SPRING 2026

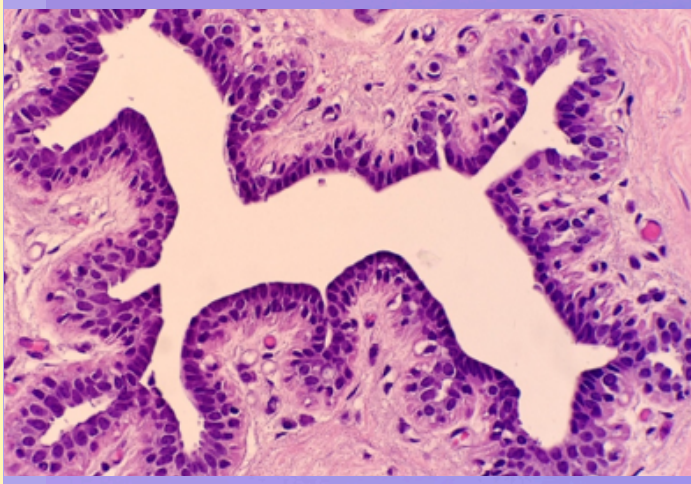
THE PATHOLOGY GAZETTE

HAPPY SPRING!

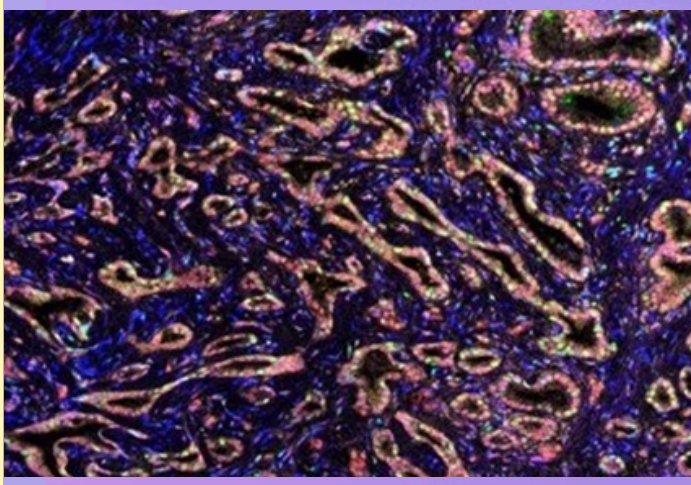
INSIDE THIS ISSUE

- Chair's Blog
- Experimental Pathology Updates
- Cellular & Molecular Graduate Program
- Faculty Academic Enhancement Initiative
- Anatomic Pathology Updates
- Artificial Intelligence in Cytology Screening
- Trainee Program Highlights
- Molecular & Genomic Pathology Updates
- Cytogenetics Laboratory Spotlight
- Hematopathology Updates
- Translational Pathology Updates
- Pediatric Pathology Updates
- Community Pathology
- Reflections of a Longitudinal Educator
- Wellness
- 2026 Research Day and Retreat

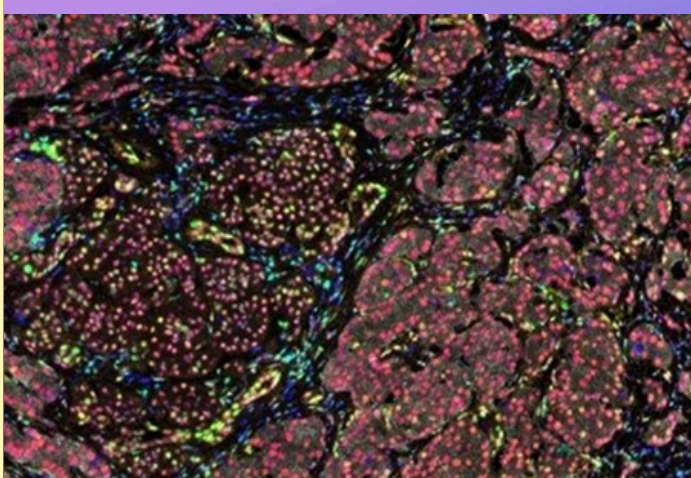
Benign Breast Duct- Submitted by Dr. Matthew Hanna



IHC Staining of Pancreatic Neuroendocrine Tumor- Submitted by Dr. Michelle A Wood-Trageser



IHC Staining of Pancreatic Neuroendocrine Tumor- Submitted by Dr. Michelle A Wood-Trageser



CHAIR'S BLOG

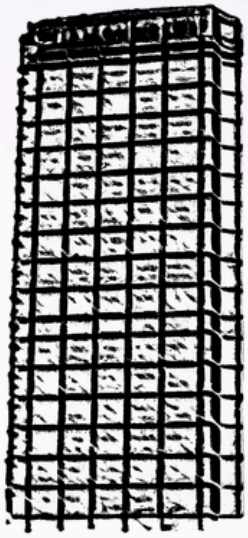
Liron Pantanowitz, MD, PhD, MHA
Maud Menten Distinguished Professor
& Chair of Pathology



The Strength of our Hybrid Academic–Community Pathology Model



Pitt



UPMC

Few pathology departments in the United States operate within a fully integrated hybrid model that combines a central academic pathology service closely aligned with a medical school and a broad network of community hospitals staffed by general pathologists. Yet this structure reflects the realities of modern health systems, which must balance subspecialized expertise, education and research with high-volume, efficient clinical service delivery.

The partnership between the University of Pittsburgh School of Medicine and UPMC exemplifies this model.

Within our UPMC–Pitt system, academic pathology divisions are based in major referral hospitals in Pittsburgh. These tertiary and quaternary centers are staffed by highly subspecialized faculty, many of whom are internationally recognized experts. Their work spans clinical service, translational and basic research, education and institutional leadership. Supported by research infrastructure and protected academic time, their scholarship advances both our medical school's mission and the broader field of pathology.

In parallel, our community-based pathologists provide comprehensive general surgical pathology, cytopathology and clinical pathology services across a wide network of hospitals. Their work emphasizes rapid turnaround, broad diagnostic expertise and close collaboration with local clinicians. Together, these services ensure timely, high-quality diagnostic care for patients throughout the region.

Our academic faculty also oversees key laboratories in Pittsburgh, including molecular genetics pathology (MGP), flow cytometry and immunohistochemistry, many housed within the Central Laboratory Building, which serves as a central reference hub for our health system. This centralized infrastructure promotes standardization, quality control and access to advanced testing across the network.

Complementarity in action

The defining strength of this hybrid model is complementarity. Community pathologists serve as frontline diagnostic partners, managing common and urgent clinical problems while maintaining strong relationships with local care teams. Academic subspecialists, in turn, provide consultation for complex or rare cases that would be impractical to support independently at every site. This structure enables patients across our system to access advanced diagnostic expertise without unnecessary travel to Pittsburgh's academic centers. At the same time, it ensures diagnostic consistency, coordinated standards and quality oversight throughout the network.

Advancing the academic mission

The scale of our community hospital network also strengthens our academic enterprise. High case volumes and diverse patient populations support outcomes research, quality improvement initiatives and the development of novel diagnostic approaches. The integrated Pitt–UPMC enterprise provides a real-world environment in which innovation can be evaluated, refined and implemented systemwide.

In turn, academic pathology establishes standards, develops best practices and drives discovery that elevates care across all sites. This reciprocal relationship reflects a core principle of the Pitt–UPMC partnership: "What strengthens one partner strengthens both". [1]

Navigating challenges with intention

Hybrid models require thoughtful governance. It is essential that community pathologists feel fully connected to the academic core, particularly when protocols, technology platforms or strategic priorities are developed centrally. Consultation from subspecialists should be experienced as collaborative, not hierarchical.

To support this alignment, academic and community pathologists as well as staff from many UPMC hospitals serve together on workgroups and steering committees across the department. Transparent communication, shared decision-making and recognition of distinct but equally essential contributions remain central priorities.

As the Chair of Pathology in our department, I am committed to ensuring alignment across the following areas:

1. Mission, vision, and values
2. Laboratory governance and vendor relationships
3. Information technology and digital platforms
4. Visibility and reputation of our department

Mutual respect and cultural cohesion are foundational to our success.

A modern model for modern medicine

Our hybrid academic–community pathology structure delivers measurable benefits in quality, access, innovation and academic vitality. It is sustained by strong institutional alignment, coordinated care delivery, economies of scale and shared commitment to excellence.

Subspecialized academic pathology and high-quality community general pathology are not competing roles. They are interdependent pillars of a modern, integrated health system and together, they define the strength of our UPMC–Pitt enterprise.

Acknowledgment

Thank you to Heather Wampler, Supervisor of Laboratory Office Services, PUH–AP Lab Administration, for reviewing and editing this blog.



Photo: UPMC Passavant community and academic pathology gathering in November 14, 2025.

Reference

1. Levine AS, Detre TP, McDonald MC, Roth LH, Huber GA, Brignano MG, Danoff SN, Farner DM, Masnick JL, Romoff JA. The Relationship Between the University of Pittsburgh School of Medicine and the University of Pittsburgh Medical Center—A Profile in Synergy. Academic Medicine 2008; 83 (9): 816-826.

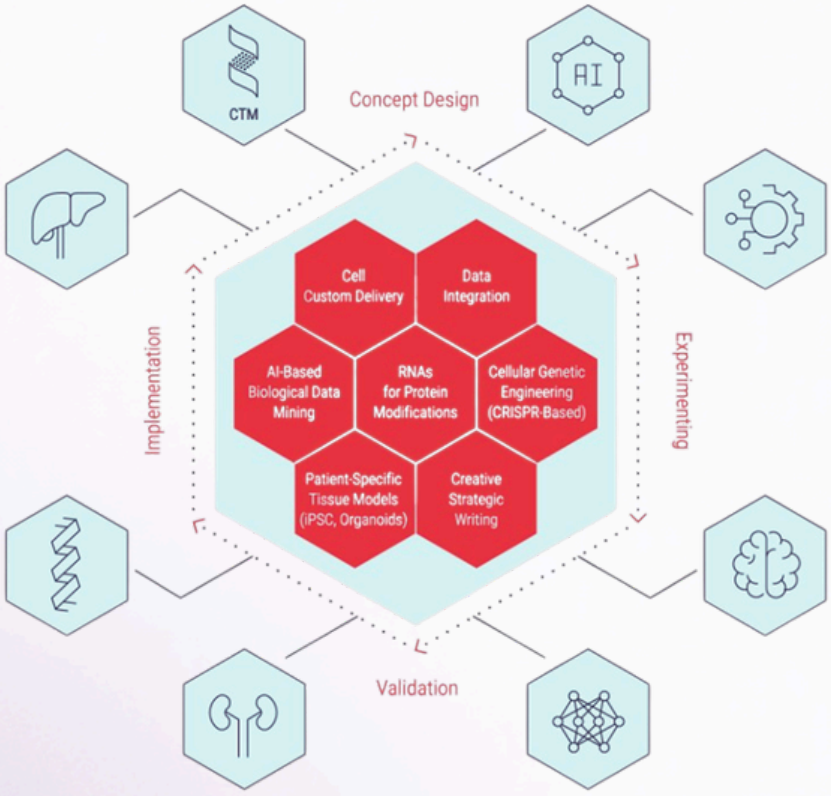
Experimental Pathology

Alejandro Soto-Gutierrez, MD, PhD
Professor of Pathology, Division of Experimental Pathology



The past year has marked a period of purposeful growth and structural innovation for the Division of Experimental Pathology. Across research infrastructure, faculty development, and collaborative culture, the Division has focused on building systems that empower investigators while strengthening our collective scientific impact. These efforts reflect a deliberate strategy to lower barriers to collaboration, support investigators at every career stage, and align our research enterprise with both institutional priorities and emerging opportunities in translational science.

A cornerstone of this progress has been the continued evolution of our collaborative research structure built around shared technological platforms and a modular plug-in framework. This model allows individual laboratories to integrate specialized expertise and tools into a unified research ecosystem while maintaining scientific independence. By connecting investigators through shared platforms rather than siloed resources, the Division has created a flexible environment that adapts rapidly to new scientific questions and enables cross laboratory innovation. This approach has proven particularly effective in supporting multidisciplinary research that bridges basic discovery with translational application.



Inter-institutional collaboration remained a central priority through the Sisterhood Program for Collaborative Research. During the past year, the Division exchanged three faculty scientists with Case Western Reserve University, fostering in depth scientific dialogue through seminars and targeted faculty meetings. These reciprocal visits strengthened cross institutional relationships, supported junior faculty development, and laid the groundwork for new collaborative research efforts.

Experimental Pathology

The Division will expand the Sisterhood Program in 2026 to include the Department of Pathology and Laboratory Medicine at the University of Pennsylvania Perelman School of Medicine. This multi-institutional exchange will further enhance opportunities for sustained high impact research collaboration.

To support human centered translational research, the Division continued to develop integrated research hubs that provide access to advanced technologies and coordinated experimental pipelines. The Human Organ Processing Hub enables the transformation of explanted human organs into patient relevant research models, supporting primary cell and tissue isolation, generation of induced pluripotent stem cells, and CRISPR based gene editing. This infrastructure allows investigators to study disease mechanisms and therapeutic responses in systems that closely reflect human biology.

Complementing this effort, the Genomics and Epigenomics Sequencing Hub provides comprehensive sequencing capabilities, including bulk, single cell, and spatial RNA sequencing, whole genome and exome sequencing, chromatin profiling, and high-resolution methylation analysis. By pairing technical execution with strategic experimental guidance, the hub enables investigators to generate high quality datasets and extract meaningful biological insights with rigor and precision.

