# COLUMBIA PATHOLOGY REPORT









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# Columbia Pathology and Cell Biology Report

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# Connection and Meaning in the Season of Change

Fall has always been a season that makes me slow down a little, not because things are less busy (they never are!), but because something about the changing light and cooler air invites reflection. The world feels quieter for a moment, even if our inboxes don't. Maybe that's why I've always loved this time of year. It's a reminder that progress isn't just about what we take on, but also what we're willing to set down.

I think that's why I find this season so grounding. It reminds us that change doesn't always have to be dramatic to be meaningful. Sometimes it's as simple as recognizing what's working and what isn't and giving ourselves permission to pivot. As the year winds down, fall invites us to practice the art of letting go, to notice the quiet beauty in change, and to stay connected to what matters most. It's easy to get swept up in the projects, deadlines, and routines of the critical work we do, but this season has a way of pressing pause, of reminding us to look around at the people who make our work meaningful. The small conversations between meetings. The shared moments with our teams that make all the difference.

The rhythm of the fall always brings renewed energy, new projects, new ideas, and new faces joining our community. But alongside that energy comes the gentle reminder that growth doesn't have to mean just adding more to our plates. It can also mean refining how we work, reconnecting with what inspires us, or simply taking a moment to breathe through it all. Progress doesn't have to be loud to be real.

This fall, I've been especially mindful of connection. Amid busy schedules and long to-do lists, it's easy to overlook the small, human moments that give our work its meaning. It's the quick check-ins, the shared laughter, and the collaboration that make our challenges feel a little lighter. Those moments are what keep us going. They remind us that even in a fast-moving and ever-changing environment, we're part of something larger than ourselves.

And connection takes many forms. Sometimes it's the mentorship between colleagues, or the curiosity that sparks when a conversation turns into a new idea. Other times, it's found in the simple act of showing up, attending a department event, reaching out to a teammate, or taking a genuine interest in someone's work or well-being. Those small gestures build the culture that defines who we are.

So as you read through this issue, I hope it gives you a moment to pause - to celebrate what's been accomplished, to reconnect with colleagues, and to reflect on the growth that comes from change. Fall teaches us that letting go isn't about loss; it's about making room for something new. And as we head into the close of another year, that feels like the perfect reminder.

Warmly,

Milan

Strategic Communications Manager, Department of Pathology and Cell Biology

Fredricks

#### STAFF SPOTLIGHT: HONORS AND AWARDS

# Celebrating Excellence: Department Leaders Honored with National Awards

Our department is proud to announce that three of our esteemed colleagues have been recognized with prestigious national awards for their significant contributions to medicine and administration.

# **AABB Honors Leaders in Transfusion Medicine**



Steve L. Spitalnik MD, has received the 2025 Tibor Greenwalt Memorial Award. This award recognizes individuals for major scientific or clinical contributions to hematology, transfusion medicine, or biotherapy. Dr. Spitalnik, professor of pathology and cell biology and executive Vice Chair for Laboratory Medicine, was celebrated for "his singular career that has profoundly influenced the blood and biotherapies field." His extensive research and clinical work have greatly impacted blood transfusion, stem cell transplantation, and therapeutic apheresis practices. He has authored over 250 peer-reviewed publications and served as principal investigator on numerous NIH-funded studies, demonstrating his unwavering dedication to scientific progress. His passionate focus on red blood cell biology and the glycobiology of blood group antigens reflects his deep commitment to improving patient care. Beyond his scientific achievements, Dr. Spitalnik has been a respected leader and mentor within the AABB community, serving diligently on the AABB Board of Directors and guiding the next generation of scientists and clinicians.



