Spring

COLUMBIA PATHOLOGY **REPORT**

Resilence & Resolve

Staff Spotlight Retirements and Graduates!

In Memoriam Remembering Our Community

Event Spotlight NENE 2025 Symposium







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Columbia Pathology and Cell Biology Report

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Resilience and Resolve



On October 4th, 1957, Russia launched Sputnik 1, the first artificial satellite to orbit the earth, thus ushering in the space age and sparking concerns within the US government that we were falling behind in science and technology. The U.S. responded by enacting the National Defense of Education Act (NDEA) of 1958, the largest investment in American science and education at that time. The NDEA led to massive funding in science, mathematics, and foreign language education, provided low-interest student loans for college, expanded graduate fellowships to support engineering and science,

and provided an infrastructure to support and expand national testing and the development of diverse educational curricula. This marked a nearly 70-year period of growth in American science, engineering, and biomedical research that has become the envy of the world. The funding strengthened and expanded NIH, its extramural funding, and set the stage for large-scale funding efforts that supported the growth and development of the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), and the Defense Advanced Research Projects Agency (DARPA).

On January 27th, 2025, the Trump Administration suspended NIH grant funding, later announcing steep cuts to its funding for science and education in the United States. Though this attempt to dismantle what has been the crown jewel of American ingenuity and creativity has been partially blocked by numerous legal petitions and injunctions the looming threat is inescapable. In addition to the widespread cuts, freezes, and termination, some specifically targeting institutions like Columbia, the FY2026 budget proposes slashing NIH funding from \$47 billion to \$27 billion. Thus far our congressional leadership, with few exceptions, has been notably silent on this matter.

It is not clear how things will shake out and where we will land on these matters, but things will no longer be "business as usual". Things have changed for biomedical research in the United States. We have to prepare and adjust. This includes diversifying strategies for funding sources including private foundations and industry partnerships. Recently and in the coming months the university and the medical center will be sponsoring and organizing group meetings and think tanks to develop strategies on how we will adapt to this "new normal". I encourage you all to look out for these meetings and opportunities and participate. Our office will do its best to vet and distribute relevant information as soon as it is available. To paraphrase a recent quote from our Executive Vice President for Research, Jeannette Wing, "Things have changed". I agree, but what remains unchanged is our resilience and commitment to excellence, discovery, and innovation in biomedical research and the goal to advance patient care, medical education, and research. That mission has not changed. Above all else, the mission continues.

Warm regards,

Kevin L. Gardner, MD, PhD Chair,

Department of Pathology and Cell Biology

STAFF SPOTLIGHT: FACULTY

Honors and Awards



Cory Abate-Shen Elected to the National Academy of Sciences

Cory Abate-Shen, MD, PhD, has been elected to the National Academy of Sciences, which recognizes achievement in science, and is one of science's highest honors one of science's highest honors. Dr. Abate-Shen, professor of molecular pharmacology and therapeutics and the Robert Sonneborn Professor of Medicine, with appointments in the Departments of Urology, Pathology and Cell Biology, and Systems Biology, is an internationally recognized leader in genitourinary malignancies. Visit the CUIMC Updates website to learn more. Congratulations, Dr. Abate-Shen.

Osama Al Dalamah Named as 2025 Louis V. Gerstner Jr. Scholar



The VP&S Office of Research announced in February 2025 that Osama Al Dalahmah, MD, PhD, assistant professor of pathology and cell biology, was selected as a 2025 Louis V. Gerstner Jr. Scholar. The Louis V. Gerstner Jr. Scholars Program supports physicians on a tenure track conducting research that promises to ultimately bring new treatments to patients. The fund will provide a stipend of \$100,000 per year for up to three years to be used for salary or laboratory support of the awardees. Congratulations to Dr. Al Dalahmah!



Minah Kim Recieves AACR 2025 Early Career Award

Minah Kim, PhD has been awarded the AACR 2025 Early Career Award. This prestigious award, presented by the American Association for Cancer Research (AACR), recognizes outstanding early career investigators who have made significant contributions to the field of cancer research. Dr. Kim joins this distinguished group of scientists who have made significant strides in understanding and combating cancer. Congratulations to Dr. Kim.



Useful Information

Updating online faculty profiles – Regularly updating your faculty profile is strongly encouraged. Department faculty can update their profiles by submitting a ticket via the **Pathology Web Request Form.**

Updating website content – If you find any outdated, incorrect, or missing content on our department website (www.pathology.columbia.edu), please let us know by submitting a website support request.

Submit news content (website/intranet/digital screens) - Have interesting content (research, events, people, honors and awards, celebrations, etc.) that you wish to post on the department website or intranet, please contact Path News at pathnews@cumc.columbia.edu.

STAFF SPOTLIGHT: FACULTY

New Faculty



Anna Lee, MD, Assistant Professor of Pathology and Cell Biology at CUMC

Dr. Anna Lee is a surgical pathologist in the Department of Pathology and Cell Biology. Following graduation from Mount Sinai School of Medicine in 2015, Dr. Lee completed her residency in Anatomic and Clinical Pathology here at Columbia University Irving Medical Center. She completed a fellowship in Oncologic Surgical Pathology at Memorial Sloan Kettering Cancer Center and then returned to Columbia for a fellowship in Gastrointestinal and Liver Pathology. After working as a Surgical Pathologist at White Plains Hospital for a few years, Dr. Lee is excited to return to Columbia again as a faculty member.

