Members of the Department Receive Prestigious Recognition

Dr. Suzanne Powell, chief of Neuropathology in the Department of Pathology and Genomic Medicine, has been elected to serve as President Elect of the American Association of Neuropathologists (AANP) for the 2014-2015 term. Dr. Powell will then serve as President of the AANP in 2015-2016.

“This is a great honor and a wonderful recognition of Dr. Powell’s many contributions to the field,” said Dr. Mary Schwartz, medical director of Anatomic Pathology. Dr. Powell received her MD degree from West Virginia University College of Medicine in 1988, and has been a member of the Department since 1998. In addition to her strong research program in the area of neurodegenerative diseases, Dr. Powell spends a large portion of her time mentoring residents and fellows and currently serves as the director of the anatomic and clinical pathology (AP/CP) residency program.

Dr. Luan Truong, medical director of Nephropathology in the Department of Pathology and Genomic Medicine, received the Harlan J. Spjut Award at the Houston Society of Clinical Pathologists (HSCP) spring symposium. This award, established in 1989 upon Dr. Spjut’s retirement, is given in recognition of distinguished scholarly achievement in pathology. A banquet celebrating Dr. Truong’s award was held April 26 in the Magnolia Hotel in Downtown Houston.

Upcoming Conferences and Symposia:

- **2014 Cancer Biomarkers Conference**
- **International Academy of Pathology**
- **American Society for Clinical Pathology**

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The Department of Pathology and Genomic Medicine sponsored the 2014 Cancer Biomarkers conference, held at the Houston Methodist Research Institute on March 22. The conference was organized by co-directors, Drs. Philip Cagle and Randall Olsen, and associate directors, Drs. Bryce Portier and Hidehiro Takei. This conference was inspired by the Cancer Biomarkers Reporting Committee, part of the College of American Pathologists (CAP). “This conference was unique because it focused on the information relevant to general pathologists and oncologists,” explains Dr. Cagle. “Our presenters emphasized information useful from a patient-oriented standpoint, concentrating specifically on practical aspects of patient care.”

Dr. Gene Herbek (pictured), CAP President and a pathologist at the Methodist Hospital Pathology Center in Nebraska, stated in his remarks: “We pathologists work with patients, not numbers or diagnoses.” His thoughts were echoed by Dr. Neal Lindeman, director of the Molecular Diagnostics Laboratory at the Brigham and Women’s hospital in Boston: “Pathologists need to lead the field of cancer biomarkers to ensure diagnoses and patient safety.”

The speakers also underscored an increasing need for the incorporation of novel diagnostic techniques into disease diagnosis and molecular characterization. Dr. Alexander Lazar, director of Sarcoma and Melanoma Molecular Diagnostics and associate professor of Pathology and Dermatology at the MD Anderson Cancer Center, highlighted the efforts of a multi-disciplinary group of researchers in implementing Next Generation Sequencing (NGS) into melanoma patient care. NGS can rapidly identify mutations in common oncogenes in patient tumor specimens, which can guide the development of targeted therapeutics that will ultimately improve patient survival. A complete list of articles related to this conference will be published in a special edition of the Archives of Pathology & Laboratory Medicine at the end of the year.

The organizing committee noted that this unique national conference attracted participants from throughout Texas and 21 other states. Attendees included not only physicians, but also nurses and other healthcare providers. The tremendous success of the conference emphasizes that its patient-centric focus filled an unmet need. The organizers plan to host similar events in the future.

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Dr. James M. Musser Presides Over the 2014 Annual Meeting of the American Society for Investigative Pathology

Dr. James M. Musser, Chair of the Department of Pathology and Genomic Medicine, presided over the 2014 annual meeting of the American Society for Investigative Pathology (ASIP), held in San Diego from April 26-30. The meeting was attended by over 300 ASIP members from the United States, Canada, and many other nations. The next annual meeting will be held in Boston, MA, from March 28 to April 1, 2015. Dr. Musser has served as the President of ASIP since 2013.
The Department of Pathology and Genomic Medicine Welcomes Three New Faculty Members

**Michael Deavers, M.D.**
*Staff Pathologist, Houston Methodist Hospital*

Dr. Michael Deavers joined the Houston Methodist Hospital in October 2013 as a staff pathologist. He received his MD from the Louisiana State University School of Medicine in New Orleans in 1989. Dr. Deavers then completed his AP/CP residency at the Walter Reed Army Medical Center in Washington, DC, and his surgical pathology fellowship at the MD Anderson Cancer Center in Houston, Texas. Prior to joining Methodist, Dr. Deavers practiced at the MD Anderson Cancer Center. He served as the director of the Immunohistochemistry Laboratory from 2005-2014 and director of clinical operations in the Department of Pathology and Laboratory Medicine from 2010-2014.

