Emory Pathology Newsletter
An update on the people and activities of the Department of Pathology & Laboratory Medicine
Emory University School of Medicine, Atlanta, GA

November 2016

Patient-Based Clinical Research in Pathology? You Bet!

Emory’s Pathologists are constantly working to create and validate new diagnostic tests, reagents, and classification schemes as part of our clinical mission. Most often that’s done using anonymized, left-over blood or tissue specimens, so it does not require working directly with patients or ongoing review by Emory’s Institutional Review Board (IRB), which oversees all human-subjects research. A handful of intrepid Emory Pathologists, however, are leading patient-based clinical studies aimed at illuminating disease mechanisms and improving patient care. In fact, of the 1,734 IRB-approved clinical trials underway at Emory in early August, 12 listed a Pathology faculty member as Principal Investigator (PI). In one such trial, Professor Cassandra Josephson, M.D., a pediatric transfusion-medicine specialist, has been tracking the health of more than 600 very-low-birthweight babies who were born in Atlanta-area hospitals and received blood transfusions during their first weeks of life. By studying this unique cohort (the largest of its kind), she and her colleagues recently discovered (JAMA 315:889-897, 2016) that severe neonatal anemia is associated with an increased risk of developing necrotizing enterocolitis, a rare but potentially life-threatening condition. Another ongoing transfusion-related trial, led by Professor and Vice Chair John Roback, M.D., Ph.D., aims to resolve a longstanding controversy about whether transfusing red blood cells that were stored for two weeks or less produces fewer adverse vascular effects than red cells stored for longer periods. Associate Professor Colleen Kraft, M.D., who specializes in infectious diseases, has treated more than 250 patients over the past four years in her ongoing trial of fecal microbiota transplantation as a treatment for recurring Clostridium difficile infections of the gut; she finds the procedure is 95% effective in curing that notoriously refractory infection. Dr. Kraft is also the Emory site-PI for a multi-institutional, retrospective trial to evaluate some of the investigational treatments (such as ZMapp) given to patients with Ebola infection. Preventing infections, on the other hand, is the goal of two large ongoing trials directed by Professor Susan Allen, M.D., M.P.H., whose team is assessing the safety, immunogenicity, and efficacy of candidate HIV vaccines at the clinical research facilities she established in the African nations of Rwanda and Zambia.

Meanwhile, other Emory Pathologists are seeing the groundbreaking discoveries made in their research labs put to the test in clinical trials. Preparations are underway in China, for example, for initial phase-I (safety) trials of a candidate synthetic pro-drug called 7,8-DHF, which was developed by neurobiologist Professor Keqiang Ye, Ph.D., and his colleagues for potential use in treating Alzheimer’s disease or other neuronal disorders. And even before Professor Aftab Ansari, Ph.D., and coworkers had published their startling finding that monkeys given a novel short-term treatment regimen were able to control an AIDS-like retroviral infection for at least 9 months after all treatment ended (Science 354:197-202, 2016), the NIH had already launched a small-scale safety trial of a similar treatment in HIV-infected humans, based on those results.

To contribute to the next newsletter, send an email to Donna Martin (dmart06@emory.edu).
Jan Gorniak, DO

The words strike fear into the hearts of some: “I’ve come from Washington DC, and I’m taking charge!” But when Dr. Jan Gorniak stepped into her new roles as Fulton County’s new Chief Medical Examiner (FCME) and as an Emory Pathology faculty member, it was cause for pure celebration. Sure, she has a big job to fill: In addition to being a highly visible public servant in one of America’s largest cities, the FCME (with Deputies in her new office) has long provided outstanding training in autopsy and forensics for trainees in our program, inspiring many to pursue forensic careers. But Dr. Gorniak had emerged as the top candidate in an intensive nationwide search conducted jointly by leaders of the County and our Department, propelled by her broad experience and vision, her passionate civic and social engagement, and her excitement for teaching. Anyway, she hadn’t been in Washington for all that long: Since completing her doctorate and a year of internship in Erie, Pennsylvania, Dr. Gorniak had spent most of her life in Ohio, training first in Anatomic Pathology at Case Western University and then in Erie, Pennsylvania, Dr. Gorniak had spent most of her life in Ohio, and her excitement for teaching. Anyway, she hadn’t been in Washington for all that long: Since completing her doctorate and a year of internship in Erie, Pennsylvania, Dr. Gorniak had spent most of her life in Ohio, training first in Anatomic Pathology at Case Western University and then as a Fellow in Forensic Pathology at the Cuyahoga County Coroner’s Office (both in Cleveland), before joining the Franklin County Coroner’s Office (in Columbus), where she worked for nearly a decade. Initially hired as a Deputy Coroner there, she soon ran for and was elected County Coroner, and held that post along with an adjunct faculty appointment at Ohio State University from 2009-2014. Her subsequent stint as Deputy Chief Medical Examiner in DC lasted only two years before she jumped at the chance to come to Atlanta in early September, enticed in part by the chance to teach our great residents, direct our highly regarded fellowship in Forensic Pathology, and continue the tradition of superb forensic training led by the FCME. So there’s no need to fear: Dr. Gorniak has come to Emory, and the FCME’s office is in excellent hands.

