



The Pathologist

The Newsletter of the Department of Pathology and Laboratory Medicine at NewYork-Presbyterian Hospital/Weill Cornell Medical Center

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Research Highlights

by Daniel M. Knowles, MD

Signal Transduction Mechanisms in Vascular Biology



Timothy Hla, PhD

Dr. Timothy Hla, Professor of Pathology and Laboratory Medicine with tenure, received his PhD in Biochemistry from the George Washington University in 1988 and did his postdoctoral training in the Laboratory of Molecular Biology at the American Red Cross. He joined the Weill Cornell Medical College in 2009 and serves as Director, Center

for Vascular Biology. Dr. Hla is an internationally recognized vascular biologist. His research has focused on angiogenesis both in terms of fundamental basic biology and mechanisms that underlie carcinogenesis. He has published more than 125 scientific articles in the peer-reviewed scientific literature and he is a well-respected and internationally known figure in the field of vascular biology. His research program has been heavily supported by the National Institutes of Health.

The Hla laboratory has had a long-standing interest in molecular mechanisms that regulate vascular endothelial cell homeostasis, injury and proliferation into new vascular structures (a.k.a. angiogenesis). In the early 1990s, his laboratory cloned two key genes, namely cyclooxygenase (COX)-2 and the prototypical sphingosine 1-phosphate receptor-1 (S1P₁), induced in vascular endothelial cells upon growth stimulation. Efforts were focused on the function of these genes in angiogenesis, inflammation and cancer. Since the vascular system is intimately involved, not only in normal homeostasis but also in inflammatory processes and cancer, he also explored the involvement of COX-2 and S1P pathways in normal physiology, animal models of human disease and in tissue sections from humans with various pathological conditions. His work has helped define the function of these gene products in various

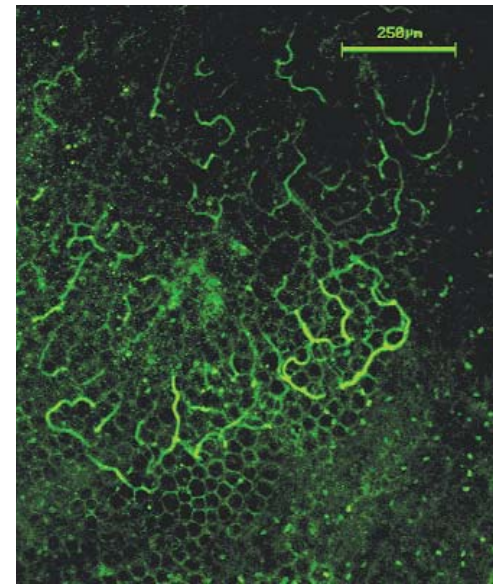


Figure 1: When COX-2 is overexpressed in breast tissue, the resulting prostaglandins that are released activate the angiogenic switch forming new capillaries. The image shows sprouting (yellow-green) visualized with a fluorescent label. The background honeycomb pattern shows normal capillaries.

“His research has focused on angiogenesis both in terms of fundamental basic biology and mechanisms that underlie carcinogenesis.”

human diseases including arthritis, colon cancer, breast cancer and atherosclerosis. This research has also provided novel approaches to controlling pathologic inflammation in various disease processes as detailed on the following pages.

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Research Highlights

continued

COX-2 as an Inducible Gene Important for Angiogenesis and Inflammation in Cancer

His laboratory cloned the human COX-2 cDNA in 1992 as an inducible gene from endothelial cells. Interestingly, both angiogenic growth factors and inflammatory cytokines induce COX-2, suggesting that it is involved in both angiogenesis and inflammation. COX-2 is overexpressed in rheumatoid arthritis, colon cancer and breast cancer tissues.

Two major questions arose from those studies: the first being whether COX-2 overexpression is pathogenic and the second question deals with the molecular mechanisms involved in the upregulation of COX-2 in pathological conditions. To tackle the first question, he developed a transgenic mouse model of COX-2 overexpression in the mammary epithelium. These mice developed late-onset mammary cancer that was blocked by COX-2 inhibitors, suggesting that COX-2 is indeed critical for cancer development. Further mechanistic studies showed that COX-2 is critical for the release of PGE₂ which regulates the angiogenic switch in the mammary stroma (Figure 1). Both the G protein-coupled EP2 receptor and the nuclear receptor PPAR δ were critical in the induction of tumorigenic response. These studies provided a mechanistic framework for the involvement of COX-2 in cancer. Parallel studies in humans conducted in collaboration with Ari Ristimaki's laboratory in Helsinki, Finland indicated that COX-2 expression is inversely correlated with disease free survival in women with breast cancer. Although these studies suggest that COX-2 inhibitors may have utility in treatment and/or preventive approaches in cancer, recent epidemiological evidence for the cardiovascular adverse effects associated with COX-2 inhibitor usage tempered their clinical utility.

His recent studies have started to unravel the molecular mechanisms by which COX-2 pathway inhibition leads to cardiovascular episodes. Although there are likely to be multiple mechanisms, he found that the COX-2 enzyme in vascular endothelial cells produces a prostacyclin-like molecule that positively activates the PPAR δ receptor and inhibits thrombotic responses. Specifically, inhibition of COX-2 results in increases in basal expression of tissue factor, a potent mediator of blood clotting. This can be obviated by activation of PPAR δ with a specific pharmacological agonist. The application of this knowledge could lead to reduction in prothrombotic side effects associated with COX-2 inhibitor usage.

The second question he addressed was the mech-

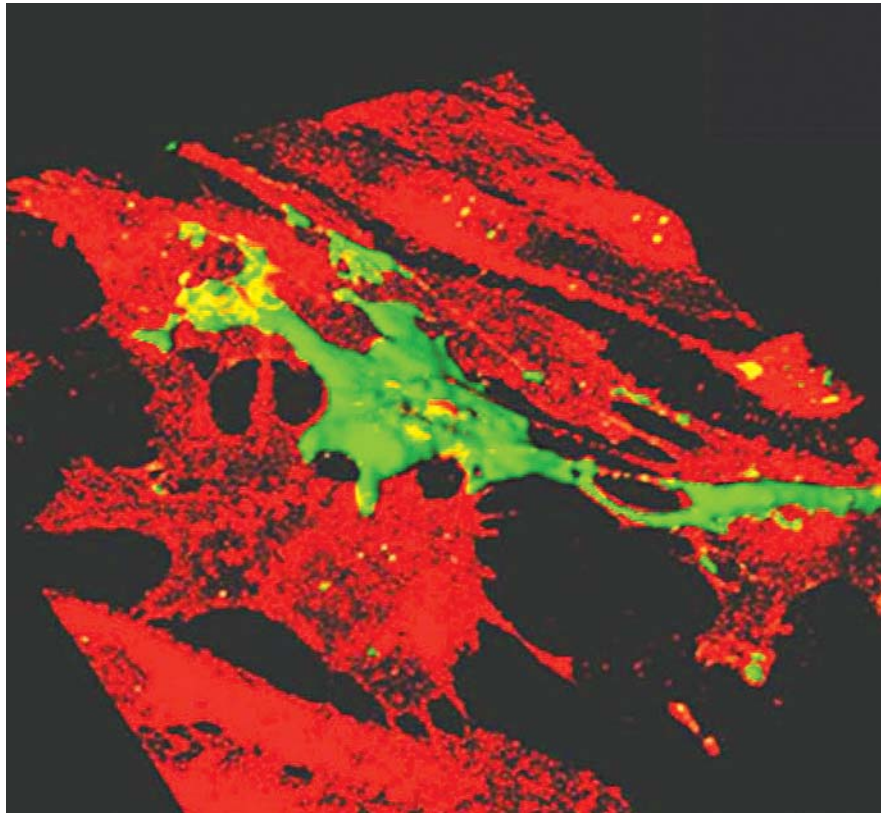


Figure 2: S1P receptor on endothelial cells grown in culture (red) promotes binding to a pericyte (green) via cell-cell adhesion molecules called cadherins. This phenomenon on vascular maturation is essential in embryonic development and neoplastic growth.

anisms by which COX-2 is upregulated in cancer and inflammation. Basic studies in COX-2 gene regulation identified post-transcriptional RNA regulatory mechanisms as a critical step. Towards that end, he identified an abundant RNA binding protein called HuR which binds to the 3'-untranslated region of COX-2 and regulates its expression. Since HuR is overexpressed and activated in various cancers, his data suggests that HuR regulates COX-2 as well as other critical cancer-regulatory genes. To address this issue, he developed an inducible mouse knock-out model.

The importance of HuR-regulated post-transcriptional RNA mechanisms in organismal homeostasis was evident when HuR knockout mice developed severe defects in hematopoiesis and intestinal villus disruption due to progenitor cell apoptosis. Interestingly, HuR regulates the p53-dependent apoptotic program in stem/progenitor cells, allowing cell survival and proliferation. However, in more differentiated cells, such as macrophages and endothelial cells, HuR regulates mRNAs involved in inflammation and angiogenesis. He is currently involved in molecular studies to define mRNAs and miRNAs regulated by HuR in endothelial cells and

macrophages. Since HuR regulates gene expression by modulating miRNA/mRNA interactions, he hopes to obtain a comprehensive view of the post-transcriptional landscape in vascular biology and pathophysiology.

“This research has also provided novel approaches to controlling pathologic inflammation in various disease processes.”