For more information on Dr. Deavers, please visit [http://www.houstonmethodist.org/michael-deaver](http://www.houstonmethodist.org/michael-deaver)

**David Alrahwan, M.D.**
*Medical Director, Houston Methodist St. John Laboratory*

Dr. David Alrahwan joined the Department as the medical director of the Houston Methodist St. John Laboratory. Dr. Alrahwan received his MD from the University of Damascus in Syria, in 1994. He then completed a 2-year postdoctoral research fellowship at the MD Anderson Cancer Center, his AP/CP residency at the University of Texas Health Science Center in San Antonio, and fellowships in surgical pathology and cytopathology at MD Anderson. Dr. Alrahwan is board certified in cytopathology and anatomic/clinical pathology. His research interests include breast, gynecologic, and urologic pathology.

For more information on Dr. Alrahwan, please visit [http://www.houstonmethodist.org/david-alrahwan](http://www.houstonmethodist.org/david-alrahwan)

**Dr. Anna Castiglione Richmond**
*Staff Pathologist, Houston Methodist St. John*

Dr. Anna Castiglione Richmond joined the Department and will serve as a staff pathologist at the Houston Methodist St. John Hospital. Dr. Castiglione Richmond received her MD degree from Wayne State University in 2006. She then completed her pathology residency at the University of Texas Health Science Center in Houston, followed by a research fellowship in cytopathology at the MD Anderson Cancer Center. Dr. Castiglione Richmond is board certified in anatomic/clinical pathology and is an active member in the College of American Pathologists, American Society of Clinical Pathology, and the United States and Canadian Academy of Pathology.

For more information of Dr. Castiglione Richmond, please visit [http://houstonmethodist.org/anna-richmond](http://houstonmethodist.org/anna-richmond)
Dr. David Cohen, a first year resident in the Department received the Stowell-Orbison Pathologist-in-Training Autopsy Award at the 103rd Annual Meeting of the United States and Canadian Academy of Pathology (USCAP) held in San Diego, California in March. This award is co-sponsored by USCAP and the Association of Directors of Anatomic and Surgical Pathology and is based on Dr. Cohen’s abstract titled “Discordant malignancy findings on autopsy at a tertiary care hospital: a continuing opportunity for quality improvement.” The abstract was co-authored by Drs. Hidehiro Takei and Andreana Rivera. “Winning this award at USCAP is quite an achievement for a first year resident, and speaks to David’s focus and proactive pursuit of important research with outcomes-based implications,” said Dr. April Ewton, associate medical director in Hematopathology.

Dr. Cohen received his MD degree from the University of Miami Leonard M. Miller School of Medicine in 2013 and joined Houston Methodist’s AP/CP residency program in July of that year.

Two St. Christus Hospitals Join the Houston Methodist System

Houston Methodist St. John, serving Clear Lake and the Greater Bay Area, and Houston Methodist St. Catherine in Katy, officially joined the growing Methodist family of health care facilities on February 3rd. These two new additions will help to fulfill specific needs in their communities.

Houston Methodist St. Catherine Hospital is a long-term, acute-care facility that will focus on patients requiring extended hospital stays, and will provide many outpatient services. Laboratory services will include on-site point-of-care tests and a full menu of laboratory services provided by the nearby Houston Methodist West facility.

Houston Methodist St. John Hospital is an accredited, full-service hospital. The facility provides a range of laboratory and pathology services, including anatomic and cytopathology, histology, microbiology, and clinical chemistry analyses. A spotlight on St. John’s facilities and staff will be published in the summer edition of The Laboratory Report.
New Tests Available from Houston Methodist Diagnostic Laboratory

Rapid Viral Meningitis and Encephalitis Molecular Test

Central nervous system infections are an important cause of human morbidity and mortality. Viral meningitis and encephalitis occur most commonly in pediatric, elderly, and immunosuppressed patients. Although many infections are asymptomatic or result in mild flu-like symptoms, others can rapidly become life threatening. Cytomegalovirus (CMV), enteroviruses, herpes simplex viruses 1 and 2 (HSV-1 and 2), and varicella-zoster virus (VZV) account for most cases. Diagnosis of these infections is challenging to the clinical laboratory because traditional viral cultures require several days to complete and have low sensitivity. To improve patient care at all hospitals in the Houston Methodist System, the Molecular Diagnostics Laboratory has validated a panel of real-time PCR assays to detect CMV, enteroviruses, HSV1, HSV2, and VZV infection. As early diagnosis and treatment are crucial for best outcomes, the viral meningitis/encephalitis panel is performed daily. Testing for West Nile Virus by real-time PCR and bacterial pathogens by culture is also available.