Yvette Tanhehco, MD, PhD, MS, is the recipient of the 2025 John Elliott Memorial Award. The award honors individuals who have shown exceptional service and leadership to the AABB through committee work, leadership roles, and sustained contributions to the association's mission. Dr. Tanhehco is recognized for "her strong leadership, unwavering commitment, and critical contributions to the blood and biotherapies community." As associate professor of pathology and cell biology at CUMC, assistant director of transfusion medicine, and director of the cellular therapy laboratory, her work is extensive. Her dedicated involvement in AABB committees has been instrumental in advancing key research and educational initiatives, reinforcing the association's leadership in the field

# **National Recognition for Administrative Excellence**



Joann Li, department administrator, has received the 2025 Award for Distinguished Service in Pathology Department Administration. This national honor from the Academic Pathology Executives Section (APEX) of the Association of American Pathologists (AAPath) recognizes her exceptional leadership and decades of service. The award celebrates her significant contributions to both the department and the wider field of academic pathology administration. Joann was formally honored at the AAPath Annual Meeting in July 2025 and more details can be found in our <a href="Spring 2025 newsletter">Spring 2025 newsletter</a>.

Congratulations to Dr. Spitalnik, Dr. Tanhehco, and Joann Li on their outstanding and well-deserved achievements!

#### STAFF SPOTLIGHT: HONORS AND AWARDS

# Dr. Alison M. Taylor Appointed Florence Irving Assistant Professor



Columbia University Irving Medical Center is proud to announce the appointment of <u>Alison M. Taylor, PhD</u>, as the Florence Irving assistant professor of pathology and cell biology at the Herbert Irving Comprehensive Cancer Center.

Her three-year term began on July 1, 2025, and runs through June 30, 2028. This prestigious appointment is part of the Irving Assistant Professorships, established in 1987 through a generous \$11 million pledge from Herbert and Florence Irving. The program supports promising early-career faculty engaged

in translational clinical research, in collaboration with the Irving Institute for Clinical and Translational Research.

In a congratulatory message, it was noted that Dr. Taylor's appointment "is an expression of our support for your work and our confidence in your ability to make significant contributions to academic medicine over the course of your career." We congratulate Dr. Taylor on this significant milestone and look forward to her continued impact on advancing clinical and translational research.

### Other Honors



Michele Disco, MS, CGC, lecturer in genetic counseling (in pathology and cell biology and pediatrics) at CUMC, will serve on the American Society of Human Genetics Membership Engagement Committee starting in January 2026 for a three-year commitment. Michele welcomes feedback on people's experiences with ASHG and ideas for how ASHG can better serve their professional needs. Additionally, Michele contributed a chapter (Chapter 11: Obtaining Consent in Acute Setting) to a book entitled "Practical Problems and Approaches in Genetic Counseling Challenges in the Era of Genomic Medicine". Boca Raton, FL: CRC Press; 2026: page 68-73. DOI: 10.1201/9781003397847-11



<u>Tanji Kurenai, MD, PhD</u>, professor of pathology and cell biology at CUMC, was named one of the <u>2025 Castle Connolly Top Doctors</u>.

# **Faculty Appointments and Promotions**

Effective July 1, 2025

- Govind Bhagat, MBBS, designated as Professor Emeritus of Pathology at CUMC
- Eric K. Ho, PhD, appointed to Assistant Professor of Pathology and Cell Biology at CUMC
- <u>David Owens, PhD</u>, promoted to Professor of Epithelial Cell Biology (in Dermatology, and Pathology and Cell Biology, and Dental Medicine), with tenure.
- Andrew Sproul, PhD, promoted to Associate Professor of Pathology and Cell Biology (in the Taub Institute for Research on Alzheimer's Disease and the Aging Brain) at CUMC.
- <u>Harris H. Wang, PhD</u>, promoted to Professor of Systems Biology, of Pathology and Cell Biology, and of Biomedical Engineering, with tenure.

#### **Recent Grants**

Source: Path Research Administration and CUIMC Weekly Update

<u>Osama Al Dalahmah, MD, PhD</u>, National Institute of Neurological Disorders and Stroke, "The role of nuclear mechano-transduction in regulating gene expression and shaping the spatial landscape in glioblastoma."

Osama Al Dalahmah, MD, PhD, National Institute on Aging, "Deciphering the role of CD44 astrocytes in Alzheimer's disease."

<u>Peter Canoll, MD, PhD</u>, **National Cancer Institute** (subcontract with Mayo Clinic Jacksonville), "Generating Synthetic Lethality in Glioblastoma with a First-In-Class Non-Muscle Myosin II Inhibitor."