- Ian A. Mellis, MD, PhD, assistant professor of Pathology and Cell Biology at CUMC (starting July 1)
- Ethan A. Mack, MD, PhD, assistant professor of Pathology and Cell Biology at CUMC (starting September 1)

Recent Faculty Tenure and Promotions

- <u>Michael Lee, MD</u>, promotied to Associate Professor of Pathology and Cell Biology (at CUMC)
- Maureen Mulhern, promoted to Assistant Professor of Genetic Counseling (in Neurology and Pathology and Cell Biology) at CUMC
- <u>Satoru Kudose, MD</u>, promoted to Associate Professor of Pathology and Cell Biology (at CUMC)
- <u>Stephen Lagana, MD</u>, promoted to Professor of Pathology and Cell Biology (at CUMC)
- <u>Carlos Pagan, MD</u>, promoted to Associate Professor of Pathology and Cell Biology (at CUMC)
- <u>Craig Soderquist, MD</u>, promoted to Associate Professor of Pathology and Cell Biology at CUMC
- <u>Andrew Teich, MD, PhD</u>, promoted to Associate Professor of Pathology and Cell Biology with tenure.
- Fann Wu, MD, PhD, promoted to Professor of Pathology and Cell Biology at CUMC

In the News

Banking on Artificial Blood

Source: ASH Chemical News



This news article from the American Society of Hematology, published in March 2025, discusses the challenges of providing blood transfusions in emergency and remote settings, and the ongoing efforts to develop a viable artificial blood substitute. It highlights the significant global blood shortages, especially in low- and middle-income countries, and the potential of synthetic blood to address these issues. Brie Stotler, MD, division chief for transfusion medicine and cellular therapy at CUIMC and NewYork Presbyterian Hospital and an associate professor of pathology and cell biology at CUMC, was quoted extensively in this article. Read the full article here.







RESEARCH

Recent Grants

Source: CUIMC Update

Swarnali Acharyya, PhD, associate professor of Pathology and Cell Biology (in the Institute for Cancer Genetics), awarded \$450,000 over three years from Metavivor for *"Targeting S100A9 signaling to treat therapy-resistant brain metastases in HER2+ breast cancer."*

Rando Allikmets, PhD, professor of Ophthalmic Sciences (in Ophthalmology and Pathology and Cell Biology): awarded \$1,844,541 over three years from the National Eye Institute for *"Stargardt/ABCA4 disease in African Americans."*

Francesca Bartolini, PhD, associate professor of Pathology and Cell Biology, awarded \$3,227,785 over five years from the National Cancer Institute for *"Investigating the Pathogenic Role of Tubulin Post-translational Modifications in CIPN."*

<u>Catherine Clelland, PhD</u>, associate professor of Pathology and Cell Biology (in the Taub Institute) at CUMC, awarded \$1,302,250 over two years from the National Institute on Aging for "Tetrahydrobiopterin Effects On Cognitive Function In Alzheimer's Disease: Biochemical, Molecular And Cognitive Analysis."

Jaewon Min, PhD, associate professor of Pathology and Cell Biology (in the Institute for Cancer Genetics), awarded \$2,056,250 over five years from the National Institute of General Medical Sciences for *"Mechanisms and Genetic Consequences of Break-Induced Replication."*

Pawel Muranski, MD, assistant professor of Medicine and Pathology and Cell Biology, awarded \$500,000 over three years from Agilent Technologies for *"Universal Platform for Manufacture of Multi-epitope Specific Cytotoxic CD4+ T cells for Adoptive Immunotherapy of Cancer and Viral Infections."*

Teresa Palomero, PhD, professor of Pathology and Cell Biology (in the Institute for Cancer Genetics) at CUMC, and Raul Rabadan, awarded \$750,000 over three years from the Leukemia and Lymphoma Society for *"Targeting Microenvironment Determinants in Peripheral T-cell Lymphoma."*

Janet Sparrow, PhD, professor of Ophthalmic Science (in Ophthalmology) and professor of Pathology and Cell Biology, awarded \$300,000 over three years from the Foundation Fighting Blindness for *"Vitamins E, C and Zinc: Therapeutics for ABCA4-disease (STGD1)."*

<u>Clarissa Waites, PhD</u>, associate professor of Pathology and Cell Biology and Neuroscience, awarded \$552,260 over one year from the National Institute on Aging for *"Uncovering stress-induced mechanisms of Tau pathology in Alzheimer's disease."*

<u>Shan Zha, MD, PhD</u>, professor of Pediatrics, Pathology and Cell Biology and of Microbiology and Immunology (in the Institute for Cancer Genetics and in the Herbert Irving Comprehensive Cancer Center), awarded \$2,148,780 over five years from the National Cancer Institute for *"The role of ATM in the suppression of lymphoid malignancy."*