Faculty development and career sustainability were advanced through the launch of the Professional Advancement, Communication and Talent Hub, or PATH. Through the redesigned Experimental Pathology website, PATH centralizes faculty wide programs and resources curated to support investigators at all career levels. The initiative also aligns the Division with the Pitt Scientist Wellbeing effort at the School of Medicine, reinforcing a shared commitment to a healthy and sustainable research culture.

The Division also formalized the Office of Strategic and Creative Writing to strengthen funding success and proposal development. Since its establishment, the office has supported multiple grant submissions across federal and private mechanisms and continues to assist additional proposals in development. Through iterative guidance on concept development, narrative clarity, and alignment with funding agency expectations, the office ensures that strong science is matched by persuasive proposal construction.

Clinical integration was strengthened through the launch of the Clinician Finder Program, which connects investigators with clinicians to refine research aims and enhance grant proposals. By facilitating targeted clinical collaboration, the program improves the clinical relevance of projects and fosters interdisciplinary relationships across the School of Medicine.

Experimental Pathology

Physical and digital infrastructure advanced in parallel through the creation of shared equipment spaces that centralize access to imaging, flow cytometry, and multiplexing technologies. The Microscopy iLab and Cellular Milieu Facility maximize efficiency through shared scheduling and faculty led training, supporting a transparent and collaborative research environment.

Faculty accomplishments were further elevated through the Exp Path Wins program, which highlights publications, grants, awards, and other achievements across the Division. By sharing these successes through institutional communication channels, the program strengthens faculty visibility and reinforces a culture of recognition and shared pride.

The Incubator Program expanded this year to support early-stage research development by pairing structured peer feedback with plans for dedicated shared laboratory space where new ideas can be tested and preliminary data generated. Within this framework, the Junior Faculty Incubator Study Section, modeled after national review processes and supported by the Office of Strategic and Creative Writing, provides a collaborative forum for refining grant proposals and accelerating the progression of promising concepts.

Looking ahead to 2026, the Division is preparing for additional growth through the launch of new hubs and programs. The Human Mimetic Hub will leverage organ on a chip platforms to model tissue function and disease pathobiology, accelerating drug discovery and therapeutic development. The SHERLOCK (Strategic Hub for Exploratory Research, Learning, Outreach, and Commercialization Know-how) program will provide training and resources for investigators interested in translation, commercialization, and real-world impact, bringing together academic, industry, and investment perspectives. An Incubator iLab will further strengthen support for junior faculty and trainees by providing dedicated infrastructure for early-stage experimentation.

Together, these initiatives position the Division of Experimental Pathology to advance transformative research while supporting the full continuum from discovery to application. By investing in shared infrastructure, collaborative culture, and faculty development, the Division continues to build a resilient and innovative research community prepared for future challenges and opportunities.

If you have questions about these programs or want to learn more to fully utilize these resources, please contact *Jon Klosinski at jek176@pitt.edu*



Cellular & Molecular Pathology Graduate Program

Wendy M. Mars, PhD
Asst. Dean for the Learning Environment, Professor of Pathology, Director, Pathology Graduate Program



Andrew W. Duncan, PhD
Associate Professor of Pathology,
Division of Experimental Pathology



Cellular & Molecular Pathology GRADUATE PROGRAM UNIV. OF PITTSBURGH

The Cellular & Molecular Pathology (CMP) Graduate Program is co-directed by Dr. Wendy Mars (since 2006) and Dr. Andrew Duncan, who was appointed Co-Director in September 2025 and serves alongside Dr. Mars in program leadership. Dr. Dave Gau was appointed Curriculum Director in September 2025. Over the past seven years, CMP has experienced sustained growth and maturation. In 2025, the program welcomed its largest incoming class to date, with 18 matriculating students (14 from the Interdisciplinary Biomedical Graduate Program [IBGP] and 4 from the Medical Scientist Training Program [MSTP]). Overall, in 2025, CMP comprised 52 graduate students, including 77% IBGP and 23% MSTP trainees.

CMP students continue to demonstrate exceptional research productivity and competitiveness. In 2025, nearly 30% of enrolled students were supported, in whole or in part, by external funding from competitive NIH and American Heart Association training mechanisms. CMP trainees published extensively during the year, with 58 publications, including 16 first-author manuscripts in journals such as Science, Nature Communications, Aging Cell, Hepatology, and the American Journal of Pathology.

Congratulations to the students who successfully defended their theses and graduated in 2025!



- Anu Balogun (Nejak-Bowen lab)
- Mona Chatrizeh (Morowitz lab)
- Andrea Cruz (Agnihotri lab)
- Matt Halbert (Agnihotri lab)
- Brandon Lehrich (Monga lab)
- Jie Bin Liu (Oesterreich lab)
- Joud Mulla (M. Scott lab)
- Sierra Wilson (Duncan lab)

CMP is supported by a large and diverse faculty, including 112 primary and 31 auxiliary members who contribute to graduate training and mentorship across the program. Although CMP is administratively housed within the Department of Pathology, its faculty span 16 departments within the School of Medicine, two departments outside the School of Medicine, and five affiliated research institutes. This breadth supports multiple interconnected scientific communities, including metabolism, heart–lung–vasculature, cancer biology, liver biology, and regeneration and repair, and provides trainees with highly integrative and multidisciplinary training environments.

The following faculty members were welcomed in 2025!

- Chris Alves, PhD
- Cris Apetrei, MD, PhD
- Sandra Cascio, PhD
- Divay Chandra, MD
- Yuanyuan Chen, PhD
- Charles Dela Cruz, MD, PhD
- Silmara de Lima, PhD
- Daniel Gao, PhD
- Eldin Jasarevic, PhD
- Daniel Kass, MD
- Tatiana Kudryashova, PhD
- Ekaterina Lobanova, PhD
- Curtis McCloskey, PhD
- Christina Megli, MD, PhD
- Yvonne Mowery, MD, PhD
- Niranjana Natarajan, PhD
- Toru Nyunoya, MD
- Hatice Osmanbeyoglu, PhD
- Thomas Pearce, MD, PhD
- Sarah Ross, PhD
- Nicole Scheff, PhD

Welcome

Beyond the laboratory, CMP provides a wide range of professional development and enrichment opportunities. CMP students participate in the annual Pathology Departmental Retreat & Research Day, where they present oral and poster presentations alongside faculty and trainees from across the department. CMP also provides financial support for student memberships in the American Society of Investigative Pathology (ASIP), facilitating access to scientific conferences, special interest groups (SIGs), and national leadership opportunities.

The Department of Pathology sponsored the PathoMingle trainee event at the annual ASIP meeting in April 2025 in Portland, OR (see figure). Recognizing that many PhD graduates pursue careers outside of traditional academic pathways, CMP launched a new, ongoing career-focused initiative in 2025 aimed at highlighting diverse professional trajectories and building institutional partnerships. Program-sponsored sessions included engagements with Pitt BioForge, TD Cowen Biotech Equity Research, and UPMC Pathology clinical laboratories. More exciting sessions are planned.



ASIP Trainee Network Event in Portland, OR

In addition to graduate training, CMP is preparing for summer research experiences for trainees of all levels. Please contact leaders for more information.

Program	*Target Group*	*Contact*	*Email*
Hillman Academy, Pathobiology Site	High Schoolers	Dr. Dave Gau Dr. Andrew Duncan	dave.gau@pitt.edu duncana@pitt.edu
Summer Undergraduate Research Program	Undergraduates	Dr. Amanda Clark Dr. Sungjin Ko	amc235@pitt.edu sungjin@pitt.edu
Klionsky Fellowship Program	Medical Students	Dr. Marie DeFrances Dr. Wendy Mars	defrancesmc@upmc.edu wmars@pitt.edu

Anyone interested in participating in the CMP program, including mentoring, teaching, and more, should contact Dr. Duncan (duncana@pitt.edu) and program coordinator Amanda Bytzura (amb430@pitt.edu).

Faculty Academic Enhancement Initiative

Esther Elishaev, MD
Professor of Pathology, Magee-Womens Hospital Pathology



This program in our Department of Pathology was established to allow faculty to request funds to support their research projects utilizing the wide array of tests available within our department, including immunohistochemical analyses and molecular assays. The data generated through these projects contribute to scientific advancement and publications, and more importantly, provide preliminary results that can be leveraged for applications for external funding.

Additionally, this initiative offers faculty—particularly trainees—the opportunity to gain experience in grant writing in a low-stakes environment, without the pressure of rejection. It also promotes collaboration with other departments across UPMC and the University of Pittsburgh, while encouraging broader utilization of the extensive clinical and anatomic pathology testing resources available within our department.

Chaired by Dr. Esther Elishaev and supported by a committee of six faculty members, grant applications are reviewed on a rolling basis with a rapid turnaround time. Applicants receive responses, comments, and/or approvals within days, and no later than three weeks.

During the current academic year, 21 grants were approved, along with two larger awards. The majority of applicants were junior faculty members, and two of the funded projects represented collaborative efforts with the Hematology–Oncology Department.



Anatomic Pathology Updates

Rajiv Dhir, MBBS, MBA
Executive Vice Chairman and Medical Director of Anatomic Pathology Services, Professor of Pathology



The start of the new academic year welcomed new faculty members as they began their journey across the academic sites of the Department of Pathology at UPMC.

New Faculty

Welcome



Dr. Azfar Neyaz joined as an Assistant Professor of Pathology (Bone and Soft Tissue) in July 2025. He received his medical degree from Jawaharlal Nehru Medical College in India and completed residency training in Anatomic and Clinical Pathology at UPMC, followed by a fellowship in Bone and Soft Tissue Pathology at UPMC. He previously completed formal pathology training in India and a research fellowship at Massachusetts General Hospital/Harvard Medical School. His research focuses on enhancing diagnostic precision in bone and soft tissue pathology through the characterization of novel tumor entities and the identification of clinically relevant prognostic and therapeutic biomarkers. He has authored over 55 peer-reviewed publications in leading journals, with more than 2,000 citations.



Dr. Lara Berklite is a board-certified pediatric pathologist joining the faculty at UPMC Children's Hospital of Pittsburgh as Director of Autopsy and Gross Room Services. Dr. Berklite completed her Anatomic and Clinical Pathology residency at UPMC from 2017-2021, serving as chief resident from 2018-2020. Following residency, she pursued a fellowship in pediatric pathology at Cincinnati Children's Hospital Medical Center (CCHMC) from 2021-2022. After fellowship, Dr. Berklite stayed on as faculty at CCHMC where she served as Autopsy Director from 2024-2025 and was awarded the CCHMC January 2025 Hidden Gem Award. Dr. Berklite is currently the liaison to the CAP Autopsy Pathology Committee for the Society of Pediatric Pathology and has a strong interest in both perinatal and pediatric autopsy. Her research interests also include pediatric liver pathology, and she is currently a Young Investigator as part of the Liver Tumor Committee of the Children's Oncology Group.



Dr. Chen Zhang, Professor of Pathology, joined our faculty in the Division of Anatomic Pathology and the Thoracic Pathology Center of Excellence on August 1, 2025, as the Samuel A. Yousem Director of Thoracic Pathology and Director of the Thoracic Pathology Fellowship. Dr. Zhang brings extensive expertise in patient care and a strong commitment to advancing clinical practice and education. Prior to joining UPMC, Dr. Zhang served as Chief of Thoracic Pathology at Weill Cornell Medicine/New York-Presbyterian Hospital.

Anatomic Pathology Updates



Dr. Drew Pratt joined the Division of Neuropathology in October 2025 as an Associate Professor. Dr Pratt is a board-certified neuropathologist with interest in the molecular classification of brain tumors. His academic interests seek to leverage machine learning, bioinformatics, and multi-omic (epi)genomic data, including DNA methylation profiling and DNA/RNA-seq, to refine the classification of cancer and to discover novel tumor types leading to improved diagnostic precision and prognostication. He received his medical degree from the University of Queensland in Brisbane, Australia, followed by residency training in Anatomic Pathology in the Laboratory of Pathology at the National Cancer Institute in Bethesda, Maryland, and fellowship training in Neuropathology at the University of Michigan in Ann Arbor, Michigan. He subsequently served as a Clinical Assistant Professor of Neuropathology at the University of Michigan before joining the NIH/NCI as a Physician Scientist in the Center for Cancer Research's Physician-Scientist Early Investigator Program. Dr. Pratt's research has led to the discovery of novel brain tumor types, including ACVR1-mutant Posterior Fossa Ependymoma and High-Grade Glioma with Pleomorphic and Pseudopapillary Features (HPAP). Currently, Dr. Pratt is developing an open-source machine learning model to classify tumors from multiple organ systems using DNA methylation, as part of an AI-driven approach to cancer classification.



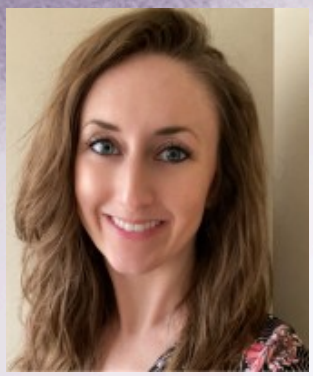
Dr. Deepali Jain, Professor of Pathology, joined our faculty in the Division of Anatomic Pathology and the Thoracic Pathology Center of Excellence on June 1, 2025. Dr. Jain is a world-renowned thoracic pathologist with extensive clinical experience and an impressive academic record, including over 370 peer-reviewed articles, multiple books, and numerous book chapters. Before joining UPMC, Dr. Jain was Professor of Pathology at the All India Institute of Medical Sciences (AIIMS).



