PATHWAYS
A Department of Pathology Publication

Message from the Chair

Exciting Beginnings

The last three months have been an exciting time in our Department. We were joined by Whitney Green as an attending on the GI and Autopsy services, had our Inaugural Research Retreat, raised money for Pelotonia, and embarked on our Digital Pathology project. In addition, a new class of residents and fellows joined the department. We are also happy to welcome several new staff members. Our James gross room project is moving forward and in August we went live with barcoding for all Anatomic Pathology specimens.

The Inaugural Research Day Retreat was a tremendous success with the keynote address given by Dr. Michael Caligiuri to a packed room. The posters were interesting and the platform presentations were excellent. There were a total of 44 posters and six platforms and over 200 people attended. Our goal of getting the department together to celebrate research, learn about each other’s projects and foster collaboration was exceeded. Our students, residents, fellows and judges did a wonderful job. We are already planning for our next Research Retreat for June 2, 2017, with Dr. Carlo Croce, Distinguished University Professor; the John W. Wolfe Chair in Human Cancer Genetics; Chair, Cancer Biology and Genetics; Director, Human Cancer Genetics Program, giving the Keynote address.

Pelotonia 16 included more than 7,700 riders and thousands of volunteers helping us move closer to our shared vision of a cancer-
free world. Lynne Abruzzo, the captain and leader of our team, helped organize the 16 members of our department who were riders, virtual riders or volunteers. Many others in the department have supported our efforts by involvement in fund raising activities such as the dunk tank where Anil Parwani and I were dunked several times by some of our other Vice-Chairs including Amy Gewirtz, Tania Oberyszyn, and Ramesh Ganju. Several other faculty, staff, residents and fellows also showed pinpoint precision. Next year we will need to move the throw line back or make the target smaller or invest in wet suits and snorkels!

After a summer hiatus we are excited to start our next year of Grand Rounds with an exciting schedule of planned speakers. Our annual OSU Pathology Update Course will occur at The Hilton at Easton, September 30 through October 2 with invited speakers including Drs. Brigitte Ronnett, Sanja Dacic, Zubair Baloch and Melinda Lerwill along with multiple OSU faculty giving lectures, case reports and round tables to highlight our amazing OSU faculty. We hope you will all attend this event.

Focus on Research

The laboratory of Aharon G. Freud, MD, PhD, Assistant Professor, who specializes in Hematopathology, recently received a highly competitive, fundable score on an R01 application that was reviewed at the NCI in June 2016. The grant, entitled “Elucidation of Human Natural Killer Cell Development”, explores fundamental aspects of human natural killer (NK) cell developmental biology.

NK cells are specialized lymphocytes that circulate throughout the body in search of malignant cells. They are able to directly detect and eliminate cancer cells, and many groups have previously shown that successful NK cell development from engrafted donor hematopoietic progenitor cells represents a critical factor impacting the successful outcome of allogeneic hematopoietic stem cell transplantation for acute myeloid leukemia.

Dr. Freud’s laboratory recently published two high profile papers in *Immunity* and *Cell Reports* delineating novel stages of human NK cell development in secondary lymphoid tissues (SLT). These recently published findings served as the core preliminary data for the outlined studies in the R01 that will center on gaining a thorough understanding of how the SLT cellular microenvironment and individual surface recognition receptors, that are expressed on developing NK cells, regulate the overall NK cell maturation process. The long term goal of these studies is to provide a more comprehensive understanding of human NK cell development in order to optimize immune-based therapies for cancer.
The Department of Pathology would like to welcome our first year Residents and new Fellows to OSU!

Residents:

- Luke Blower
  Medical school at Medical University of the Americas (Nevis)

- I-sanna Gibbons-Fideler
  Medical school at St. George’s University School of Medicine

- Gopal Patel
  Medical school at Saba University School of Medicine

- Youssef Youssef
  Medical school at University of Damascus Faculty of Medicine

Fellows:

- Michael Markow
  Medical school at Ross University
  Residency at University of South Florida

- Andrew Martowski
  Medical school at University of Miami
  Residency at Cedars-Sinai Hospital

- Hang Zhou
  Medical School at Norman Bethune Medical School in China
  Residency at Temple University
  Surgical Pathology Fellowship at Pennsylvania Hospital
Dr. Anjali Satoskar was the first invited lecturer of the year. She gave a wonderful Renal Review for the upcoming Med 2 exam, which was very highly reviewed by both medical students and the pathology fellows in attendance.

PSIG Shadowing Experience at NCH

Coaching Session on the Residency Interview Process
On Monday, August 15, we started the go-live process of our long-awaited barcoding module for CoPath, which is called SMART. This was in the making for several months. Our primary goal with SMART was to improve patient safety, by reducing the manual entry of accession numbers and other data, and increasing the number of identifiers on every slide and block, in order to meet best practice standards. While there may be some efficiencies gained by the SMART implementation, they are not immediately apparent, nor were they expected to be. The totally new workflow actually was expected to slow things down, at least for the first few weeks.