Eunhee Choi, PhD, Irma T Hirschl Trust, "Structure-function relationship of the insulin receptor family."

<u>Tae Wan Kim, PhD</u>, **National Institute on Aging**, "FOXO3-dependent proinflammatory transcription program of AD."

Alex Rai, PhD, \$600,000 over three years for a subaward from the **National Institutes of Health**, "Validation and clinical development of plasma EV protein biomarkers for minimally invasive detection of Alzheimer's disease."

Hans-Willem Snoeck and <u>Anjali Saqi, MD, MBA</u>, \$1,000,000 over three years from the **Kully Family Foundation**, "Development of cell replacement therapy for idiopathic pulmonary fibrosis and childhood interstitial lung disease."

Andrew Teich, MD, PhD, and Lawrence Honig, The 2025 Ludwig Center Pilot Program in Neurodegeneration, "A Proposal to study the Molecular and Cellular basis of Alzheimer's Disease-associated Microbleeds, Microinfarcts, and associated vascular disease."

<u>Clarissa Waites, PhD</u>, and <u>Ulrich Hengst, PhD</u>, The 2025 Ludwig Center Pilot Program in Neurodegeneration, "The role of IFN1 Signaling in Chronic Stress-Induced Disruption of the Blood-Brain-Barrier."

Stuart Weisberg, MD, PhD, National Institute of Diabetes and Digestive and Kidney Diseases, "Mechanisms of pancreatic inflammation in obesity."

<u>Hynek Wichterle, PhD</u>, \$3,132,108 over five years from the **National Institute of Neurological Disorders and Stroke**, "Effects of re-expression of motor neuron selector transcription factors on ALS pathology."

<u>Hynek Wichterle, PhD</u>, (MPI w. Chaolin Zhang), **National Institute of Neurological Disorders and Stroke**, "Engineering alternative splicing programs to accelerate maturation of stem cell-derived neurons."

<u>Ai Yamamoto, PhD</u>, \$3,640,432 over five years from the **National Institute on Aging**, "Calcium signaling and autophagy defects in Alzheimer's disease neurons."

<u>Hee Wong Yang, PhD</u>, **Melanoma Research Foundation**, "Overcoming Drug Resistance in NRAS-Mutant Melanoma via Epigenetic Therapy."