RESEARCH

Recent Publications

- <u>Regulation and function of insulin and insulin-like growth factor receptor signalling</u>. **Choi, E**.*, Duan, C.* & Bai, Xc*. Nature Reviews Molecular Cell Biology (2025). (*Corresponding author)
- <u>Targeting CDK4/6 in breast cancer.</u> A Shanabag, J Armand, E Son, **H Yang**;. Exp & Mol Med, 57: 312-322, 2025
- Therapeutic benefits of maintaining CDK4/6 inhibitors and incorporating CDK2 inhibitors beyond progression in breast cancer. J Armand, S Kim, K Kim, E Son, M Kim, and **H Yang;** eLife, 14:RP104545, 2025
- Development of high-titer class-switched antibody responses to phosphorylated amino acids is prevalent in pancreatic ductal adenocarcinoma. Aguiar T, Mashiko S, Asam K, Roy P, Wang S, Frank K, Dietzel M, Schahadat LGZ, Ausmeier M, Hertel A, Duan ZRS, Aouizerat B, Genkinger JM, Remotti H, Zorn E.Front Immunol. 2025 Mar 28;16:1501943. doi: 10.3389/fimmu.2025.1501943. eCollection 2025.PMID: 40226613
- Estimating the prevalence of preoperative iron deficiency and its impact on red blood cell transfusion in adolescents undergoing scoliosis surgery: A pilot study. Qiu A, Fliginger D, Feit Y, Hassan F, Lenke LG, Li G, **Hod EA**, Eisler L.Transfusion. 2025 Apr 7. doi: 10.1111/trf.18246. Online ahead of print.PMID: 40191932]
- <u>A new, immunocompetent brain-metastatic mouse model of HER2-positive breast cancer.</u> Chen L, Chow A, Ma W, Coker C, Gu Y, Canoll P, Kandpal M, Hibshoosh H, Biswas AK, Acharyya S. Clin Exp Metastasis. 2025 Apr 12;42(3):25. doi: 10.1007/s10585-025-10343-4.PMID: 40220135
- Modulation of CREB3L2-ATF4 heterodimerization via proteasome inhibition and HRI activation in Alzheimer's disease pathology. Herline-Killian K, Pauers MM, Lipponen JE, Zrzavy MA, Gouveia Roque C, McCurdy EP, Chung KM, Hengst U. Cell Death Dis. 2025 Mar 31;16(1):225. doi: 10.1038/s41419-025-07586-0.PMID: 40164587
- <u>Therapeutic targeting of the NOTCH1 and neddylation pathways in T cell acute lymphoblastic leukemia</u>. Bertulfo K, Perez-Duran P, Miller H, Ma C, Ambesi-Impiombato A, Samon J, Mackey A, Lin WW, Ferrando AA, **Palomero T.** Proc Natl Acad Sci U S A. 2025 Apr 8;122(14):e2426742122. doi: 10.1073/pnas.2426742122. Epub 2025 Mar 31.PMID: 40163723
- Antibodies targeting ADAM17 reverse neurite outgrowth inhibition by myelin-associated inhibitors. Saha N, Chan E, Mendoza RP, Romin Y, Tipping MJ, Nikolov DB.Life Sci Alliance. 2025 Mar 25;8(6):e202403126. doi: 10.26508/Isa.202403126. Print 2025 Jun.PMID: 40132887
- <u>Beyond Scratching the Surface: A Nonpruritogenic Novel Bile Acid Derivative That Ameliorates Cholestatic-and Diet-Induced Liver Injury.</u> Haeusler R, Debosch BJ.Gastroenterology. 2025 Mar 7:S0016-5085(25)00482-2. doi: 10.1053/j.gastro.2025.03.002. Online ahead of print.PMID: 40057127
- <u>A variational deep-learning approach to modeling memory T cell dynamics.</u> van Dorp CH, Gray JI, Paik DH, Farber DL, Yates AJ. bioRxiv [Preprint]. 2025 Feb 25:2024.07.08.602409. doi: 10.1101/2024.07.08.602409. PMID: 40060443
- <u>Genetic and pharmacologic enhancement of SUMO2 conjugation prevents and reverses cognitive</u> impairment and synaptotoxicity in a preclinical model of Alzheimer's disease. Fioriti L, Wijesekara N, Argyrousi EK, Matsuzaki S, Takamura H, Satoh K, Han K, Yamauchi H, Staniszewski A, Acquarone E, Orsini F, Martucci A, Katayama T, **Arancio O**, Fraser PE. Alzheimers Dement. 2025 Mar;21(3):e70030. doi: 10.1002/ alz.70030.PMID: 40047257

EDUCATION: RESIDENCY/FELLOWSHIP PROGRAM

Meet our New 2025 Residents!



Suchet Anand, MD

AP/CP

University of Iowa, Roy J. and Lucille A. Carver College of Medicine

Suchet brings experience in digital pathology, having developed an algorithm for cell analysis and image segmentation of NK cells in renal transplant biopsies. He also conducted IHC and molecular studies, creating TMAs for colorectal cancer, gliomas, and neuroendocrine tumors. A racquet sport enthusiast for nearly 20 years, he brings both precision and energy to our team.



Nicholas Boivin, MD

AP/CP

Hackensack Meridian School of Medicine

In addition to his budding career in pathology, Nick holds both a PharmD and an MBA. During medical school, he received the Rutgers Academic Excellence Award and authored a study on HPV vaccination rates among individuals with HIV. He's also a certified personal trainer and has fostered over 100 kittens.



William Borchert, MD, PhD

AP/CP

SUNY Upstate Medical University, Alan and Marlene Norton College of Medicine Harvard University

Originally from the Hudson Valley, William earned his PhD in Population Health Sciences with a focus on Environmental Epidemiology, studying sudden cardiac death with Dr. Jamie Hart. His research has taken him to the University of Tokyo and Cambridge, and he has lectured at the Harvard Division of Continuing Education. He's also an avid gardener.