Sphingosine 1-Phosphate (S1P) Biology in Vascular and Hematopoietic Systems

He cloned an inducible G protein-coupled receptor called EDG-1 from human endothelial cells stimulated with the tumor promoter phorbol myristic acetate. Subsequently he found that the plasma-borne lipid *continued on page 3*

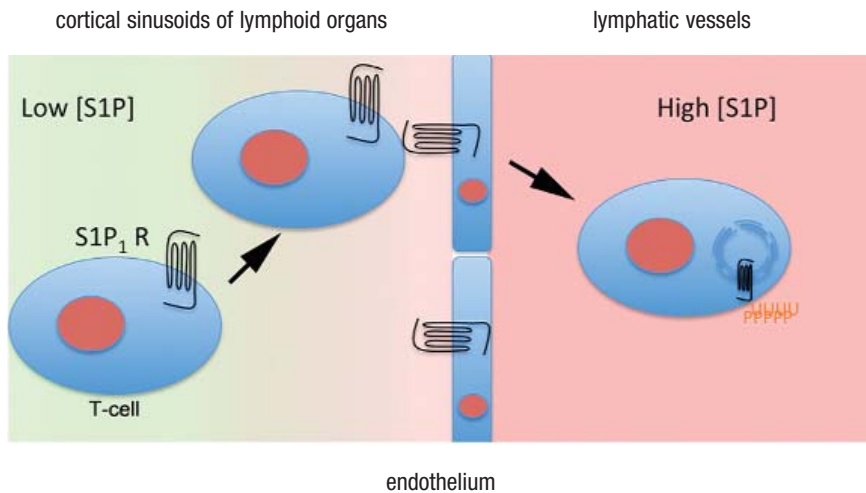


Figure 3: S1P receptor-1 on T cells is a key regulator of T cell egress from lymphoid organs into lymphatics. High S1P levels in lymph (pink color) and lower levels (green color) in the lymph nodes makes the T cells move against the gradient by the process of chemotaxis. Although the lymphatic endothelium also expresses the S1P receptor-1, this does not seem to regulate lymphocyte egress. Once the T cells exit the lymph nodes, S1P receptor-1 gets internalized due to endocytosis. This process of lymphocyte egress is blocked by FTY720, a new drug recently developed by commercial entities and approved as a first-line oral therapy in multiple sclerosis.

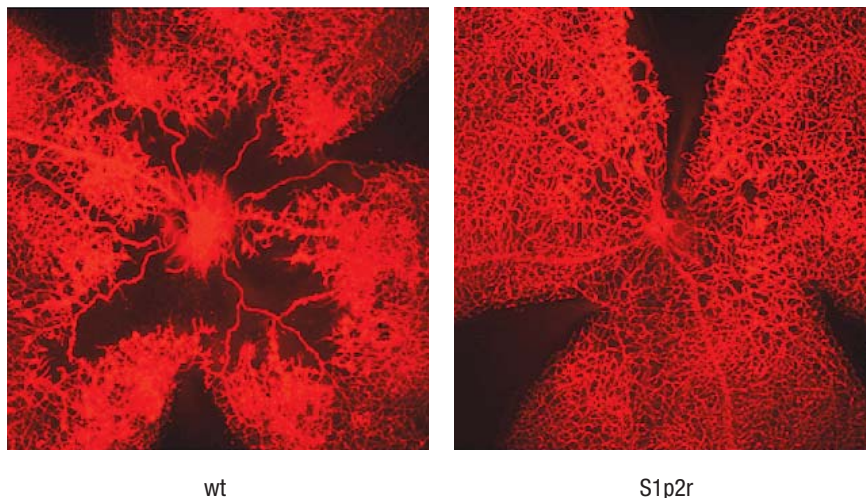


Figure 4: S1P receptor-2 is induced in hypoxic retinal blood vessels and is essential for the formation of pathologic lesions called vascular tufts (left panel in wild type (WT) mice). In the Knockout (-/-) mice (right panel), which lack the S1P receptor-2, vascular tufts are absent and normal vasculature is present despite hypoxia. The blood vessels are labeled with a fluorescent lectin (red).

molecule S1P is a high affinity ligand for EDG-1. This work identified EDG-1 as the prototypical S1P receptor and suggested that S1P signaling is critical in vascular endothelial activation and angiogenesis.

Indeed, subsequent studies from his lab and others show that S1P is a potent angiogenic factor and that it regulates angiogenesis, vascular stabilization and vascular permeability by interacting with a family of S1P receptors (Figure 2).

Independent work showed that S1P gradients (high S1P in blood and lymph plasma and low S1P in interstitial fluids) regulate T cell recirculation. The S1P-dependent egress of hematopoietic cells from a low S1P environment (i.e. tissue spaces, secondary lymphoid organs) to a high S1P environment (i.e. circulatory and lymphatic systems) may indeed be a general mechanism that many hematopoietic cells utilize as they enter and exit the vascular

compartment (Figure 3).

Since this process is controlled by a specific S1P receptor, novel pharmacologic agents were developed by commercial entities as S1P receptor modulators to control pathologic immune reactions. Indeed, a recent report describes the positive results from a phase III clinical trial in which an S1P receptor modulator was shown to reduce the neuro-inflammation and myelin loss associated with multiple sclerosis. The clinical application of S1P receptor modulators to the clinic has accelerated research in this area and has also intensified work on the role of different S1P receptors in vascular and immunobiology (Figure 4).

Dr. Hla hypothesized that S1P receptor trafficking and ubiquitinylation within cells regulates the signal intensity and duration of S1P signaling. To address this issue, we developed a knock-in mouse model in which S1P₁ receptor internalization is defective. These mice show increased egress of T lymphocytes in response to pharmacologic S1P receptor modulators and inflammatory stimuli. In addition, we showed that S1P receptor trafficking on T cells rather than endothelial cells is critical for lymphocyte egress from lymphoid organs into the circulatory system. He is currently examining the role of S1P₁ receptor internalization in other hematopoietic cells such as progenitor cells and myeloid cells.

S1P₁ and S1P₂ receptors are present on myeloid cells and appear to regulate inflammatory reactions and myeloid cell migration patterns. Since sphingolipids are deposited into the atherosclerotic plaque and S1P is produced in the inflammatory milieu of the atherosclerotic plaque, he is testing the hypothesis that S1P receptors mediate the increased sphingolipid loading in the vessel wall and subsequent inflammatory sequelae. Using mouse models of atherosclerosis as well as in vitro study of primary macrophages, current studies are focused on the role of specific S1P receptors and the consequent molecular pathways in the vascular disease of atherosclerosis.

These efforts are anticipated to provide fundamental information on the role of specific lipid mediator signaling pathways in numerous pathological processes such as cancer, chronic inflammatory diseases and atherosclerosis. Since such molecular knowledge provides novel therapeutic targets, such as S1P receptor modulators and COX-2 inhibitors, Dr. Hla anticipates that these efforts will lead to novel approaches to control various pathological conditions. ■

Focus

by Daniel M. Knowles, MD

Welcome New Incoming Faculty

I am delighted to introduce five individuals who joined our faculty in the summer of 2010. Two of the five individuals completed their residency training in our program and are joining the faculty after completing specialized fellowship training elsewhere. A third individual is a Weill Cornell Medical College graduate who is joining the faculty after completing her residency and fellowship training at the Massachusetts General Hospital. A fourth individual is a young scientist who is joining us following her training at Cold Spring Harbor and Memorial Sloan-Kettering Cancer Center. The fifth individual is joining us after completing laboratory medicine residency and fellowship training at the University of Washington.

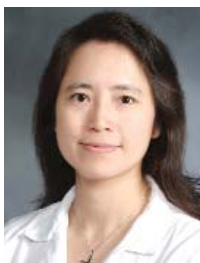
Suzanne Brandt, MD graduated from the



Georgetown University School of Medicine in 2005. After completing the combined anatomic and clinical pathology training program at the Weill Cornell Medical Center, she completed a cytopathology fellowship at the

Memorial Sloan-Kettering Cancer Center. During her training, she presented several abstracts at the annual meetings of the United States and Canadian Academy of Pathology and published peer-reviewed clinical research concerning breast pathology. Dr. Brandt will be appointed Assistant Professor of Pathology and Laboratory Medicine. She will be joining our Cytopathology Division.

Yi-Chieh (Nancy) Du, PhD completed her under-



graduate education in her native Taiwan. Subsequently, she immigrated to the United States, receiving her PhD from State University of New York at Stony Brook in 2002. Her graduate work focused on "delineating biological

control for DNA replication and ribosome biogenesis." She joined Harold Varmus' Laboratory at the Memorial Sloan-Kettering Cancer Center as a post-doctoral fellow in 2003. In 2008, she was promoted to Research Associate. During these several years, she studied the molecular mechanisms involving cancer initiation, progression and metastasis principally by employing a mouse model of pancreatic carcinoma which she developed. These studies have led to several publications in highly respected scientific journals, including *Science* and *Proceedings of the National Academy of Science*. Dr. Du will be appointed Assistant Professor of Pathology and Laboratory Medicine. She will establish her research laboratory in our Division of Experimental Pathology.

