The Department-Sponsored Cancer Biomarkers Conference II was an Outstanding Success

The Cancer Biomarkers Conference II (CBCII) hosted by the Department of Pathology and Genomic Medicine was held on September 10-11 in the Houston Methodist Research Institute. The event, which surpassed attendee expectations, featured 30 renowned speakers and panel moderators and was attended by almost 170 faculty, trainees, and other allied health professionals. Attendees hailed from 26 states in the U.S., and from Canada, China, Brazil, Mexico, and Saudi Arabia.

The speakers gave updates on biomarker testing for a range of cancers, including hematologic malignancies, melanoma, lung, gastrointestinal, and breast cancer. There were panel discussions on the utility of biomarkers in diagnosis and four keynote lectures on a variety of topics. The CBCII had a large presence on social media, and trended on Twitter with millions of views ("impressions") while it was taking place. A total of 2,440 tweets were generated by 231 participants at an average of 61 tweets per hour during the 1.5-day event. There were more than 4 million views on Twitter during the actual event. Congratulations to Dr. Philip Cagle and all department faculty and trainees that participated and contributed to making the conference an overwhelming success! To see Twitter images and comments from attendees, please visit the conference twitter page.
The Department of Pathology and Genomic Medicine
Announces Four New Named Chairs

The Department of Pathology and Genomic Medicine has the great pleasure to announce four new named chairs awarded to Drs. Philip Cagle, Dina Mody, Mary Schwartz, and Youli Zu. These physicians are honored with this distinction due to their outstanding and long-lasting contributions to Methodist pathology.

Philip T. Cagle, MD, Medical Director of Pulmonary Pathology, was named to the S. Donald Greenberg Chair in Pathology. Dr. Cagle is a world-renowned pulmonary pathologist who joined Houston Methodist as an attending pathologist in 1987, and became director of pulmonary pathology in 2004. In addition to being Editor-in-Chief of Archives of Pathology and Laboratory Medicine, Dr. Cagle is on the editorial boards of CAP Today and Human Pathology. Dr. Cagle served as co-chair and co-author of the College of American Pathologists (CAP) Lung Cancer Biomarker Guidelines, and chaired the CAP Lung Cancer Biomarker Reporting Template Workgroup. Dr. Cagle is the recipient of the CAP Distinguished Patient Care Award, the Houston Society of Clinical Pathologists (HSCP) Harlan J. Spjut Award, the CAP Pathologist of the Year Award, the Texas Society of Pathologists John J. Andujar Citation of Merit Award, and the America's Top Doctors award for the past 6 years. Most recently, Dr. Cagle received the 2016 America's Most Honored Professionals Award in Pathology, given to the top 1% in Pathology based on his receiving 132 recognitions since 2005. He is the author of over 150 peer-reviewed articles, editor of 15 textbooks, two electronic books, and editor for 3 book series.

“In the aggregate, these four colleagues have more than 100 years of tireless and extensive contributions to our Department, including outstanding accomplishments in patient care, training, and research.” - James M. Musser, MD, PhD, Chair

Dina Mody, MD, Medical Director of Cytopathology and Director of the Cytopathology Fellowship program, was named to the Ibrahim Ramzy Chair in Pathology. This year she received the Lansky Award of CAP for her leadership role in cytology. Previous leadership positions include President of the Texas Society of Cytology, Chair of the Scientific Program of the Houston Society of Clinical Pathologists, and President of the American Society of Cytopathology. In 2009, she received the Lifetime Achievement Award from CAP, and in 2010, she received the Harlan J. Spjut Award of HSCP and the Excellence in Education Award from the American Society of Cytopathology. Dr. Mody is the author of over 100 peer-reviewed articles and 15 book chapters, and the editor of the recently published book Diagnostic Pathology: Cytopathology. Dr. Mody’s current research focuses on the application of HPV testing and genotyping in low- and high-risk populations, application of new imaging modalities in diagnostic cytopathology, and immunohistochemical and molecular testing in body fluid cytology.
Mary Schwartz, MD, Medical Director, Anatomic Pathology, and Director, Surgical Pathology Fellowship program, was named to the Jack L. Titus Chair in Pathology. Dr. Schwartz is a recognized national leader in pathology education and an invaluable resource to all Methodist physicians. She has been named as one of the Best Doctors in America since 1996. In 2009, Dr. Schwartz received the Harlan J. Spjut Award from the HSCP for sustained scholarly achievements in pathology, and the CAP Spotlight Service Award for routinely going above and beyond to serve the community. Dr. Schwartz has received the CAP Lifetime Achievement Award, the American Society of Cytopathology Excellence in Education Award, and the Faculty Teaching Award from HMH Residency Programs (several times). Most recently, she was awarded the 2016 John W. Overstreet Award, which is given annually to a Houston Methodist physician who “exemplifies the best of the medical profession”. Dr. Schwartz is the author of over 130 peer-reviewed articles, web-based educational programs, editor of two electronic monographs, and many more. Her research interests include discovery and validation of tumor markers in breast and pancreatic cancers.