This process all began months, and even years, ago. There were many high-level discussions back and forth, regarding what system we should go with for barcoding, and many bumps along the way before money was actually approved and allocated for this project. The CoPath SMART module was chosen for purchase soon after funding was received.

Starting in December 2015, and January 2016, most of the equipment was chosen and ordered, and Jami Ritchie, from Sunquest, was on site for a couple of days in order to access our workflow, and make recommendations on the barcoding implementation.

In early April, Jami returned to OSU to teach the managers how to “build” SMART for each of their areas, and to work with the LIS team regarding changes that they would need to make and things they would need to know about SMART. We spent three days learning about how SMART works, and “doing the build” with Jami.

There was much work still to be done, however. There were still some “builds” to be done and lots of testing to be done, as soon as the hardware was deployed and connected.

By mid-June, testing was on-going and each area was asked to take several “dummy cases” from accessioning to the pathologist on a daily basis.

Training was on-going and most areas had at least 1-2 “super-users” to assist with the training and to help troubleshoot after “Go-Live”.

By the end of July, all changes in the test system were completed. Everything had to be ready for the transfer to “Live”, but the training and practicing continued.

By August 15, everyone was quite ready, and other than a few minor glitches and some anticipated slow-downs, “Go-Live” was rather anticlimactic.

There are still two more “phases” that will be instituted a bit later. One of those includes interfacing the IHC orders directly to the IHC instrumentation, which will avoid double-entry and clerical errors for the IHC stains, and the other is tracking the “assets”, or blocks and slides, throughout the department. This will require each asset to be scanned every time it is moved from one “SPOT” (Specimen Points of Tracking) to another.

While everyone is still making small improvements and tweaking the workflow, we are so proud of how well everyone has adapted to the new workflow, and we really appreciate how hard everyone has worked on this project.
Billing Tip
From the Billing and Coding Committee

Try to remember to check the part types and bill codes in your cases, especially complex cases or bill codes that change based on your diagnosis.

Questions about a part type/bill code? Refer to the resources available via our departmental website using the link circled below.

If you would like to change a part type/bill code, email Marlene Parker and Pathology LIS.

Upcoming Events

Grand Rounds
“My genes don’t fit: when genotypes and phenotypes are not in agreement”
Thomas W. Prior, PhD, FACMG
Professor of Pathology and Neurology, Director of Molecular Pathology, OSU
September 27, 2016 11-12pm James L035

OSU Update Course
Mark your calendars, the OSU Update Course will take place from September 30-October 2 at The Columbus Hilton at Easton.

CAP Annual Meeting
September 25-28, 2016
Las Vegas NV

Ohio Society of Pathologists Fall Meeting
Saturday, November 12, 2016
DUBLIN Embassy Suites Hotel, Conference Room #4
5100 Upper Metro Place
Dublin, Ohio 43017
614-790-9000
Medical Students Years 1-3
Clinical Experiences in Pathology
M2 Pathology Career Exploration

We have just completed Pathology Career Exploration for the 2nd year medical students. All medical specialties throughout the College of Medicine are required to have half-day experiences which highlight each specialty. Thirteen students participated in two half-days of pathology lectures and mini-rotations on August 4 and 5. Thanks to all who participated! New this session was the inclusion of a Housestaff Panel Discussion by two current Pathology Fellows, Dr. Nowacki and Dr. Markow, which was well-received by the medical students. The next Career Exploration will take place January 5-6, 2017. If you have any suggestions for this event, please contact Dr. Zynger, Dr. Tozbikian and/or Courtney Saby.

Evaluation comments provided by the students included:
“I thought that this was a great way to explore the various fields of Pathology. I enjoyed the rotations.”
“I thoroughly enjoyed this experience, I think it was great to have the chance to look at specimens under the microscope with the pathologists and see how the samples are grossed.”
“I felt the presentations were very interesting and provided a great overview of the life of a Pathologist.”

Trainee Highlights

Undergraduate students:
Ben Stocker, from Dr. Otero’s lab, returned from a Pelotonia funded fellowship at the University of Sao Paulo.

Summer Fair, from Dr. Otero’s lab, also recently returned from the University of Sao Paulo from a summer research experience and recently was awarded an Administrative Supplement to Promote Diversity in Biomedical Research.

