Summer
2021

COLUMBIA PATHOLOGY AND CELL BIOLOGY REPORT

One Mission

Honoring our Community
Retirements and In Memoriam

COVID-19 Research
Departmental response to the pandemic

IN THIS ISSUE

Columbia Pathology and Cell Biology Report

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ON THE COVER:
Team spirit flat illustration by Storyset

A Shared Mission

Kevin A. Roth, M.D., Ph.D., Chair
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THE pandemic isn't over but the successful development and widespread implementation of highly effective Covid-19 vaccines has dramatically decreased the number of Covid-19 inpatients and deaths at NYP-CUIMC and in New York City overall. The Department of Pathology and Cell Biology has been severely impacted by the pandemic and we have sadly lost family members, friends, and colleagues to SARS-CoV-2 over the last 18 months. Our departmental commitment to Covid-19-related patient care, research, and education has been remarkable and is evident in many ways, including the publication of over sixty manuscripts on SARS-CoV-2 and Covid-19 pathology.

These efforts will continue as new coronavirus variants potentially emerge and the long-term health consequences of Covid-19 infection become more apparent. The sense of shared mission that we experienced during the most trying times of the pandemic was powerful. As more department members return safely to onsite activities in the upcoming months, we have the opportunity to apply lessons learned during the pandemic and work together to enhance our clinical, research, and educational missions.

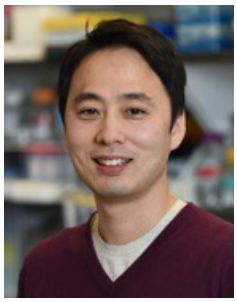
I look forward to seeing many more of you in person in the near future and the re-establishment of previously "routine" in person departmental activities including lab meetings, seminar series, and faculty meetings during this academic year. We will closely follow and inform the department regarding evolving University and CUIMC guidelines on vaccinations, social distancing, mask requirements, testing frequency, etc. and do our best to ensure a safe working environment throughout the department. I am enthusiastic about the upcoming year and am confident that our department will continue to lead by example. ◆

Best wishes,

Kevin A. Roth, M.D., Ph.D.

Honors and Awards

Hee Won Yang Selected as a 2021 Velocity Fellow



Hee Won Yang, PhD, assistant professor of pathology and cell biology, has been selected as one of this year's Velocity Fellows for his proposal entitled "Deciphering mechanisms of CDK4/6-inhibitor resistance to determine new breast cancer therapeutic opportunities". Velocity is HICCC's flagship fundraising event that brings together family, friends, co-workers, patients, caregivers and neighbors to accelerate cancer research and bring benefit to the patients and community.

Breast cancer is the second most common cause of death from cancer in women. Metastatic breast cancer is responsible for the vast majority of those deaths. Historically, metastatic breast cancer has rarely been curable, but recently FDA-approved cyclin dependent kinase 4 and 6 (CDK4/6) inhibitors have shown promising clinical outcomes. However, the development of resistance to CDK4/6 inhibitors has severely limited the success of these agents. Dr. Yang's project focuses on studying mechanisms that lead to therapeutic resistance in patients with metastatic breast cancer and drug combinations that could overcome resistance.

Dr. Yang will be awarded $100,00 from Velocity Funds, for the purpose of supporting project specific study experiments.

Michael Gershon Wins FNM Lifetime Achievement Award

Michael Gershon, MD, professor of pathology and cell biology, received a Lifetime Achievement Award from the Federation of Societies of Neurogastroenterology and Motility. Five societies met internationally and voted to present the award to Dr. Gershon. He should have received the award in 2020, but due to the pandemic, the meeting at which the award was to be given was postponed and the award was presented to him at a virtual ceremony in April 2021. The societies represented are the Australasian Neurogastroenterology and Motility Society, the American Neurogastroenterology and Motility Society, the Asian Neurogastroenterology and Motility Society, the European Society of Neurogastroenterology and Motility, and the Latin American Neurogastroenterology and Motility Society.