Dan Dou, MD, PhD

AP/NP

Perelman School of Medicine at the University of Pennsylvania

Dan completed his PhD in Dr. Erika Holzbaur's lab, where he investigated axonal transport of organelles. He also worked in Dr. MacLean Nasrallah's lab, researching the impact of CDKN2A/2B loss on outcomes in IDH-mutant gliomas. His pet rabbit, Nori, knows tricks—but keep your internet cables safely tucked away.



EDUCATION: RESIDENCY/FELLOWSHIP PROGRAM

Meet our new 2025 Residents!





Rose Maisner, MD

AP/CP

Rutgers New Jersey Medical School

Rose joins us with prior training in plastic surgery, where she has published extensively and received numerous awards. Along the way, she discovered a passion for Pathology. We're excited to welcome her exceptional work ethic and hunger for knowledge. She is also a classically trained ballet dancer.



Tyler Steidl, MD

AP/CP

Rutgers New Jersey Medical School

Tyler earned a master's degree researching integrins and axon regeneration in retinal ganglion neurons. He received the William S. and Dorothy G. Wallace Memorial Award for Outstanding Neuroscience Student Scholarship and served as president of his undergraduate fencing club.



Emma Thames, MD

AP/CP

McGovern Medical School, University of Texas Health Science Center at Houston

A Texas native, Emma served as Vice President of the Pathology Interest Group in medical school and conducted research on the cardiotoxicity of prostate cancer therapies. She was selected as a Sawyer Fellow for the Rice-McGovern Center for Humanities and Ethics. We also look forward to trying her acclaimed pumpkin bread.

Residency Honors and Awards



Vladislav (Vlad) Korobeynikov, MD, PhD



Barbara (Bobbie) W. Pelham-Webb, MD, PhD

Two Pathology and Cell Biology residents, **Vladislav (Vlad) Korobeynikov, MD**, **PhD** and **Barbara (Bobbie) W. Pelham-Webb, MD**, **PhD**, were part of the sixty-one residents and fellows from the Columbia University Vagelos College of Physicians and Surgeons recognized for outstanding patient care at the inaugural Academy of Clinical Excellence Rising Star Award Ceremony. The awards were presented on May 8, 2025.

The ACE Rising Star Award celebrates early-career physicians who consistently exceed expectations, demonstrate unwavering dedication to patient care, and exhibit a deep knowledge base with the ability to apply and communicate their skills effectively across clinical practice, education, and research. Read more at the <u>CUIMC Newsroom</u>.

STAFF SPOTLIGHT: IN MEMORIAM

Dr. Alexander Kratz (1965–2025)



It is with a heavy heart that we share the sad news of the passing of Dr. Alexander Kratz (1965-2025), who served as the Medical Director of the Automated Laboratory, and as the Medical Director of our Point-of-Care Testing Program. Dr. Kratz was an integral part of our

faculty for over 15 years, contributing immensely to clinical care, research, and education. His dedication, mentorship, and impish sense of humor left a lasting impact on our Department and many of our current faculty members and staff, in addition to all former trainees who had the privilege of working with him.

Dr. Kratz received his M.D. in 1989 from the University of Vienna, an M.P.H. in 1991 from the Yale University School of Public Health, and then a Ph.D. in Immunology in 1995 from Yale University; his dissertation research was recognized by a Merit Award from the American Society for Investigative Pathology. In 1996-2000, he received residency training in Clinical Pathology and fellowship training in Transfusion Medicine at the Massachusetts General Hospital, becoming Board Certified in each.

After serving as a faculty member at Harvard Medical School (2000-2006), where he was the Director of the Clinical Hematology Laboratory and the Associate Director of the Core Laboratory, we were fortunate to be able to recruit him to join us at Columbia University as an Assistant Professor in July, 2006. He was then rapidly promoted to Associate Professor in 2008, and then to Professor in 2017.

His initial roles at Columbia were as the Director of Clinical Laboratories at The Allen Hospital and as the Associate Director of our Core Laboratory. Unfortunately, not long after he arrived at Columbia, his primary mentor, Dr. Daniel Fink, a long-time Columbia faculty member, died suddenly, thereby thrusting Dr. Kratz into the role of Interim Director. Dr. Kratz took on these new responsibilities willingly and humbly, successfully exceeding all of our expectations, including his own. As a result, in 2008, he was appointed as the official Director of the Core Laboratory and of the Point-of-Care Testing Service, in addition to continuing in his role as the Director of Clinical Laboratories at The Allen Hospital.

Dr. Kratz's primary clinical role for the bulk of his time with us was to direct our large, extraordinarily busy, and highly complex, Automated Laboratory at the 168th Street campus. Indeed, he led our efforts to design, build, and inaugurate this Laboratory, significantly increasing the size and efficiency of this operation, which receives ~10,000 patient samples per day, is staffed by >120 clinical laboratory technologists and clerical staff, and produces >5,000,000 test results per year. Because of the types of testing performed there, it is our most medically exposed and politically fraught clinical service. Dr. Kratz led this effort with skill, aplomb, and a steady hand. In addition, he personally interpreted and signed out individual cases in clinical chemistry and clinical hematology, and implemented new, clinically-relevant diagnostic tests. Given his broad background in medicine, basic science, and clinical pathology, he filled these roles admirably.