Olga Kolman, MD graduated Alpha Omega Alpha

from Weill Cornell Medical College in 2006. She received multiple prizes and awards while pursuing her medical education at Weill Cornell Medical College, including the prestigious Glasgow-Rubin Memorial Citation for graduating first in the class of 2006. Subsequently, she completed residency in anatomic pathology followed by a surgical pathology fellowship at Massachusetts General Hospital. She became actively involved in clinical research while pursuing her residency and fellowship education. She presented several times at the annual meetings of the United States and Canadian Academy of Pathology and also published peer-reviewed clinical research in *American Journal of Surgical Pathology* and *Journal of the American Academy of Dermatology*. Dr. Kolman will be appointed Instructor in Pathology and Laboratory Medicine and will spend the first year of her appointment actively involved in our gastrointestinal pathology and general surgical pathology services. (no photo available)

Brian Robinson, MD graduated from the Weill Cornell Medical College in 2006. He completed the



anatomic pathology training program at the Weill Cornell Medical Center in 2009 and the urological pathology fellowship under Dr. Jonathan Epstein at the Johns Hopkins Hospital. During his training Dr. Robinson actively participated in clinical research

leading to a number of published abstracts and presentations at the annual meetings of the United States and Canadian Academy of Pathology. He actively engaged in laboratory-based research concerning the tumor microenvironment of metastatic breast cancer, leading to first author publications in *Future Oncology*, *Clinical Cancer Research*, and *The Breast Journal*. He also published clinical research studies with Dr. Jonathan Epstein in the *American Journal of Surgical Pathology*. In addition to his diagnostic and clinical research activities, Dr.

Robinson is very interested in medical student education. He will be appointed Assistant Professor of Pathology and Laboratory Medicine and join our Division of Anatomic Pathology where he will participate in the urologic pathology, breast pathology and general surgical pathology services. In addition, he will play an active role in our medical student education program.

Mikhail Roshal, MD, PhD immigrated to the United States from the Soviet Union. He completed his



undergraduate education at the University of Chicago in 1996. Subsequently, he matriculated in the University of Rochester School of Medicine and Dentistry medical scientist training program, completing his

PhD in 2003 and his MD in 2005. He completed residency in laboratory medicine, followed by hematopathology fellowship, at the University of Washington, Seattle Washington. His doctoral research activities led to publications in *Journal of Virology*, *Journal of Biological Chemistry*, *Journal of Neuroscience*, and *Apoptosis*. During his residency and fellowship education his interests became more translational, focusing on immunophenotypic identification of acute myeloid leukemia propagating cells and tissue culture expression studies of Reed-Sternberg cells of Hodgkin lymphoma. He also became involved in the analysis of minimal residual disease and in clinical test development. These activities garnered research awards from the University of Washington Department of Laboratory Medicine as well as from the Academy of Clinical Laboratory Physicians and Scientists. Dr. Roshal will be appointed Assistant Professor of Pathology and Laboratory Medicine. He will join our Division of Laboratory Medicine where he will serve as Chief, Hematology Laboratory and also as Consultant, Flow Cytometry Laboratory. ■

Keynotes

by *Domenick J. Falcone, PhD*

► **Dr. M. Desmond Burke**, Professor Emeritus of Pathology and Laboratory, Medicine has been appointed Life Trustee of the American Board of Pathology. Congratulations!

► **Dr. Domenick J. Falcone** was invited by the Departments of Surgery and Pathology, Stony Brook School of Medicine, NY to present his research on prostaglandin receptors as therapeutic targets in the treatment of vascular diseases (June 2010). Dr. Falcone was appointed Chair of the *Core of Basic Sciences Committee*, which oversees the first and second years of the medical college curriculum. He continues to serve as associate director of the Human Structure & Function course (January-May) and director of the Host Defenses course (May-June). During the convocation in June, Dr. Falcone received the *First Year Teaching Award* from the Class of 2013 and was named to the Senior List by the graduating class (2010) for excellence in teaching.

► **Dr. Timothy Hla** was an invited speaker at the following scientific meetings: Cell Signaling in Cancer, Barossa Valley, Adelaide, South Australia (November 2009), Gordon Conference on Sphingolipids and Glycolipids, Ventura, CA (February 2010) and Keystone Meeting on Angiogenesis, Keystone, CO (March 2010). He was also invited to present his research on sphingolipids and vascular biology at the Department of Pharmacology at the New York Medical College, Valhalla, NY and Hospital for Special Surgery, New York, NY. Dr. Hla also served as a grant reviewer at the NHLBI program project review committees (fall 2009 and spring 2010) and the NIH Membrane biochemistry and protein processing study section (spring 2010). Dr. Hla's lab was awarded the competitive renewal grant for the program project P01-HL70694 (2009-2014) entitled Interactive Signaling Modules in Vascular Inflammation. (Project 1: Hla, T-Sphingolipid signaling in atherogenesis). His lab will be collaborating with investigators from the University of Connecticut Health Center and Yale University on signal transduction pathways during vascular inflammation and atherosclerosis.

► **Dr. Rana S. Hoda** lectured on various cytopathology-related topics at multiple national and international meetings including the 2010 USCAP Annual Meeting, Washington DC, where she presented a short course entitled: "Glandular Lesions in Liquid-

Based Pap Tests." She was course director of a four-day non-gynecologic cytology course sponsored by the ASCP at Scottsdale, AZ in 2009. Dr. Hoda also had several speaking engagements at the ASCP Annual Meeting in Chicago, IL (October 2009) and the American Society of Cytopathology (November 2009). Dr. Hoda also presented courses at various international meetings in 2009 including King Faisal Hospital at Riyadh, Saudi Arabia where she spoke on FNA of head & neck. She represented the American Society of Cytopathology at the 22nd European Congress of Pathology at Florence, Italy, where she spoke on EUS-FNA of pancreas. She lectured on FNA of the breast at USCAP Companion Meeting at Abadan, Nigeria and spoke on the same topic at the University Hospital at Istanbul, Turkey. Dr. Hoda is course director for "Tutorial in Diagnostic Cytopathology" being hosted at WCMC end of July, 2010. She continues to serve on the Scientific Abstract Review Board for cytopathology at USCAP. She was appointed as "Associate Editor" for CytoJournal, Section Editor for "Case of the Month" at the International Academy of Cytopathology website and Chair of the Fundraising & Outreach Committee for the American Society of Cytopathology.

► **Dr. Syed A. Hoda** participated in various capacities at multiple educational events across the United States and in several countries. He was the Keynote Speaker in the *International Academy of Pathology-West African Division's Scientific Conference* held in Ibadan, Nigeria in August 2009. Dr. Hoda also lectured at the Annual Meeting of the *Venezuelan Mastology Society* in Merida, Venezuela in September 2009, in

Saudi Arabian King Faisal Hospital in Jeddah in October 2009, in *Saudi Arabian King Faisal Hospital in Riyadh* in October 2009, in *School of Breast Oncology, Atlanta* in November 2009 and in *New York Pathological Society President's Symposium* in May 2010. In addition, Dr. Hoda conducted multiple Short Courses at several leading educational conferences including at the Annual Meeting of *American Society of Clinical Pathology (ASCP)* in Chicago (October 2009), at the Annual Meeting of *American Society of Cytology (ASC)* (November 2010), at the Annual Meeting of *United States and Canadian Academy of Pathology (USCAP)* in Washington (March 2010), and at the Annual Meeting of *British Society of Clinical Cytology (BSCC)* in Edinburgh, Scotland (May 2010).

► **Dr. Stephen G. Jenkins** was an invited speaker at several symposia and chaired a workshop on Antimicrobial Resistance at the Interscience Conference on Antimicrobial Agents and Chemotherapy in San Francisco, CA (September 2009). Dr. Jenkins also coordinated the U.S. faculty and lectured on "Gram-positive antimicrobial resistance" at a workshop jointly sponsored by the American Society for Clinical Microbiology and the European Society for Clinical Microbiology and Infectious Diseases, in Cairo, Egypt (October 2009). In addition, Dr. Jenkins was a Visiting Professor at the Albert Einstein School of Medicine presenting on Antimicrobial Resistance among Gram-negative Pathogens—Detection, Epidemiology and Treatment (February, 2010). He presented four lectures at the Austrian-American Foundation Salzburg Medical Seminars in June.

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Dr. Syed Hoda (center, front row) with other Faculty Speakers who participated in the 4th Annual Scientific Conference of the West African Division of International Academy of Pathology held in Ibadan Medical College in Nigeria in August 2009. Dr. Hoda's Keynote Lecture at the Conference was entitled "Pathology of Breast Tumors: What Have We Learned?"

