



Director's Corner

Dear Members of the Division of Precision and Computational Diagnostics (PCD),

Welcome to the second edition of our Divisional Newsletter. This last quarter has been filled with activities ranging from process improvement projects to the implementation of new tests. I am very delighted and gratified by the efforts of staff and faculty in the Division who continue to contribute immensely to our mission.

I look forward to an exciting upcoming quarter with numerous accomplishments reflecting the commitment of our Division members and diversity of our activities aimed at improving patient care through molecular and genomic testing.

Sincerely,
Kojo Elenitoba-Johnson, M.D.

Penn Medicine Awards of Excellence

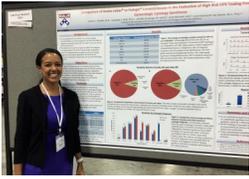
Each year the Perelman School of Medicine awards faculty with the Penn Medicine Award of Excellence. The distinguished awardees exemplify our profession's highest values of scholarship and teaching, innovation, commitment to service, leadership, and dedication to patient care. They epitomize the preeminence and impact we all strive to achieve. The awardees range from those at the beginning of their highly promising careers to those whose distinguished work has spanned decades.

We are pleased to announce that our very own Christopher D. Watt, MD, PhD, is the recipient of the Leonard Berwick Memorial Teaching Award.

Each recipient was chosen by a committee of distinguished faculty from the PSOM or the University. The contributions of these clinicians and scientists exemplify the outstanding quality of patient care, mentoring, research, and teaching of our world-class faculty. Congratulations Chris!



PCD Travels



In September, pathology resident Annika Windon, MD, traveled to the Annual Meeting of the American Society for Clinical Pathology in Las Vegas, NV, to present her Molecular Pathology PCD rotation project entitled "Comparison of Roche cobas to Hologic Cervista Assays in the Evaluation of High Risk HPV Testing from Gynecologic Cytology Specimens." Co-authors included Cindy McGrath, MD, Director of Cytopathology and PCD members Jacquelyn Roth, PhD, Jennifer Strubinger, and senior author Vivianna Van Deerlin, MD, PhD.

Vivianna Van Deerlin, MD, PhD, has been busy traveling this fall! First she attended the 10th International Conference on Frontotemporal Dementias (FTD) in Munich, Germany where she was a co-author on eight posters! This international conference provides an opportunity for clinicians, researchers and trainees to share their knowledge with the goal of improving the care of patients with FTD. Others from the Penn Dept. of Pathology and Laboratory Medicine who also attended included Drs. Virginia Lee, John Trojanowski, Eddie Lee and EunRan Suh, a Senior Research Investigator in Dr. Van Deerlin's laboratory (pictured).



After the conference in Munich, Dr. Van Deerlin attended the Memory Clinic at the Institute on Aging at Pontificia Universidad Javeriana in Bogota, Colombia, along with Penn faculty Drs. Murray Grossman, David Irwin, Corey McMillan and Katya Rascovsky. This trip was part of a funded NIH Fogarty grant entitled "Young-Onset Dementia in Colombia," on which Dr. Van Deerlin is a co-investigator. The group from Penn visited with collaborators, learned about their program, and presented a symposium on young-onset dementia. Dr. Van Deerlin presented on the subject of Genetics of FTD and Young-Onset Dementia.

CPD & Next Gen Sequencing

Alan J. Fox, Matthew C. Hiemenz, MD, David B. Lieberman, Shrey Sukhadia, Barnett Li, Joseph Grubb, Patrick Candrea, Karthik Ganapathy, Jianhua Zhao, PhD, David Roth, MD, PhD, Evan Alley, MD, PhD, Alison Loren, MD and Jennifer J. D. Morrisette, PhD, were co-authors of the paper "Next Generation Sequencing for the Detection of Actionable Mutations in Solid and Liquid Tumors" which was recently published in the Journal of Visualized Experiments (JoVE), a peer-reviewed scientific journal in video format. The JoVE video describes clinical protocols for two next-generation sequencing panels, one that interrogates hematologic malignancies and the other that targets genes commonly mutated in solid tumors. Molecular classification of driver mutations in human malignancies offers valuable prognostic and predictive information. View the video here: <http://pathology.med.upenn.edu/research/publications/next-generation-sequencing-detection-actionable-mutations-solid-and-liquid>

Molecular Pathology Participates in THINKER Clinical Trial

This summer, the THINKER (Transplanting Hepatitis C Kidneys Into Negative Kidney Recipients) clinical trial was launched at Penn Medicine. This is the first clinical trial to perform transplantation of Hepatitis C virus (HCV)-infected kidneys into HCV negative patients, who will subsequently receive anti-HCV treatment after the kidney transplantation. This trial seeks to demonstrate that patients who contract the virus via kidney transplant can be successfully treated for HCV, thereby opening up a larger pool of available organs for transplant.