He also led our efforts to continue to expand our Point-of-Care Testing Service, which supports >20 different types of testing platforms, producing >1,000,000 test results per year, often under critically-important and time-sensitive conditions, such as in the operating rooms, intensive care units, and emergency departments. Dr. Kratz ensured the quality and efficiency of this complex type of testing program.

At Harvard and Columbia, Dr. Kratz's teaching efforts extended to all levels of medical education: medical students, residents and fellows in Pathology, technical staff, and Continuing Medical Education. He was a committed, organized, and dedicated teacher who provided high quality education. He was an effective teacher in all settings: lecturer, one-onone, and small group. In recognition of his teaching skills and his passionate commitment to education, the residents in our Department voted for him to receive the 2015 Dr. Joseph G. Fink Laboratory Medicine Faculty Teaching Award. (con't)

STAFF SPOTLIGHT: IN MEMORIAM

(con't)

Dr. Kratz was also dedicated to advancing our field by participating in translational and patient-oriented research, particularly focusing on the practice and management of clinical laboratory testing. He was consistently productive throughout his career, with ~80 publications to his credit. Most of these focused on the theme of high-throughput laboratory testing, with a specific focus on laboratory "wet" hematology, for which he had an international reputation. He was also well known for his expertise regarding laboratory reference ranges, including editing the relevant chapter in several editions of Harrison's Principles of Internal Medicine.

Dr. Kratz was well respected by his peers, both nationally and internationally. For example, he was often invited to speak at national and international meetings. In particular, he had important leadership positions in two international organizations relevant to his interests: the International Council for Standardization in Haematology (ICSH) and the International Society for Laboratory Hematology. One prominent outcome of these efforts was his first-authored paper providing the "ICSH recommendations for modified and alternate methods measuring the erythrocyte sedimentation rate."

Dr. Kratz exemplified the values of academic medicine. He combined deep clinical expertise with a commitment to teaching and a passion for advancing laboratory science. His work improved patient care, enriched the careers of countless trainees and colleagues, and helped define best practices in laboratory medicine worldwide. We remember him not only as a superb physician-scientist and educator, but also as a generous colleague, a trusted mentor, and a deeply kind person whose wit and wisdom continue to echo through our halls. His absence is felt every day, but his legacy lives on in the work we do and the values we uphold.

Dorian Dufore, 1952–2025



It is with great sadness that we announce the passing of Dorian Dufore, a treasured member of the Columbia University/Pathology & Cell Biology community whose commitment, integrity, and warmth left an indelible mark on our institution.

Dorian served Columbia for over 26 years, exemplifying tireless dedication and heartfelt service. She was known for her unwavering professionalism, her generous spirit, and the genuine care she extended to colleagues, students, and faculty alike. Whether navigating the challenges of day-to-day operations or offering a kind word when it was most

needed, Dorian did her work with pride, grace, humility, and excellence.

More than a colleague, Dorian was a mentor, a friend, and a steady presence who enriched our university family. Her contributions were felt in every corner of the campus she touched, and her memory will continue to inspire us.

As we remember Dorian, we honor not only her years of loyal service but the way she made Columbia a better place. She will be deeply missed, and her legacy will continue to live on in the lives of all who knew her.

We extend our heartfelt condolences to her family, friends, and loved ones.

STAFF SPOTLIGHT: MILESTONES & ACHIEVEMENTS

A Quiet Force, A Lasting Legacy: A Fond Farewell to Mireya Gutierrez

After 22 years of devoted service, Mireya Gutierrez has retired from the Department of Pathology and Cell Biology on June 30, 2025. Since joining us in 2003, Mireya has been a steady and deeply valued presence in our laboratories, someone whose quiet dedication and hard work have steadfastly supported our research mission over the years. Her role may often be behind the scenes, but her impact has always been front and center.

In the meticulous world of scientific research, where precision and reliability are paramount, Mireya has set the gold standard. She ensures the cleanliness and readiness of our laboratory's glassware, knowing that even the slightest contamination could compromise results. Mireya's commitment to her work is unmatched, and she performs it with such quiet resilience and independence that it's easy to overlook just how much she carries on her capable shoulders. Mireya takes on her responsibilities humbly, but her contributions are vital to our department's research success.

Beyond her professional contributions, Mireya has brightened our department with her warmth, kindness, and ever-present smile. She enthusiastically takes on any challenge, and her approachable nature has made her a beloved figure in our department. Mireya's resilience and positivity inspire us all, and her empanadas? Well, they are simply the best —a testament to the care she brings to everything she does.

Mireya's dedication, kindness, and unwavering commitment as a quiet yet vital force have left a lasting mark on our community. She embodies the best of our department and CUIMC. While we will miss her dearly, her retirement is well-earned. We are grateful for all she has given and wish her nothing but happiness in the next chapter. All the best to you, Mireya!

Celebrating New Graduates!





On May 20, 2025, Maria Barros, administrative coordinator for <u>Anatomic Pathology</u>, graduated with her Master of Health Administration from Columbia University. While balancing fulltime work, she applied advanced training in health systems management, HR strategy, and organizational leadership directly to her role. "As one of the 8% of Latinas in the U.S. to hold a master's degree, I take great pride in this accomplishment," said Barros. "This experience has strengthened my ability to support recruitment, streamline HR operations, and lead process improvements in a complex healthcare environment."Congratulations, Maria!