Dr. Kiyoko Oshima joined the Division of Hepatic and Transplantation Pathology in November 2025. Previously, she served as the Director of Clinical Hepatic Pathology at Johns Hopkins University School of Medicine, where she oversaw diagnostic quality, service operations, and clinical practice standards in liver pathology. She has served in multiple leadership roles including Co-Director of Residency Training and Director of the Gastrointestinal/Liver Pathology Fellowship. She has practiced academic medicine for over twenty years, with clinical expertise in non-neoplastic and neoplastic hepatobiliary and transplant pathology. Dr. Oshima's research focuses on the morphologic and molecular characterization of hepatobiliary diseases and transplant pathology.

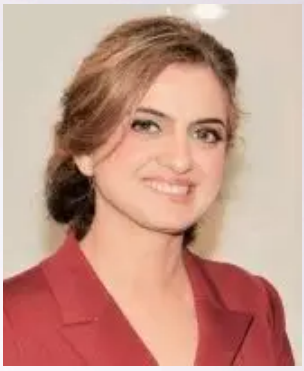
Anatomic Pathology Updates

UPMC School of Histology



Jessica Connell, HTL (ASCP)
Program Manager

Among the new initiatives launched, the UPMC School of Histology stands out as a critical venture aimed at addressing the chronic shortage of trained histotechnologists. Jessica Connell will serve as the Program Manager of the School, and Dr. Nigar Khurram will be the Director of the UPMC School of Histotechnology



Nigar Khurram, MD
Medical Director

After two years of bold redesign and growth, the UPMC School of Histology proudly reopened in January 2026 with a renewed focus on accessibility, sustainability, and meeting today's healthcare workforce needs. The revitalized course now offers an accelerated nine-month, NAACLS-accredited Histotechnician (HT) certificate program, with new cohorts launching each January and July. By pairing virtually delivered coursework with hands-on clinical training across an expanded network of 11 UPMC laboratory sites, the School has significantly increased its capacity, preparing and graduating up to 20 highly trained histology professionals each year to help address the national shortage in this critical field.



These changes extend beyond the structure of the program alone. Through strategic partnerships with local colleges and universities, expanded outreach to raise awareness of histology as a career, and a Tuition Loan Forgiveness Program that fully covers tuition in exchange for a two-year employment commitment within UPMC, the School is intentionally building a sustainable pipeline of future histotechnologists. This transformation positions the UPMC School of Histology as a leader in innovative, workforce-driven education, offering students a dynamic learning experience while strengthening the laboratories and patient care services that depend on their expertise.

How to Apply | UPMC School of Histology

https://www.upmc.com/healthcare-professionals/education/allied-health/school-of-histology/apply

Anatomic Pathology Updates



Dr. Ibrahim Abukhiran, the Medical Director of the Image Analysis Laboratory, has been working on an initiative aimed at creating an AI agent for report generation, within the UPMC firewall.

Development and Clinical Validation of a Clinically Embedded AI Agent for Gastrointestinal Pathology: Reporting within the UPMC Microsoft 365 Environment

Rationale and Innovation

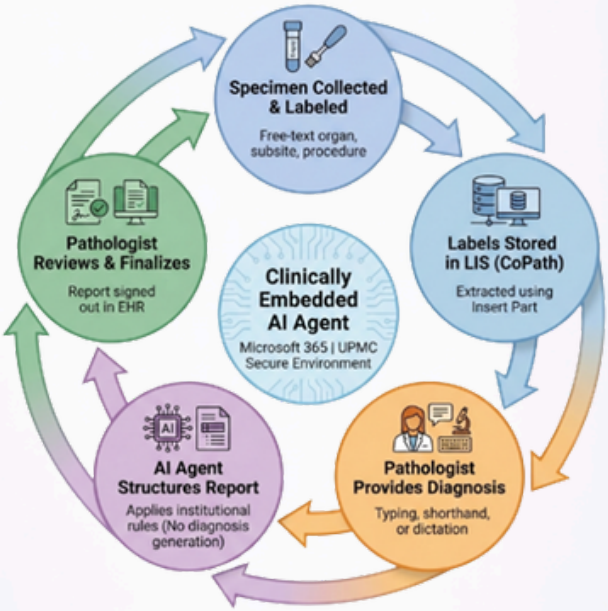
The Gastrointestinal Center of Excellence has established an artificial intelligence (AI) co-pilot designed to streamline surgical pathology reporting while preserving diagnostic accuracy and clinical oversight. This tool was developed in response to the recognition that a substantial portion of a pathologist's daily workflow—particularly in gastrointestinal (GI) biopsy cases—is devoted to repetitive, non-diagnostic tasks such as constructing diagnostic headers and formatting multi-part reports. Built entirely within UPMC's secure, HIPAA-compliant Microsoft 365 clinical environment, this AI co-pilot leverages large language model technology to reduce clerical burden, improve report consistency, and allow pathologists to focus more fully on interpretation and patient care. To our knowledge, this represents the first end-to-end clinical validation of an agent-based Large Language Model deployed directly within an enterprise clinical pathology environment.

How the Tool Works

The GI pathology co-pilot is built on Microsoft 365 Copilot and is embedded directly within UPMC's institutional Microsoft ecosystem, ensuring compliance with enterprise data security and privacy standards. The agent uses specimen container labels extracted from the laboratory information system (via the "Insert Part" function in CoPath) to automatically generate the structured "skeleton" of a surgical pathology report, including standardized diagnostic headers for each specimen part. Pathologists may then enter diagnoses using their preferred workflow—typing, shorthand quick text, or speech-to-text—and the agent assembles a fully formatted report in real time. Importantly, the co-pilot does not generate diagnoses independently; rather, it functions as a controlled clinical tool that applies institutional reporting rules consistently and reproducibly.

Impact and Future Directions

Early deployment and clinical validation of the GI pathology co-pilot have demonstrated a meaningful reduction in report preparation time for multi-part GI biopsy cases while maintaining formatting accuracy and diagnostic fidelity. By standardizing report structure and minimizing manual transcription steps, the tool promotes consistency across faculty, trainees, and reporting styles. This work represents a foundational step toward clinically validated, agent-based AI tools in anatomic pathology and establishes a scalable framework for future expansion into additional subspecialties, reporting tasks, and deeper integration with structured data and analytics pipelines across the department.



AI agent performs clerical and structural tasks only; diagnostic interpretation remains the responsibility of the pathologist.

Anatomic Pathology Updates



Lakshmi Harinath, MD
Assistant Professor of Pathology, Magee-Womens Hospital Pathology

Career Related Talk Series has been an initiative that started about two years ago. The Department of Pathology has been successfully conducting the "career related talk series" for fellows in the program. This concept germinated during sign-out with one of the trainees at that time, Dr. Mason Marshall, discussing job trends with Dr. Lakshmi Harinath, and negotiations for his future career as a pathologist. With Dr. Pantanowitz' s and Dr. DeFrances's support and encouragement, Dr. Harinath became the faculty champion and has since developed a career-related talk series that focuses on topics that are essential for trainees during their job hunt and beyond as they commence working as a staff pathologist. Some of the topics of discussion include tips and tricks that can be useful during transition from trainee to faculty, job market trends, financial remuneration, benefit negotiation tactics, comparison of different job types, etc.

Additionally, important topics such as personal finance, networking and advocacy in pathology committees, wellness and burnout were also covered in the past in conjunction with Dr. Khader, our Vice Chair for Wellness. Several guest lectures and workshops for our fellows conducted by prominent speakers have benefitted our trainee cohort including presentations by Dr. Ian Barbash, Dr. Jesse Goldstein, and the current president of CAP, Dr. Jim Zhai. A unique and popular feature of this endeavor includes an annual round table conference with past fellows currently practicing in different institutions including academic, community and private settings. Alumni join our virtual roundtable sessions to share invaluable insights and experiences from their transition to becoming full-fledged pathologists serving the community



A huge thank you and our sincere appreciation to all our alumni who have generously taken time out of their busy schedules to speak candidly with our fellows about confidential matters, including the successes and challenges they have encountered while navigating this complex process. Some of our past alumni guests include Dr. Dana Martin, Dr. Jeffrey Kleinberger, Dr. Mustafa Oraibi, Dr. David Starr, Dr. Murad Elsadawi, Dr. Megan Zilla, Dr. Linda Logan, and Dr. Ellie Hong. A big thank you to Dr. Simmi Patel for her role in scheduling these talks. We follow complete confidentiality in order to foster a safe environment for learning and for sharing sensitive information.

In addition, we have been actively collecting "pearls of wisdom" from our faculty that can guide and help trainees as well as junior faculty as they navigate and find their own path in this demanding but fulfilling field of pathology. Some of these words of advice have been showcased in the past in the Chairman's faculty meeting.

At this time, we would like to invite our pathology faculty to continue to share their insights/ experiences/ anecdotal advice/ suggestions from their own journey that can help our trainees and pathologists derive inspiration and support as they traverse through this overwhelming process of becoming a successful pathologist in the real world.

Please email **harinathl@upmc.edu** with your ideas and indicate if you would prefer to keep it anonymized.

The Adult and Perinatal Autopsy Services

The autopsy services provide a critical role serving the academic and non-academic hospitals. For the family, the autopsy serves as one of the last resources to ascertain an answer to the reasons contributing to the passing away of a loved one.



Tanner Bartholow, MD
Associate Professor of Pathology, Director, Autopsy and Forensic Pathology Center of Excellence, Division of Anatomic Pathology

The Adult Autopsy service at UPMC Presbyterian, under the leadership and guidance of Dr. Bartholow, continues to grow and evolve, providing services to even more UPMC hospitals, as our outreach continues to expand across the system. Internally, we have promoted India Brinson, SPT, to the role of Autopsy Coordinator, and have trained two new autopsy technicians, Kaitlyn Peremba and Christina Raad. Dr. Bartholow, our service director, was especially honored to help Hope for Others celebrate their first Remembrance Ceremony in 2025.

Dr. Bartholow has been appointed as a co-lead in the new Diagnostics course at the School of Medicine. He also received the UPMC 2025 Q2 Extra Mile Physician Award and the 2025 AP Faculty Teaching Award. His course at CAP25, Postmortem Analyte Testing: Practical Tips, Guidelines, and Feasibility in Medical Autopsies, which he delivered in conjunction with Dr. Octavia Peck-Palmer, was very well-received. He recently was second author on two manuscripts in Archives on Pathology and Laboratory Medicine, characterizing Decedent Affairs Offices, the largest undertaking to date describing them in the academic literature.

Perinatal Pathology & Autopsy Service Highlights at UPMC Magee Womens Hospital



Lauren Skvarca, MD, PhD
Director of Perinatal Pathology, Assistant Professor of Pathology, Magee-Womens Hospital Pathology

In 2025, the Perinatal Pathology & Autopsy Service at UPMC Magee Womens Hospital, under the leadership of Dr. Skvarca, continued to focus on patient-centered care, multidisciplinary collaboration, and operational excellence. Our team partnered across disciplines to redesign bereavement paperwork related to fetal loss— an extensive and thoughtful effort aimed to both improve clinical communication and enhance the experience of families navigating pregnancy loss.

We also laid important foundations for program growth by preparing to resume community perinatal autopsy services for our UPMC sites across Pennsylvania-beginning in January 2026 at no cost to families, hiring a dedicated autopsy coordinator shared between perinatal and adult autopsy services, and welcoming a new bereavement coordinator through social work services at Magee.



Throughout these initiatives, the service maintained its dedication to clinical pathology workload and processed ~5,000 surgical specimens and completed ~50 autopsies in 2025. These achievements reflect our commitment to compassionate, high-quality care for patients and families.

Artificial Intelligence in Cytology Screening

Chengquan Zhao, MD
Professor of Pathology, Magee-Womens Hospital Pathology



Lakshmi Harinath, MD
Assistant Professor of Pathology, Magee-Womens Hospital Pathology



History in the making: Deployment of an Artificial Intelligence-assisted cervical cytology system at UPMC

We are excited to announce that the University of Pittsburgh and UPMC Magee-Womens Hospital Department of Pathology has successfully implemented Artificial Intelligence (AI)-assisted cervical cytology screening in clinical practice as of January 2026. This advancement marks a significant step forward in healthcare, addressing challenges such as delayed reporting and staffing shortages that often affect laboratories relying on manual interpretation of cytology specimens. As a leader in digital pathology, UPMC is among the first few institutions to adopt this innovative approach using the Hologic Genius™ Digital Diagnostic System (GDDS), recently cleared for commercial use by the U.S. Food and Drug Administration.

The GDDS combines AI algorithm analysis with advanced volumetric imaging technology that assists in the interpretation of ThinPrep Pap test slides in gynecologic cytology specimens. The adoption of the Genius system enhances cervical cancer screening and helps standardize diagnosis while preserving full professional oversight.