Keynotes

continued

► **Dr. Daniel M. Knowles**, Chairman and Pathologist-in-Chief, continues to direct the Tutorial on Neoplastic Hematopathology. He has directed the Tutorial for the past 14 years. This is widely considered the premier postgraduate course in Hematopathology offered in the United States. This five-day course covers all aspects of malignant lymphoproliferative and myeloproliferative disease occurring in nodal, bone marrow and extranodal locations. The faculty includes a small roster of outstanding, internationally recognized expert hematopathologists. This past year, the course was held in Marco Island, Florida in January 2010. In addition to directing the Tutorial Dr. Knowles lectured on “Pathology of Immune Deficiency-Associated Lymphoproliferative Disorders.” Dr. Knowles actively participated in the Annual Meeting of the United States and Canadian Academy of Pathology held in Denver, Colorado in March 2010. In addition to attending the annual meetings of the several editorial boards upon which he serves, Dr. Knowles co-authored abstracts with other members of the Weill Cornell Hematopathology group and residents and fellows. In September 2009, Dr. Knowles attended the Annual Meeting of the Northeast Pathology Chairs in Bermuda. In addition to serving as Program Chairman for the meeting, Dr. Knowles led a spirited discussion concerning the economic opportunities and challenges facing academic pathology departments. In addition, Dr. Knowles continues in his role as Chief Medical Officer of the Weill Cornell Physician Organization. He also serves as Chair of the Strategic Plan III Clinical Implementation Committee. This committee is charged with coordinating all clinical programs and recruitments included in Strategic Plan III and in the planning initiatives of the Physician Organization. The committee is responsible for developing recommendations to the Dean for sequencing priority funding and investments in people, space and programs. Dr. Knowles also co-chairs the Board of Directors of Weill Cornell Imaging at NewYork-Presbyterian Hospital with Dr. Steven Corwin, Executive Vice President and Chief Operating Officer of NewYork-Presbyterian Hospital. Lastly, he serves as Chairman of the Internal Advisory Board charged with developing the administrative, clinical and scientific infrastructure necessary to eventually develop an NCI-designated Comprehensive Cancer Center at the Weill Cornell Medical Center.

► **Dr. Joan G. Jones** presented her work on Tumor Micro-Environment of Metastasis (TMEM) at two

AACR Special Conferences this year. The “Advances in Breast Cancer Research: Genetics, Biology, and Clinical Applications” conference was held in October 2009 in Mission Bay, California. The “EMT and Cancer Progression and Treatment” Conference was held in March 2010 in Arlington, Virginia. Related work on the relationship of TMEM to cancer stem cells was presented at the 2010 USCAP meeting in Washington, DC. In April, Dr. Jones served as host for the Jean Oliver lecture of the New York Pathological Society. The invited speaker, Dr. Ignacio Wistuba from MD Anderson Cancer Center, spoke on the timely topic, “Biomarker Analysis for Targeted Therapeutic Selection in Lung Cancer.”

► **Dr. Attilio Orazi** was an invited speaker at the EBMWG Scientific Meeting entitled “Advances in Bone Marrow Diagnostics” which was held in Szeged, Hungary (September 2009). The titles of his lectures were: “Ongoing studies in MDS/MPN: refractory anemia with ring sideroblasts and thrombocytosis (RARS-T)” and “Myelodysplastic Syndromes and MDS/MPN: WHO 2008.” In addition, he presented two cases and chaired one of the scientific sessions. Dr. Orazi was an invited speaker at the National Congress of the Italian Society of Hematology – held at the Milano Convention Centre, in Milano 18-21 October, 2009. The title of his lecture was “Myelodysplastic Syndromes: WHO 2008.” During the same week, Dr. Orazi together with Dr. Fabio Facchetti of the University of Brescia taught the course “Pathology of the Spleen” at the University of Brescia on October 20, 2009. From Italy, he went directly to Japan where he was invited by the Japanese Society of Hematology (JSH) as a keynote speaker to their annual clinical hematology meeting, which was held in Kyoto, Japan (October 2009). On November 16, 2009 he presented a Grand Rounds seminar to the Department of Pathology and Laboratory Medicine, WMC entitled: “Frequent diagnostic questions in spleen pathology.” He was a visiting professor in the Department of Pathology, NYU School of Medicine and presented a Grand Rounds seminar entitled: “A practical approach to spleen pathology” (December 2009). In January 2010, he presented lectures on “Myelodysplastic Syndromes” and “Myelodysplastic/Myeloproliferative Neoplasms” at the Tutorial on Neoplastic Hematopathology directed by Dr. Daniel Knowles, which was held in San Marco Island, Florida. In addition, Dr. Orazi chaired one of the sessions and gave the concluding remarks. In March

2010, Dr. Orazi participated in the 99th Annual Meeting of the United States and Canadian Academy of Pathology (USCAP) held in Washington, D.C. At the USCAP, Dr. Orazi attended the annual meeting of the Executive Committee of the Society for Hematopathology where he serves as member-at-large. He also attended the meeting for the Hematopathology Fellowship Program Directors. He co-chaired one of the morning proffered papers sessions. In addition to attending the annual meetings of the editorial boards upon which he serves, Dr. Orazi co-authored three posters. Together with Dr. D. Arber (Stanford University), Dr. Orazi directed a new short course: “Modern Approach to the Diagnosis and Classification of Myeloid Neoplasms.” During the year Dr. Orazi has continued in his role as Vice-President of the New York Pathological Society (NYPS). He has selected speakers for five successful NYPS events held between September 2009 and February 2010.

► **Dr. Edyta C. Pirog** was invited to serve as a consultant and pathology reviewer for the “International epidemiologic study of worldwide distribution of type-specific HPV DNA in invasive cancers and pre-neoplastic lesions” at the Cancer Epidemiology Research Program, Unit of Infections and Cancer, Catalan Institute of Oncology, Barcelona, Spain. In addition, she presented a lecture entitled “Pathologic classification of cervical adenocarcinoma and adenosquamous carcinoma” at the Catalan Institute of Oncology (December 2009). Dr. Pirog presented 3 posters at the 99th Annual Meeting of The United States & Canadian Academy of Pathology Washington, DC entitled: “Smooth muscle actin immunostaining as a marker of invasion in cervical adenocarcinoma” (Vinicius J.A. Panico, Yi-Fang Liu and Edyta C. Pirog); “HPV genotyping and HPV16 variant analysis in glandular and squamous neoplastic lesions of the uterine cervix” (Koen D. Quint, Maurits N.C. de Koning, Leen-Jan van Doorn, Wim G.V. Quint, and Edyta C. Pirog); and “P16 and Ki-67 immunostaining as markers of anal intraepithelial neoplasia and condyloma; correlation with Human Papillomavirus detection by PCR” (Edyta C. Pirog, Koen D. Quint and Rhonda K. Yantiss).

► **Dr. Audrey N. Schuetz** was invited as faculty lecturer and co-convenor of a workshop entitled: “Antibiotic Resistance among Bacterial Pathogens,” at the Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) 2009 annual

Keynotes

continued

► **Dr. Audrey N. Schuetz** *continued* meeting in San Francisco, CA. At that workshop, Dr. Schuetz lectured on "Molecular Epidemiology of Bacterial Pathogens." She was also invited as course instructor and lecturer at the annual Laboratory Identification of Emerging Pathogenic Molds course in Atlanta, Georgia (2010), sponsored jointly by the Centers for Disease Control and Prevention and the National Laboratory Training Network. She also serves as co-director of the Pathology Residency Leadership Committee and was recently elected a councilor for the New York City branch of the American Society for Microbiology. She was recently appointed a member of the Anaerobe Working Group of the National Clinical Laboratory Standards Institute (CLSI) Subcommittee on Antimicrobial Susceptibility. In addition, she serves as an ad hoc reviewer for the *Journal of Clinical Microbiology*, *Anaerobe*, and the *Journal of Clinical Virology*.

► **Dr. Surya V. Seshan** completed successfully the year 2009 as the President of the Renal Pathology Society (RPS) which has international members. Currently, Dr. Seshan is the Chair of the Nominating and Awards Committee of the RPS and is a Section Editor in Nephropathology for *Archives of Pathology and Laboratory Medicine*. She served as a moderator, abstract reviewer and invited speaker at the 2nd International CME in Renal & Transplantation Pathology meeting at PGI in Medicine, Chandigarh, India (February 2009). The titles of Dr. Seshan's lectures were: "Tubulo-interstitial lesions in immune disorders" and "Lessons from Renal Transplantation Pathology." She was an invited speaker at the Nephropathology Pre-Congress and the main Congress of the European Society of Pathology in Florence, Italy (September 2009). The titles of Dr. Seshan's lectures were: "Immune profiling in renal transplantation; biopsy correlation with urine and plasma PCR studies" and "Renal disease in rheumatoid arthritis." In addition, she co-moderated the session on "The kidney in auto-immune diseases." She also spoke at the 5th Course in Theory & Practice of Renal Immunopathology in Trani, Italy on "Lupus nephritis: classification and implications" and "Thrombotic microangiopathy: Pathology and new pathogenetic insights" (September 2009). Dr. Seshan also delivered several lectures at the Renal Pathology Course held with the biennial meeting of the Latin-American Society of Nephrology and Hypertension, Mexico City, Mexico (April 2009). In 2009, she gave

lectures at Grand Rounds in the Departments of Pathology and Medicine at the Albert Einstein Medical Center, and Drexel-Hahnemann University Hospital, both in Philadelphia; UMDNJ, Newark, New Jersey; Division of Rheumatology, Hospital for Special Surgery; Department of Hematology Oncology, Multiple Myeloma Series, Weill Cornell Medical College; and the Kidney and Urology Foundation and Nephrology Grand Rounds – CPC in NY. She presented in the Clinical Nephrology series and Renal biopsy correlations at the annual meeting of the American Society of Nephrology in San Diego, CA (October 2009).