Dr. Gershon has been called the "father of neurogastroenterology" because, in addition to his seminal work on neuronal control of gastrointestinal (GI) behavior and development of the enteric nervous system (ENS), his classic trade book, The Second Brain, has made physicians, scientists, and the lay public aware of the significance of the unique ability of the ENS to regulate GI activity in the absence of input from the brain and spinal cord. Dr. Gershon has published almost 400 peer-reviewed papers. Major contributions, which have relevance to disorders of GI motility, including irritable bowel syndrome, include identification of serotonin as a GI neurotransmitter and the initial observation in the gut of intrinsic sensory nerve cells that trigger propulsive motor activity.

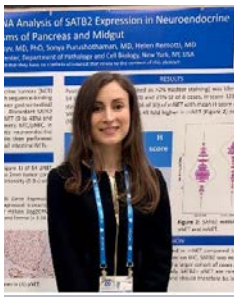
Honors and Awards

Alex J. Rai Accepted for First APLF Class of 2021-2022

The Leadership Development and Diversity Committee of the Association of Pathology Chairs (APC) has recently accepted Dr. Alex Rai's application for the APC Pathology Leadership Fellowship (APLF) Class of 2021-2022. The Pathology Leadership Fellowship is APC's newly launched program designed to cultivate leadership potential and opportunities by providing experiences and education that accelerate understanding and competency in the skills required for academic administration.

Alex Rai, PhD is an associate professor of pathology and cell biology and Director of the Special Chemistry Laboratories at Columbia University Medical Center. His lab focuses on the discovery of novel biomarkers for cancer and other diseases, and their translation into clinically actionable diagnostic tests.

Simona De Michele Receives Pathologist-in-Training Research Award at USCAP 2021



We are pleased to announce that Simona De Michele, MD, has recently received the First Place of the Pathologist-in-Training Research Award by the Papanicolaou Society for Cytopathology (PSC) at the 110th Annual Meeting of the United States and Canadian Academy of Pathology (USCAP) 2021. The work titled "Machine Learning/Convolutional Neural Network in Fluid Cytology for Predicting Malignancy" is coauthored by Dr. Patricia Wasserman and Dr. Simon Sung.

Dr. De Michele is a fellow in gastrointestinal and liver pathology. She was a PGY4 resident in anatomic and clinical pathology and a former chief resident at CUIMC. During her residency, she has actively engaged in academic activities, including presentations at national conferences, and numerous peer-reviewed publications with focus on gastrointestinal and liver pathology. Dr. De Michele is actively involved in multiple pathology societies, being resident ambassador for CUIMC at CAP, USCAP and New York Pathological Society.

Honors and Awards

Anjali Saqi, MD, MBA - Professor of Pathology and Cell Biology at CUMC

CASTLE CONNOLLY TOP DOCTORS® Selected as 2021 Castle Connolly Top Doctors and Exceptional Women in Medicine

One of the recipients of the 2021 Life Science Accelerator pilot grants* for her project titled "***OnXpansion: Automated, targeted expansion of patient tumor samples for clinical biomarker analysis and personalized treatment***" with co-Investigator Keith Yeager, M Eng, research engineer.

***Life Science Accelerator pilot grants are awarded for creative and inventive lab-to-market project that aim to change the way patients are being treated or diagnosed.**

Larisa Debelenko, MD, PhD - Associate Professor of Pathology and Cell Biology at CUMC
Igor Katsyv, MD - former Pathology and Cell Biology PGY3 resident
Matthias Szabolcs, MD - Professor of Pathology and Cell Biology at CUMC

Their paper titled "***Trophoblast damage with acute and chronic intervillositis: disruption of the placental barrier by severe acute respiratory syndrome coronavirus 2***" was featured on the cover of 2021 March issue of the Human Pathology.