Our faculty and staff have conducted several clinically useful validation studies, producing positive and encouraging results that have led to the decision to implement this system in our clinical practice. Below is a list of selected studies published by our group supporting this initiative. We welcome your feedback, questions, and comments regarding the system and its implementation. Please feel free to contact us at **zhaocx@upmc.edu** or **harinathl@upmc.edu**





Links to validation studies of the GDDS at UPMC Magee Womens Hospital.

https://pubmed.ncbi.nlm.nih.gov/40543043/
https:/pubmed.ncbi.nlm.nih.gov/39498535/
https:/pubmed.ncbi.nlm.nih.gov/39947984/
https:/pubmed.ncbi.nlm.nih.gov/41346093/
https:/pubmed.ncbi.nlm.nih.gov/40610286/

Artificial Intelligence in Cytology Screening

Candid reactions from cytologists using the system for clinical sign out for the first time:

"The Hologic Genius Digital Diagnostics System enables remote access and real-time collaboration. We no longer need to ship the glass slides for consultation". **Jonee Matsko SCT MB (ASCP)CM**

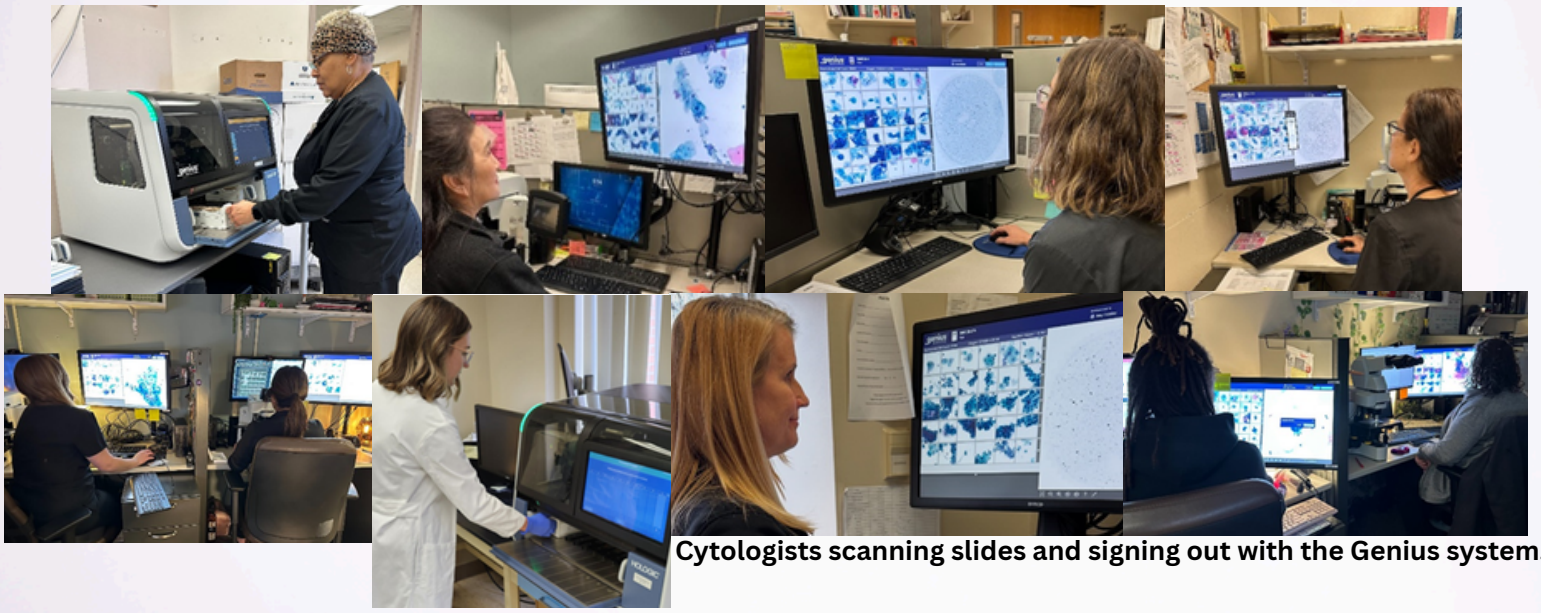
"Today was my first day using the AI Genius system in our cytology department, and I genuinely loved it. Seeing AI integrated into screening is exciting and reassuring. There's definitely a learning curve, but I'm looking forward to growing more comfortable with the system and continuing to learn alongside this technology". **Jessica Lovic CT (ASCP)CM**

"After using the Genius system for the last few days, I am starting to get used to the new workflow and can say that I am excited for this new chapter in Cytology! It is very exciting getting to see new technology implemented in our field!" **Haley Brown CT (ASCP)CM**

"I felt nervous for the first day using the Genius, but once I started, I realized the preparation we did was more than adequate. Now that I've started, I am very excited to be part of this revolutionary time in cytology!" **Jensen Bendig CT (ASCP)CM**

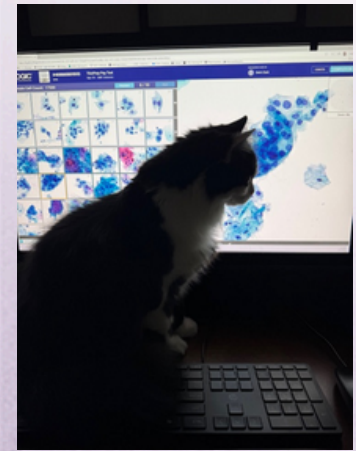
"It is exciting to be a part of new and emerging technologies in cytology." **Taylor Charity CT (ASCP)CM**

Genius Pictures- First day of clinical implementation at Magee Womens Hospital



Cytologists scanning slides and signing out with the Genius system.

The Magee Genius Mascot/Ambassador: Fiona Clark



Fiona likes to sit next to her mom and look at the ThinPrep images displayed by the Genius system.

Picture courtesy: Cat mom, Dr. Beth Clark.
Picture taken while reviewing practice cases on the Hologic website.





Magee IT support at a pizza lunch celebrating the Genius implementation.

Acknowledgments: Celebrating the Team Behind This Milestone

Hologic INC:

Perry Bruno: We are truly grateful for your incredible support and willingness to help with every question and request along the way. Your patience and understanding made this journey so much smoother. Thank you for going above and beyond; we deeply appreciate everything you've done to make this implementation a success.

Hologic Technical team members (Tim Allen, Peter Veiga, Josh Brice, Chris Shumaker, Tony Zenone, and Kevin Wong): For your invaluable assistance in resolving technical challenges and addressing daily queries, ensuring the system was seamlessly tailored for optimal use at UPMC.

Hologic Education team (Eileen Ludlow, Katie Eighme, Kathleen Kelley, and Joan Fischer): For delivering engaging and insightful presentations that deepened our understanding of subtle morphological changes, and for your patience and guidance in navigating differing viewpoints to achieve accurate interpretations.

UPMC:

Dr. Pantanowitz: The vision and the driving force behind this endeavor! Your unwavering support, passion for pathology, and commitment to elevate UPMC to the next level in the field of AI and digital pathology is truly inspirational.

Dr. Dhir, Dr. Bhargava, Dr. Khader and Dr. Hanna: For the invaluable help, encouragement, out of the box solutions and consistent willingness to go over and beyond to make this transition happen.

Magee cytopathologists: Thank you so much for your patience and for your willingness to support this deployment while managing the heavy and complex daily caseloads at Magee.

Amy Colaizzi: Amy is a delight to work with, effortlessly handling multiple roles with precision. Whether delivering her first national-level talk with calm confidence or contributing to several research projects, she consistently gives her best to every task.

Jonee Matsko: This could not have happened without "Jonee 1, Jonee 2, and Jonee 3" (as it often felt like Jonee had to clone herself to keep up). Jonee is truly a pleasure to work with and has been the backbone of this crucial implementation, in addition to her important roles in the EPIC Bridges project and the cytology school. She has single-handedly carried out many of the activities required for the deployment of the Genius system, with support from Amy Colaizzi.

Magee cytologists: Thank you for being so supportive and for persevering through the chaos of this transition, especially while participating in dual workflows as we deployed this technology in phases. Your enthusiasm and willingness to go the extra mile are truly remarkable.

Matt O'Leary: Thank you for being exceptional and for your willingness to think outside the box to find novel solutions. This is yet another person without whom this deployment could not have been successfully accomplished. His poise and grace in navigating red tape and minor frustrations are truly commendable. We deeply appreciate all your efforts, support, and patience. Kudos and a heartfelt thank you.

UPMC Digital Pathology (Ryan Mitchell), Magee IT support (Tom Rudnicki, Lynn Zombeck, Micheal Bowman) and Mercy IT support (Rosa Uccellini): For the tremendous effort and careful attention to detail you dedicated to installing the IMS and setting up workstations throughout the different offices.

A heartfelt thank you to **Terri Waller,** the Magee pathology coordinator, for her invaluable support in organizing and scheduling meetings and for graciously taking on every request, often with very little notice.

Other acknowledgements: UPMC lab operations, UPMC legal and malpractice, UPMC supply chain management and UPMC media relations.

Once again, a heartfelt thank you to everyone who has made this transition possible. We are very grateful for all your hard work and perseverance as we add this novel tool to our arsenal that serves as a vital bridge to better health outcomes. Let us embark on this new journey and step into a new and exciting frontier of AI-assisted cytopathology sign out. Yinz making history here!

Trainee Program Highlights

Marie C. DeFrances, MD, PhD
Vice Chair, Pathology Medical Education, Professor of Pathology, Division of Molecular & Genomic Pathology



The Pathology Residency and Fellowship Programs are thriving at UPMC!

Currently, our Residency Program is ranked #10 (out of approximately 141 programs) in the Doximity Residency Navigator, an online tool reviewed by pathology residency applicants to help them curate their program application lists. This ranking is a tremendous honor and a testament to our outstanding national reputation for graduating fantastic, well-trained pathologists from our programs. Interviewees at our Residency Program often note that our Doximity ranking was instrumental to them choosing to apply to our program. The next Doximity Navigator Nomination Survey will likely open in April. If you receive a link to the Doximity survey, please vote for "UPMC Medical Education"!

In addition to rotating through our AP Centers of Excellence (COE) and CP Lab divisions and learning from our incredible faculty and staff, our trainees also receive education about a variety of topics that complement standard clinical training. During our Laboratory Management didactics series organized by our CP Didactics Coordinator (resident John Grove [PGY3]), topics such as Adverse Event Reporting, IRB and Research matters, Intellectual Property, and AI software are covered.

At the beginning of the academic year in July of 2025, we welcomed six (6) new PGY1 pathology residents into the program: Emily Gripp, Emma Harvey, Nathan McGrath, Peace Preston, Sierra Raney, and Adnan Syed. In addition, twelve (12) fellows and five (5) Clinical Instructors are training in our department. New this year, our department established the Leidos Computational Pathology Fellowship, and we accepted our first Leidos fellow: Jeremy Minkowitz. Please see the entire list of our new trainees in the adjacent box.

Welcome

PGY1 Residents
- Emily Gripp
- Emma Harvey
- Nathan McGrath`
- Peace Preston
- Sierra Raney
- Adnan Syed

Clinical Fellows
- Mohamed Elmoryah - Bone and Soft Tissue Pathology
- Juanita Ferreira - Hematopathology
- Hae-Sun La - Neuropathology
- Andre Lametti - Head and Neck Pathology
- Mason Marshall - Cytopathology
- Udit Naik - Molecular Genetic Pathology
- Simmi Patel - Neuropathology
- Pranav Patwardhan - Molecular Genetic Pathology
- Nazar Rahmanov - Hematopathology
- Timothy Ramseyer - Cytopathology
- Gabe Sexton - Neuropathology

Clinical Instructors
- Martha Caicedo Murillo - GI Pathology
- Jake Jerome - Breast/Gyn Pathology
- Sherry Lee - GI Pathology
- Serene Mostafa - Breast/Gyn Pathology
- Rachel Vanderschelden - Breast/Gyn Pathology

Post-Doctoral Associate
- Jeremy Minkowitz - Leidos Computational Pathology

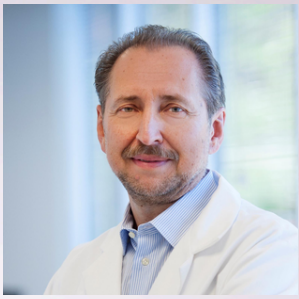
To foster trainee resilience and well-being, our Wellness Champions (residents Wenli Dai [PGY3] and Stephanie Torres [PGY2]) hold short 20 – 30 minute sessions during Wellness Wednesdays focusing on the importance of maintaining self-care, combating fatigue and sleep deprivation, and understanding public safety resources. To engage with the larger community, the Wellness Champions also organize blood drives through Vitalant. We welcome new and innovative ideas about how to foster well-being in our trainees and how we as a program can contribute to wellness out in the community!

Our trainees are actively engaged in research. Many had abstracts accepted to the USCAP annual scientific meeting being held March 21 - 26 in San Antonio, TX. To celebrate their achievements and to reconnect with our past trainees and faculty attending this USCAP meeting, we will hold our annual Department of Pathology Alumni Reception on Sunday, March 22 at 7:30PM. As final details about the event become available, we will share them with you. If you are in San Antonio for the meeting, we hope to see you at our event where we can enjoy some tasty hors d'oeuvres and a glass of wine to toast our trainees' successes and catch up with acquaintances from the past. Speaking of celebrating, please mark your calendars for the Department Graduation Ceremony planned for Friday, June 12 at 5PM at the University Club in Oakland where we will acknowledge the achievements of our senior residents, graduating fellows and clinical instructors.

Our phenomenal training programs couldn't function as seamlessly as they do without the dedication and help of practically everyone in the entire department. A huge Thank You from me to all of you who train and assist our residents and fellows to excel at every step along their educational path.

