abstracts, and serves on the editorial boards of numerous books and Web sites, including BioMed Central, an online database, and *Cardiovascular Pathology*, the journal of the Society for Cardiovascular Pathology.

— Article by Bob Shepard, UAB Media Relations.

"The AOA Award provides national recognition to faculty members who have distinguished themselves in medical student education."

Faculty Profile: Vishnu Reddy, M.D.



Perhaps the best way to start talking about Dr. Vishnu V. B. Reddy is to say that he

has been described as a Renaissance Man. According to Wikipedia, the term Renaissance Man is "used to describe a person who is well educated, or who excels, in a wide variety of subjects or fields." Everyone who knows Dr. Reddy agrees that he typifies such a person.

Dr. Reddy graduated from medical school in India in 1972. He moved to the United States in 1975 when he started his career in Pathology. After his training in New Jersey and West Virginia, he worked for five years at William Beaumont Army Medical Center in El Paso, Texas,

where he was Chief of Clinical Pathology and Medical Director of the Hematology/Coagulation Laboratory. He then moved to Colorado and worked for nine years as Chief of Hematology and Coagulation of the Fitzsimmons Army Medical Center Department of Pathology. Luckily for UAB, he came here in 1993 and has since been the Section Head of Hematology and Bone Marrow Laboratories. In the last fifteen years, Dr. Reddy has trained and inspired dozens of students, residents and fellows to further their training in hematopathology. His sign-out sessions are some of the most popular teaching gatherings in our department. His diagnostic abilities at the microscope and knowledge not only of his chosen specialty but of pathology in general are truly amazing; as the saying goes, he has forgotten more than most people know!

Dr. Reddy's fellowship program is highly competitive among UAB and

non-UAB residents looking for training with an outstanding mentor and curriculum. Of sixteen teaching awards given every year by Pathology residents to Clinical Pathology faculty members, Dr. Reddy has received six, more than any of his other colleagues! Even more impressive and unique, he is the only faculty member in Pathology who works in two divisions and, not surprisingly, has also received two awards for his teaching in Anatomic Pathology. At UASOM, Dr. Reddy has been nominated and received several Argus Awards for his work as coursemaster and lecturer of the Hematology/Oncology course. For those of us who have learned so much from him, Dr. Reddy serves as an exceptional example of hard work, dedication and humility. His love for chocolate is perhaps the main characteristic that brings him closer to ordinary mortals like the rest of us! Thank you for everything, Dr. Reddy!

Dr. Reddy has trained and inspired dozens of students, residents and fellows to further their training in hematopathology

Accolades

Gene P. Siegal, M.D., Ph.D.—



Professor and Director of Anatomic Pathology has been named the A.P. Stout Lecturer for 2009 by the American Society of Clinical Pathology (ASCP).

Dr. Siegal will present his lecture at the annual meeting next year of the Society in Chicago.



Silvio H. Litovsky, M.D.— Assistant Professor of Pathology has been named as a new CAP State Inspector.



Steven L. Carroll, M.D., Ph.D.— Professor of Pathology has been named the Director of the Division of Neuropathology.



Robinna G. Lorenz, M.D., Ph.D.— Professor of Pathology has been appointed to the AAMC Great Group

MD-PhD Section Steering Committee. She plans to serve for three years .



Stephen A. Maser, Ph.D.— Professor of Pathology was recently named the Chair of the Faculty Affairs Committee.

AJCP Resident Research Symposium Award and Poster Abstracts

Two pathology residents tied for 1st place in the *American Journal of Clinical Pathology (AJCP)* Resident Research Symposium Competition on October 18 at the [2008 ASCP Annual Meeting](#) in Baltimore.

Kathrina Alexander, MD, of the University of Alabama-Birmingham, presented "Thrombotic Events in the Setting of Activated Recombinant Clotting Factor VII Use."

Michael H. Roehrl, MD, PhD, of Massachusetts General Hospital presented "Glycoproteomic Analysis of

Human Lung Adenocarcinomas Using Glycoarrays and Tandem Mass Spectrometry: Differential Expression and Glycosylation Patterns of Vimentin and Fetuin A Isoforms."

They each won \$1000, presented by new ASCP President Barbara J. McKenna, MD, FASCP, courtesy of [ARUP Laboratories](#).