Osama Al Dalahmah, MD, PhD - Assistant Professor of Pathology and Cell Biology
Jean Paul Vonsattel, MD - Professor Emeritus/Special Lecturer of Pathology and Cell Biology
Markus Siegelin, MD - Associate Professor of Pathology and Cell Biology
James Goldman, MD - Professor of Pathology and Cell Biology (in Psychiatry)
Peter Canoll, MD - Professor of Pathology and Cell Biology at CUMC
Gunnar Hargus, MD, PhD - Assistant Professor of Pathology and Cell Biology

2021 Terry Award for the Best Paper on Neurodegenerative Diseases: "***Combining Postmortem Single Cell Analysis with An Induced Pluripotent Stem Cell Model To Study Dysregulated Pathways In FTD***"

Useful Information

Updating online faculty profiles – Faculty members can update their online profiles at http://columbiaprofiles.org/. Regularly updating your profile is strongly encouraged. If you have any questions, please contact PathWebMaster@columbia.edu.

How to update website content – If you find any outdated, incorrect, or missing content on our department website (www.pathology.columbia.edu), and would like to have it updated, please contact PathWebMaster@columbia.edu.

How to post images on touchscreen directories – Have interesting images (research, events, people, celebrations, etc.) that you wish to post on our three touch-screen directories located near the main elevators of the P&S and PH buildings, please contact PathNews@cumc.columbia.edu.

Honors and Awards

FACULTY PROMOTIONS

Catherine Clelland, 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 Columbia University Medical Center

Rebecca Haeusler, PhD
promoted to Associate Professor of Pathology and Cell Biology with tenure

Mabel Ko, MD
promoted to Associate Professor of Pathology and Cell Biology at Columbia University Medical Center

Mahesh Mansukhani, MD
promoted to Professor of Pathology and Cell Biology at Columbia University Medical Center

Fabrizio Remotti, MD
promoted to Associate Professor of Pathology and Cell Biology at Columbia University Medical Center

Emer Smyth, PhD
promoted to Associate Professor of Pathology and Cell Biology at Columbia University Medical Center

Renu Virk, MD
promoted to Associate Professor of Pathology and Cell Biology at Columbia University Medical Center

Clarissa Waites, PhD
promoted to Associate Professor of Pathology and Cell Biology and Neuroscience with tenure

Hynek Wichterle, PhD
promoted to Professor of Pathology and Cell Biology, Rehabilitation and Regenerative Medicine, and in Neuroscience (Neurology)

Anette Wu, PhD
promoted to Associate Professor of Pathology and Cell Biology at Columbia University Medical Center

FACULTY ADMINISTRATIVE PROMOTIONS AND LEADERSHIP APPOINTMENTS

Carlos Pagan, MD, assistant professor of pathology and cell biology, has been appointed Pathology Residency Program Director effective July 1, 2021. Dr. Pagan has been associate program director and is assuming the directorship from Dr. Charles Marboe who retired on June 30, 2021, after 25 years as program director. Dr. Pagan is a graduate of the University of Puerto Rico School of Medicine and completed his AP/CP training at Weill Cornell. Carlos is board certified in Anatomic Pathology, Clinical Pathology, and Molecular Genetic Pathology and joined our faculty in 2016.

Dr. Pagan is assisted by Ladan Fazlollahi, MD, assistant professor of pathology and cell biology, who assumed the position of assistant program director for anatomic pathology. Dr. Fazlollahi received pathology residency training at Washington University in St. Louis and Massachusetts General Hospital before completing Gastrointestinal/Liver Pathology and Surgical Pathology fellowships in our department. Ladan joined our faculty as an assistant professor in 2016. Dr. Fazlollahi is assuming the position previously held by Andrew Turk, MD who also served as interim program director for one year.

The Pathology Residency Leadership team also includes Richard Francis, MD, assistant program director for clinical pathology, and Kevin Gardner, MD, PhD, director of our physician-scientist research pathway.