Molecular & Genomic Pathology (MGP)

Yuri E. Nikiforov, MD, PhD
Division Director, Molecular & Genomic Pathology, Vice Chair of the Department of Pathology, Professor of Pathology

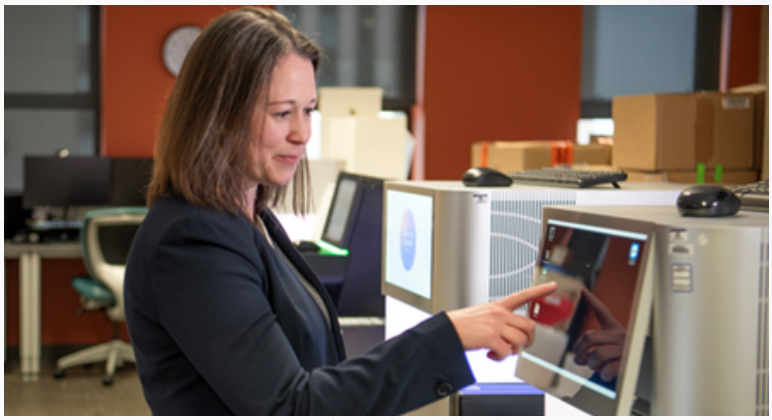


The year 2025 was an important and productive year for the MGP division and laboratory as we are progressing towards our goal to upgrade and expand the existing genetic panels and continue developing tests based on broad clinical genomic analyses of human tumors. In 2025, the total volume of MGP tests exceeded 35,000, the vast majority of which are complex next generation sequencing-based tests.

During the course of last year, four new molecular tests have been validated and launched, including BCR::ABL1 minor transcript (p190) detection and quantitation (March), methylation array & sarcoma classifier (April), whole transcriptome analysis (RNAseq) for fusion detection in hematological neoplasms (July) and finally, the UPMC Oncomine Plus pan-cancer panel (October).

It took us close to a full year to build and validate the UPMC Oncomine Plus test, an over 500 gene NGS panel that substituted a 161-gene Oncomine panel which was the main pan-cancer genetic panel offered to UPMC cancer patients since 2018. Oncomine Plus allows for a single workflow assessment of tumor samples for mutations, copy number alterations, targeted gene fusions, microsatellite instability (MSI) status, and accurate calculation of Tumor Mutational Burden (TMB). While this MGP test is based on the commercial Thermo Fisher panel, a number of significant modifications had to be introduced to improve the test performance and adjust it to the MGP sample flow and reporting, including customized variant calling, secondary analysis of all MSI loci, and updated display of copy number variation across additional target regions. Full details of the Oncomine Plus test, including all gene targets, can be found on the MGP's website. https://mgp.upmc.com/Home/Test/Oncomine.

The validation of the test and its customization and adjustment to the MGP needs was an effort that involved a large working group comprised of MGP faculty, trainees, and MGP laboratory staff involved in different aspects of test running and data analysis. The Oncomine Plus working group was led by **Dr. Abby Wald**, Assistant Director of the MGP lab.



Abigail Wald, PhD

She organized, oversaw, and documented the validation using results from over 300 various cancer cases and worked closely with MGP's bioinformatics team to develop and optimize the analysis pipeline, which uses software on UPMC's High Performance Computing (HPC) cluster and the vendor's Ion Reporter analysis server.

For this important project, Abby utilized her 13-year experience working at MGP in different capacities, as well additional knowledge gained while serving on the Molecular Oncology Committee for the College of American Pathologists (CAP) since 2023. This national committee creates and supports the CAP's proficiency testing programs, develops educational seminars and adjuncts for the CAP National Meetings, and supports the CAP laboratory accreditation program requirements for molecular pathology and genetics.

Molecular & Genomic Pathology (MGP)

In addition to introducing new tests, MGP faculty have been heavily involved in the work resulting in expanding the utility and clinical impact of existing molecular tests, several of which have been developed at the MGP lab, and optimizing the menu of genetic tests for specific tumor types to achieve the biggest clinical impact in the most cost-efficient way.



John Skaugen, MD

A telling example of such an approach is harmonizing molecular test offerings for CNS/brain tumors, which has been led by **Dr. John Skaugen.** Dr. Skaugen, who was recently appointed as Assistant Director of the Division of Molecular & Genomic Pathology, has been at UPMC/Pitt for almost 10 years, including AP/CP residency, MGP fellowship, and MGP faculty.

He developed an interest in molecular genetics and testing of brain neoplasms during his MGP fellowship while contributing to the validation of whole genome methylation profiling of CNS tumors. This methodology utilizes oligonucleotide probes to assess methylation status across hundreds of thousands of CpG sites across the genome.

Several classifiers have been developed to identify unique methylation signatures and enable refined diagnosis of these uncommon tumors. Recently, Dr. Skaugen led the work to validate the use of whole transcriptome sequencing (RNA-Seq) for fusion detection in CNS tumors, which is particularly important for pediatric CNS tumors and identification of potential therapeutic targets in aggressive tumors.

Dr. Skaugen works closely with UPMC neuropathologists, neuro-oncologists, and neurosurgeons to offer the most optimal and cost-effective molecular characterization of CNS tumors. The MGP lab offers a number of molecular tests for this purpose, including a targeted NGS panel (GlioSeq), methylation array, RNAseq, MGMT promoter methylation status, and even the pan-cancer NGS panel (Oncomine Plus) for select cases, which are utilized to inform diagnosis and treatment of patients with CNS tumors. He also interacts frequently with neuropathologists from across the country who rely on UPMC's molecular test offerings for CNS tumors, and he has been invited to present pathology grand rounds at two institutions to discuss these topics, particularly methylation profiling. He was involved in a publication highlighting important considerations and challenges of validating methylation profiling (PMID: 38378079) and has provided expertise for other laboratories looking to validate this test at their own institutions. He also remains involved in molecular neuropathology research, collaborating with the UPMC Division of Neuropathology and others within and outside of UPMC.

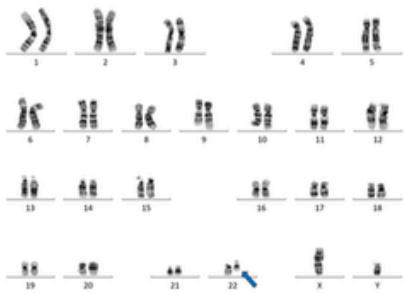
Laboratory Spotlight

Mahmoud Aarabi, MD, PhD
Medical Director, UPMC Cytogenetics Laboratories

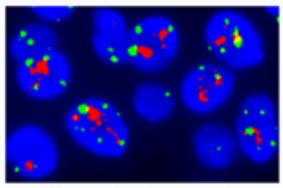


UPMC Cytogenetics Laboratories have provided clinical diagnostic services for nearly four decades. Located at the UPMC Magee-Womens hospital, Cytogenetics Laboratories include Karyotyping, Fluorescent in Situ Hybridization (FISH) and Microarray labs that collectively perform over 25,000 tests every year. While ~80% of the clinical services are provided to cancer patients across the UPMC system, a critical part of cytogenetic testing is dedicated to prenatal, newborn and pediatric diagnostic procedures.

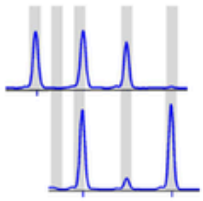
With access to comprehensive genetic data, the Cytogenetics Laboratories have been involved in numerous research collaborations with various divisions within the Department of Pathology, as well as with other Departments and Centers including the Hillman Cancer Center, Magee-Womens Research Institute, and the Institute of Precision Medicine at the University of Pittsburgh.



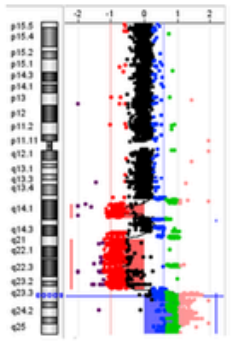
Philadelphia chromosome due to a translocation between chromosomes 9 and 22 in a child with B-ALL.



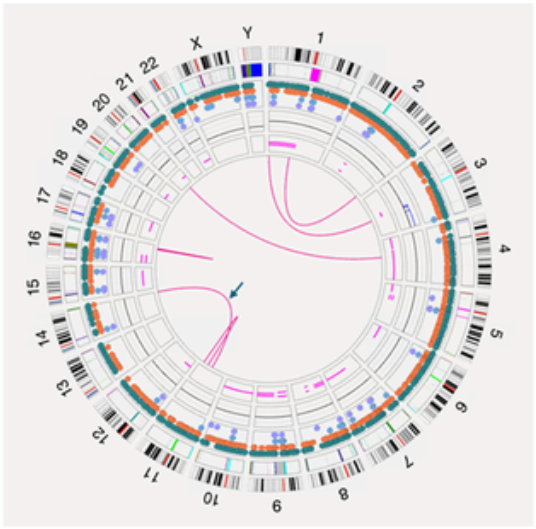
HER2 amplification by FISH in a patient with breast cancer.



Comparison of fetal (top) and maternal (bottom) STR markers reveals the diandric triploidy associated with partial mole in a product of conception.



Complex chromosome 11 rearrangements including *KMT2A* amplification by microarray in a prostate cancer patient with therapy-related AML.



Digital karyotyping by Optical Genome Mapping (OGM) uncovers *IGH::CCND1* fusion due to translocation between chromosomes 11 and 14 (arrow) along with several balanced and unbalanced rearrangements in a patient with Mantle Cell Lymphoma.

Our Future: Since joining the Department of Pathology's Molecular & Genomic Pathology (MGP) Division in 2024, we have focused on expansion and transformation of cytogenetics services at UPMC. Strengthening our DNA-based diagnostic platforms specific for hematologic malignancies, solid tumors and germline testing, the microarray laboratory now offers short tandem repeat (STR) testing for molar pregnancy in collaboration with the Placental and Perinatal Pathology Center of Excellence and the Magee Genomics Laboratory. Over the past year, we have initiated the implementation of Digital Karyotyping using state-of-the-art Optical Genome Mapping (OGM) technology. With clinical validation in progress, OGM will offer a comprehensive solution replacing karyotype, FISH, and microarray tests for the initial diagnosis of many cancer patients at unprecedented high resolution. In parallel, we plan to modernize the existing karyotype and FISH services by integration into the digital pathology initiatives underway at UPMC and whole slide scanning/analysis approaches.

Laboratory Spotlight

Our Trainees: Each year, over 30 residents and fellows spend at least two weeks in a Cytogenetics rotation to learn about techniques and their clinical utilities. This rotation is offered to pathology and medical genetics residents, and fellows in hematopathology, MGP, pediatric endocrinology, and reproductive endocrinology subspecialties. In addition, UPMC Cytogenetics Laboratories are home to the GME-accredited Laboratory Genetics and Genomics (LGG) fellowship.

Our Team: A team of 35 highly trained, dedicated and enthusiastic cytogenetics technologists and faculty contribute to clinical care while playing an active role in training the future generation of healthcare providers. Our cytogenetics pathology faculty members present lectures for resident didactics, as part of the Pathology GRIP course, and genetics courses at the University of Pittsburgh and Carnegie Mellon University. Cytogenetics faculty represent UPMC and Pitt in various national professional societies including Dr. Mahmoud Aarabi (Chair of the Ethics, Legal, and Social Implications Committee at the American College of Medical Genetics and Genomics-ACMG), Dr. Rodney Wiltshire (member of the Early Career Initiative Committee at the Cancer Genomics Consortium-CGC), and Dr. Marwa Daghsni (member of the Community, Outreach and Engagement Committee at the ACMG and their Communications Committee at CGC).



Faculty and Staff of UPMC Cytogenetics Laboratories.

Reach us: https://geneticslab.upmc.com/Home/CytogeneticsHome and pittcytogenetics@upmc.edu

Hematopathology Updates

Nidhi Aggarwal, MD
Associate Professor of Pathology, Interim Director;
Division of Hematopathology Division of Molecular & Genomic Pathology



It is a distinct honor to serve as the Director of the Division of Hematopathology. The division has continued to advance its clinical, academic, and educational missions through strategic growth, diagnostic innovation, and meaningful service line improvements.

This year, we strengthened our faculty and leadership with several key appointments. We welcomed Dr. Luiz P. Guido as Assistant Professor of Pathology. Dr. Miroslav Djokic returned as Associate Professor and was appointed Director of the ATL Laboratory and EPIC Optimization. These additions have reinforced leadership across critical diagnostic areas and positioned the division for continued growth.

Significant enhancements were achieved across our laboratories. The Flow Cytometry Laboratory implemented advanced 12-color panels, improving characterization of myeloid and monocytic populations and establishing the foundation for acute myeloid leukemia minimal residual disease (AML MRD) testing. A high-sensitivity AML MRD assay is currently in final validation, with plans for clinical launch early this year. Additional innovations include validation of a 17-marker screening tube to improve efficiency and diagnostic yield—particularly for peripheral blood and pauci-cellular specimens—and the development of multiple immune monitoring assays supporting immunodeficiency evaluation and post-therapy surveillance.

In Molecular Hematopathology, MGP laboratory successfully launched BCR::ABL1 minor testing and an RNA fusion assay for hematologic malignancies, eliminating send-out testing and significantly improving turnaround times. A comprehensive 160-gene DNA panel for myeloid and lymphoid malignancies is currently in validation and is anticipated to launch in early 2026. The immunohistochemistry laboratory further expanded its diagnostic capabilities with new erythroid and T-cell markers (CD71 and CD3/TRBC1 dual stain) and optimization of several high-impact legacy stains, including CD19, NPM1, and Cyclin D1.

Operational and digital initiatives continued to enhance efficiency and quality. Flow cytometry workstations were upgraded to support the ongoing need for faster and more robust data analysis, while digital pathology platforms are being evaluated for high-resolution bone marrow imaging and remote review. In parallel, standardized bone marrow reporting templates using report genie from CPACE are under development to streamline workflows and improve diagnostic consistency.

Patient-centered care remains at the core of our mission. Focused initiatives are underway to optimize genetic test utilization through targeted education, process redesign, and enhanced IT solutions. Multidisciplinary collaboration continues to expand, with the CHP Tumor Board now convening twice monthly and active planning in progress for an Adult Hematology-Oncology Tumor Board. In parallel, workflows between CHP and Hematopathology have been streamlined to improve turnaround times and address several longstanding operational challenges.





