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

Welcome to the fourth issue of our Divisional Newsletter. After the mild winter, we can feel that spring is “in the air,” which infuses us with enthusiasm to pursue our upcoming professional and extracurricular activities.

Please join me in welcoming Robyn Sussman, PhD, Amanda Oran, PhD, and Tori Gawel who recently joined the PCD.

We are looking forward to an exciting menu of upcoming activities this spring, including our annual party on April 29.

Please continue to submit ideas for professional and recreational forums that bring members of our Division together and showcase the impact of our activities within and outside the Department of Pathology.

Best wishes and looking forward to an exciting spring.

Sincerely,
Kojo S. J. Elenitoba-Johnson, M.D.

Faryabi Lab Receives Grant

In February of 2017, Robert Babak Faryabi’s Lab received three grants from the Institute for Translational Medicine and Therapeutics, the Abramson Cancer Center Cooper Scholar Fund, and the Penn Epigenetics Institute to investigate the mechanism of epigenetic dysregulation in tumor maintenance and response to targeted therapies. Despite the recent progress in developing potent inhibitors for several chromatin-associated proteins, the success of preclinical trials of these drugs have been limited in part due to development of resistance in patients. Faryabi’s lab teamed up with Warren Pear, MD, PhD and Golnaz Vahedi, PhD labs to elucidate how the heterogeneity of epigenetic regulatory elements across tumor cells contributes to drug resistance, and whether this information could be used to more effectively target the resistant sub-population. To answer these questions, they established a cutting edge single-cell genome-wide assay at PENN for the first time that complements commonly used population-based genome-wide technologies.
Peter C. Nowell, MD Remembrance

Peter Nowell was the father of Cancer Cytogenetics and a visionary in cancer biology; his fundamental discoveries in science and medicine will be what most people remember. Instead of focusing on the contributions he made to the Cytogenetics and Oncology communities I’d like to focus my thoughts on the daily aspect of Peter’s career, cancer Cytogenetics, and specifically a few anecdotes that I think capture who he was to the Cytogenetics laboratory and his colleagues here at Penn.

Peter was the leader of Clinical Cancer Cytogenetics at the University of Pennsylvania, performing chromosome analysis on bone marrow specimens from leukemia patients from the late 1950s until his retirement. He was known to greet the laboratory every day with “What’s new? Do we still have 46 chromosomes?” in reference to the early days of his career when it was thought that humans had 48 chromosomes. Peter’s sense of humor made the laboratory a wonderful place to work.

Peter believed in education, as you have heard from Jonni Moore, his former fellow, but he also believed in education for his laboratory technologists. When Chris Leid, a new technologist in the lab identified trisomy 8 in a bone marrow donor, he submitted an abstract to the Annual Biomedical Research Conference for Minority Students which was accepted, unfortunately without funding. Peter paid for the conference from his own funds so that Chris would have this opportunity. Once, when hiring a new technologist, she was unable to cover her security deposit, so Peter gave her the money so she would be able to begin her career at Penn. Peter had an administrative assistant for over two decades, Lewis Delpino, who became a great friend. In the last five years of Lew’s life he began to have health issues, so Peter would pick him up every morning and drop him off each evening so they could continue to work together.

Peter had many friends at Penn, and after his retirement he would come to work to catch up with his friends. Every time he visited he would seek out Mark Greene, Nicholas Gonatas and Jonni Moore, and would be disappointed if they weren’t in their office to catch-up. When we would talk he would often reminisce about the exciting times spent with John Glick and Leonard Jarett and they grew the Cancer Center and the Department of Pathology.

When I first came to Penn it was to assist Peter in his transition to retirement. I didn’t have an office, but sat in the laboratory to sign out cases surrounded by the hubbub of lab life. One day Peter handed me a small statue of Sisyphus that he had kept in his office. For those of you who don’t remember your Greek mythology, Sisyphus was a Greek king who chained death and was sentenced by the gods to push a boulder to the top of a mountain, only to watch it roll back down to the bottom every time he reached the top. Peter said that this reminded him of our struggle with cancer; there is always another disease to overcome and that the struggle is necessary to make a difference.

Peter will be best known for his groundbreaking discovery of the Philadelphia chromosome and the discovery of tumor evolution, but many of us will remember the man who took his time and resources to secure education and impart wisdom; in my mind that is his legacy.

As submitted by Jennifer J D Morrissette, PhD at Dr Nowell’s Memorial Service

"We enjoyed having Dr. Nowell at our celebration of passing the cytogenetics boards in 2013. We were so happy to celebrate with him."
- - Jackie and Vania
Charity Events

Charity Box Tops for Cash
Caren Gentile and her daughter Maya have been busy collecting Box Tops for Maya’s school, a childcare and educational facility which supports children from infants through Kindergarten.

Did you know:
- Each Box Tops Clip is worth 10 cents for your school? Occasionally, Bonus Box Tops or Bonus eBoxTops of a different value are issued for special promotions.
- Each eligible school may earn up to $20,000 cash per year beginning on March 2 of every year from the Clip program? There are no maximum annual earning limits for schools earning eBoxTops or Bonus Box Tops.
- Your school can use the money for anything it needs?

Path & Lab Medicine visits the Ronald McDonald House
The Philadelphia Ronald McDonald House supports families of seriously ill children by creating a community of comfort and hope.

Joe Biden Speaks
PCD members attended the David and Lyn Silfen University Forum to hear about “A Formidable Foe: Cancer in the 21st Century.” The panel, moderated by University President Dr. Amy Gutmann, featured prominent members of the Penn community including Dr. Carl June and the 47th Vice President of the United States, and Benjamin Franklin Presidential Practice Professor, Joseph Biden Jr.!
Robyn Sussman, PhD, is delighted to join the CPD as our new R&D Coordinator. Robyn received her PhD in Cell and Developmental Biology from Thomas Jefferson University and her postdoctoral fellowship at CHOP in the laboratory of John Maris. She received her bachelor’s degree from the University of Michigan and spends her free time fantasizing about a major football victory over Ohio State. She also enjoys cooking and traveling, and is very excited to join the division in improving patient care.

Amanda Oran, PhD, is joining the Center for Personalized Diagnostics as a Postdoctoral Fellow and is excited to get started on several research and development projects. She recently completed her doctoral degree in Genetics, Genomics, and Cancer Biology at Thomas Jefferson University. Originally from New Jersey, she went to Syracuse University for her undergraduate education, then moved to Philly for graduate school. Currently she lives in Delaware and has been steadily taking on the east coast one state at a time.

Tori Gawel is the newest tech in MolPath and is a graduate of Penn State University with a BS in Biotechnology and minor in Microbiology. She was working in HUP’s Blood Bank after completing Pennsylvania Hospital’s Medical Laboratory Science program and receiving her ASCP certification in 2015. When she’s not in the lab, she spends her time working on her photography, volunteering, playing cello and traveling.