# **Recent Publications**

- S Kim\*, E Son\*, H Park, **M Kim**, and **H Yang**; Dual targeting CDK4/6 and CDK7 augments tumor response and anti-tumor immunity in breast cancer. **J of Clinical Investigation** (In press)
- K Kim, J Armand, S Kim, and **H Yang**; *E2F activity determines mitosis versus whole-genome duplication in G2-arrested cells.* **Nat Comm**, 16: 6677, 2025
- Lee, J., Sohn, E.J., Lee, J., Cheng, A.Y., Taglialatela, A., Ciccia, A., and **Min, J.** (2025) *Distinct mechanisms underlying extrachromosomal telomere DNA generation in ALT cancers.* **Nucleic Acids Res**. 10.1093/nar/gkaf771
- Ma M, Paryani F, Jakubiak K, Xia S, Antoku S, Kannan A, Lee J, Madden N, Li J, Chen D, Hargus G, Mahajan A, Flowers X, Menon V, Harms, A, Sulzer D, **Goldman JE**, Sims P, Al-Dalahmah O. *The spatial landscape of glial pathology and T-cell response in Parkinson's Disease substantia nigra*. **Nat Commun**, in press.
- Nasr SH, Royal V, Best Rocha A, Büttner-Herold M, Roufosse C, Bridoux F, Ismail W, Bu L, Cornell LD, Dendooven A, Gupta RK, Hara S, Javaugue V, Kozakowski N, Kudose S, Méndez GP, Oliver K, Picken MM, Santoriello D, Sethi S, Shimizu A, Singh G, Stokes MB, Wang SX, Leung N, Markowitz GS, D'Agati VD. Renal Pathology Society/International Kidney and Monoclonal Gammopathy Research Group consensus on pathologic definitions and terminology of monoclonal gammopathy-associated kidney lesions. Kidney Int. 2025 Aug;108(2):184-193. PMID: 40280412
- Turi GF\*, Teng S\*, Chen X, Lim ECY, Dias C, Hu R, Wang R, Zhen F, Peng Y (2025) Serotonin modulates infraslow oscillation in the dentate gyrus during Non-REM sleep. Elife. 2025 Apr 3;13:RP100196. doi: 10.7554/eLife.100196. PMID: 40178074. \* co-first author.
- Zhi X, Wu F, Qian J, Ochiai Y, Lian G, Malagola E, Zheng B, Tu R, Zeng Y, Kobayashi H, Xia Z, Wang R, Peng Y, Shi Q, Chen D, Ryeom SW, Wang TC. (2025) Nociceptive neurons promote gastric tumour progression via a CGRP-RAMP1 axis. Nature. 2025 Feb 19. doi: 10.1038/s41586-025-08591-1. PMID: 39972142.
- Stokes MB. Complement Activation in BK Polyoma Virus Nephropathy: What's the Story? Kidney Int Rep. 2025 May 17;10(7):2110-2112
- Christiaan H. van Dorp, Joshua I. Gray, Daniel H. Paik, Donna L. Farber\*, **Andrew J. Yates**\*. *A variational deep-learning approach to modeling memory T cell dynamics*. **PLoS Computational Biology**, in press (2025)
- Nora Lam, J. Carlos Angel, Bruce A. Buchholz, Stuart P. Weisberg, Brea H. Brown, Julia Davis-Porada, Daniel P. Caron, Isaac J. Jensen, YoonSeung Lee, Peter A. Szabo, Basak B. Ural, Steven B. Wells, Masaru Kubota, Rei Matsumoto, Maigan Brusko, Todd M. Brusko, Chao Lu, Andrew J. Yates, Donna L. Farber. Continuous turnover and asynchronous aging of human memory T cells across tissues. Immunity, in press (2025)
- Sanmoy Pathak, Thea Hogan, Sanket Rane, Yundi Huang, Charles Sinclair, Simon Barry, Larissa Carnevalli, Andrew J. Yates\*, Benedict Seddon\*. A linear ontogeny accounts for the development of naive, memory, and tumor-infiltrating regulatory T cells in mice. Science Immunology, 10(108):eadu7341 (2025)



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 <a href="https://www.giving.cuimc.columbia.edu/ways-give/gifts-securities">www.giving.cuimc.columbia.edu/ways-give/gifts-securities</a> for more information. And visit the <a href="https://www.giving.cuimc.columbia.edu/ways-give/gifts-securities">Pathology and Cell Biology Giving Page</a> if you'd like more information on how to make a gift to one of our many worthwhile educational or research funds.

# Turning Back the Clock on Neurons: A New Path Toward Combating Neurodegeneration Source: Internal



A study in Nature Neuroscience, led by Hynek Wichterle, PhD, professor of pathology and cell biology; rehabilitation & regenerative medicine and in neuroscience (neurology), with first authors Dr. Emily Lowry and Dr. Tulsi Patel (assistant professor at Rutgers University), tests a new strategy to reset the transcriptional age of neurons that are vulnerable to age-dependent neurodegenerative disease. Previous attempts to reactivate youthful gene expression programs have centered around the re-expression of the "Yamanaka factors", a group of transcription factors that can reprogram terminally differentiated cells to a pluripotent state but carry major risks, including cellular de-differentiation and teratoma formation.

Instead, Wichterle and his team focused on the motor neuron selector transcription factors ISL1 and LHX3, which govern the early gene expression program in embryonic motor neurons but are downregulated as motor neurons mature. They reasoned that these lineage-specific factors would be the best candidates to "turn back the clock" in aged motor neurons without disrupting motor function. Using a motor neuron-specific viral expression system developed by Dr. Patel coupled with single nucleus multiome sequencing, they found that ISL1 and LHX3 re-expression partially reactivates early gene expression patterns in mature motor neurons in vivo. Interestingly, the "rejuvenating" effect of these factors was most pronounced in alpha motor neurons controlling muscle contractions, which are also most vulnerable in ALS, while it had minimal effect on gene expression in gamma motor neurons that are resistant to degeneration.