Youli Zu, MD, PhD, Medical Director of Hematopathology and Director, Cancer Pathology Research Laboratory at HMRI, is named to the Hematopathology Research Chair in Pathology. Dr. Zu joined the Department of Pathology and Genomic Medicine at HMH in 2004, and was appointed Director of the Cancer Pathology Research Laboratory at HMRI and Medical Director of Hematopathology Section in the Department of Pathology and Genomic Medicine in 2010 and 2012, respectively. These combined positions enable him to directly apply his research findings to address clinical questions, and thus rapidly improve disease diagnosis and treatment. He is a prominent investigator in the field of aptamer-based clinical applications and nanotechnology. In particular, Dr. Zu was the first to demonstrate the utility of aptamers in multi-color flow cytometry analysis of patient samples, immunohistochemical staining of fixed tumor tissues, rapid detection of circulating tumor cells, specific tumor imaging, and in vivo drug delivery for targeted cancer therapy. Dr. Zu is the author of over 100 peer-reviewed articles. Dr. Zu is currently the principal or senior investigator on several research studies funded by NIH and the Cancer Prevention and Research Institute of Texas (CPRIT) that explore novel ways to detect, diagnose, and cure a variety of cancers.
Dr. James Musser, Chair of the Department of Pathology and Genomic Medicine, and Dr. James Versalovic, Texas Children’s Hospital’s Pathologist-In-Chief and Director of the Microbiome Center, have established a collaboration for a community-wide virus detection and surveillance program thanks to generous support by Virginia “Ginny” and L.E. Simmons. By connecting Houston Methodist’s seven hospitals with Texas Children’s three hospitals, the program will cover the entire Houston metropolitan area and most of the outlying suburbs. The program is focused on rapidly identifying and tracking viral pathogens throughout the Houston area to prevent continued spread and limit potential outbreaks. “This is a unique undertaking that will have fast-acting consequences for viral monitoring, which is especially important now given the foothold Zika virus has gained in the U.S.,” stated Dr. Musser. The collaborating laboratories were able to rapidly launch Zika virus molecular diagnostics using support provided by this visionary award. The Virginia and L.E. Simmons Family Foundation program aims to promote excellent, collaborative, and interdisciplinary research programs, and has generously supported many programs in the Texas Medical Center and the Houston area.
Dr. Matthew Cykowski Selected to Receive a Prestigious Clinician-Scientist Award

Dr. Matthew Cykowski, a neuropathologist in the Department of Pathology and Genomic Medicine, was selected to receive a prestigious Clinician-Scientist Recruitment and Retention Award from the Houston Methodist Institute for Academic Medicine (IAM). This highly competitive program is designed to recognize and support recently recruited faculty members who show exceptional promise as clinician-scientists. Dr. Cykowski will study the molecular aspects of neurodegenerative diseases, with emphasis on amyotrophic lateral sclerosis (Lou Gehrig's disease). Dr. Stanley Appel, Chair of the Department of Neurology, will mentor Dr. Cykowski, and Dr. Suzanne Powell, Medical Director of Neuropathology for the Department, will be closely involved in his continued professional development.

Dr. Cykowski joined the department in 2015 as a staff pathologist specializing in neuropathology. He completed a neuropathology fellowship (2013-2015) in the Department of Pathology and Genomic Medicine at Houston Methodist Hospital, and an anatomic pathology residency at the University of Oklahoma Health Science Center (2010-2013) where he served as the co-chief resident.

The Clinician-Scientist Program supports the IAM in advancing its core mission as an academic medical center. The three pillars of this mission are to: i) deliver integrated and high-quality patient care, ii) educate the next generation of health care providers and providers-in-training, and iii) perform research that expands our understanding of human disease to create new tools for improved health.