Post-docs:
Dr. Hasnaa Mustafa, from Dr. Otero’s lab, has been awarded an Administrative Supplement to Promote Re-entry into the Biomedical Work Force.
The Division of Transfusion Medicine and Apheresis within the Department of Pathology at OSUWMC provides comprehensive transfusion medicine services and state-of-the-art therapeutic apheresis procedures for OSUWMC patients. Medical Director Scott Scrape, MD, and the division’s three other fellowship trained Transfusion Medicine physicians, Elizabeth Biller, MD, Jian Chen, MD and Irmeen Siddiqui, MBBS, oversee the daily functions of the OSUWMC University Hospital and East Hospital blood banks as well as the new 10,000 square foot Apheresis Center located on the first floor of the James Cancer Hospital.

The OSUWMC blood banks are some of the busiest in the country, performing approximately 42,000 tests and issuing over 60,000 blood products annually to a complex patient population. The transfusion service supports active solid organ and bone marrow transplant, general and cardiac surgery, neonatal and obstetric, sickle cell, and hematology services. The Transfusion Medicine physicians routinely provide expert advice and consultative services to help clinicians meet the transfusion needs of their patients. Both blood banks are accredited by the College of American Pathologists and the American Association of Blood Banks (AABB).

The Transfusion Medicine physicians have developed working relationships with practically every department and clinical area of the medical center to help better manage our blood supply, educate the clinical staff and nurses on transfusion guidelines, and develop strategies to help reduce blood loss. In addition, they have authored transfusion medicine related articles and book chapters, and they also serve on several local and national Transfusion Medicine related committees.

The group also manages a busy inpatient and outpatient apheresis service which performs over 2,500 procedures yearly. Procedures available include plasmapheresis, RBC exchange, white cell reduction, platelet reduction, allogeneic and autologous
hematopoietic stem cell collection, photopheresis and LDL-apheresis. The patient population consists of approximately 60% outpatients and 40% inpatients. Many are referred in from other hospitals in the region. There are a variety of hematologic, neurologic, and transplant-related indications for apheresis. The apheresis department service is accredited by the AABB.

The transfusion service operates as the core educational resource for Transfusion Medicine at OSUWMC. In addition to pathology residents, all anesthesiology residents and hematology fellows at OSU rotate through the blood banks. The training of fellows, residents, medical students, nurses and hospital staff is an essential part of our commitment to excellence.

The Division offers a fellowship in Transfusion Medicine. The ACGME-accredited 1-year clinical and research program offers extensive experience in the OSUWMC and Nationwide Children’s Hospital Transfusion and Apheresis Services, as well as training in the local American Red Cross Diagnostic Reference Laboratory. At the end of the fellowship, the fellows are board-eligible in Transfusion Medicine/Blood Banking.

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**Digital Pathology: Progress**

It’s been a big summer in Digital Pathology.

July 19 saw the official announcement of The James’ agreement with Inspirata Inc. to construct a comprehensive long-term digital pathology workflow at Ohio State. When complete, pathologists will be able to digitally access high-resolution slide images, gross images, test results, digital analysis of special stains, and patient records back to 2002, all from a specially-constructed “cockpit” on their desktop. This visionary first-of-its-kind-in-the-world initiative will transform pathology at Ohio State, making us a model for other institutions. More importantly, it will enable us to serve our patients better, faster, and more efficiently than ever before.


Of more immediate impact is our roll-out of a telepathology solution for frozen sections. No longer must pathologists waste time with trips from another building or from their home to review frozen sections. Using the VisionTek Live Digital Microscope by Sakura and WebEx, a pathologist needs only to log-on from their office or home computer to review slides. The system is Web-based and no special software is needed. VisionTek is not a scanner but a live microscope. The pathologist has full control over it as they would an ordinary microscope. The pathologist can change magnification, change illumination, change focus, adjust gamma, etc. just as they would on a normal microscope. As always, our goal with this system is to improve patient care and make the most effective use of pathologists’ scarce time.

If you are interested in using the VisionTek system, contact the Digital Pathology staff for mandatory training.

For questions or slide scanning, telepathology, or digital image analysis services, contact Scott Hammond, David Kellough, or Kurtis Yearsley. We are always happy to help!
Sergey V. Brodsky, MD, PhD, attended the Korean Society of Nephrology meeting in June. His oral presentation was honored with the KSN Best Abstract Award.

Anjali Satoskar, MD, will receive the Michael J. Mihatsch & Dusan Ferluga Award for best renal abstract at the 2016 International Academy of Pathology/European Society of Pathology meeting to be held in Cologne, Germany.

Paul E. Wakely Jr., MD, will be presenting the Head and Neck Pathology Educational Course at the ASCP Oncologic Surgical Pathology Course in Austin, TX in November.

Dr. Wakely will be traveling to Weil Cornell Medical Center, NY in December as a Visiting Professor.

The Renal Lab, under the directorship of Dr. Tibor Nadasdy, has made it to the 2016 Deans List. This is awarded by the Environmental Health & Safety Program to the laboratories with no items of concern noted during the annual laboratory site visit.