► **Dr. Rhonda K. Yantiss** served as chairperson of the Rodger C. Haggitt Gastrointestinal Pathology Society education committee and member of its executive committee. She moderated the Gastrointestinal Pathology Society Companion Meeting at the 2010 United States and Canadian Academy of Pathology National Meeting in Washington, DC and coauthored numerous abstracts at that meeting. She was invited to lecture at several institutions in New York City, presented at The Big Apple Review and Update: The Art and Science of Surgical Pathology, and spoke at the 2009 American Society of Clinical Pathology National Meeting in Chicago, IL. Dr. Yantiss directed the first annual 5-day Tutorial on Pathology of the GI Tract, Pancreas, and Liver in Boca Raton, FL. She serves as an ad hoc reviewer for fifteen journals and was recently appointed to the editorial boards of the *Archives of Pathology and Laboratory Medicine*, *Modern Pathology*, and *The American Journal of Surgical Pathology*. She also completed her second term as an abstract reviewer for the College of American Pathologists. This year, Dr. Yantiss wrote several manuscripts and a textbook regarding frozen section interpretation of the colorectum, appendix, and anus. Her collaborative efforts with Dr. Andrew Dannenberg resulted in continued research support from the New York Crohn's and Colitis Foundation. Dr. Yantiss also serves on the Continuing Medical Education committee and Translational Research Committee of Weill Cornell Medical College. She is the co-director of the combined WCMC/MSKCC gastrointestinal pathology fellowship and co-directs the gastrointestinal pathophysiology module of the second year medical student course Basis of Disease. ■

Newly Awarded Grants in Pathology

Leukemia and Lymphoma Foundation Research Grant Award

Title: Mechanism-based Targeting of CDK4/CDK6 in Mantle Cell Lymphoma Therapy
Principal Investigator: **Selina Chen-Kiang, PhD**
Period of Support: 10/01/10 - 09/30/13
Total Direct Costs: \$1,140,030

National Institutes of Health National Heart, Lung, Blood Institute

Title: Post-Transcriptional Mechanisms and Vascular Inflammation
Principal Investigator: **Timothy Hla, PhD**
Period of Support: 07/01/10 - 04/30/14
Total Direct Costs: \$1,000,000

National Institutes of Health National Institute of Allergy and Infectious Diseases Training Grant

Title: Immunology and Microbial Pathogenesis Research Training Program
Principal Investigator: **Ethel Cesarman, MD, PhD**
Period of Support: 09/15/10 - 08/31/15
Total Direct Costs: \$990,470

Starr Cancer Consortium Research Grant Award

Title: Functional Validation of Somatic Mutations in Prostate Cancer
Principal Investigator: **Mark A. Rubin, MD**
Period of Support: 07/01/10 - 06/30/12
Total Direct Costs: \$500,000

National Institutes of Health National Cancer Institute

Title: Understanding the Biology of Taxane Response in the context of ETS Rearranged Prostate Cancer
Principal Investigator: **David S. Rickman, PhD**
Period of Support: 06/01/10 - 5/31/12
Total Direct Costs: \$239,250

Department of Defense New Investigator Award

Title: Towards Understanding the Genetic Predisposition for Signaling Pathway Activation in Aggressive Prostate Cancer
Principal Investigator: **Francesca Demichelis, PhD**
Period of Support: 07/01/10 - 06/30/12
Total Direct Costs: \$224,858

National Institutes of Health National Center for Research Resources (WCMC CTSC Program) Research Grant Award

Title: New Assays for Detection of KSHV in KS
Principal Investigator: **Ethel Cesarman, MD, PhD**
Period of Support: 06/01/10 - 05/31/12
Total Direct Costs: \$60,000

Resident's Corner

by Debra G.B. Leonard, MD, PhD

Welcome to Our New Residents

- **Dr. Constantin Friedman** completed the MD-PhD Program at Mount Sinai School of Medicine and joins us as an AP only resident.
- **Dr. Paula Ginter** received her MD from the Chicago Medical School at Rosalind Franklin University of Medicine and Science where she was elected to AOA, and joins us as an AP/CP resident.
- **Dr. Francesca Khani** received her MD from the University of Medicine and Dentistry of New Jersey, and joins us as an AP/CP resident.
- **Dr. Kevin Turner** completed the MD-PhD Program at Jefferson Medical College of Thomas Jefferson University, and joins us as an AP/CP resident.
- **Dr. Shuhan Zhu** received her MD from Case Western Reserve University School of Medicine, and joins us as an AP/CP resident.

Welcome to Our New Fellows

- **Dr. Daniel DiBartolo** is our first Clinical Cyto-genetics Fellow in the new American Board of Medical Genetics (ABMG)-accredited Cytogenetics Fellowship Program, under the direction of Dr. Susan Mathew. Dr. DiBartolo received his PhD from the Weill Cornell Molecular and Cellular Biology and Genetics Program in 2007. He did his thesis work in the laboratory of Dr. Ethel Cesarman.
- **Dr. Rosanny Espinal-Witter** graduated from our Pathology Residency Training Program in June 2010 after completing AP/CP training and is one of our two Hematopathology Fellows.
- **Dr. Kristina Loukeris** graduated from our Pathology Residency Training Program in 2009, and this past year was our Cytopathology Fellow.
- **Dr. Nicole Panarelli** graduated from our Pathology Residency Training Program in June 2010, after completing Anatomic Pathology training and is one of our two Gastrointestinal Pathology Fellows in the joint NYPH-MSKCC fellowship program.

- **Dr. Belinda Tan** completed the MD-PhD program at the David Geffen School of Medicine at UCLA in 2006. From 2006 to 2007, she did a transitional year internship at Memorial Sloan-Kettering Cancer Center. From 2007 to 2010, she trained as a Dermatology resident at Harbor-UCLA Medical Center. She is one of our two Dermatopathology Fellows in the joint MSKCC-NYPH program.
- **Dr. Jennifer Toyohara** received her MD in 2006 from the Columbia University College of Physicians and Surgeons. From 2006 to 2007, she was a preliminary intern in medicine at Lenox Hill Hospital. From 2007 to 2010, she trained as Dermatology resident here at NYPH-WCMC. She is one of our two Dermatopathology Fellows in the joint MKSCC-NYPH program.
- **Dr. Balamurali Varadarajalu** received his MD in 2004 from the University of Illinois. From 2004 to 2005, he was an internal medical resident at the University of Pittsburgh Medical Center. From 2005 to 2009, he completed Pathology Residency training at the Albany Medical Center. From 2009 to 2010, he was a Hematopathology Fellow at the Virginia Commonwealth University Medical Center and joins us as a Cytopathology Fellow.

Residents



Constantin Friedman, MD, PhD



Paula Ginter, MD



Francesca Khani, MD



Kevin Turner, MD, PhD



Shuhan Zhu, MD

Fellows



Daniel DiBartolo, PhD



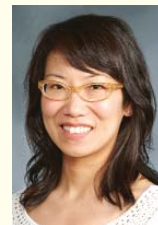
Rosanny Espinal-Witter, MD



Kristina Loukeris, MD



Nicole Panarelli, MD



Belinda Tan, MD, PhD



Jennifer Toyohara, MD



Balamurali Varadarajalu, MD, PhD



Shalini Verma, MD



Gloria Young, MD

New Fellows *continued*

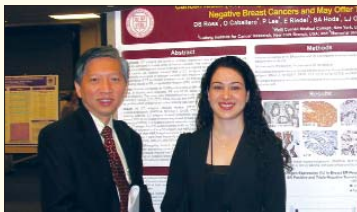
■ **Dr. Shalini Verma** received her MD in 2001 from the J.J.M. Medical College in India, followed by an internship year in the P.L. Sharman Hospital in India. From 2006 to 2010, she was a Pathology resident at the Los Angeles County/University of Southern California Medical Center and is one of our two Hematopathology Fellows.

■ **Dr. Gloria Young** completed our Pathology Residency Training Program in 2009, followed by a one year Oncologic Pathology Fellowship at Memorial Sloan-Kettering Cancer Center. She is one of our two Gastrointestinal Pathology Fellows in our joint NYPH-MSKCC program. ■

House Staff Events



Oral presentation by Adam Gersten, MD during Resident's Research Day.



Drs. Yao-Tseng Chen and Dara Ross viewing their abstract at the USCAP meeting



Residents and Faculty after an enjoyable dinner following the USCAP meeting held in Washington, DC.



Steven Salvatore (far left) and Nicole Panarelli (far right) used the money they won for Resident's Research Day and bought Mets tickets for all the residents to go to the game at Citi Field on 9/12/10.

Resident's Research Day

The 1st Annual Department of Pathology and Laboratory Medicine Resident's Research Day took place on Thursday, May 20, 2010 in the Griffith Faculty Club. There were eight oral presentations as well as a number of posters on display. Drs. Ethel Cesarman, Yao-Tseng Chen, Lora Ellenson and Hanna Rennert judged the oral presentations.

The department extends its congratulations to the recipients of the Distinguished Research Awards for the oral presentations, Drs. Nicole Panarelli, Jeremy Segal and Steven Salvatore. The event was a success and we look forward to next year's event.

Selected MicroRNAs May Aid the Preoperative Diagnosis of Pancreatic Adenocarcinoma

NC Panarelli, RK Yantiss, XK Zhou, N Kitabayashi, Y-T Chen

Comparison of Different Testing Modalities for EGFR and KRAS Mutations in Lung Adenocarcinoma

Jeremy P. Segal, Lin Cong, Yingcai Tan, Alber Michael, Viktor Moroz, Carmen Azurin, Hanna Rennert

Collapsing Glomerulopathy (CG) in 13 Patients with Systemic Lupus Erythematosus (SLE): Cause or Coincidence?

SP Salvatore, L Barisoni, SV Seshan



(left to right) Dr. Daniel M. Knowles congratulating the Distinguished Research Award recipients, Drs. Jeremy P. Segal, Nicole Panarelli and Steven Salvatore.