Dr. Tina Ipe named one of the American Society of Clinical Pathology’s “Top 40 Under 40”

Dr. Tina Ipe, Associate Director of Transfusion Medicine, was named to the American Society of Clinical Pathology’s list of the “Top 40 Under 40” for 2016. This annual list compiles the top 40 clinical pathologists in the U.S. whose leadership and accomplishments are making a significant impact on the field.

Dr. Ipe joined Houston Methodist Hospital as Associate Medical Director of Transfusion Medicine in 2013, and was appointed Assistant Professor of Clinical Pathology and Genomic Medicine at Houston Methodist in 2015. Dr. Ipe received her MPH degree from Dartmouth Medical School, Hanover, NH, and her MD degree from Medical College of Virginia, Richmond, VA. She then pursued a clinical pathology residency at the Hospital of the University of Pennsylvania, PA, and completed a fellowship in transfusion medicine at the same institution. Her research interests are in translational research in transfusion medicine, namely apheresis data analysis for improvement of patient outcomes. Congratulations Dr. Ipe! To see the entire list of winners, please visit the ASCP 40 Under 40 website.
CONGRATULATIONS (cont)

Dr. Youli Zu and Collaborator Receive Award from the Cancer Prevention and Research Institute of Texas (CPRIT)

Dr. Youli Zu, Medical Director of Hematopathology, and Dr. Richard Willson, Huffington-Woestemeyer Professor of Chemical and Biomolecular Engineering and Professor of Biochemical and Biophysical Sciences at University of Houston, are lead investigators on the awarded project “An ultra-sensitive nanomagnetic sensor for the early detection of anaplastic large cell lymphoma.”

Dr. Zu specializes in aptamer nanotechnology, and has introduced innovative approaches in cancer diagnostics and clinical applications based on aptamers, a novel class of molecular recognition probes composed of small nucleic acid sequences. Dr. Zu also has extensive experience in cancer research, including anaplastic large T-cell lymphoma. For more information on Dr. Zu and his research, please visit his webpage.

Dr. Randy Olsen Speaks on Department’s Cutting-Edge Approach to Clinical Pathology

Dr. Randy Olsen, Medical Director of Molecular Diagnostics, presented the international plenary talk “Application of Next Generation Sequencing (NGS) in the Clinical Laboratory” at the 5th Molecular Microbiology Meeting 2016, which took place in Waterview, Bicentennial Park, Australia, on March 2-3, 2016.

Dr. Olsen and members of the Molecular Diagnostic Laboratory team have been responsible for developing many new tests that use NGS to greatly expedite and enhance cancer and microbiology diagnoses. These include tests to identify specific breast cancer mutations, both hereditary and acquired, and changes in genes linked to different leukemias. Most recently, a test that uses NGS to identify mutations in 79 different genes that are associated with brain tumors, including glioblastoma multiforme and pituitary adenomas, was developed and is now in use. Knowing the underlying genetic mutation(s) responsible for the cancer can have significant influences on diagnosis, prognosis, and personalized therapy. For a list of all tests offered in the HMH Molecular Diagnostic Laboratory, please visit the test page. For questions about the Houston Methodist Diagnostic Laboratory, please contact Heather Hendrickson, Molecular Manager, at HLHendrickson@HoustonMethodist.org.

Dr. Randy Olsen
AND MORE KUDOS:

Dr. Xin Yi, Co-Director of Clinical Chemistry, was recently elected to the National Academy of Clinical Biochemistry, and has a first-author publication in the inaugural issue of The Journal of Applied Laboratory Medicine. The article titled “High-Sensitivity Micro LC-MS/MS Assay for Serum Estradiol without Derivatization” was published in the July 2016 issue and focuses on the development and validation of a test to measure estradiol in patient samples.

Dr. Xin Yi completed her fellowship training in clinical chemistry at the University of Chicago School of Medicine after completing her PhD in clinical-bioanalytical chemistry at Cleveland State University in collaboration with Cleveland Clinic. She joined the department in September 2015 as Associate Medical Director of Clinical Chemistry. She is a Diplomate of the American Board of Clinical Chemistry (DABCC) with broad expertise in clinical chemistry, endocrinology testing, therapeutic drug monitoring, toxicology, and clinical pharmacogenetics. “I learn from my colleagues every day and am always looking forward to new challenges,” said Dr. Yi.