Alexa De Jesus, clinical lab technologist in the <u>Clinical Pharmacology and Toxicology (CPTL)</u> lab recently graduated with her Master's in Health Administration from Columbia University's Mailman School of Public Health. The interdisciplinary program emphasized leadership, equity, and system-level transformation in healthcare. "This program gave me more than technical tools—it gave me a community, a shared purpose, and the confidence to step into the work ahead with clarity and conviction," said De Jesus. "It challenged me to think critically about how operations, equity, and patient outcomes intersect." Congratulations, Alexa!

Eric K. Ho, senior staff associate for the <u>Immunogenetics and Clinical Immunology Laboratory</u>, recently earned his doctoral degree in healthcare administration from the School of Public and Health Administration at Franklin University, marking a significant milestone in a career rooted in chemistry, immunology, biostatistics, and health policy. "This doctorate represents more than an academic achievement," said Dr. Ho. "It is a testament to persistence, purpose, and a lifelong commitment to improving healthcare through science, leadership, and compassion. This degree has not only deepened my understanding of healthcare systems, but also equipped me to lead initiatives that improve patient safety and operational performance." He extends special thanks to Dr. Kevin Gardner, Chair, for supporting his dissertation research and academic journey. Congratulations, Eric!

STAFF SPOTLIGHT: MILESTONES & ACHIEVEMENTS

Celebrating Excellence: Pathology Shines at the CUIMC Luminary Employee Recognition Event!

On May 15, 2025, Columbia University Irving Medical Center (CUIMC) came together to honor outstanding contributions in education, leadership, and mentorship at the <u>2025 Luminary Employee</u> <u>Recognition Event</u>. Organized by the CUIMC Women Employee Resource Group, the event highlighted the exceptional talent and dedication that define our institution.

Launched as the "Spotlight Your Colleagues" campaign, the initiative received hundreds of nominations and ultimately recognized 118 individuals and one team across four CUIMC campuses and 43 departments. Approximately 125 employees attended the celebration, which featured a thoughtprovoking panel discussion on leadership, mentorship, and education—core values that continue to strengthen our community. As Clara Lapiner, Executive Sponsor of the CUIMC Women's ERG, noted, "It's the people who make up our community that keep us going."

We are especially proud to celebrate the following members of the Department of Pathology and Cell Biology who were recognized for their exemplary service and leadership:

Melissa Carter, Associate Director of Clinical Revenue, was honored for her exceptional leadership and subject matter expertise in Health Information Management (HIM), Laboratory Information Systems (LIS), operations, finance, contracts, and regulatory compliance. For over two decades, Melissa has been "instrumental in optimizing operations and driving strategic improvements across Pathology and CUIMC." Her leadership in major projects such as Epic implementation, combined with her commitment to mentorship and collaboration, continues to drive excellence throughout the department.

Susan Ceballo, HR Generalist, was recognized for her outstanding mentorship and unwavering support. She was praised for "exceptionally" training colleagues on Columbia HR processes and procedures, and for always being "supportive and there to help manage nuanced HR situations".

Rene Deknatel, Procurement Supervisor, received accolades for her impactful leadership and peoplecentered approach. Colleagues praised her authenticity, practical insight, and approachable demeanor, describing her as a "breath of fresh air," noting her steady and inspiring presence whose guidance is deeply valued and needed.

Courtney Tulli, HR Generalist, was recognized for her calm leadership, serving as a supportive mentor and a valuable resource of knowledge. As a new hire, one colleague found Courtney to be a "sense of calm in complex situations." Her ability to navigate complex situations with composure and her supportive nature have made her an invaluable resource and trusted leader within the department.

These honorees exemplify the values of leadership, mentorship, and collaboration that define both our department and the broader CUIMC community. Their contributions continue to inspire excellence and foster a culture of growth and mutual respect.



There are many tax advantages to giving appreciated stock to the Department of Pathology and Cell Biology. In donating appreciated securities, you avoid capital gains tax and qualify for a charitable income tax deduction for the full value of the securities. Please visit <u>www.giving.cuimc.columbia.edu/ways-give/</u><u>gifts-securities</u> for more information. And visit the <u>Pathology and Cell Biology Giving Page</u> if you'd like more information on how to make a gift to one of our many worthwhile educational or research funds.

STAFF SPOTLIGHT: MILESTONES & ACHIEVEMENTS

Celebrating Excellence: Joann Li Receives National Distinguished Service Award



We are immensely proud to announce that our esteemed Department Administrator, Joann Li, has been named the recipient of the <u>2025 Distinguished Service Award</u> <u>in Pathology Department Administration</u>. She will formally receive the award at the AAPath Annual Meeting in July 2025.

This highly competitive national honor, awarded by the Academic Pathology Executives Section (APEX), recognizes an administrator who has shown "extraordinary effort" and made significant contributions not only to their own institution but to the entire field of academic pathology administration. The selection by the Association of American Pathologists (AAPath) Council signifies the highest level of national recognition from pathology leadership. Joann's long-standing impact and ongoing leadership perfectly embody the spirit of this national recognition.

For all of us in the department, this award formally acknowledges what we have long known: Joann is the bedrock of our community. For over 30 years, Joann has been an unwavering pillar within the department and the University, embodying dedication and excellence. As our Department Administrator, she consistently demonstrates exceptional leadership, tirelessly guiding our operations and fostering our success through her strategic vision, steadfast support, and deep commitment, which are instrumental in everything we do. This award celebrates her role as a leader and mentor both within our walls and in the broader academic pathology community.