MLPA Assay to Detect and Identify HPV Genotypes

Human papillomavirus (HPV) testing is an ever-expanding area of interest for cancer screening, diagnosis, and prognosis. HPV infection causes the vast majority of cervical cancers. It is also implicated in anogenital tract squamous carcinomas and squamous carcinomas of the oropharynx and esophagus in men and women. To date, more than 150 HPV types have been identified. However, evidence suggests that only a few of them, or so-called “high risk” genotypes, such as HPV-16 and HPV-18, confer a significant risk for developing cancer.

The Molecular Diagnostics Laboratory at Houston Methodist has validated a Multiplex Ligation-dependent Probe Amplification (MLPA) assay to detect the presence of HPV-16, HPV-18 and 12 other high-risk HPV genotypes. The assay is FDA approved for screening patients age 21 and older with abnormal cervical cytology results and for assessing the presence or absence of high-risk genotypes in women 30 and older. Recently, the Medical Devices Advisory Committee recommended that the assay could be used as a primary screening tool for cervical cancer. The HPV test can be performed on all cervical specimens. Validation studies for testing formalin-fixed, paraffin-embedded tissue are underway.

For more information on these assays or any Molecular Diagnostic Laboratory test, please contact:

Ms. Heather Hendrickson (HLHenderson@houstonmethodist.org)
Dr. Bryce Portier (BPPortier@houstonmethodist.org) or
Dr. Randall Olsen (RJOlsen@houstonmethodist.org).
New Chief Residents for 2014-2015 Are Announced

Dr. Suzanne Powell, director of the Department’s residency program, announced that Drs. Jaclyn Jerz (PGY3) and Eric Salazar (PGY2) will serve as the 2014-2015 Chief Residents. Dr. Lauren King will serve as the Chief Fellow.

“I would like to thank our outgoing Chief Residents, Daniel Wimmer (PGY4) and Suzanne Crumley (PGY3), and our Chief Fellow, Dr. Angela Wright, for all their hard work and dedication this year. We have been most fortunate to have such talented individuals in these roles.” The Chiefs began serving in their new roles in March.

Research Spotlight: KRAS Mutations are Linked to Lung Adenocarcinoma Invasiveness

A team of pathologists from the Houston Methodist Hospital and Research Institute and Northwestern University has recently linked mutations in a well-known Kirsten-RAS (KRAS) oncogene with invasive properties of peripheral lung adenocarcinoma. The study was led by Dr. Kirtee Raparia, who is featured in this issue’s “Where Are They Now?” spotlight, and included Dr. Philip Cagle as one of the co-authors.

Despite extensive research efforts, the 5-year survival of patients diagnosed with lung cancer has remained around 12-17% since 1975. As with most cancers, lung cancer develops as the result of tissue cells accumulating sequential genetic and epigenetic alterations. Patients whose tumors harbor KRAS mutations represent a unique group of individuals who are typically heavy smokers, are unlikely to respond to tyrosine kinase inhibitor treatment, and have a poor overall survival.

Dr. Raparia’s group analyzed 187 resected lung adenocarcinomas for the status of 12 known mutations in the KRAS oncogene. Their results showed a significant correlation between heavy smoking and the presence of KRAS mutations, as well as between the presence of pleural invasion in patients with KRAS mutant tumors. Dr. Raparia’s results confirm that clinicopathologic features of lung adenocarcinoma are defined by their molecular make-up, such as their oncogene status.

The article, published in Archives of Pathology & Laboratory Medicine, can be found on the journal’s web page.

Houston Methodist St. Catherine Hospital is Evaluated by the Joint Commission

Triggered by the change in hospital ownership, The Joint Commission conducted an inspection and survey of Houston Methodist St. Catherine’s Hospital in March. With a successful completion of this major hurdle, Dr. Thu Ngo, medical director of Laboratory Services at the Methodist West Hospital, would like to express his gratitude to his laboratory team.

“Preparation for this survey was an incredible effort by our amazing West Houston Laboratory Director, Melody Peeples, her point-of-care specialist, Tina Benson, and the rest of their dedicated team. I am very proud of their work and their ability to prepare for the survey in a very short period of time. Please join me in congratulating them on this superb achievement!”
Dr. Kirtee Raparia is currently an assistant professor of Pathology and Ophthalmology at Northwestern University in Chicago. She received her medical degree from Lady Hardinge Medical College in New Delhi, India. Following residency and fellowship training in ophthalmology, she then completed her AP/CP residency training in the Department of Pathology and Genomic Medicine at Houston Methodist Hospital in 2010.