Dr. David Cohen, a PGY4 in the Department, was selected as a 2016 CAP Foundation Leadership Development Award recipient. This award is designed to help defray travel expenses in connection with attending the CAP policy or resident meetings. Dr. Cohen was also elected to the CAP resident forum executive committee, the CAP subcommittee on graduate medical education, and a section editor for Archives of Pathology and Laboratory Medicine in clinical effectiveness and economics. Congratulations Dr. Cohen!
The cobas® EGFR Mutation Test v2 is the first FDA-approved, blood-based genetic test that can detect epidermal growth factor receptor (EGFR) gene mutations. These mutations are present in 10-20% of non-small cell lung cancers (NSCLCs). This is a companion test to the cancer drug erlotinib, which is effective against cancers with these specific gene mutations. Lung cancer is the leading cause of cancer-related deaths among men and women in the U.S., and blood-based diagnostics allow doctors to prescribe targeted medicines with a minimally invasive procedure. The benefits of liquid biopsy are numerous, and in addition to being non-invasive, it lacks the potential heterogeneity of solid tumor biopsy, allows real-time monitoring of disease progression and treatment effects, and can be performed on patients who may be too ill to undergo an invasive procedure.

Dr. Yimin Ge of the department's pulmonary pathology group is leading our in-house investigations into the development of liquid biopsy for lung cancer, and spoke on this topic at the Cancer Biomarkers Conference II in September.

To read the FDA press release, please visit the website. You can read the statement that the Pulmonary Pathology Society has issued regarding the liquid biopsy for lung cancer here.
MEETING NEWS

The Inaugural Houston Methodist Lung Cancer Symposium will take place in the John F. Bookout Auditorium at HMRI on October 8-9, 2016. The symposium is presented by the Houston Methodist Department of Pathology and Genomic Medicine, the Houston Methodist Lung Center, the Houston Methodist Cancer Center, and is endorsed by CAP.

Over the past year, there have been very significant advances in the diagnosis and treatment of lung cancer. These changes include the approval of lung cancer screening by the Centers for Medicare and Medicaid Services, advances in diagnosis of lung cancer by interventional pulmonology procedures, advances in thoracic surgery and radiation oncology, implementation of new targeted therapies for lung cancer, major revisions in the classification of lung cancer, and new advances in biomarker testing for targeted and immune therapies of lung cancer. Please visit the website for event details.

Pathobiology for Investigators, Students, and Academicians (PISA) is being hosted by Houston Methodist's Department of Pathology and Genomic Medicine, and will take place on October 20-22, 2016, in the John F. Bookout Auditorium in the HMRI. This conference, titled Breakthroughs in Biology: From Underlying Pathogenesis to Translational Medicine, will be of interest to investigators and trainees from a spectrum of disciplines and attendance is encouraged. Department Chair Dr. James Musser will deliver the Rous-Whipple Award Lecture on Friday, October 21st. PISA is hosted by the American Society for Investigative Pathology (ASIP) and is aimed at providing attendees the most exciting and up-to-date concepts in molecular pathogenesis and translational medicine. Please visit the PISA website for event details and registration.

The Texas Society of Pathologists (TSP) will hold their 96th annual meeting at the Hyatt Regency Lost Pines in Bastrop, Texas, from January 20-22, 2017. Dr. Mary Schwartz, Medical Director of Surgical Pathology for our Department, will give the opening lecture titled "Current Controversies in Breast Pathology". Other sessions will focus on the 2015 WHO classification of lung cancer, and informatics for the practicing pathologist. Please visit the TSP website for a complete schedule of events and to register.

ALUMNI NEWS

Dr. JoElle Peterson, a former resident in the Department of Pathology and Genomic Medicine, received the Richard W. Leech Teaching Award from the residents at Oklahoma University at the resident graduation ceremony on June 9, 2016. This award is presented by the Department of Pathology residents to the faculty member who has best exemplified excellence in teaching.

Dr. Peterson is the Surgical Pathology Rotation Director at Oklahoma University, where she is in charge of resident education in surgical pathology. She completed her residency and fellowships in neuropathology and surgical pathology at HMH in June 2014. The subspecialties she practices include neuropathology, ophthalmic pathology, head and neck pathology, and pulmonary pathology. She teaches trainees in the departments of pathology, neurology and neurosurgery, as well as medical students, nursing students, and allied health students. “It is truly a privilege to be able to work with such fantastic residents. I am humbled by the honor they have given me with this award.” - JoElle Peterson, MD
Department Welcomes New Faculty

The Department of Pathology and Genomic Medicine welcomes four new faculty members. The department continues to grow to meet the increased patient volume resulting from Methodist’s ongoing expansion. Please extend a warm welcome to the following new faculty:

Dr. Ross Miller

Dr. Ross Miller joined the department as a staff pathologist after completing fellowships in cytopathology (2014-2015) and surgical pathology (2015-2016) in the Department of Pathology and Genomic Medicine at HMH. He graduated first in his class from the Sanford School of Medicine at the University of South Dakota, Vermillion, SD, in May 2010, and completed a clinical and anatomic pathology residency (2010-2014) at the same institution. Dr. Miller’s research interests are focused on surgical pathology & cytopathology.