Retirements

Dr. Charles Marboe Retires after 45 Years of Service at Columbia University

BY KEVIN ROTH, MD, PHD
Chair and Professor of Pathology and Cell Biology

It is with mixed emotions that we annonce the retirement of Charles (Chuck) Marboe, MD that took effect on June 30, 2021. Chuck has had a remarkable 45 plus year career in the Columbia University Department of Pathology and Cell Biology starting with his pathology internship at the Presbyterian Hospital in the City of New York in 1976. Upon completion of his training, Chuck rose through the academic ranks at Columbia University and has held the title of professor for over 25 years. He has been the director of the department's residency training program since 1996, has served as vice chair for education since 2009, and has been a generous and caring mentor to more than two decades of trainees. His commitment to graduate education is evidenced by numerous annual lectures and laboratory sessions to students in the Vagelos College of Physicians and Surgeons. Notably, from 2013-2018 he actively participated in an international educational effort to design and implement a histopathology curriculum for students at the National University of Rwanda. He was an inaugural member of the Vagelos College of Physicians and Surgeons Academy of Clinical Excellence and was appointed to the Virginia Apgar Academy of Medical Educators.

Chuck is an internationally recognized cardiac pathologist and has authored over 200 peer reviewed manuscripts in his long and outstanding career. His expertise and collaboration have contributed significantly to NYP-CUIMC pre-eminence in cardiovascular surgery, cardiology, heart transplantation, and lung transplantation. Chuck's steady and thoughtful leadership, combined with his generous and kind spirit, has been an inspiration to all who have interacted with him during his tenure in the department.

As Ramonita Ferreira, who worked with Chuck as the residency program coordinator since 2019 said, "Dr. Marboe taught me a lot during my time working with him, and I wish I could continue to learn from him. He was, indeed, one of the most special people I have ever worked with, and I am grateful for the experience. I will be forever grateful for Dr. Marboe's support and encouragement".

"To me, Dr. Marboe represents an institution", says Carlos Pagan, MD, assistant professor and current residency program director. "I didn't complete my residency here, but I had heard a lot of great things about training at Columbia early on, in no small part to Dr. Marboe's leadership. After getting a chance to work with him, Dr. Marboe was always exceedingly kind, patient, and helpful. He was beloved by the staff at GME who knew him through his many years of service. Unflappable as always, Dr. Marboe saw the residents' potential and gave so much of himself to help them become the best pathologists possible".

I congratulate Chuck on a remarkable career and wish him all the best on the next phase of his life's journey.

ANNUAL LECTURESHIP: To recognize Dr. Marboe's long and distinguished career in the department, we have established an annual lectureship in his honor. The annual Dr. Charles Marboe Lecture will continue Chuck's history of sharing his expertise in cardiovascular pathology, cardiology, and heart transplantation. This endowed lecture will ensure quality education within the department by supporting Columbia's most important assets: its accomplished educators and faculty members who shape the future leaders in the field. Messages to Dr. Marboe may be made at **ccm1@cumc.columbia.edu.**

SUPPORT EDUCATION! To make a gift online in Dr. Marboe's honor, please click the link **here.**

Retirements

Dr. Susan Whittier Retires after 25 years of service at Columbia University

BY DANIEL GREEN, MD
Assistant Professor of Pathology and Cell Biology at CUMC

We are happy, yet sad, to announce that Susan Whittier, PhD, professor of pathology and cell biology, retired on June 30th, 2021. Susan joined Columbia Presbyterian upon completing her fellowship at UNC-Chapel Hill in 1992. Initially she was responsible for the infectious disease serology laboratory but was soon integrated into the management team of the overall Clinical Microbiology Service. At that time, her research activities focused on the diagnosis of pneumococcal disease in pediatric patients, investigating the association of normal skin microbiota and infections and the optimization of susceptibility testing for organisms isolated from patients with cystic fibrosis. Unexpectedly, she became an expert in hospital-associated Legionella infections when CPMC experienced an uptick during the late 1990s.