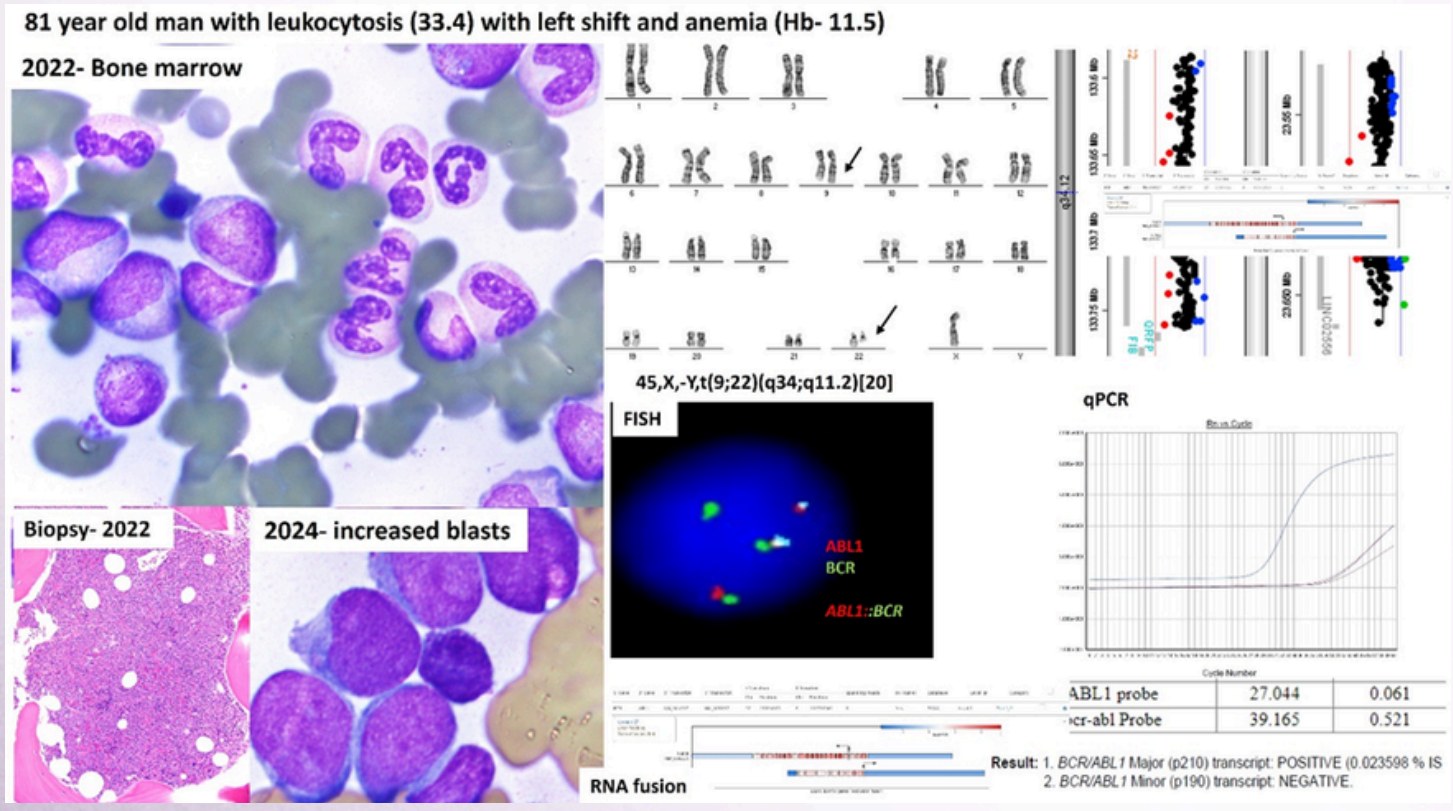
Hematopathology Updates

Educational and academic accomplishments remain a hallmark of the division. We developed a new Pediatric Hematology-Oncology and Hematopathology fellowship curriculum, offer a very successful mini-elective for early medical students (Personalized Medicine: The impact of ancillary testing on Patient Care), and successfully transitioned the Hematopathology Fellowship to the Match. Teaching excellence was recognized with Dr. Jawad receiving the Outstanding Clinical Pathology Teaching Faculty Award, additional faculty nominations (Drs. Davis and Aggarwal), and the Division of Hematopathology once again being nominated as one of the best Clinical Pathology rotation experiences. We also presented a short course, an interactive microscopy session led by our residents, and at the specialty conference at the USCAP annual meeting.

Scholarly productivity continues at a high level, with 19 original publications in the past year, numerous national and international presentations, seven abstracts presented at USCAP 2025, and six additional abstracts submitted for USCAP 2026.

Equally important, the division remains committed to health and wellbeing. We continued our tradition of monthly FIKA gatherings, fostering connection, reflection, and camaraderie across the division. Three of our members (Dr. Katelynn Davis, Ms. Robyn Roche and Ms. Kaitlyn Livengood) were recognized as the wellness champions and Ms. Wendy Shallenberger received the Dignity and Respect Champion award from UPMC.

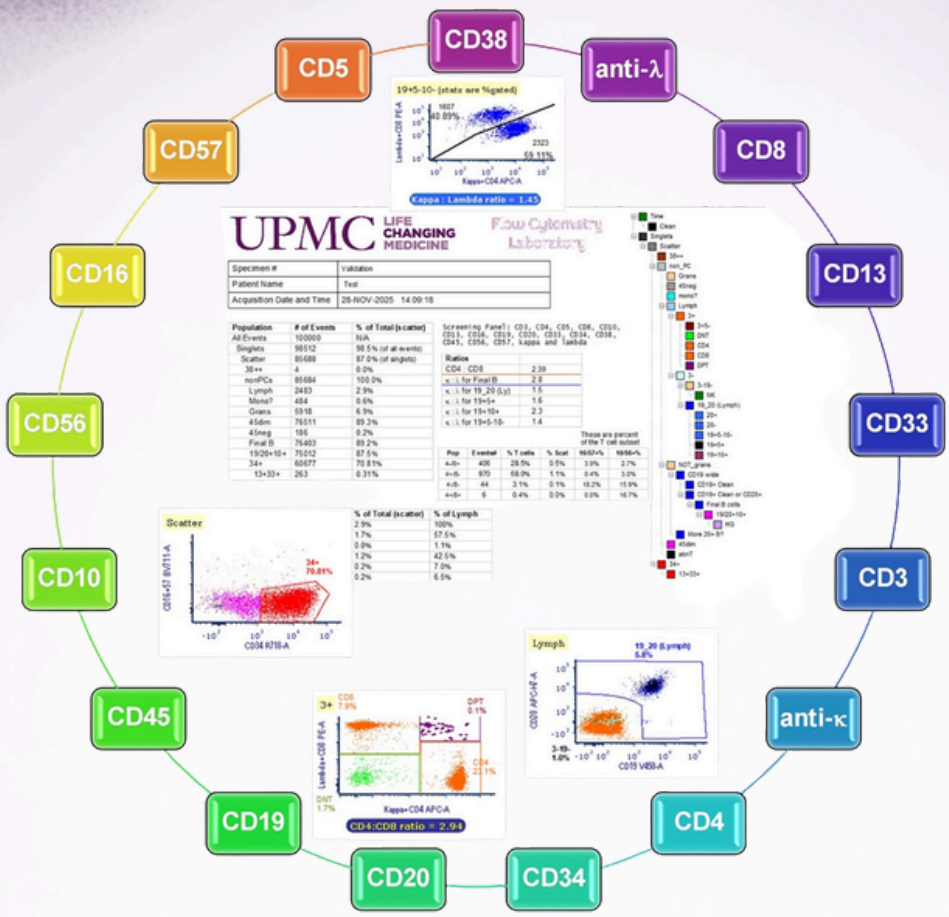
These achievements reflect our continued commitment to innovation, collaboration, and excellence. I am deeply grateful to our faculty and staff, our colleagues across departments, and our leadership for their dedication, partnership, and support.



A typical hematopathology case demonstrating diagnostic integration of morphology, flow cytometry (not shown), immunohistochemistry (not shown), cytogenetic, and molecular findings.

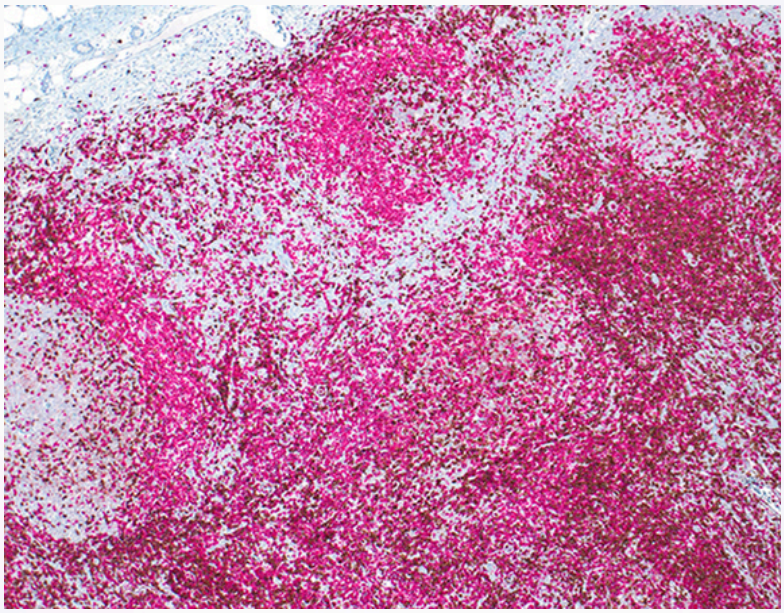
Hematopathology Updates

Flow cytometry screening tube enabling the simultaneous evaluation of 17 markers to improve efficiency.





Consensus conference in Hematopathology.



New dual stain TRBC1/CD3 to evaluate clonality of alpha/beta T-cells in tissues.

Translational Pathology Updates

Aatur D. Singhi, MD, PhD
Associate Professor of Pathology; Vice Chair of Translational Pathology, Division of Anatomic Pathology



Not many people may be familiar with the Division of Translational Pathology, which bridges laboratory research and clinical care by developing and validating novel diagnostic tests and biomarkers that directly impact patient management. The division is directed by Dr. Aatur Singhi and includes faculty with diverse expertise across several areas. Dr. Rinda Soong focuses on gynecologic and breast pathology research with emphasis on molecular-epidemiologic-pathologic profiles. Dr. Tanner Freeman has responsibilities in the Division of Molecular and Genomic Pathology and serves as Medical Director of the Biobank for NSABP/NRG Oncology Pittsburgh and manages the Translational Pathology Imaging Laboratory. Dr. Michelle Wood-Trageser concentrates on new test development and serves as a liaison with the Office of Collaborative Pathology to facilitate industry collaborations and novel assay validation. Dr. Nuha Shaker and Dr. Tolson Nichols bring expertise in gastrointestinal pathology with focus on artificial intelligence applications and RNA sequencing approaches in pancreatobiliary disease.



The division includes the Clinical Test Development Laboratory, which expanded its capabilities in 2025 with the addition of the Hamamatsu Photonics MoxiePlex multiplex immunofluorescence imaging system and a partnership with Quanterix, providing access to multi-color imaging for spatial mapping of proteins in tissue. In collaboration with Hillman Cancer Center, the division supports spatial transcriptomics technologies including 10x Visium and Chromium, Nanostring GeoMx and CosMx, and Xenium platforms. Recently, the laboratory has developed and validated a clinical multispectral immunofluorescence assay for pancreatic neuroendocrine tumors. Additionally, it has completed 286 histology-based research requests and 489 clinical trial requests for not only the Department of Pathology, but multiple other departments and centers within the University of Pittsburgh and University of Pittsburgh Medical Center. Faculty have published more than 50 peer-reviewed articles in 2025 in journals including *Modern Pathology, Annals of Surgical Oncology*, *Annals of Surgery*, *Gastrointestinal Endoscopy, Gastroenterology, Hepatology*, and *Journal of Clinical Oncology*. The division maintains partnerships with technology and pharmaceutical organizations including Hamamatsu, Leica, Ventana, Owkin, Kalivir Immunotherapeutics, Astellas Pharmaceuticals, and Amgen to support ongoing translational research efforts.

Pediatric Pathology Updates

Jennifer Picarsic, MD
UPMC Children's Hospital of Pittsburgh Chief of Pathology and Head of Laboratories, Professor of Pathology



Growing, Innovating, and Shaping the Future of Pathology/Lab Medicine at UPMC Children's: The #KidsFirstLab first year achievements

The UPMC Children's Hospital of Pittsburgh Pediatric Pathology and Lab Medicine team had a remarkable year, making incredible strides and driving impactful change.

We remain focused on the Department's overall vision focused on people and building collaborative teams, creating efficient processes, and leading with innovation, all within a "Kids First Lab" approach. To that end, we have been actively investing and developing our "people pillar" this past year. Since the last newsletter, we have welcomed Mr. Marcus Lawrence MBA, MLS(ASCP), as our new Director of AP/CP Lab Operations at Children's, who brings unique insight into the UPMC Bridges project with previous real-world experience in EPIC Beaker. He is also a leader in the US Navy Reserve, serving as a MLS, Medical Service Corps Officer. In just under a year, he has helped bring together Children's leadership, lab leaders, and faculty to further develop our AP and CP teams, as witnessed by hiring over 16 new staff members and promoting an additional 24 staff members in 2025.