Dr. Tara Miller

Dr. Tara Miller joined the department as a staff pathologist after completing a hematopathology fellowship in the Department of Pathology and Genomic Medicine at HMH and a clinical and anatomic pathology residency (2010-2013), serving as the chief resident in 2013, at the Sanford School of Medicine at the University of South Dakota, Sioux Falls, SD. She received her MD degree, also graduating first in her class, from the Sanford School of Medicine at the University of South Dakota, Vermillion, SD, in July 2009. Dr. Miller’s research interests are focused on hematopathology.

Dr. Eric Salazar

Dr. Eric Salazar joined the Department as a staff pathologist after completing a fellowship in transfusion medicine (2015-2016), serving as the chief fellow for this period, in the Department of Pathology and Genomic Medicine at HMH. Prior to that, he completed a clinical pathology residency (2012-2015), serving as the chief resident for 2014-2015, in our Department. Dr. Salazar received his MD degree from the Weill Cornell Medical College in 2012 and his PhD in pharmacology from the Weill Cornell Graduate School of Medical Sciences while working at Rockefeller University. Dr. Salazar’s research interests are focused on transfusion medicine and immunology. Currently, he is actively involved in several collaborative research projects at HMH.

Dr. Jessica Thomas

Dr. Jessica Thomas joined the Department as a staff pathologist after completing a combined clinical and anatomic pathology residency (2011-2015) and a clinical fellowship in molecular genetic pathology (2015-2016) in the Department of Pathology, Microbiology, and Immunology at Vanderbilt University Medical Center, Nashville, TN. She received her MD degree from the School of Medicine, Louisiana State University, New Orleans, LA, in 2011 and her PhD from the Department of Microbiology, Immunology, and Parasitology at the same institution. She earned her Master of Public Health (MPH, Health Education) degree from the University of Southern Mississippi, Hattiesburg, MS, in 2001.
Welcome PGY1 Residents 2016-2017

Paloma Monroig-Bosque, MD, PhD
University of Puerto Rico
School of Medicine

Charlotte Myers, MD
Wake Forest School of Medicine

Eric Rutledge, MD
Baylor College of Medicine

Tiffany Sheu, MD
Medical College of Georgia
Georgia Regents University

Kent Swimley, MD
The University of Texas
School of Medicine, San Antonio

Jessica Tomsula, MD
Creighton University
School of Medicine

Department Awards Five New Microgrants

The Department of Pathology and Genomic Medicine recently invited its faculty to submit research proposals for small, internal research grants. The Department's microgrant program is designed to foster innovation and expansion of our clinical service. Each selected project receives a budget, and the work must start and finish within 3-4 months. The Department's microgrant review committee is pleased to announce that five proposals have been chosen for funding. Congratulations to all five collaborating teams:

The Utility of CD138 in the Differential Diagnosis of Ductal vs. Lobular Carcinoma of the Breast, awarded to Drs. David Alrahwan and Anna Richmond

Development of Mass Spectrometry Quantitative Method for PD-L1 in FFPE NSCLC Samples, awarded to Drs. Nicola Dundas, Clayton Wilburn, Philip Cagle, Michael Deavers, Xin Yi, and Ping Wang

Investigating Molecular Profiles in Indeterminate Thyroid FNA Specimens, awarded to Drs. Maren Fuller, Dina Mody, Anh Nguyen, Maja Udovcic, Richard Robbins, and Randall Olsen

Morphologic and Molecular Characterization of Creutzfeldt Cell-Rich Glioblastoma, awarded to Drs. Leomar Y. Ballester, Matthew D. Cykowski, Suzanne Powell, Andreana Rivera, Gregory N. Fuller (MD Anderson Cancer Center), David Baskin, Gavin Britz, and Randall Olsen

Ethnic Specific Genomic Instability Signatures as Breast Cancer Early Detection Markers, awarded to Drs. Susan Haley, Mary Schwartz, Jenny Chang, and Randa El-Zein


PUBLICATIONS [CONTINUED]