Prevalence of Upper Gastrointestinal Tract Inflammation in Pediatric Patients with Ulcerative Colitis

AJ Gersten, D Beneck, D Blanco, RK Yantiss

Accurately Assessing HER-2/neu Status in Needle Core Biopsies of Breast Cancer Patients in the Neoadjuvant Setting

Timothy D'Alfonso, Yi-Fang Liu, Stefano Monni, Paul Peter Rosen, Sandra Shin

Microinvasive Lobular Carcinoma of Breast: Characterization of a Rare Entity Based on a Clinicopathological Profile of Fifteen Cases

Dara Ross, SA Hoda

Decidual Vasculopathy: Location and Association with Ischemic Lesions

JSY Chan, DS Heller, RN Baergen

Detection of Molecular Defects that May Be Important in the Pathogenesis of Polycythemia Vera Using a Combined Genomic and Proteomic Approach

Rosanny Espinal-Witter, Lynn Wang

Research Seminar Series 2010-2011

The Pathology Research Seminar Series is a monthly lecture where invited speakers present cutting-edge developments in basic and translational research. The seminar series started in 2000 and has played a critical role in introducing the most recent advances at the forefront of scientific fields, especially the current understanding of disease processes and the underlying pathobiological mechanisms to the research and clinical groups at the Pathology Department and the entire Medical College. It also serves as an important platform for introducing our current basic and translational research programs to the broad scientific community and for promoting interactions and collaborations.

Speaker: **Hamid Band, MD, PhD**
Professor, Eppley Institute for Research in Cancer Associate, Director for Translational Research and Co-Program Leader, Molecular, Biochemical and Etiology Program, University of Nebraska Medical Center-Eppley Cancer Center, Omaha, NE

Date/Host: October 5, 2010-Pengbo Zhou, PhD

Speaker: **Wei Hsu, PhD**
Associate Professor of Biomedical Genetics & Oncology University of Rochester Medical Center

Date/Host: November 11, 2010-Selina Chen-Kiang, PhD

Speaker: **Srinivasan (Vasan) Yegnasubramanian, MD, PhD**

*Assistant Professor of Oncology
Johns Hopkins University*

Date/Host: November 16, 2010-Mark A. Rubin, MD

Speaker: **Jerold Chun, MD, PhD**
*Professor, Department of Molecular Biology,
The Scripps Research Institute*

Date/Host: February 1, 2011-Timothy Hla, PhD

*Conferences on Tuesdays and Thursdays at Noon,
John T. Ellis Library, C-405.*

Faculty Publications in 2010

Chan JSY, Heller DS, **Baergen RN**: Decidual vasculopathy: Location and association with ischemic lesions. *Mod Pathol* 23:393, 2010.

Chan JSY, **Baergen RN**: Gross umbilical cord abnormalities: histologic sequelae and association with hypoxia. *Mod Pathol* 23, Suppl 1: 394A, 2010.

A review of human carcinogens-Part B: biological agents. Bouvard V, Baan R, Straif K, Grosse Y, Secretan B, El Ghissassi F, Benbrahim-Tallaa L, Guha N, Freeman C, Galichet L, Coglianov V; WHO International Agency for Research on Cancer Monograph Working Group (**Cesarman E**, Collaborator). *Lancet Oncol* 10:321-322, 2009.

Sparano JA, Lee JY, Kaplan LD, Levine AM, Ramos JC, Ambinder RF, Wachsman W, Aboulafia D, Noy A, Henry DH, Von Roenn J, Dezube BJ, Remick SC, Shah MH, Leichman L, Ratner L, **Cesarman E**, Chadburn A, Mitsuyasu R: Rituximab plus concurrent infusional EPOCH chemotherapy is highly effective in HIV-associated, B-cell non-Hodgkin's lymphoma. *Blood* 115:3008-16, 2010.

Carbone S, **Cesarman E**, Gloghini A, Drexler HG: Understanding pathogenetic aspects and clinical presentation of primary effusion lymphoma through its derived cell lines. Editorial Review. *AIDS*, 24:479-90, 2010.

Chadburn A, Noy A, Lee JY, Hyjek E, Banham AH, Sparano JA, Bhatia K, **Cesarman E**: Reply to K Dunleavy et al. *J Clin Oncol* Apr 2010, Epub ahead of print.

de Oliveira DE, Ballon G, **Cesarman E**: NF-kappaB signaling modulation by EBV and KSHV. *Trends Microbiol*. 2010 May 6. [Epub ahead of print]

Tormey CA, Peddinghaus ME, Erickson M, King K, **Cushing MM**, Bill J, Goodrich T, Snyder EL: Improved plasma removal efficiency for therapeutic plasma exchange using a new apheresis platform. *Transfusion* 50:471-7, 2010.

Oldridge DA, Banerjee S, Setlur SR, Sboner A, **Demichelis F**: Optimizing copy number variation analysis using genome-wide short sequence oligonucleotide arrays. *Nucleic Acids Res* 38:3275-86, 2010.

Setlur SR, Chen CX, Hossain RR, Ha JS, Van Doren VE, Stenzel B, Steiner E, **Oldridge D**, **Katabayashi N**, Banerjee S, Chen JY, Schaefer G, Horninger W, Lee C,

Rubin MA, Klocker H, **Demichelis F**: Genetic variation of genes involved in dihydrotestosterone metabolism and the risk of prostate cancer. *Cancer Epidemiol Biomarkers Prev* 19:229-39, 2010.

Beroukhim R, Mermel CH, Porter D, Wei G, Raychaudhuri S, Donovan J, Barretina J, Boehm JS, Dobson J, Urashima M, Mc Henry KT, Pinchback RM, Ligon AH, Cho YJ, Haery L, Greulich H, Reich M, Winckler W, Lawrence MS, Weir BA, Tanaka KE, Chiang DY, Bass AJ, Loo A, Hoffman C, Prensner J, Liefeld T, Gao Q, Yecies D, Signoretti S, Maher E, Kaye FJ, Sasaki H, Tepper JE, Fletcher JA, Taberero J, Baselga J, Tsao MS, **Demichelis F**, **Rubin MA**, et al: The landscape of somatic copy-number alteration across human cancers. *Nature* 463:899-905, 2010.

Sboner A, **Demichelis F**, Calza S, Pawitan Y, Setlur SR, Hoshida Y, Perner S, Adami HO, Fall K, Mucci LA, Kantoff PW, Stampfer M, Andersson SO, Varenhorst E, Johansson JE, Gerstein MB, Golub TR, **Rubin MA**, Andren O: Molecular sampling of prostate cancer: a dilemma for predicting disease progression. *BMC Med Genomics* 3:8, 2010.

Steenport M, **Khan KMF**, Du B, Barnhard S, Dannenberg AJ, **Falcone DJ**: Matrix metalloproteinase (MMP)-1 and MMP-3 induce macrophage MMP-9: Evidence for the role of TNF-alpha and cyclooxygenase-2. *J Immunol* 183: 8119-8127, 2009.

Genzen JR, Fareed J, Hoppensteadt D, Kurup V, Barash P, Coady M, Wu YY: Prolonged elevation of plasma argatroban in a cardiac transplant patient with a suspected history of heparin-induced thrombocytopenia with thrombosis. *Transfusion* 50:801-7, 2010.

Genzen JR, Yang D, Ravid K, Bordey A: Activation of adenosine A2B receptors enhances ciliary beat frequency in mouse lateral ventricle ependymal cells. *Cerebrospinal Fluid Res* 6:15, 2009.

Genzen JR, Kinney B: Central nervous system Aspergillus infection after epidural analgesia: diagnosis, therapeutic challenges, and literature review. *Diagn Microbiol Infect Dis* 65:312-18, 2009.

Genzen JR, Platel JC, Rubio ME, Bordey A: Ependymal cells along the lateral ventricle express functional P2X(7) receptors. *Purinergic Signal* 5: 299-307, 2009.

Hla T: Plugging vascular leak by sphingosine kinase from bone marrow progenitor cells. *Circ Res* 105:614-6, 2009.

Ghosh M, Aguila HL, Michaud J, Ai Y, Wu MT, Hemmes A, Ristimaki A, Guo C, Furneaux H, **Hla T**: Essential role of the RNA-binding protein HuR in progenitor cell survival in mice. *J Clin Invest* 119:3530-43, 2009.

Hla T, Oo ML: Ramping up RANTES in the acute response to arterial injury. *J Clin Invest* 120:90-2, 2010.

Michaud J, Im DS, **Hla T**: Inhibitory role of sphingosine 1-phosphate receptor 2 in macrophage recruitment during inflammation. *J Immunol* 184:1475-83, 2010.

Wagner D, Bonfiglio TA, **Hoda RS**: ThinPrep Pap test of endocervical adenocarcinoma with lymph node metastasis: Report of a case in a 17-year-old woman. *Diagn Cytopathol* 2010 Jan 20. [Epub ahead of print]

Johnykutty S, Miller CH, **Hoda RS**, Giampoli E: Fine needle aspiration of dedifferentiated acinic cell carcinoma. *Diagn Cytopathol* 37:763-8, 2009.

Boost J, **Hoda RS**, Soper D: Management of the LSIL Pap Smear: A cross-sectional, observational cohort. *J Reprod Med* 54:421-4, 2009.