Fifty-seven of the 75 abstracts submitted were published in the October issue of *AJCP*. The abstracts can be viewed on the web at www.ajcp.com/pdf/

[ASCP abstracts.pdf](#). The first ten abstracts in the document are the competition finalists.



(L-R): Drs. McKenna Roehrl and Alexander

New Pathway to Bone-Building Identified



Xu Cao, Ph.D.
Professor



Mei Wan, Ph.D.
Associate Professor

Scientists have identified a crucial step in hormone-triggered bone growth that could lead to development of new and better bone-building therapies, according to UAB research published in the November issue of the journal *Genes and Development*.

The study demonstrated that parathyroid hormone (PTH) — given intermittently — enhances the body's own bone-building action, said pathology Professor Xu Cao,

Ph.D., senior author on the study. "We have identified the protein co-receptor crucial to the whole process."

Researchers examined PTH signals in mice to identify the cell receptors that actively recruited calcium from the blood, and they uncovered the co-receptor responsible for turning on the bone-building process, said Associate Professor Mei Wan, Ph.D., first author on the study.

Previously, the mechanism of PTH-signaled bone formation had been unknown and complicated by the joint production of osteoblasts and osteoclasts, said Professor Jay McDonald, M.D., Director of UAB's Center for Metabolic Bone Disease. Both types of cells help regulate the skeleton.—osteoblasts by forming new bone and osteoclasts by resorbing old and brittle bone. Many osteoporosis drugs target both osteoblasts and osteoclasts, which can

lead to zero or minimal bone formation, he said.

"The ideal would be to have one drug to shut down the osteoclasts and turn on the osteoblasts to effectively build bone. We don't have that yet, but this study shows us the path to get there," McDonald said.

— Article by Traci Bratton, UAB Media Relations

From the Chief Residents

Recruiting season for next year's resident class is underway. Interviews began in late October and will run until January. During their visit, candidates will interview with various faculty and have a chance to attend some of our department conferences. Residents will have an opportunity to get to know the candidates over breakfast or lunch.

Please introduce yourselves to the resident applicants who come through the department over the next few months, and make them feel welcome during their visit to UAB.

Jeremy Henderson and Diane Peterson
Chief Residents, 2008-2009

Congratulations!

...to **Kathryn Clary**, who will complete her residency training at the end of October and will join the faculty as an Instructor in Anatomic Pathology on November 17.

College of American Pathologists Annual Meeting —The Annual CAP Meeting was held on September 25 – 28 in San Diego, California. **Kathrina Alexander, Marian Kraemer, Meiklejohn McKenzie, and Xiaojun Wu** represented our program at the meeting of the CAP Residents Forum on Wednesday, September 24, prior to the start of the Annual Meeting.

Residents on National Committees

The Board of Directors of the American Society for Clinical Pathology (ASCP) recently re-appointed **Elizabeth Kerr** and **Jeremy Henderson** to one-year terms on the ASCP Finance and eCourse Committees, respectively. Additionally, **Jeremy** will represent his committee as an ex-officio member of the ASCP Instructional Technology Committee. He also serves as a junior member of the CAP Council on Accreditation.

Mock Laboratory Inspection

During October, residents will participate in a mock inspection of UAB clinical laboratories. Residents will be paired with a laboratory technologist to inspect assigned sections of the lab and will present their findings at a summation conference at the end of October. The mock inspection is being held prior to the actual unannounced CAP Inspection, which will occur sometime between November and January.

Program Reaccreditation

On October 4, the ACGME Residency Review Committee for Pathology awarded continued accreditation to the UAB Pathology Residency Program. The five-year re-accreditation status is in place until the next survey in October 2013.

New CP Offices

On August 26, residents joined faculty and representatives from hospital laboratories in a Ribbon Cutting Ceremony for the new resident CP offices, located in Room 293 of the Medical Education Building (M293). **Jeremy Henderson**, Chief Resident for Clinical Pathology, cut the ribbon hanging across the door of the offices and thanked the residents, faculty, and laboratory representatives for their contributions to a successful move. Refreshments were served, and residents treated the faculty and other guests to tours of the new offices.



Jeremy Henderson cuts the ribbon hanging across the door of the new resident offices in M293, during a ceremony on August 26.