Bryon Jackson, MD, MHA

He could have been a terrific neurologist. By the time Dr. Bryon Jackson collected his diploma from the University of Pennsylvania’s medical school, he’d already won two national awards for excellence in the field from the American Academy of Neurology as well as one from the school, and he’d co-authored three manuscripts on neurological topics. Everything pointed to a bright future for him in that specialty. But his first year of internship wasn’t quite what he’d hoped for, so he paused, stepped off the conveyor belt, put his medical training on hold, and took some time off to reflect. He managed to keep himself busy, of course, first by working for two years with McKinsey and Company as a healthcare consultant, advising big healthcare and pharmaceutical companies about strategy and organizational design, and then for two years earning a Masters in Healthcare Administration at the University of Minnesota. All the while, though, memories of his early experiences studying thrombolysis in ischemic stroke kept tugging at his mind, beckoning him back to the clinical realm. And so it came to pass that Dr. Jackson returned to Philadelphia, in 2011, to pursue a four-year residency in Anatomic and Clinical Pathology at Thomas Jefferson University, and then moved to the University of Pittsburgh’s highly regarded Institute for Transfusion Medicine for a subspecialty fellowship in that field. By the time we spotted him, he was a highly trained expert with five more publications in blood banking, transfusion, and coagulation, and with a particular interest in trauma. All of which – along with being a Morehouse College grad, summa cum laude, class of 2002 – made him the ideal choice to join our faculty last month as the newest member of our Clinical Pathology Division and of our elite Center for Transfusion and Cellular Therapies, stepping seamlessly into his new role as Director of Blood Banking and Transfusion at Grady Hospital. So let’s join in welcoming Dr. Jackson onto our faculty, and rejoice that he found his way into Pathology -- the most cerebral specialty of all.
What’s twice as good as being perfect? Being perfect twice! That’s what Professor Periasamy Selvaraj, Ph.D., accomplished when his recent NIH RO1 grant application on cancer vaccine design got a perfect score from the study section—something that rarely happens, but had happened to him once before. Dr. Selvaraj thus became the first member of our Department -- and the second person ever -- to qualify twice for membership in the Emory 1%, an honorary society for those whose grants score in the top percentile. He will be re-inducted into the Emory 1% at a campus ceremony on December 1st.

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Six clinical chemists from across the country spent a week in Atlanta during September to learn the finer points of mass spectrometry under the tutelage of Professor Jim Ritchie, Ph.D., and four colleagues from the Centers for Disease Control and Prevention (CDC). The course was the first in a planned Emory-CDC series aimed at promoting the adoption of advanced analytic technology in clinical diagnostics. Dr. Ritchie is Medical Director of Emory Medical Laboratories.

Interesting Links

Pathologists in the News

Sean Stowell/Guy Benian
Erskine College—June 13, 2016
Erskine hosts Emory professors
• http://news.erskine.edu/emory-professors-visit-erskine-campus/

Carlos Moreno
Emory News Center—July 19, 2016
Emory, Metaclipse Therapeutics receive NIH grant to develop breast cancer vaccine

Guy Benian
Laneey Graduate School, Emory University
STEM Research and Career Symposium
• http://www.gs.emory.edu/diversity/programming/stem.html

Volkan Adsay
ArtCAN
Radio interview (audio only) at the ArtCAN charity event—a fundraiser for pancreaticobiliary cancer research at the Winship Cancer Institute
• https://www.dropbox.com/s/yxhans5g52j/udC5/AB%20-%20Dr.%20Adsay%20-%20Pamela%20%20Monastra.mp3?dl=0

Aftab Ansari
STAT
A drug used to treat Crohn’s disease could suppress HIV, monkey study suggests
• http://publichealthmagazine.emory.edu/issues/2016/spring/features/getting-to-zero/index.html

Colleen Kraft/Andy Neish
Emory Medicine Magazine
Learning to Love Our Bugs
• http://emorymedicinemagazine.emory.edu/issues/2016/fall/features/loving-our-bugs/index.html

Periasamy Selvaraj
Atlanta Business Chronicle—July 20, 2016
Emory, Metaclipse Therapeutics get $2.4 million grant for breast cancer vaccine

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The infamous 'Inadequate Specimens' at the Winship 5K Race—October 1, 2016

If you wish to view/download individual photos from these composites, go to Google Drive here:

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