Loukeris K, **Salvatore S**, **Hoda RS**: Pulmonary zygomycoses in an immunosuppressed patient. *Images in Cytology. Diagn Cytopathol* Jan 20, 2010.

Miroballi Y, Baird JS, Zackai S, Cannon J-M, Messina M, Ravindranath T, Green R, Della-Latta P, **Jenkins S**, Greenwald B, Furuya EY, Graham III PL, Sonnett FM, Platt S, DelaMora P, Saiman L: Novel influenza A (H1N1) in a pediatric health care facility in New York City during the first wave of the 2009 pandemic. *Archiv Ped Adol Med* 164:24-30, 2010.

Jenkins SG, Fisher AC, Peterson JA, Nicholson SC, Kaniga K: Meta-analysis of doripenem vs comparators in patients with pseudomonas infections enrolled in four phase III efficacy and safety clinical trials. *Curr Med Res Opinion* 25:3029-3036, 2009.

Robinson BD, **Jones JG**: Tumor microenvironment of metastasis (TMEM): a novel tissue-based assay for metastatic risk in breast cancer. *Future Oncol* 5:919-921, 2009.

Kabat GC, **Jones JG**, Olson N, Negassa A, Duggan C, Ginsberg M, Kandel RA, Glass AG, Rohan T: A multi-center prospective cohort study of benign breast disease and risk of subsequent breast cancer. *Cancer Causes Control* Jan 19 (Epub ahead of print), 2010.

Kabat GC, **Jones JG**, Olson N, Negassa A, Duggan C, Ginsberg M, Kandel RA, Glass AG, Rohan TE: Risk factors for breast cancer in women biopsied for benign breast disease: a nested case-control study. *Cancer Epidemiol* 34:34-9, 2010.

Chiu A, Nanaji NM, Czader M, Gheorghe G, **Knowles DM**, Chadburn A, **Orazi A**: The stromal composition of mast cell aggregates in systemic mastocytosis. *Mod Pathol* 22:857-65, 2009.

Faculty Publications

continued

- Navi BB, Kawaguchi K, Hriljac I, **Lavi E**, DeAngelis LM, Jamieson DG: Multifocal stroke from tumor emboli. *Arch Neurol* 66:1174-5, 2009.
- Nizri E, Irony-Tur-Sinai M, Lory O, Orr-Urtreger A, **Lavi E**, Brenner T: Activation of the cholinergic anti-inflammatory system by nicotine attenuates neuroinflammation via suppression of Th1 and Th17 responses. *J Immunol* 183:6681-8, 2009.
- Chiu A, Frizzera G, **Mathew S**, Hyjek E, Chadburn A, **Tam W**, **Knowles DM**, **Orazi A**: Diffuse blastoid B-cell lymphoma: a histologically aggressive variant of t(14;18) negative follicular lymphoma. *Mod Pathol* 22:1507-17, 2009.
- Fraser CR, Wang W, Gomez M, Zhang T, **Mathew S**, Furman RR, **Knowles DM**, **Orazi A**, **Tam W**: Transformation of chronic lymphocytic leukemia/small lymphocytic lymphoma to interdigitating dendritic cell sarcoma: evidence for transdifferentiation of the lymphoma clone. *Am J Clin Pathol* 132:928-39, 2009.
- Czader M, **Orazi A**: 2007 Workshop of the Society for Hematopathology and European Association for Haematopathology. *Am J Clin Pathol* 132:248-9, 2009.
- Orazi A**, Czader MB: Myelodysplastic Syndromes. *Am J Clin Pathol* 132:290-305, 2009.
- Czader MB, **Orazi A**: Therapy-Related Myelodysplastic Syndromes. *Am J Clin Pathol* 132:410-25, 2009.
- Sadat M, Dirscherl S, Sastry L, Dantzer J, Pech N, Griffin S, Hawkins T, Zhao Y, Barese CN, Cross S, **Orazi A**, An C, Scott-Goebel W, Yoder MC, Li X, Grez M, Cornetta K, Mooney SD, Dinuer MC: Comparison of gamma-retroviral vector integration in post-transplant hematopoiesis in mice conditioned with either submyeloablative or ablative irradiation. *Gene Therapy* 16:1452-64, 2009.
- Thiele J, Kvasnicka HM, Vardiman JW, **Orazi A**, Franco V, Gisslinger H, Birgegard G, Griesshammer M, Tefferi A: Bone marrow fibrosis and diagnosis of essential thrombocythemia. *J Clin Oncol* 27:220-1, 2009.
- O'Malley DP, George T, **Orazi A**, Abbondanzo S: Benign and reactive conditions of lymph node and spleen. *Atlas of Nontumor Pathology Armed Forces Institute of Pathology (AFIP). First Series/Fascicle 7*. Am Reg Pathol Press, Washington, DC, 2009.
- Schuetz AN**, Cohen C: Aspergillus immunohistochemistry of culture-proven fungal tissue isolates shows high cross-reactivity. *Appl Immunohistochem Mol Morphol* 17:524-529, 2009.
- Fusco DN, Alexander EL, Weisenberg SA, Mediavilla JR, Kreiswirth BN, **Schuetz AN**, **Jenkins SG**, Rhee KY: Clinical failure of vancomycin in a dialysis patient with methicillin-susceptible vancomycin-heteroresistant *S. aureus*. *Diagn Microbiol Infect Dis* 65:180-183, 2009.
- Glezerman I, Kris M, Miller V, **Seshan SV**, Flombaum CD: Gemcitabine nephrotoxicity and Hemolytic Uremic Syndrome: Report of twenty-nine (29) cases from a single institution. *Clin Nephrol* 71:130-139, 2009.
- Seshan SV**, Jennette JC: Renal disease in Systemic Lupus Erythematosus with emphasis on classification of Lupus Glomerulonephritis: Advances and Implications. *Arch Pathol Lab Med* 133:233-248, 2009.
- Anglicheau D, Sharma VK, Ding R, Hummel A, Snopkowski C, Dadhania D, **Seshan SV**, Suthanthiran M: MicroRNA expression profiles predictive of human renal allograft status. *Proc Natl Acad Sci USA* 106:5330-5, 2009.
- Husain M, Meggs LG, Vashistha H, Simois S, Griffiths KO, Kumar D, Mathieson PW, Saleem MA, Malhotra A, Delvalle L, Pina-Oviedo S, Reiss K, **Seshan SV**, Singhal PC: Inhibition of p66ShcA longevity gene rescues podocytes from HIV-1 induced oxidative stress and apoptosis. *J Biol Chem* 284:16648-58, 2009.
- Seshan SV**, Franzke C, Redicha P, Monestier M, Mackman N, Girardi G: Role of tissue factor (TF) in a mouse model of thrombotic microangiopathy (TMA) induced by aPL antibodies. *Blood* 114:1675-83, 2009.
- Davidson-Moncada J, Papavasiliou N, **Tam W**: MiRNAs of the immune system: roles in inflammation and cancer. *Annals of the New York Academy of Sciences* (ed. N. Rose) 1183:183-194, 2010.
- Tam W**: MicroClassifying diffuse large B cell lymphoma [invited commentary]. *Blood* 113:6506-6507, 2009.
- Konstantinos JM, Wolfe AL, Oricchio E, Palomero T, de Keersmaecker K, McJunkin K, Zuber J, James T, Khan AA, Leslie CS, Parker JS, Paddison PJ, **Tam W**, Ferrando A, Wendel HG: Genome-wide RNA interference screen identifies miR-19 targets in Notch-induced T-cell acute lymphoblastic leukaemia. *Nature Cell Biol* 12:372-379, 2010.
- Bolisetty MT, Dy G, **Tam W**, Beemon KL: Reticuloendotheliosis virus strain T induces miR-155, which targets JARID2 and promotes cell survival. *J Virol* 83:12009-12017, 2009.
- Yang GCH**, **Besanceney CE**, **Tam W**: Histiocytic sarcoma with interdigitating dendritic cell differentiation: A case report with fine needle aspiration cytology and review of literature. *Diag Cytopath* 38:351-356, 2010.
- John BK, Dang NC, Hussain SA, **Yang GC**, Cham MD, **Yantiss R**, Joseph AS, Giashuddin SM, Lee PC, Fleming R, Somnay K: Multifocal granular cell tumor presenting as an esophageal stricture. *J Gastrointest Cancer* 39:107-113, 2009.
- Boyle JO, Gümüs ZH, Kacker A, Choksi VL, Bocker JM, Zhou XK, **Yantiss RK**, Hughes DB, Du B, Judson BL, Subbaramaiah K, Dannenberg AJ: Effects of cigarette smoke on the human oral mucosal transcriptome. *Cancer Prev Res* 3: 266-2278, 2010.
- Espinal-Witter R**, Servais EL, Klimstra DS, Lieberman MD, **Yantiss RK**: Localized intrapancreatic malignant mesothelioma; a rare entity that may be confused with other pancreatic neoplasms. *Virchows Arch* 456: 455-461, 2010.
- Narang TK, Schnoll-Sussman FH, **Yantiss R**, **Ely SA**, Pascal-Alyea E, Pochapin MB: A rare case of duodenal immunoglobulin M infiltration in a patient with chronic lymphocytic leukemia. *Am J Gastroenterol* 104: 2862-2863, 2009.
- Wan DW, Marks K, **Yantiss RK**, Talal AH: Autoimmune hepatitis in the HIV-infected patient: A therapeutic dilemma. *AIDS Patient Care and STDs* 23:407-413, 2009.
- Vakiani E, **Yantiss RK**: Pathologic features and biologic importance of colorectal serrated polyps. *Adv Anat Pathol* 16: 79-91, 2009. ■

Faculty Promotions

Congratulations!