Following the Ribbon Cutting Ceremony, **Darrell Sanders** and **Marian Kraemer** smile for the camera in the new resident CP offices.



Jose Lima and **Amanda Crowe** lead Dr. **Marisa Marques** on a tour of the new CP resident offices after the Ribbon Cutting Ceremony.

Resident Social

Residents and their guests gathered on the evening of September 11 for a time of good food and fellowship at New York Pizza in Homewood.



Amberly Nunez, Charles Nunez, and Dara Wakefield



Emily Gorman, Sam Borak, and Frank Anderson

Resident Publications

Shuting Bai is the first author on "TRAF6 is an Intranuclear Transcriptional Co-Activator in Osteoclasts" in the September 2008 volume of the *Journal of Biological Chemistry*. He is co-author on "The LIM Protein LIMD1 Influences Osteoblast Differentiation and Function" in the September 2008 volume of *Experimental Cell Research*.

From the Chief Residents cont'd...

AJCP Resident Research Symposium

Virginia Dailey and **Kathrina Alexander** competed among eight other residents in the AJCP Resident Research Symposium held on October 18 at the annual ASCP Meeting in Baltimore, Maryland. **Virginia** presented "Primary Enteric Adenocarcinoma of the Prostatic Urethra: An Overview of Three Cases with Em-

phasis on its Immunohistochemical Profile." Faculty mentor was Dr. Omar Hameed. **Kathrina** tied for first place in the competition with her presentation "Thrombotic Events in the Setting of Activated Recombinant Clotting Factor VII Use." Faculty mentor was Dr. Marisa Marques.



Virginia Dailey (second from right) and **Kathrina Alexander** (fourth from right) stand with other residents who competed in the AJCP Resident Research Symposium on October 18 at the annual ASCP Meeting.

From the Graduate Students

Students who have successfully defended their theses:

Joshua Anderson

September 26, 2008
 "Thrombospondin Type-1 Repeats and Their Potential Role in Inhibiting Glioblastoma Angiogenesis"
 Mentor - Candace Gladson, PhD

James Cody

October 30, 2008
 "A Dual-Action, Armed Replicating Adenovirus for the Treatment of Bone Metastases of Breast Cancer"
 Mentor - Joanne Douglas, PhD

Douglas DiGirolamo

October 21, 2008
 "Growth Hormone Signaling and Action in Osteoblasts"
 Mentor - Thomas Clemens, PhD

Xin Li

September 9, 2008
 "Mechanism of the Cross Talk Between Growth Hormone Receptor and Epidermal Growth Factor Receptor"
 Mentor - Stuart J. Frank, PhD

Alexandra Silveira

October 31, 2008
 "Characterization of SUO53 as a BRMS1 Family Member in Breast

Cancer"
 Mentor - Dan Welch, PhD

October 17, 2008 MCP Graduate Student Research Day Awards

Lauren VanDuyn

1st place in poster presentation
 "Calreticulin Plays a Role in Collagen Regulation"
 Mentor - Joanne Murphy-Ullrich

Yekaterina B. Khotskaya

2nd place in poster presentation
 "Interfering with Syndecan-1/ Heparanase Axis to Target Multiple Myeloma"
 Mentor - Ralph Sanderson

Junghyun Kim

3rd place in poster presentation
 "Chromatin Looping Between an Intronic Enhancer and Distal Promoter Regions Regulates Human Heme Oxygenase-1 Gene Expression"
 Mentor - Anupam Agarwal

Dario A. Vitturi

1st place for oral presentation
 "Sodium Nitrite Prevents Hypertension Associated with the Hemoglobin Based Blood Substitute HBOC-21"
 Mentor - Rakesh Patel

Erin McCoy

2nd place for oral presentation
 "Characterizing the Role of CD68 in Mediation of Breast Cancer Attachment to Bone"
 Mentor - Xu Feng

Colin Reily

3rd place for oral presentation
 "Diabetes Included Kidney Damage Ameliorated by a Mitochondrial Targeted Antioxidant"
 Mentor - Victor Darley-Usmar

Graduate Program Director:

Rakesh P. Patel, Ph.D.