Two years after having her two children, Eric (1996) and Amy (1997), at CPMC (aka 12th floor, Babies Hospital South) Susan relocated to NJ to direct the consolidation of four hospital-based microbiology labs into one central lab. Once that challenge was complete, Susan realized she missed the hustle and bustle of NYC and re-joined NYP/CUMC in 2004. Since that time, she has guided the microbiology team through yet another Legionella surge, helped establish a biocontainment laboratory at the Allen Hospital in preparation for Ebola and has worked side by side with our Infection Prevention & Control colleagues to combat the infectious agent de jour.

One of the greatest opportunities at CUIMC is the chance to mentor those who will replace us and collaborate with esteemed colleagues. Susan was able to serve on the scientific oversight committees for several infectious disease clinicians and worked on innumerable projects with colleagues who quickly became friends. She has served as the president of the NYC Branch of the American Society of Microbiology several times and was a councilor for the national ASM. Susan never met a camera she did not love and therefore appeared on many local and national networks to educate the public on “germs” that we encounter in our everyday life.

Clearly, navigating a pandemic during 2020 was unexpected. Susan and Dan Green, together with their amazing microbiology team, rose to the challenge. They made the “impossible” – possible. Together with the Cerner team and other laboratory partners, assays were verified and went live in record time. The only focus was our patients. If you have ever seen “Miracle on Ice”, every day (well almost) had that same feeling of victory.

Susan leaves knowing that the Microbiology laboratory is in the excellent hands of co-directors Dan Green and Greg Berry. We are excited that Susan will be available as a consultant on an as- needed basis for future projects. We wish her and her new husband Al well!

New Faculty

Swikrity Bastoka, MD
Assistant Professor of Pathology and Cell Biology at CUMC

Swikrity Upadhyay Baskota is a cytopathologist and surgical pathologist at Department of Pathology and Cell Biology. She completed her anatomic pathology residency and cytopathology fellowship training at University of Pittsburgh Medical Center (2017-2021). Prior to her resettlement in the United States, she completed anatomic and clinical pathology residency training from National Academy of Medical Sciences, Kathmandu, Nepal (2011-2014), and medical school from College of Medical Sciences, Bharatpur affiliated to Kathmandu University, Nepal (2003-2009). She practiced anatomic and clinical pathology in her home country, Nepal for 2 years.

Dr. Baskota serves as a Junior Ad Hoc Member of the eJournal Committee of American Society of Cytopathology. She also served as CAP Cytopathology Committee, Junior Member (2019-2020). Dr. Baskota was honored by the American Society of Cytopathology with the 2020 Dr. Bernard Naylor Excellence in Cytomorphology Award. She is also active in various social media educational platforms. She has a number of peer-reviewed articles published in esteemed journals.

Gregory J. Berry Ph.D., D(ABMM)
Associate Professor of Pathology and Cell Biology at CUMC

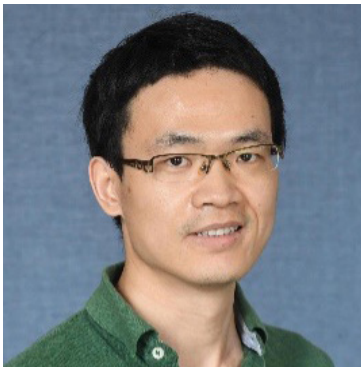
Gregory Berry is board-certified diplomate of the American Board of Medical Microbiology. He received his Ph.D. in Microbiology and Immunology from the Pennsylvania State University College of Medicine and completed a fellowship in Medical and Public Health Microbiology at the University of Texas Medical Branch. Dr. Berry is currently an Associate Professor of Pathology and Cell Biology in the Columbia University Vagelos College of Physicians and Surgeons, Co-Director of the Clinical Microbiology Service, and Associate Director of the Center for Advanced Laboratory Medicine (CALM) at NewYork-Presbyterian/Columbia University Irving Medical Center. He has also held previous appointments as an Assistant Professor of Pathology and Laboratory Medicine at the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell and Director of the Division of Infectious Disease Diagnostics at Northwell Health.