When they tested these factors in an aggressive mouse model of ALS, they observed a dramatic reduction in the accumulation of mutant protein in vulnerable motor neurons at early stages of the disease and a delay in motor neuron degeneration and clinical phenotypes at later stages. These findings serve as proof-of-concept for new, cell-type specific strategies to attenuate age-related neurodegeneration. See also a research briefing written by Emily Lowry and Tulsi Patel.

# Systematic analysis of cellular cross-talk reveals a role for SEMA6D-TREM2 in regulating microglial function in Alzheimer's disease

Source: TaubCONNECT Research Perspective: August 2025



In this study, which was recently published in <u>Science Translational Medicine</u>, our researchers Gina Fina, PhD, associate research scientist, and <u>Tae-Wan Kim, PhD</u>, associate professor of pathology and cell biology, in close collaboration with the researchers of Ohio State University, set out to investigate how brain cell types communicate with one another and how these interactions become disrupted in Alzheimer's disease (AD). By integrating single-nucleus RNA sequencing with spatial transcriptomics, they identified a previously unrecognized interaction between neuronal SEMA6D and microglial TREM2.

They found that the SEMA6D-TREM2 signaling pathway is activated around amyloid plaques and enhances the ability of microglia to clear toxic A $\beta$  aggregates. Importantly, as the disease progresses, the loss of SEMA6D expression is associated with diminished microglial activation and impaired plaque clearance, suggesting a mechanism that may contribute to worsening pathology at later stages.

It was especially gratifying to see this pathway emerge from computational prediction, be confirmed in human brain tissue, and then validated in functional experiments using stem cell-derived microglia in a 3D triculture AD model. This work highlights how bridging large-scale data analyses with experimental systems can uncover new insights into disease biology and point to potential therapeutic targets.

# Building Momentum: Reflecting on Year Two of the Pathology and Cell Biology Research Retreat

By Taisha Lembert (administrative manager, research and training programs)

On September 15, 2025, the department once again brought together researchers, faculty, trainees, and students for the 2nd Annual Pathology and Cell Biology Research Retreat. And what an amazing day it was! The research retreat was a huge success, filled with inspiring talks, lively discussions, and incredible scientific talent. Special thanks to everyone for making this event so engaging.

The presentations were so outstanding that, although it was initially planned to recognize only one winner for the main session and one for the flash talks, the judges couldn't resist naming a runner-up for each!

## **Main Session**

- Winner: Tanner Dalton, PhD, student in the Olive and Arpaia labs "Ras inhibition modulates the tumor immune microenvironment and potentiates T-cell-directed immunotherapy in pancreatic cancer."
- Runner-Up: Mia Burke, PhD student in the Waites lab "Glucocorticoid stress hormones regulate small extracellular vesicle release via activation of nSMase2."

#### Flash Talks

- Winner: Michael Harris, PhD, student in the Haeusler lab "Investigating the role of E3 ubiquitin ligase component Fbxo21 in hepatic lipoprotein metabolism."
- Runner-Up: Sarah Cardoso, PhD, student in the Choi lab "Tuning insulin receptor signaling using de novo designed agonists."

Congratulations to all our awardees, and a huge thank you to everyone who made the retreat such a vibrant and memorable event. We can't wait to see you all again next year!

(Right) Mia Burke, PhD Candidate in the Waites Lab, presents her research findings at the 2nd Annual Research Retreat, "Glucocorticoid stress hormones regulate small extracellular vesicle (sEV) release activation of nSMase2"

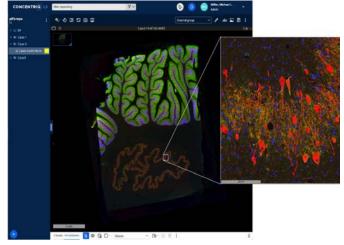


# New slide scanner up and running in DCPL

This scanner will image slides stained by immunofluorescence (IF). The scanner delivers high-quality images and enables whole-slide viewing in an IF staining experiment. Scans can be imported into analytical software platforms for subsequent quantifications.