The Molecular Pathology Laboratory is contributing to this trial by offering a rapid HCV genotyping method to identify which organs are suitable for use in the study. The developmental and implementation efforts were led by current PCD members Vivianna Van Deerlin, MD, PhD and Caren Gentile, as well as former fellow Midhat Farooqi, MD, PhD. Molecular Pathology manager Jennifer Smith stated: "The THINKER Study has humanized laboratory sciences for all of us involved. Usually we work behind the scenes and do not see the end result of our work. For the majority of us, this is the first time that we are intimately involved in determining the direct care of a patient. . . [S]oon after the first recipient was home with her family, happy and healthy, we all realized what a truly remarkable thing we were a part of."

The PCD would like to recognize the technologists who are on-call 24/7 making this exciting study possible, Caren Gentile, Chris Hogan, Jessica O'Donnell, Jennifer Resling, Brittany Schneider, Ryan Sharkey, and Gary Tang! Also thank you to technologists Alicia Carlin, Zhenying Liu, Monica Shah, and Laura Tooke for providing coverage of other stat testing!

Additional information can be found in the Press Release: http://www.uphs.upenn.edu/news/News_Releases/2016/09/thinker/. To see the impact of the THINKER trial, watch the Penn Medicine video: "Expanding Access: First Clinical Trial Transplants Hepatitis C-Infected Kidneys at Penn Medicine." (https://www.youtube.com/watch?v=L7UHyf_QpM).

In Our Community



The Light The Night Walk benefitting the Leukemia & Lymphoma Society brings together families and

communities to honor blood cancer survivors, as well as those lost to the diseases. **The Penn Medicine Team** helped to shine a light on the importance of finding cures and providing access to treatments for blood cancer patients.



Come walk with the Path & Lab Medicine team on November 5th for the American Heart Association's Heart Walk!

<http://heartwalk.kintera.org/philly/PathologyandLabMedicineCardiacChargers>

News & Newsworthy

Congrats to Jennifer Morrissette, PhD, Dana Farengo Clark and Jackie Powers for a fantastic Educational Breakout Session at this year's National Society of Genetic Counselors Annual Education Conference!

Details are published in the below GenomeWeb article: *Germline Mutations Uncovered Through Tumor Sequencing Present Challenges for Providers* <https://www.genomeweb.com/sequencing/germline-mutations-uncovered-through-tumor-sequencing-present-challenges-providers>



Chris Leid (Cytogenetics) with President Clinton from this year's Made In America Music Festival on September 4, 2016. Chris was backstage, enjoying the show, when President Clinton unexpectedly arrived and greeted concert-goers with a very friendly, approachable demeanor. It was a memorable experience that Chris will never forget!

April Schrank-Hacker (Cytogenetics) recently completed her Masters of Science degree in Organizational Dynamics. Now she is looking forward to working on her doctorate in Organizational Leadership.

Congratulations April!



On October 1, 2016, **Brittany Schneider**, lead technologist in Molecular Pathology, was wed to her now husband, David, at Union Trust in center city Philadelphia. Congratulations Brittany!



Congratulations to **Shrey Sukhadia** (Bioinformatics Specialist at the CPD) and his wife on the birth of their daughter, Shravya.

Welcome New Members!

Contributors

Kojo Elenitoba-Johnson, MD
Vivianna Van Deerlin, MD, PhD
Daniel Wild, PhD
Suanne Gardiner
Emma Staatz

Jacquelyn Roth, PhD
Laura Pritchard

Christopher Orr, PhD, is our newest Genetic Variant Analyst in the CPD. He graduated from the Genetics Program at Thomas Jefferson University. After graduation he did a post-doc and subsequently became a production scientist in a small Delaware biotech company. In his free time, he enjoys running a Lego club at his boys' school (but does not enjoy picking them up at home). Chris is excited to return to an academic setting in the clinical realm and work with a great group of people.



Do you have comments, suggestions, or content for the newsletter? Please contact Jackie Roth or Laura Pritchard; jacquelyn.roth@uphs.upenn.edu or laura.pritchard@uphs.upenn.edu