Dr. Berry specializes in the application of infectious disease testing for the clinical diagnosis of disease and patient management. His research interests include the optimization of current methodologies and the development of new technologies for patient-centered clinical testing.

New Faculty

Elizabeth Stone, MD, PhD
Assistant Professor of Pathology and Cell Biology at CUMC

Elizabeth Stone earned her MD and PhD from Columbia, served as a resident in clinical pathology at NYP/CUIMC, and then as a fellow in transfusion medicine at the New York Blood Center and NYP/CUIMC. During residency and fellowship, she worked in the Laboratory of Transfusion Biology focusing on G6PD deficiency and malaria, and she assisted in the evaluation of COVID-19 convalescent plasma donors. After fellowhsip, Dr. Stone was assistant professor at the Icahn School of Medicine at Mount Sinai Hospital, where she also served as the medical director of the Blood Bank and Transfusion Services at Mount Sinai Morningside and attended in Transfusion Medicine at Mount Sinai Hospital. Returning to Columbia, Dr. Stone will attend in Transfusion Medicine and Cellular Therapy at NYP/CUIMC and will serve as the medical director of clinical pathology at NYP/Lawrence Hospital. She will also continue her research in the Laboratory of Transfusion Biology in the Department of Pathology and Cell Biology, where she will continue to study G6PD deficiency and malaria.



Junfei Zhao, PhD
Assistant Professor of Mathematical Genomics in Pathology and Cell Biology at CUMC

Junfei Zhao received his PhD from Chinese Academy of Sciences and completed his postdoctoral work at Dr. Raul Rabadan's lab at the Columbia University Department of Systems Biology. His work has shed light on the genomic markers for predicting patients' response to therapy and its underlying mechanism. His current research interests include cancer sequencing data analysis, algorithms designing for prediction of functional consequences of somatic aberrations in cancer and cancer evolution study.

CYTOPATHOLOGY

The Significance of ASC-H and LSIL Dual Interpretation with Risk Stratification: One Institution Experience

AUTHORED BY Abel Gonzalez, Akosua Ametorgoh, Diane Hamele-Bena, Sedef Everest, Renu Virk, Adel Cimic, Patricia Tiscornia-Wasserman

Source: Journal of the American Society of Cytopathology DOI: https://doi.org/10.1016/j.jasc.2021.06.004

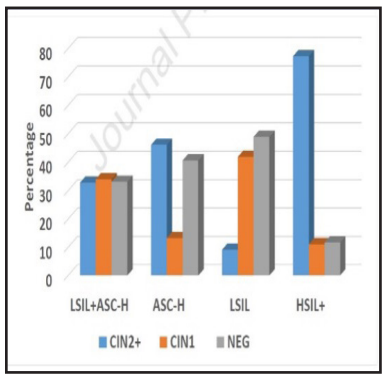


Figure: Pap Diagnosis Compared to Biopsy Diagnosis

Highlights:

- LSIL+ASC-H appears to have a distinctive HPV distribution pattern that clearly differs from ASC-H and SIL and approaches HSIL.
- The predictive value for CIN2+ appears higher for ASC-H than LSIL+ASC-H
- Our literature review identified conflicting findings, probably suggesting a lack of reproducibility in cytologic criteria and the need for consistent inclusion of ASC-H and LSIL when both are present.

NEUROPATHOLOGY

Scientists begin to unravel the mysteries of the coronavirus and brains

Source: The Washington Post, June 7, 2021

In the coronavirus pandemic's early weeks, in neuropathology departments around the world, scientists wrestled with a question: Should they cut open the skulls of patients who died of covid-19 and extract their brains?