**Caption**: Human cerebellum stained with MAP2 (red) and NF186 (green), counter stained with DAPI (blue), scanned at 40x objective using a semi-automated Hamamatsu S60 FL whole slide imager, then viewed and managed on the webbased Concentriq LS platform. Left panel shows the zoomed out (low power) view of the whole slide image, and elements of the management system's user interface. Right panel reflects a screen shot captured directly from the viewer, which shows a zoomed in (high power) view.

The DCPL shared resource provides a variety of image acquisition, management and analysis solutions, offering an end-to-end solution for quantitative (computational) pathology, at-scale.



Acquiring this 4.72~cm2 area of tissue, scanned at 40x using 3 channels, took  $\sim 38$  mins total (scan time varies). Study performed and designed by: Giovanni Oliveros, PhD and Phyllis L. Faust, MD, PhD.

#### **EDUCATION**

# Spotlight on the INTEGRITY Post-Baccalaureate Program

By Taisha Lembert (administrative manager, research and training programs)

The INTEGRITY Post-Baccalaureate Program, funded by the American Cancer Society and supported by the Herbert Irving Comprehensive Cancer Center, is preparing the next generation of researchers on cancer health disparities.

# **Meet Our Inaugural Fellows**

Mila Cordero, mentored by Dr. Adana Llanos Wilson, and Nathalia Felix de Mendonça, mentored by Dr. Jasmine McDonald, have completed Year One! They have participated in seminars on cancer disparities and ethics, professional skills workshops, immersive mentored research experiences, and networking opportunities. This year, they also presented their research at the CUPP Symposium and the ACS Post-Baccalaureate Annual Meeting.

# Year One Highlights

- September 2024: Attended the ACS Post-Baccalaureate Annual Meeting in Atlanta, connecting with fellows nationwide.
- February 18, 2025: Hosted a Networking Event featuring Dr. Rebecca Kehm, Assistant Professor of Epidemiology, with her talk "Physical activity across the life course for breast cancer prevention."
- April 2025: Nathalia presented her research findings in Brazil, sharing her work on an international stage.

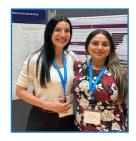


Inaugural INTEGRITY fellow Nathalia (right), with Dr. McDonald, presenting at the AACR Meeting, September 2025

- July 9, 2025: Welcomed Ellie Daniels, from the American Cancer Society, for a site visit at the Department of Pathology; the fellows presented and shared their research updates.
- July 23, 2025: Presented posters at the CUPP (Columbia University Pathways Programs)
   Symposium:
- Mila Cordero: An Audit of Skin Lightening Products in Northern Manhattan: Pilot Fieldwork of Project CLEAR
- Nathalia Felix de Mendonça: Sex-based differences in head and neck cancer risk: Evidence from the All of Us Research Program
- September 18, 2025: Nathalia presented her poster at the 18th AACR Meeting in Baltimore.
- Fun Fact: Mila volunteers at NewYork-Presbyterian Hospital, reflecting her dedication to the community.

# **Meet Our New Fellows**

Marissa Esteban and Jazmine Hudson joined the INTEGRITY community on September 8, 2025. They have begun their research training and, along with the inaugural fellows, attended this year's ACS Post-Baccalaureate Annual Meeting to connect with peers and expand professional networks. (continued)



Inaugural INTEGRITY fellows Nathalia (left) and Mila (right) presenting at the CUPP Symposium, July 2025

# **Useful Information**

**Update faculty profile/web pages** – Regularly updating your faculty profile is strongly encouraged. To request faculty profile updates or to update incorrect or missing content anywhere on the <u>department</u> <u>website</u>, please complete the <u>Pathology Web Request Form</u>.

**Post content on digital monitors** – Submit interesting content (research, events, people, celebrations, etc.) to post on our digital monitors - contact the Path Communication team at <a href="mailto:PathNews@cumc.columbia.edu">PathNews@cumc.columbia.edu</a>.