Timothy Hla, PhD to Professor of Pathology and Laboratory Medicine with tenure

Susan Mathew, PhD to Professor of Clinical Pathology and Laboratory Medicine

Debra Beneck, MD to Professor of Clinical Pathology and Laboratory Medicine

Hanna Rennert, PhD to Associate Professor of Pathology and Laboratory Medicine

Paul Peter Rosen, MD to Emeritus Professor of Pathology and Laboratory Medicine

Debra Leonard, MD appointed Chief Diversity Officer for the Weill Cornell Medical College

CME Conference Update

The Tutorial on Pathology of the GI Tract, Pancreas and Liver November 15-19, 2010

Westin Diplomat Resort & Spa, Hollywood, Florida
Course Director: **Rhonda K. Yantiss, MD**

Target Audience

General surgical pathologists and pathologists-in-training.

Course Goals and Objectives

This course is designed to update physicians on advances in our understanding of gastrointestinal diseases, address problems faced during the pathologic evaluation of tissue samples, and provide pathologists with a framework for interpretation of both histologic patterns of disease and results of molecular analyses.

Accreditation

34.75 AMA PRA Category 1 Credit(s)[™]

Tutorial on Neoplastic Hematopathology January 24-28, 2011

Marco Island Marriott Resort, Golf Club & Spa
Marco Island, Florida
Course Director: **Daniel M. Knowles, MD**

Target Audience

Pathologists, pathologists-in-training and medical oncologists/hematologists.

Course Goals and Objectives

This course is designed to update physicians on the latest advances in Neoplastic Hematopathology. The program will consist of lectures, case presentations and discussions designed to provide pathologists, pathologists-in-training and medical oncologists/ hematologists with an in-depth discussion of diagnostic problems that arise in neoplastic hematopathology. In addition to discussions of recent advances in the morphologic classification of hematopoietic tumors, the application and interpretation of immunological and cytochemical studies and molecular techniques in the diagnosis and classification of these diseases will be presented.

Accreditation

34.0 AMA PRA Category 1 Credit(s)[™]

Reserve early! Space is limited.

For more information or to register, contact:

Ms. Jessica Pfeifer (212) 746-6464

jep2018@med.cornell.edu

www.cornellpathology.org

Conference Agenda

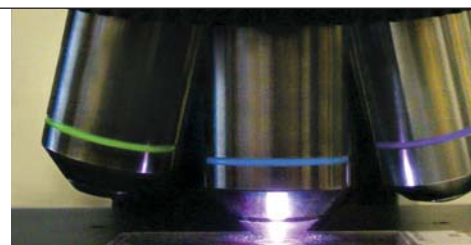


Weill Cornell Medical College

Presented by Weill Cornell Medical College

November 15-19, 2010

Westin Diplomat Resort & Spa, Hollywood, Florida



TUTORIAL ON PATHOLOGY OF THE GI TRACT, PANCREAS AND LIVER

PROGRAM DIRECTOR

Program Director
Rhonda K. Yantiss, MD

CREDIT

34.75 AMA PRA Category 1 Credit(s)[™]

INFORMATION

(212) 746-6464
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DAY 1 ▷ MONDAY, NOVEMBER 15

- 7:00-8:00 am Registration
- 8:00-8:15 am **Moderator: Neil D. Theise, MD**
Welcoming Remarks
Rhonda K. Yantiss, MD
- 8:15-9:00 am Chronic Hepatitis
Neil D. Theise, MD
- 9:00-9:45 am Drugs, Toxins, and Patterns of Hepatic Injury
John Hart, MD
- 9:45-10:00 am Questions
- 10:00-10:15 am Break and Refreshments
- 10:15-11:00 am Cholestatic Liver Disease
John Hart, MD
- 11:00-11:45 am Tumors of the Liver
Linda D. Ferrell, MD
- 11:45-12:00 pm Questions
- 12:00-1:30 pm Lunch (on your own)
- 1:30-2:30 pm Case Presentations and Questions
Neil D. Theise, MD
- 2:30-3:30 pm Case Presentations and Questions
John Hart, MD
- 3:30-3:45 pm Break and Refreshments
- 3:45-4:45 pm Case Presentations and Questions
Linda D. Ferrell, MD
- 4:30-4:45 pm Questions
- 4:45-5:15 pm Memorable Mistakes and Lessons Learned
John Hart, MD
- 5:30-7:00 pm Cocktail Reception—Meet the Faculty

DAY 2 ▷ TUESDAY, NOVEMBER 16

- 8:00-9:00 am **Moderator: David S. Klimstra, MD**
Pancreatic Carcinoma and Cancer Precursors
David S. Klimstra, MD
- 9:00-9:45 am Endocrine Tumors of the GI Tract
Rhonda K. Yantiss, MD
- 9:45-10:00 am Questions
- 10:00-10:15 am Break and Refreshments
- 10:15-11:00 am Molecular Testing in Colorectal Carcinoma
Wade S. Samowitz, MD
- 11:00-11:45 am Serrated Neoplasia
Rhonda K. Yantiss, MD
- 11:45-12:00 pm Questions
- 12:00-1:30 pm Lunch (on your own)
- 1:30-2:30 pm Case Presentations and Questions
David S. Klimstra, MD
- 2:30-3:30 pm Case Presentations and Questions
Wade S. Samowitz, MD
- 3:15-3:30 pm Questions
- 3:30-3:45 pm Break and Refreshments
- 3:45-4:45 pm Case Presentations and Questions
Rhonda K. Yantiss, MD
- 4:30-4:45 pm Questions
- 4:45-5:15 pm Pitfalls in Frozen Section Diagnoses of GI Specimens
David S. Klimstra, MD

DAY 3 ▷ WEDNESDAY, NOVEMBER 17

- 8:00-8:45 am **Moderator: Elizabeth Montgomery, MD**
Reflux, Allergy, and Other Forms of Esophageal Injury
Joel K. Greenson, MD
- 8:45-9:45 am Early Neoplastic Conditions of the Upper GI Tract
Elizabeth Montgomery, MD
- 9:45-10:00 am Questions

DAY 3 ▷ WEDNESDAY, NOVEMBER 17 CONTINUED

- 10:00-10:15 am Break and Refreshments
- 10:15-11:00 am Gastritis and Mucosal Injury
Henry D. Appelman, MD
- 11:00-11:45 am Small-Intestinal Biopsy Interpretation
Laura W. Lamps, MD
- 11:45-12:00 pm Questions
- 12:00-1:30 pm Lunch (on your own)
- 1:30-2:30 pm Case Presentations and Questions
Joel K. Greenson, MD
- 2:30-3:30 pm Case Presentations and Questions
Elizabeth Montgomery, MD
- 3:30-3:45 pm Break and Refreshments
- 3:45-4:45 pm Case Presentations and Questions
Henry D. Appelman, MD
- 4:45-5:15 pm Pitfalls to the Preoperative Evaluation of Pancreatic Neoplasms
Rhonda K. Yantiss, MD

DAY 4 ▷ THURSDAY, NOVEMBER 18

- 8:00-8:45 am **Moderator: Laura W. Lamps, MD**
Colonic Injury and Inflammation
Joel K. Greenson, MD
- 8:45-9:45 am Pitfalls in the Diagnosis of IBD and Dysplasia
Robert D. Odze, MD, FRCP
- 9:45-10:00 am Questions
- 10:00-10:15 am Break and Refreshments
- 10:15-11:00 am Immunodeficiency and Gastrointestinal Injury
Laura W. Lamps, MD
- 11:00-11:45 am Differential Diagnosis of Ischemic Enterocolitis
John Hart, MD
- 11:45-12:00 pm Questions
- 12:00-1:30 pm Lunch (on your own)
- 1:30-2:30 pm Case Presentations and Questions
Robert D. Odze, MD, FRCP
- 2:30-3:30 pm Case Presentations and Questions
Laura W. Lamps, MD
- 3:30-3:45 pm Break and Refreshments
- 3:45-4:45 pm Case Presentations and Questions
Henry D. Appelman, MD
- 4:45-5:15 pm Memorable Mistakes and Lessons Learned
Laura W. Lamps, MD

DAY 5 ▷ FRIDAY, NOVEMBER 19

- 8:00-8:45 am **Moderator: Rhonda K. Yantiss, MD**
Cancer Staging Issues
Rhonda K. Yantiss, MD
- 8:45-9:30 am Mesenchymal Tumors of the GI Tract
Brian Rubin, MD
- 9:30-10:30 am Lymphoproliferative Disorders of the GI Tract
Jerome S. Burke, MD
- 10:15-10:45 am Questions
- 10:45-11:00 am Break and Refreshments
- 11:00-11:45 am Hereditary Colon Cancer and Polyposis Syndromes
Stanley R. Hamilton, MD
- 11:45-12:00 pm Questions
- 12:00-1:00 pm Case Presentations and Questions
Brian Rubin, MD
- 1:00-2:00 pm Case Presentations and Questions
Jerome S. Burke, MD
- 2:00-2:15 pm Closing Remarks
Rhonda K. Yantiss, MD

Continental breakfast daily • 7:00-8:00 am



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