Please join us in extending our heartfelt congratulations to Joann Li on this truly welldeserved honor, as we celebrate her ongoing leadership within our department and the broader field of academic pathology.

Wichterle Lab Postdoc Secures Independent Faculty Position at University of Chicago

We are proud to announce that Dr. Sumin Jang, a postdoctoral researcher in the Wichterle Lab, has accepted a tenure-track Assistant Professor position in the Department of Neurobiology at the University of Chicago. Dr. Jang will launch her independent laboratory in January 2026. Dr. Jang's research focuses on unraveling the mechanisms underlying the remarkable expansion of the human central nervous system (CNS) compared to other mammals. Her groundbreaking work, published last year in Nature Neuroscience, identified an evolutionarily novel progenitor domain in the embryonic human spinal cord that enhances motor neuron production. In her new lab, Dr. Jang will explore how the diversity of neural progenitors in humans differs from that in rodents and non-human primates, aiming to uncover the developmental origins of unique human central nervous system (CNS) features. We congratulate Dr. Jang on this exciting next step and look forward to her continued contributions to neuroscience!

EDUCATION @PATHOLOGY: The annual Dr. Charles Marboe Lecture was created in honor and recognition of Dr. Marboe's distinguished career at Columbia University and within the Department of Pathology and Cell Biology. The lectureship will continue Dr. Marboe's history of sharing his cardiovascular pathology, cardiology, and heart transplantation expertise and ensure quality education within the department by supporting Columbia's most important assets: its accomplished educators and faculty members who shape future leaders. Visit <u>https://bit.ly/3NfMAOf</u> to make a tax-deductible gift to the Dr. Charles Marboe Lecture fund.

COMMUNITY NEWS

Local Students, National Impact: NextGen Lab Tech Pilot Program Inspires Future Healthcare Leaders

The department has collaborated on a high-impact initiative that addresses a critical need in the healthcare workforce while opening doors to promising careers for high school students. The <u>NextGen Lab Tech pilot</u> <u>program</u>, launched at Charles E. Gorton High School in Yonkers, NY, is making meaningful progress in developing a pipeline of skilled laboratory technicians. This initiative exemplifies the power of strategic collaboration in advancing both community health and economic opportunity.

Developed in response to the nationwide shortage of laboratory professionals, the program introduces high school juniors to the laboratory technician career path and educates them on academic pathways that lead to in-demand roles. Charles E. Gorton High School, a magnet school focused on medical professions, was strategically selected as the pilot site. The program has already hosted two cornerstone events designed to inspire and inform students:

- Career & College Info Session (April 10, 2025): This session introduced junior students to diverse career opportunities in laboratory technology and highlighted academic pathways such as SUNY Broome's fully online AAS in Clinical Laboratory Technology, which leads to clinical laboratory degrees.

- Lab Immersion Day (April 24, 2025): Forty Gorton juniors participated in hands-on case studies, gaining firsthand experience with the daily responsibilities of lab technicians. Students collaborated with scientists from across the country, engaging in interactive exercises in hematology, histology, cytogenetics, and microbiology. They also presented their findings, developing both technical and communication skills.

These immersive experiences offer invaluable exposure to diagnostic techniques and data analysis, helping students envision a future in science and healthcare.

A Collaborative Effort with National Impact

The NextGen Lab Tech pilot is led by a dynamic collaboration among COLA (Commission on Lab Accreditation), Columbia University's Department of Pathology and Cell Biology, and the American Public Health Laboratories (APHL). The Westchester Women's Agenda's Female Economic

> (Left) Participating students from the Charles E. Gorton High School and their program supporters, including Dr. Tiffany Thomas (3rd from left) and Joann Li (second from the right) at the Info Session on April 10.

Empowerment workgroup is also playing a key role in guiding the initiative, reinforcing its mission to promote sustainable career pathways.

Voices of Support

Leaders involved in the initiative have expressed strong support:

- Jamie Morales, Principal of Charles E. Gorton High School, remarked, "This collaboration offers our students a direct path to rewarding, well-paying careers in healthcare and science, benefiting both individuals and our broader community."

- Joann Li, Departmental Administrator of Columbia University's Department of Pathology and Cell Biology, emphasized, "Addressing the lab tech shortage is essential to maintaining high standards of healthcare in New York."

- Kathy Nucifora, Chief Operating Officer of COLA, shared her enthusiasm for providing students with "immersive experiences and real-world career pathways," noting that this partnership is helping to

create a "playbook for similar schools and community

partners nationwide."

Looking Ahead

The NextGen Lab Tech pilot empowers students to prepare for successful futures in science and healthcare while ensuring a steady supply of welltrained professionals for the region's healthcare system. If successful, the program is poised to serve as a national model through the Workforce Action Alliance playbook, strengthening the laboratory workforce across the country. This initiative demonstrates how targeted partnerships can drive sustainable career development and make meaningful contributions to public health and economic resilience. We look forward to the continued growth and success of this groundbreaking program.



HIGHLIGHTED EVENTS: DEPARTMENT

NENE 2025: A Vibrant Gathering of Nuclear Envelope Researchers at Columbia University

In May 2025, in partnership with the Herbert Irving Comprehensive Cancer Center (HICCC), the 2025 NENE meeting was hosted at CUIMC by Dr. Mégane Rayer, a postdoc in the laboratory of Dr. Gregg Gundersen, professor of pathology and cell biology.