**Reserve a conference room** – To reserve a department conference room, please contact the Path Facilities team at <a href="mailto:pathfacilities@cumc.columbia.edu">pathfacilities@cumc.columbia.edu</a>.

#### **EDUCATION**



**Jazmine Hudson** is a recent graduate from Fordham University who studied Integrative Neuroscience and Religious Studies. Coming from a multicultural background, she is passionate about conducting science research that is relevant and applicable to underserved communities. Her research interests span neuroscience, cancer biology, and public health. She hopes to pursue an MD/PhD in the future, to advance research that bridges scientific discovery and community health.



Marissa Nicole Esteban recently graduated from the University of San Diego with a degree in Computer Science and minors in Mathematics and Art History. Her engineering school instilled in her a strong sense of community and a commitment to impact-driven projects, shaping the trajectory of her career as a computational scientist. She is continually seeking new ways to engage in computational and engineering research and is excited to learn and contribute to the work at CUIMC through the INTEGRITY program. Her goal is to pursue a PhD in computational science and to continue shaping science through collaboration and creativity.

# **Looking Ahead**

As the INTEGRITY Program continues into its second year, we look forward to supporting our new and inaugural fellows as they deepen their research skills, expand their professional networks, and contribute to advancing cancer health disparities research. We are grateful to the American Cancer Society, the Herbert Irving Comprehensive Cancer Center, and all mentors for their continued support in shaping the next generation of researchers.

# Medical and Dental Teaching: The return of "Man in the Pan"

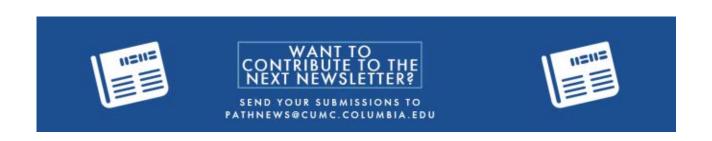


Man in the Pan, the beloved autopsy conference for medical students once led by former Pathology and Cell Biology faculty Dr. Jay Lefkowitch and Dr. Charles Marboe, has made a successful comeback!

Marie Smithgall, MD, assistant professor of pathology and cell biology at CUMC, and Carlos Pagan, MD, associate professor of pathology and cell biology at CUMC, have revived the series, and the first session was a resounding success. A second-year resident presented an autopsy case involving a patient with decompensated cirrhosis who experienced sudden

loss of consciousness, hypotension, and large-volume hematemesis while hospitalized for aortic valve endocarditis.

The session offered rich teaching opportunities: discussions centered on NASH cirrhosis, esophageal varices—the source of the acute GI bleed—and endocarditis, all supported by striking gross pathology findings. Medical students were fully engaged and enthusiastic, and both faculty and students are already looking forward to the next Man in the Pan conference.



#### **EDUCATION**

# **Exploring Futures in Pathology: Summer Youth Employment Program (SYEP) Leaves Lasting Impact**

By Anita Sandeva (manager, Anatomic Pathology)



For six enriching weeks this summer, a group of motivated young participants joined the

Anatomic Pathology Department through the annual Summer Youth Employment Program (SYEP). This program, designed to provide early exposure to healthcare careers, gave students a hands-on look into the vital work that happens behind the scenes in the lab and pathology fields.

The journey began in the accessioning lab, where students learned how specimens are received, identified, and prepared for analysis. They quickly grasped the importance of accuracy, attention to detail, and the critical role these initial steps play in patient care.

From there, they followed the specimens to the gross room, where they had the opportunity to shadow Pathologist Assistants (PAs). Here, they observed the examination and processing of tissue samples, gaining insight into a field many had never encountered before.

In the histology lab, students worked alongside lab floaters to prepare case materials for pathologists to review. They also participated in organizing and achieving slides and tissue blocks, completing the life

Figure 2 (above): (Left to right) Osielis, Dianca, Ashley, and Isaac triaging in Accessioning.

cycle of a diagnostic specimen. Their tasks included triaging, document archiving, and research data entry, giving them exposure to both the clinical and academic sides of laboratory work.