Specifically on the CP side, we were thrilled to welcome Dr. Sarah Wheeler full-time to Children's as our newly appointed CP Medical Director over the CHP labs in July 2025. She brings extensive academic, clinical, and regulatory expertise, while also being a national leader in ADLM, CAP, and the Cystic Fibrosis Foundation. In her dual role as Director of Lab Medicine AI in CPACE, she further strengthens our Pediatric Lab Medicine in a comprehensive, multi-tiered approach.

On the AP side, despite a prolonged shortage of Pediatric Pathologists, the faculty have consistently demonstrated resilience and dedication, maintaining both productivity, engagement, and leadership. Dr. Catherine Gestrich serves as an exemplary research mentor and collaborator, earning national recognition from the Society for Pediatric Pathology and the Children's Oncology Group as a Young Investigator on the Soft Tissue committee of Children's Oncology Group (COG) while also serving as our Children's Director of Pediatric Molecular Pathology. Dr. Qian Wang remains busy in her role as Children's Cytology Director, delivering high-quality support to the Children's IR and ENT teams through a growing number of rapid on-site evaluation requests for pediatric procedures. As the fellowship director, she has also been instrumental in recruiting new fellows into the Pediatric Pathology ACGME program for 2027-28 and 2028-29. We are incredibly fortunate to have recruited Dr. Lara Berklite back to Pittsburgh. She joined us in January 2026 and will serve as our Director of Autopsy and Gross Room services at Children's. She is board certified in AP/CP (UPMC, 2021) and Pediatric Pathology (2022), having completed her fellowship at Cincinnati Children's Hospital Medical Center. Dr. Berklite serves as the CAP Autopsy Pathology Committee in liaison to the Society of Pediatric Pathology and has a strong clinical interest in both perinatal and pediatric autopsy. Her research interests include pediatric liver pathology and she is a young investigator on the Liver Tumor committee of COG.

Pediatric Pathology Updates

While we grow, we must also sadly say goodbye to key faculty. Dr. Steven F. Dobrowolski, Professor of Pathology, is retiring as the Clinical Biochemical Genetics (BCG) Medical Director at Children's Hospital after a long tenure of dedicated leadership and service. The BCG specialty lab at Children's supports both children and adults throughout the greater UPMC network, supporting the UPMC Division of Genetic and Genomic Medicine (who see both pediatric and adult patients), the Children's Center for Rare Disease Therapy, the Hillman Center for Pediatric Transplantation, and the Pitt Athlete Sickle Cell Screening Program. Additionally, it functions as a regional referral laboratory for positive newborn screening results.

Over the past year our "process pillar" has included advancing diagnostic quality, patient safety, and access through targeted implementation of pediatric-appropriate testing, system alignment of instrumentation and policies, and operational workflow improvements. These initiatives have reduced variability, improved reliability and turnaround time, strengthened pre-analytical oversight, while enhancing the patient and provider experience across inpatient, outpatient, and point-of-care settings. Nonetheless, our pediatric lab experts under Dr Wheeler's guidance also help to identify performance limitations unique to pediatrics and continually implement safeguards to protect diagnostic accuracy in our population. We look forward to continually providing pediatric-specific guidance and decision-support recommendations to the UPMC system labs while expanding our testing menus with state-of-the-art technology as the system leader for Pediatric Lab Medicine.

Our "innovation pillar" has included utilizing digital pathology to enhance the provider, patient and family experience. Our expanded digital hematopathology access allows remote viewing of blood smears across sites, improving consistency and availably of timely subspeciality expertise. Our "Pathology Explanation Clinics" pilot at Children's has been received with great enthusiasm by the Hillman Center for Pediatric Transplantation team. For decades, our Pediatric Pathology Pathologists' Assistants have welcomed patients and families to personally view their explanted organs together with the transplant team. We have now expanded this experience to include a digital review of their slides to see the "before and after" of transplant with digital slide review of their explant and allograft. As one mother commented, "This is patient-centered care at its absolute best… She [her daughter] learned how sick she really was, how close she came to dying, and how extraordinary it is that a new organ could give her a second chance at life. That understanding gave her something every child deserves: clarity, ownership, and peace. The team showed the beautiful world of tissue patterns, how her biopsies looked during rejection and how they look now when they're healthy. Those images didn't just comfort her. They inspired her. Pathology absolutely improves the patient experience." This type of innovation drives our mission forward.

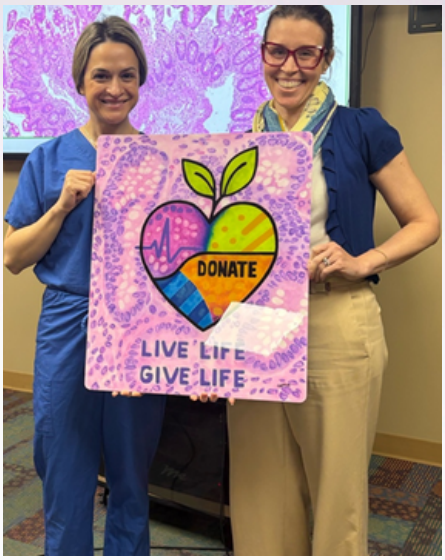
By putting people first, improving processes, and driving innovation, we advance pediatric pathology and lab medicine across UPMC—not just in Lawrenceville, but throughout the system.

"What we do for ourselves alone dies with us; what we do for others and the world remains and is immortal." — Albert Pine



Pediatric Pathology Updates





Following attendance at a Children's pathology explanation clinic with her child post-transplant, a mother created a moving artwork inspired by tissue patterns which evolved into a symbol of hope, healing, and bravery in her child's prolonged recovery process. The family recently donated the painting to the Children's laboratory in memory of their daughter, who will always be remembered by her smile, inquisitive questions, and resilience throughout her arduous medical journey. My she rest in eternal peace.





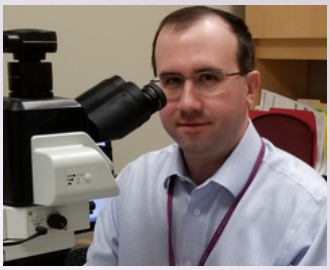
The 2025-26 George Fetterman Memorial Lecture at Children's: Dr Gaurav Goyal, Histiocytic Neoplasm: Beyond the microscope with Dr Picarsic. (Dr Fetterman oil painting, c.1975).



2025 Walk for Children's at Schenley Park in which the KidsFirstLab team raised $1,082 for the Children's Hospital Foundation. Save the date for this year's walk on June 6, 2026.

Community Pathology

Matthew T. Then, MD
Clinical Assistant Professor of Pathology,
Chief, Division of Community Pathology



As we step into the new year, I wanted to take a moment to share an update on what's been happening across our community pathology division. Many of you already have a sense of the big picture, but there have been quite a few changes—both in people and in our information systems—that are worth highlighting. 2025 brought plenty of challenges, but it also brought real progress, new connections, and a lot of teamwork worth celebrating.

This past year, we saw increases in digitization across our community sites, continuing our move toward more modern and efficient workflows. While we are still adapting, this effort has already begun to strengthen how we communicate and work together.

At the same time, many community sites transitioned to the Epic environment during the Wave 1 rollout. Multiple different laboratory information systems were harmonized into the Epic environment. No transition this big comes without a few hiccups. Still, the overarching theme has been improved collaboration and tighter integration between sites. The experience of our colleagues from north and central Pennsylvania will help positively shape the experience and final Epic build for the Wave 2 sites.

Particularly complex challenges of Wave 1 hospitals whose material is processed at a Wave 2 site required dynamic collaborations and problem solving.

I would be remiss not to call out one of the most meaningful displays of collaboration this year. Our colleagues at Passavant and Williamsport have stepped up to assist with specimen review of Altoona material during a professional staffing shortage. The administrative and support staff at each of these sites has enabled a smooth workflow to facilitate this cross coverage. Dr. Marc Clapper deserves recognition for both serving as chief and his above and beyond efforts in maintaining high quality services at a busy community site during this difficult time. Moments like this show the value of our interconnected community model. The willingness to help across sites ensures continuity for our patients and support for one another—and it's something to feel proud of.



UPMC Williamsport team including (left to right) Dr. Michael Belenko, Dr. Vandi Ly-Bryant, Dr. Jamie Adam, Julie Phillips (histology), Dr. Ryan Collins, Dr. Jaclyn Cappel.

Community Pathology



Another highlight of the year has been welcoming new faces and acknowledging colleagues that have stepped into leadership roles. I've asked some of the community division's newest members to share a little about themselves:

Dr. Cody Marshall — UPMC Jameson

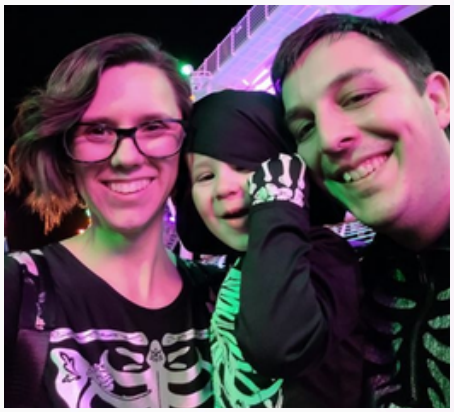


My name is Cody Marshall, I grew up in the small town of Greenville, PA, which is located about 1.5 hours north of Pittsburgh. My mother was a nurse, my father was a physician assistant, and I have an older brother and younger sister who are not in the medical field. After graduating from high school in Greenville, I attended Penn State University, where I majored in biochemistry and molecular biology.

I really enjoyed my time there and have fond memories of going to the football games, going to the creamery for ice cream, and meeting many amazing people. After I graduated from PSU, I began medical school at LECOM, and at this time, I also began connecting with my wife, Caitlyn. Just a few years later, we were married. After residency and a cytopathology fellowship at AHN, I completed another fellowship at UPMC before taking a job at UPMC Jameson. My wife and I now have a total of three kids, 2 boys and 1 girl. (Cyril, age 6, Sonny, age 4, and Frances, age 2.)

I spend a lot of time between work and being a dad, but throughout high school and even now I love playing sports (soccer, tennis, and basketball), playing video games, and hanging out / playing cards with friends and family. I am starting to get more into golf and have begun trying to learn to play the piano, but I plan to spend a lot of time in the coming years teaching/coaching my kids on the things they want to pursue. You can find me grabbing slices of pizza at our new favorite pizza shop after the boys' karate class, or while exploring the local parks and restaurants, or visiting family that are now closer by. I am very happy with where I am and pleased to be a part of the UPMC family.

Dr. David Starr — UPMC Passavant



David Starr is happy to become part of the UPMC Passavant team in 2025 and to return to the Pittsburgh area to be closer to friends and family. David trained in Saint Louis University for both medical school and residency. For fellowship he was happy to be able to train at the cytopathology department at UPMC. His current interests when outside of work include his board game collection, playing guitar, and nature walks. His wife, Samantha, and son, Alexander (Xander), both share in David's enthusiasm for board games and nature. This combination of hobbies allow the Starr family to enjoy each other's company in rain or shine. The Starr family favorite holiday is Halloween for its haunting atmosphere and endless variety of snacks (attached is a picture of a spooky skeleton aboard a cruise liner enjoying the festive season of Halloween).

Dr. Alex Chang — UPMC Passavant



I am thrilled to be returning to Pittsburgh after twenty years of school, training and practice in other places around the country. I am joined by my husband, mother, and two young children, 4 and 2 years old, whom I am slowly infecting with my passion for Pittsburgh sports. When I'm not chasing after my toddler, I enjoy tropical houseplant keeping, restaurant trivia, world geography and overly complicated board games. I have also been known to dabble in low stakes hold'em poker.

Professionally, my interests include hepatopancreaticobiliary pathology and cytopathology. I also enjoy teaching medical students and residents.

Furthermore, I want to congratulate Dr. Matt Swadley for his new role as chief of pathology at Passavant. Matt is a great collaborator and we are only occasionally confused with one another.

Finally I would like to thank Dr. Raj Amin for his many years of service to the community division and the mission of UPMC Pathology. I am grateful for his years of support and mentorship. I wish him the best in his next chapter.

Our plan is to keep building on the digitization momentum, refine Epic workflows based on what we've learned, and continue improving communication across community locations. We're committed to smoothing out systems, reducing barriers between sites, and ensuring that everyone has the tools they need to succeed.

Most importantly, we'll continue prioritizing teamwork, transparency, and shared progress. Thank you all for everything you navigated, supported, and accomplished this past year. Your dedication is what keeps this division moving forward, even during change-heavy seasons.

Here's to continued growth, smoother workflows, and another year of collaboration across our community sites and the academic centers. I thank you for your support of myself and the community division as a whole.

Bird Watching Adventures



A male chestnut-sided warbler is seen at the Ottawa National Wildlife Refuge on Lake Erie northwest of Sandusky Ohio. The photo was taken in May 2025. This location is a major site for viewing the Spring warbler migration.

Courtesy of: **David Lacomis, MD**

Reflections of a Longitudinal Educator

Tatiana M. Villatoro, MD
Assistant Professor of Pathology, Magee-Womens Hospital Pathology



I had the privilege of being a Longitudinal Educator (LE) for the University of Pittsburgh School of Medicine Class of 2028. In this role, I facilitated and taught small groups of first-year (MS1) and second-year (MS2) medical students, ranging from 10-12 students per semester, every Tuesday through Thursday, throughout the Keystone Fundamentals and Organ System phases of the new Three Rivers curriculum.

During Keystone Fundamentals, the first semester of the MS1 curriculum, I and other LEs led weekly discussions on a variety of clinical entities such as inborn errors of metabolism, gastroenteritis, breast cancer, sickle cell disease, pneumonia, diabetes, myocardial infarction, and lupus, among others. These sessions integrated multiple foundational medical education threads, including microbiology, immunology, biochemistry, and pathophysiology. The Organ Systems phase, spanning the second semester of MS1 and first semester of MS2, included courses such as Cardiology, Pulmonology, Nephrology, Digestion and Nutrition, etc.