Christina A. Arnold, MD was named one of ASCP’s 2016 Top Five from this year’s 40 Under Forty Honorees. The ASCP 40 Under Forty program acknowledges the deep dedication of 40 Pathologists, Laboratory Professionals, and Residents for 2016. These future leaders have achieved outstanding accomplishments and demonstrated passion for the Pathology and Laboratory Medicine fields early in their careers.

New Faculty: Whitney Green, MD

Whitney was born in Heidelberg, Germany but spent most of her life hopping around the eastern seaboard as an army brat before landing in Columbus. She completed her undergraduate education at Princeton University and graduated with an AB in Ecology and Evolutionary Biology. She received her MD from The Johns Hopkins School of Medicine and stayed in Baltimore for post-graduate training where she completed AP/CP residency training and a fellowship in Gastrointestinal and Liver Pathology. Her interests include the gut microbiome, non alcoholic fatty liver disease and the role of lifestyle factors in common gastrointestinal pathologies such as Barrett's esophagus, reflux gastritis and colon cancer.

She's a confessed gym rat who enjoys powerlifting and long walks, loves to cook and marvel at the science of food while experimenting in the kitchen, and is an avid reader of books on nutritional science, American presidents and the psychology of decision making. She lives in Grove City with her kitties, Shiitake and Porcini.
**HR Corner**

**Etimesheet/Eleave**
Managers: Please make sure you are approving leave requests and timesheets before deadline.
For Biweekly employees, the deadline for managers to approve is every Monday by 2pm.
For Monthly employees, the deadline is variable but recommended at least once per month.

**Benefits while on unpaid leave**
If you go on an unpaid leave of absence for at least one full pay period (biweekly/monthly) your benefits premium will not deduct from a paycheck since there is no paycheck. However, the employee is still responsible for paying the premium. In that case, employees are invoiced after the first day of the month following the missed contributions. If coverage is cancelled due to lack of payment, employees are still responsible for the owed amount. Therefore, if you go on an unpaid leave of absence you will need to complete the Benefit Continuation During Unpaid Leave election form.
For additional information, see "Benefits During a Leave" at hr.osu.edu/life-events/leaves-of-absence. Please direct any questions to HR Customer Service at (614) 292-1050 or by emailing hr@osu.edu.

**CBL Deadline Change**
The deadline to complete CBLs (e-learning) is changing. Instead of being “due” at the end of the calendar year, modules will now need to be complete by the end of the fiscal year (June 30). To ease this transition, faculty and staff will have until June 30, 2017, for this year only to complete CBLs. This 18-month grace period will allow for a smoother transition and give staff more time to acclimate to this change. Access BuckeyeLearn when you are ready to complete your CBLs and other training or register for classes.
Moving to a fiscal year deadline for CBLs features these key benefits:

- Syncs performance review (P3) discussions with CBL completion. Managers will be able to easily capture CBL completion as part of the P3 process.
- Syncs the eCOI disclosure process with the fiscal year.

Exclusions to this new fiscal year deadline are influenza vaccinations (all staff) and physicians at Teaching Hospital and Model of Care Training (MD, DO).

**BuckeyeLearn Resources**
BuckeyeLearn is now available for all e-learning university wide. NetLearning is no longer available. This new system enables learning and training opportunities to be easily accessed and tracked for the university and Wexner Medical Center community of faculty, staff and student employees.

To learn more about BuckeyeLearn features, capabilities, and to access FAQ, please visit: https://onesource.osumc.edu/corporatenews/Pages/Buckeye-Learn-for-Leaders.aspx
Inaugural Pathology Research Retreat
Dunkotonia 2016
Residents and Fellows Welcome Picnic
Residents and Fellows Welcome Picnic
Sharon S. Cook came to Ohio State University Department of Pathology from Nationwide Children’s Hospital in September 2002 as an Administrative Associate 1 in the laboratory of Dr. Larry Lasky. Her amazing organizational and laboratory skills were recognized quickly and in July 2004, Sharon became the Operations Director for Anatomic Pathology. She was promoted to the Chief Administrative Officer role in August 2010. As all of you know, we celebrated Sharon’s wonderful career and retirement from this position and from OSU a few weeks ago.

Sharon touched all of our lives; from the patients to volunteers to staff, faculty, and senior leaders at OSU. She had an impact on all of us in many different ways. She cared deeply about everyone and was dedicated to the success of the department. Sharon pushed us to be the best we could be and continually challenged us to improve. Her confidence in us and pride when we succeeded were evident. Sharon was a role model as a leader and took an interest in developing future leaders from amongst us. Many of us, including myself, have benefited from her sage advice. The breadth and depth of her impact is evidenced by the hundreds of emails sent after her death. All of us are better for having known Sharon and feel a great sense of shared loss.