Throughout the program, time was dedicated to guiding and mentoring students, explaining each task, its significance, and how it fits into the larger healthcare system. Our department has hosted this program for several years, always striving to provide meaningful, practical experiences in a professional setting.

The impact has been clear. Many participants, some stepping into a professional environment for the first time, demonstrated exceptional professionalism, punctuality, and a strong sense of responsibility. They took their roles seriously and engaged deeply with the learning process.

This program not only helps students build real-world skills but also opens their eyes to career possibilities they may not have considered. By giving them early exposure to the world of pathology and laboratory medicine, we hope to inspire the next generation of healthcare professionals.

I strongly encourage other departments to get involved in this initiative. The benefits are mutual: students gain valuable experience, and we, in turn, help shape the future workforce of our field.





# ICEP Wins Big in International Educational Excellence

ICEP Global, the interdisciplinary medical and health professions exchange program overseen by Dr. Anette Wu, within the Department of Pathology and Cell Biology at Columbia University, won the 2025 ASPIRE-to-Excellence Award in International Collaboration in Health Professions Education by the AMEE. The International Association for Health Professions Education (AMEE) is one of the most prestigious medical education associations in the world. The Aspire to Excellence Awards are major awards in medical education that recognize leadership and innovation across specific categories. "Going beyond traditional accreditation, the ASPIRE awards highlight best practice and promote innovation."



Dr. Anette Wu at the Aspire to Excellence Awards on behalf of ICEP Global.

#### STAFF SPOTLIGHT

# New Staff

Adriana Rodriguez-Gibbons , Grants Manager, Pathology Research Administration



On October 27, Adriana Rodriguez-Gibbons joined our team as Grants Manager. She earned her bachelor's in international studies/French with a concentration in business from the College of New Rochelle and brings over ten years of experience in grants administration at Columbia University. Adriana is excited to be part of the Pathology and Cell Biology department and looks forward to supporting Columbia's scientists in their research. In her free time, Adriana enjoys singing in a community chorus and spending time in nature. Welcome, Adriana!

# **Promotions**

Josefina Taveras from Histology was promoted to Clinical Lab Technologist on June 1st. She worked incredibly hard, completing her studies and clinical hours while managing her floating position in the Histology Lab. Congratulations, Josefina!

#### STAFF SPOTLIGHT: IN MEMORIAM

# Dr. Charles Marboe, MD (1950-2025)

Remembering Dr. Charles Marboe, Esteemed Cardiovascular Pathologist and Beloved Educator



It's with heavy hearts but profound gratitude that we honor the life of Dr. Charles "Charlie" Marboe, a brilliant pathologist, gifted teacher, and the kind of mentor who made everyone around him better. Dr. Marboe passed away on August 4, 2025, in Evanston, Illinois, at the age of 75, leaving behind an incredible legacy of knowledge and kindness.

Dr. Marboe joined Columbia in 1980 and spent more than four decades shaping how we teach and practice pathology. He led with curiosity and compassion, whether he was guiding residents through a tricky diagnosis,

helping redesign the curriculum, or reminding us all why medical education matters. His work in cardiovascular pathology and transplant medicine touched lives around the world, but those who knew him best will remember his warmth, humility, and unwavering belief in his students.

After retiring in 2021, Dr. Marboe became Professor Emeritus and continued to inspire through the Dr. Charles Marboe Lecture, created in his honor. The fund keeps his spirit of mentorship and learning alive — a fitting tribute to sowmeone who gave so much of himself to others. If you'd like to support that legacy, you can do so here: <a href="https://bit.ly/Marboe-Lecture">https://bit.ly/Marboe-Lecture</a>.

A memorial service will be held on November 8, with his friends, family, colleagues, and former students gathering to celebrate his remarkable life and career.

Dr. Marboe taught us that excellence means more when it's shared, and that's how we'll remember him: generous, brilliant, and forever part of the heart of Pathology and Cell Biology at Columbia. Read Dr. Marboe's full obituary.