Graduate Program Support:

Nicole Newton

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MCP 2008 Welcome Reception



MCP 2008 Graduate Student Research Day

UAB Clinical Pathology Quick Guide Series Update

In the April 2007 newsletter, there was an article on the first "Quick Guide to Coagulation Testing" by Dr. Marisa B. Marques and George Fritsma that had been published by AACC Press in July 2006.

Since then, the following additional pocket books have become available:

"Quick Guide Hematology Testing," by Drs. Vishnu Reddy, Marisa B. Marques, and George Fritsma (released in July 2007; 916 copies sold as of last August). Topics discussed include peripheral smear examination, anemias, leukemias, lymphomas, myelodysplasia, myeloproliferative disorders, flow cytometry, histochemical stains, cytogenetics, etc.

"Quick Guide to Transfusion Medicine," by Dr. Marisa B. Marques and Margaret Fritsma. (released in July 2007; 386 copies sold as of last August). The booklet is divided in 4 broad areas: transfusion safety, blood donation, collection and processing, blood components and blood transfusion therapy, which also includes therapeutic apheresis.

"Quick Guide to Clinical Chemistry," by Drs. Janelle M. Chiasera, John A. Smith, and Robert W. Hardy (202 – released in July 2008; 202 copies sold in the first month). The "Quick Guide to Clinical Chemistry" serves as a quick reference for the interpretation of tests used to aid in the diagnosis and management of several common clinical conditions, including electrolytes, liver function

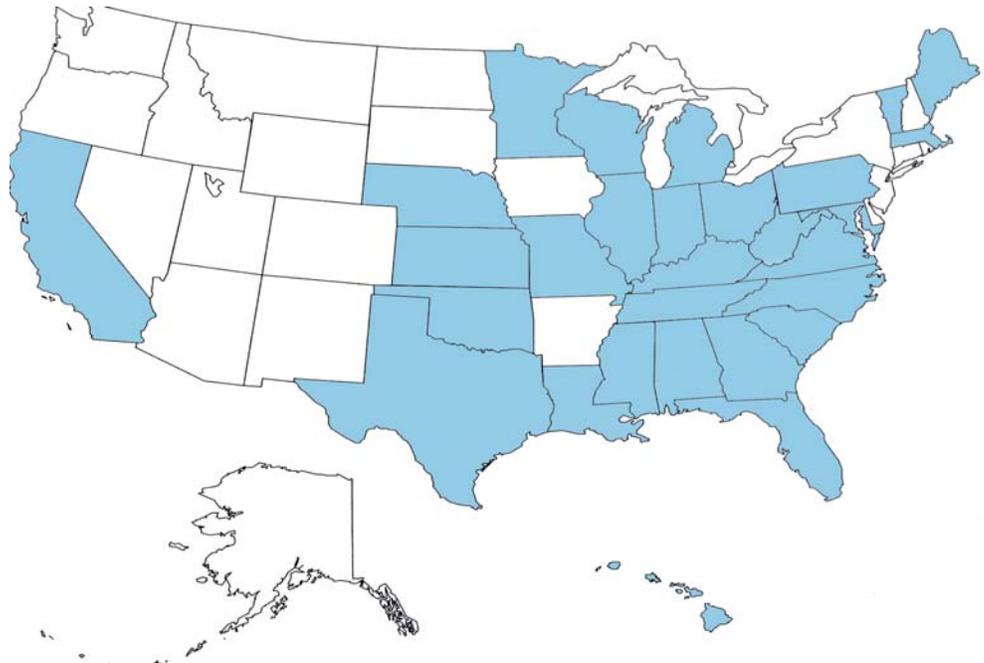
tests, cardiac markers, therapeutic drug monitoring, thyroid tests, etc. In keeping with the goal of this series, it is designed for anyone who orders, performs or interprets these laboratory tests.

As of the beginning of 2008, the first three Quick Guides published in 2006 and 2007 had been sold in 58 countries in all 5 continents!

Dr. Marques is now working on a second and expanded edition of the Coag Testing to be released in early 2009.

The books are available and can be purchased through the publisher at : <http://direct.aacc.org/ProductCatalog/AACCSearch.aspx> or at www.amazon.com.

Past Pathology Fellow/Residents... Where are they now?



Quebec, Canada

Khldoun Bakdounes, M.D.

Malta

Andrew Falzon, M.D.

Victoria, Brazil

Ana Paula Santos Louro, M.D.