For the first time, the Northeast Nuclear Envelope (NENE) meeting was hosted at Columbia University, marking a departure from its traditional venue at Yale University. This one-day event, held in collaboration with HICC and the Yale Department of Cell Biology, was entirely organized by trainees postdoctoral fellows and PhD students. This year's organizing team included three trainees from our department: Dr. Mégane Rayer (postdoc), Dr. Sebastian Quintremil, and Paige Wilson (PhD student), along with three colleagues from Yale University.

NENE 2025 marked the sixth edition of this regional meeting, which brings together laboratories across the Northeast with a shared interest in the nuclear envelope and related cellular processes. It serves as a unique opportunity for researchers to present their work, discover novel findings

in nuclear biology, and expand their professional networks.

The nuclear envelope is a dynamic and versatile structure that orchestrates various biological functions, from intracellular signaling and molecular transport to DNA repair and transcriptional regulation. Meetings like NENE are essential to promote data sharing and collaborative discussions that deepen our understanding of this critical cellular compartment.

NENE 2025 was a great success!

Throughout the day, PIs, senior researchers, and early-career scientists engaged in lively discussions in a warm and welcoming atmosphere, fostering a valuable opportunity to exchange ideas and spark new directions in the field. The talks and posters were of excellent guality and attendees agreed wholehartedly on the event's success:

"In terms of organization, it was great! The schedule had a good number of talks, and it was on time! Overall, the scientific content was diverse enough to be interesting. During poster sessions, there was ample time to focus on certain topics and discuss with the presenters. The room for

the poster session could have been better; some of the posters were at the far end of the room and were hardly noticeable to most of the audience. While the commute was a bit tiring for those traveling from New Haven, the science made up for it!" - Anonymous attendee.

A Personal Note from the Organizer, Dr. Mégane Rayer

"A couple of years ago, my PI, Dr. Gregg Gundersen, challenged me to organize a regional meeting here at Columbia University. The NENE meeting was the perfect opportunity to take on that challenge. It wasn't easy - organizing such an event came with many hurdles - but we did it, and I'm incredibly happy and proud of the result.

I want to extend my heartfelt thanks to the organizing team and everyone who helped make this event possible. The quality of the talks and posters was truly outstanding. One of the highlights for me was a fascinating presentation on bacterial nuclear invasion and its impact on the nuclear envelope. And of course, our keynote lecture - a fascinating "ballad through the nuclear pore" by Dr. Mike Sprout - was a beautiful and inspiring way to close the day."



(Top-Left) Hannah Kurka Margolis, MIT PhD student, presents her work on nuclear invasion by bacteria; (Top-Right) PhD student presents her poster about the nuclear shape of the neutrophils; (Botton-Left) A travel inside the nuclear pore by the Keynote speaker, Dr. Mike Rout, from Rockefeller University;

(Botton-Left) Event organizers: Dr Anthony Isenhour, Dr Vanessa Todorow, Dr Mégane Rayer, Dr Sebastian Quintremil, Dr Chandrayee Mukherjee (and Paige Wilson, PhD Student, not pictured); (Bottom) Group photo of NENE2025 attendees



HIGHLIGHTED EVENTS: DEPARTMENT

Celebrating the Heart of Healthcare: Medical Laboratory Professionals Week 2025

This year, Medical Laboratory Professionals Week (Lab Week), an annual event honoring medical laboratory professionals and pathologists who play a vital role in every aspect of healthcare and patient advocacy, took place from April 20-26. Lab Week is an opportunity to acknowledge the significant and often underappreciated efforts of laboratory teams that provide advanced care to patients every day — and have some fun at the same time!

Laboratories at CUIMC and NYP, such as the <u>Personalized Genomic Medicine (PGM)</u> and <u>Clinical Pharmacology</u> and <u>Toxicology (CPTL)</u> labs, participated in activities that showcased teamwork and appreciation. Lab Week genuinely honors our lab professionals, emphasizing their essential role in our laboratory community. "Our PGM and CPTL teams always look forward to Lab Week festivities each year to take a moment from our busy and stressful jobs to simply have fun and enjoy some laughs. Labs often get overlooked, so this is a great way to recognize the amazing work that our teams do every day to provide cutting-edge care for our patients", says. Chris Freeman, Divisional Administrator for PGM. The department organized a self-sponsored breakfast and lunch, but the highlight was the creative, free activities, such as this year's Lab Week Olympics, featuring games like "tapetube bowling" and "guess the volume." We hope these images express the joy and commitment of our laboratory professionals. Thank you for your unwavering dedication to patient advocacy and health!





(Top-Left) Lab week Olympics: Claudia Cujar takes part in the tape-tube bowling.

(Top-Right) Priya Patel takes a blind guess at hitting 400 uL exactly on the pipette challenge.

(Botton-Left) Dr. Mansukhani and his attempt to Guess the Volume of liquid in a variety of tube types.;

(Botton) **Winter Garden Lab Week Celebration**: Laboratories from NYP-CUIMC participate in a lab week celebration on April 24th, displaying creative posters and displays that highlight the exciting work we do. Children, healthcare professionals, and visitors all enjoyed meeting the laboratory team.



The Columbia Renal Biopsy Course July 16-18, 2025

This course assists nephrologists and nephropathologists in diagnosing and managing common medical renal diseases.

Register Here