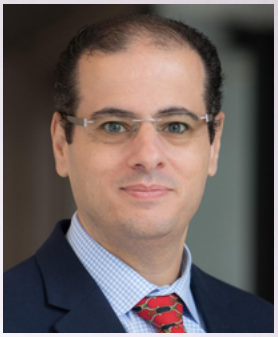
Serving as an LE is a significant time commitment and often requires teaching topics beyond one's usual clinical comfort zone. However, it is a highly rewarding experience that allows practicing professionals the opportunity to build meaningful, longitudinal relationships with the medical students during a very special and academically rigorous time in their medical education. Students consistently voice their appreciation for LEs who demonstrate true dedication to their learning and who share insights from their respective fields. I am grateful for the opportunity to contribute to medical education and to introduce students to pathology as a potential career path in the process.



Me and my first MS1 small group from Class of 2028, Fall 2024.

Wellness

Samer Khader, MD
Professor of Pathology, Division of Anatomic Pathology
Vice Chair of Wellness



Pathologists play a critical role in patient care, yet national and departmental data indicate that more than 40% experience significant burnout, driven primarily by heavy workloads and staffing shortages. The negative effects of these stresses will be felt not only on the well-being of the pathologists themselves, but also on the functioning of teams within the department, overall departmental productivity and efficiency, and ultimately the quality of patient care being provided. Recognizing these challenges, the department committed to addressing wellness as a core professional priority rather than an ancillary concern.

Over the past year, the Department of Pathology has made a concerted effort to prioritize faculty and staff wellness in response to overall rising levels of burnout, workload pressures among physicians in general and pathologists in particular. Through a combination of structured initiatives, open communication, more transparency and creative engagement, the department has taken meaningful steps toward fostering a healthier, more supportive, and accommodative workplace. Positive early outcomes of the efforts suggest that there are small, but measurable, improvements in professional fulfillment, engagement, and burnout reduction, creating a strong basis for further growth and development.

Oversight of the wellness program is provided by a representative Wellness Committee composed of members from the majority of departmental divisions, professional roles, and demographic groups, ensuring broad representation and alignment with the needs of the department as a whole. The committee is chaired by the Vice Chair for Wellness Dr. Samer Khader.

The overarching purpose of this wellness initiative is to improve the quality of life as well as the sense of professional fulfillment for all members of the Department of Pathology. Objectives include creating a better work-life balance, reducing burnout, increasing collegiality, improving both physical and mental health and to encourage growth in one's career as well as mentoring.

Key Wellness Initiatives Implemented

A. Leadership Engagement and Communication

The “Coffee with the Chair” initiative created a consistent, low-pressure space for faculty and staff to engage directly with departmental leadership (Chair). These informal 30-minute sessions encouraged open dialogue around career development, workplace challenges, and opportunities for improvement, reinforcing transparency and trust.

B. Ongoing Wellness Education and Awareness

The "Wellness Wednesday" communications were distributed bi-weekly as an avenue for delivering accessible wellness information to faculty and staff. The topics of communications ranged from managing stress, increasing mindfulness, maintaining a better work-life balance, improving nutrition, enhancing physical activity, building emotional resilience, achieving financial well-being, and developing positive workplace relationships. The purpose of this initiative was to promote wellness conversations among employees and develop relevant tools that could be used both in and out of the workplace.

C. Wellness Champion Award

The Wellness Committee recognize a Monthly Wellness Champion to highlight individuals who actively promote a positive, healthy, and collaborative work environment. Additionally, the committee recognizes employees who work on improving any aspect of their physical or mental health. Employees may nominate colleagues whose actions support well-being, collegiality, and respect in the workplace. Each month, the Wellness Champion is selected through a combination of nominations and subcommittee voting, encouraging broad participation across divisions and staff roles.

2025 Award Recipients

January Dr. Robert Peel	**May** Dr. Kyle Damen	**September** Nikki Siko
February Rose Ann King	**June** Jeanna Dickson	**October** Robyn Roche
March Dr. Diana Bell	**July** Dr. Katelynn Davis	**November** Dr. Parmjeet Randhawa
April Dr. Matthew Romanish	**August** Juliet Redinger	**December** Kait Livengood

D. Quarterly Wellness Series

A recurring quarterly wellness series offered educational and experiential sessions on topics such as sleep, yoga, meditation, nutrition, resilience, leadership growth, and career development. These sessions reinforced the department's commitment to holistic well-being and lifelong professional development.
Some of the distinguished speakers in the past were: Drs. Michael Cohen, Jennifer Berliner, Joseph Losee, Jesse Goldstein, Ian Barbash, Deepa Burman, Barbra Crothers, Dipanjan Basu, and Melissa Hogan.

E. Creative and Community-Building Activities

The "Art in Pathology" competition highlighted the inherent beauty and creativity in pathology through image submissions from daily work. By celebrating artistry alongside scientific excellence, the program fostered reflection, creativity, and shared pride in the profession.
In addition, regular social gatherings, semi-formal meetings, and the monthly "Pathology Pause" at Shadyside (inspired by the Swedish tradition of Fika) provided structured opportunities for connection, relaxation, and informal peer support.

F. Alignment with Institutional Values and Utilizing Institutional Resources

The department's wellness efforts directly support UPMC's core values of Quality and Safety, Responsibility and Integrity, Excellence and Innovation, Caring and Listening, and Dignity and Respect. By investing in the well-being of its people, the department strengthens its ability to deliver high-quality patient care and sustain excellence in education and research. We also share the institutional resources, such as "Physician Thrive" and the excellent resources provided by physician learning group to enrich the education and wellness experience for our faculty.

G. Collecting Data through an Anonymous Survey

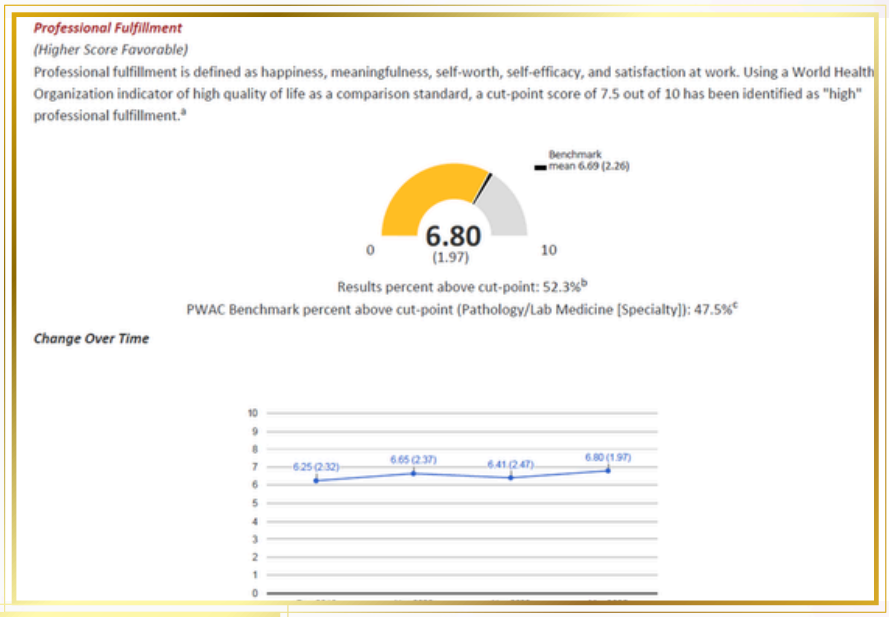
A baseline wellness survey was conducted by the Wellness Committee in 2024 to assess burnout, professional fulfillment, and workplace well-being among pathology faculty, complementing the institution-wide wellness survey. The survey also provided a safe, anonymous platform for faculty and staff to share concerns and suggest areas for improvement.

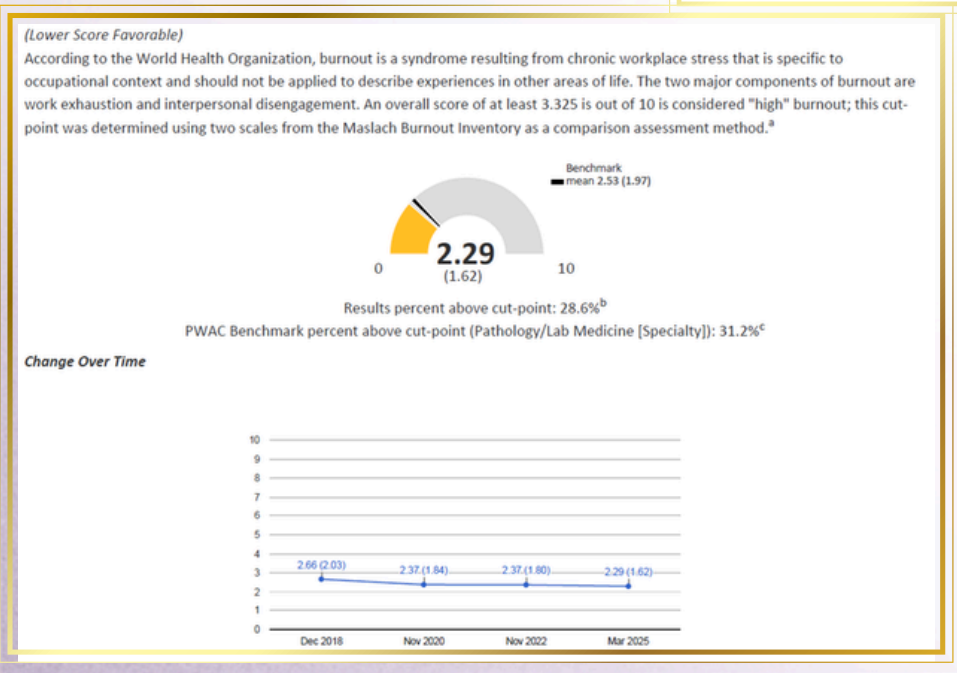
H. Wellness Website

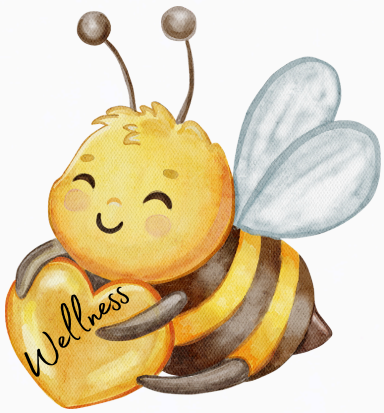
The department wellness website serves as an accessible hub within the departmental website that highlights wellness resources, initiatives, and upcoming events for faculty and staff. It provides information on available institutional and departmental support services, shares wellness communications and educational materials, and promotes ongoing programs. By consolidating resources in one location, the wellness website enhances awareness and encourages engagement. https://www.path.pitt.edu/resources/wellness

Initial outcomes from the wellness survey data and qualitative feedback suggest encouraging trends. Faculty reported a slight increase in professional fulfillment and a modest decrease in burnout levels. Engagement and connectedness among team members improved, reflecting stronger collegial relationships and a more supportive departmental culture. While changes are incremental, the overall trajectory is positive and aligns with the long-term nature of cultural change in wellness.

UPMC
LIFE CHANGING MEDICINE
Department of Pathology
WELLNESS PROGRAM







Department of Pathology

2026 Research Day and Retreat

May 27, 2026

University of Pittsburgh. | School of Medicine Department of Pathology | UPMC LIFE CHANGING MEDICINE

Innovations, Initiatives, & Partnerships

9:15 am to 11:15 am
3785 Alan Magee Scaife Hall



Tanner Freeman, MD, PhD
National Surgical Adjuvant Breast & Bowel Project



Octavia Peck Palmer, PhD
UPMC Pathology Clinical Chemistry



Yuri Nikiforov, MD, PhD
UPMC Molecular & Genomic Pathology



John C. Byrd, MD
UPMC Hillman Cancer Center

Keynote, Faculty, & Trainee Talks

12:00 pm to 4:30 pm
3785 Alan Magee Scaife Hall



Keynote Presentation
Jayanta Debnath,MD
Professor & Chair of Pathology & Laboratory Medicine
University of California San Francisco
Autophagy-Dependent Proteostasis & Metastasis



Mahmoud Arabi, MD, PhD, MBA
Associate Professor of Pathology
University of Pittsburgh
Digital KaryotypingbyOpticalGenome Mapping (OGM): Entering a New Era in Cancer Cytogenetics



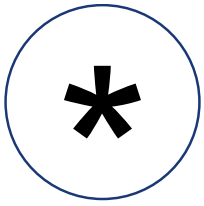
MagaliJ.Fontaine,MD, PhD
Professor of Pathology
University of Pittsburgh
The Versatile Power of Blood Tr ansf usi ons



Christiano Alves, PhD
Assistant Professor of Pathology
University of Pittsburgh
Customized CRISPR-BaseEditors to Treat Severe Human Diseases



Smita Iyer, PhD
Associate Professor of Pathology
University of Pittsburgh
Crossing Barriers: T Cells in the CNS



Abstract-driven talks (7)
Graduate Students, Postdocs, & Residents
Topics in Basic and Clinical Research

Poster Session & Reception

University Club, Ballroom B, 5:30 pm to 7:30 pm



Join your colleagues for an interactive poster session, hors d'oeuvres, and drinks. Say hello to old friends and make new ones.

Plan to attend!

Registration is required. Submit your abstract by April 20, 2026. For more information, contact Amanda Bytzura at amb430@pitt.edu.

www.path.pitt.edu/events/department-pathology-2026-research-day-and-retreat