“My time at Methodist was the most important period in shaping my career. I was particularly inspired by Drs. Ro, Ayala, Schwartz, and Cagle. It was because of Dr. Cagle that I decided to make pulmonary pathology my primary area of clinical and research focus.” —Kirtee Raparia, M.D.

Dr. Raparia was recruited as a pulmonary pathologist to Northwestern Memorial Hospital in 2010. She is actively involved in investigating the role of biomarkers and identifying potential targets for molecular therapy in lung cancer. “Dr. Raparia has a positive can-do attitude and has become one of the brightest new stars in pulmonary pathology,” explains Dr. Philip Cagle. “She has an active diagnostic and research career at one of the top medical schools in the country, has numerous articles and book chapters, and has been an invited speaker to multiple countries in Europe, Asia, and North America.” Her expertise is recognized on a national level, and she was invited to give a talk, entitled “Lymphoproliferative Neoplasms of Lung”, at the 93rd Annual Meeting of the Texas Society of Pathologists.

In addition to her clinical and research duties, Dr. Raparia serves as a pulmonary pathology section editor for Archives of Pathology & Laboratory Medicine, a CAP spokesperson, and a member of CAP surgical pathology committee. She is a proud mother of two beautiful daughters and lives with her husband in Chicago.

HMRI Summer Interns to Join Department Research Laboratories

For the 10th year since its inception in 2005, the Houston Methodist Research Institute (HMRI) Summer Student Program will welcome this summer’s cohort of bright undergraduate students. This year, the Program selected forty-four students from the top local, national, and international academic institutions. Five of the students will be conducting research in laboratories in the Department of Pathology and Genomic Medicine. The students will complete their 10-week research projects during their June 2 to August 8 internships.

Participation in summer research programs serves as a catalyst that propels budding investigators to further pursue their scientific passion. Students interested in basic, translational, or clinical research have been selected from a large pool of applicants by a committee led by the program director, Dr. Patricia Chévez-Barrios. Students are matched to a faculty member based on their expressed interests. In addition to completing an independent research project, the interns will attend weekly didactic lectures. At the end of their internship, the students will present their data at a day-long retreat.

For more information on the HMRI Summer Student Program, please visit http://www.houstonmethodist.org/SummerStudentProgram

Center for Molecular and Translational Human Infectious Diseases Research

Laboratory of Dr. James M. Musser
Jesus Paez-Mayorga – Tecnológico de Monterrey

Laboratory of Dr. Randall J. Olsen
Francisco Jimenez – University of St. Thomas

Ocular Pathology Research Laboratory

Director, Dr. Patricia Chévez-Barrios
Gabriella Hinojosa Garza – Tecnológico de Monterrey

Cancer Pathology Laboratory

Director, Dr. Youli Zu
Lamia Alakrash – King Saud bin Abdulaziz University for Health Sciences
James Zhang – Columbia University
The Department of Pathology and Genomic Medicine honored its many administrative staff during the annual Administrative Professionals’ Day luncheon, held on April 22. Administrative Professionals’ Day recognizes the work of administrative staff, from executive assistants to program managers to financial analysts and operations managers. Mr. Will Kyle, the Department administrator, extended his gratitude to all staff who support every aspect of the department’s day-to-day operations. As a small expression of appreciation, Dr. James M. Musser and Mr. Kyle presented all administrative staff with flowers delivered on April 23.

The Office of Academic Development (OAD) is pleased to announce that Dr. Yekaterina (Katya) Khotskaya joined the office on March 31 in the role of scientific writer. Katya received her Bachelor of Science degrees in Microbiology and Cell Biology/Pre-Med from Montana State University in Bozeman, and her PhD in Pathology from the University of Alabama at Birmingham (UAB). Prior to joining the Department of Pathology and Genomic Medicine, Katya completed two postdoctoral fellowships in breast cancer biology at UAB and MD Anderson Cancer Center. Katya was successful in securing a T32 Postdoctoral Trainee Award from the NIH and a Department of Defense Postdoctoral Fellowship in breast cancer research. She has extensive experience with regulatory protocols, grant preparation, and manuscript writing and editing. Katya is a member of the American Medical Writers Association, American Association for Cancer Research, and the Metastasis Research Society.

The OAD provides editorial services to the Department’s trainees and faculty, assists with identification of new funding opportunities, and offers training in grantsmanship and scientific writing. For more information on OAD please visit: http://www.houstonmethodist.org/OAD
RECENT PUBLICATIONS


Powell SZ. Topics from the Milestones Working Group, the American Board of Pathology and Association of Pathology Chairs (APC), and the Program Directors of Pathology Section of APC Working Groups in Genomics and Laboratory Management. Arch Pathol Lab Med. 2014 Mar;138(3):305-6. PubMed PMID: 24576023


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