Autopsy staff at Columbia University in New York were hesitant. Sawing into bone creates dust, and the Centers for Disease Control and Prevention had issued a warning about the bodies of covid patients — airborne debris from autopsies could be an infectious hazard.

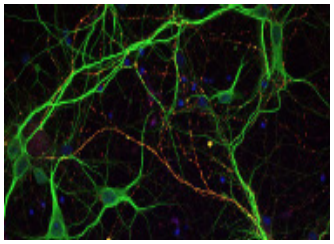
But as more patients were admitted and more began to die, researchers decided to "make all the efforts we could to start collecting the brain tissue," Columbia neuropathologist and professor of Pathology and Cell Biology Peter D. Canoll said.

Read the full Post article here.

NEUROSCIENCE

Alzheimer's: New Treatment Idea Targets Tau

Source: CUIMC Newsroom, May 26, 2021



A new idea for treating Alzheimer's disease could eradicate the toxic proteins most closely linked to cognitive decline in the places where they do the most damage, a study from researchers at Columbia University Vagelos College of Physicians and Surgeons suggests.

The study was published online in Science Translational Medicine on May 26.

Early in Alzheimer's disease, toxic tau proteins accumulate inside the brain's synapses, compromising the transmission of signals from one neuron to another. Cognitive decline in Alzheimer's is closely linked to tau: the more tau that accrues, the faster cognition deteriorates.

Eradicating toxic tau could improve cognition in Alzheimer's patients, and in a previous study, the Columbia team discovered that tau levels can be reduced by enhancing the activity of proteasomes, cell structures that degrade old or unwanted proteins.

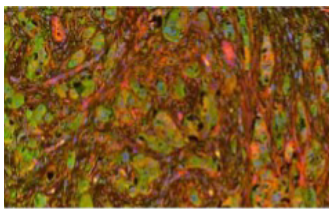
Read the full story in CUIMC Newsroom.

Breast Cancer

Getting to the Bottom of Racial Disparities in Breast Cancer

Source: CUIMC Newsroom, April 28, 2021

Cancer incidence and mortality are declining in the U.S. overall, yet certain groups continue to have an increased risk compared to others. Women of European heritage have a slightly higher likelihood of developing breast cancer, for instance, but women of African heritage remain more likely to die from their disease at any age. Triple-negative tumors, known as the most aggressive subtype, also occur twice as often in women of African heritage compared to their European counterparts.



The biological reasons for these racial disparities in breast cancer still aren't fully understood, but a new study highlights a prognostic biomarker called Kaiso that may provide some insight. Kevin Gardner, MD, PhD, professor of pathology and cell biology at Columbia's Vagelos College of Physicians & Surgeons, and his colleagues found that the predictive value of Kaiso varies across racial groups and differs based on its location within tumor cells. The results were published in Communications Biology.

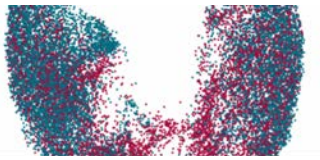
Read the full story in CUIMC Newsroom.

Infectious Diseases

New Cell Atlas of COVID Lungs Reveals Why SARS-CoV-2 Is Deadly and Different

Source: CUIMC Newsroom, April 29, 2021

A new study is drawing the most detailed picture yet of SARS-CoV-2 infection in the lung, revealing mechanisms that result in lethal COVID-19, and may explain long-term complications and show how COVID-19 differs from other infectious diseases.



Led by researchers at Columbia University Vagelos College of Physicians and Surgeons and Herbert Irving Comprehensive Cancer Center, the study found that in patients who died of the infection, COVID-19 unleashed a detrimental trifecta of runaway inflammation, direct destruction and impaired regeneration of lung cells involved in gas exchange, and accelerated lung scarring.

Though the study looked at lungs from patients who had died of the disease, it provides solid leads as to why survivors of severe COVID may experience long-term respiratory complications due to lung scarring.

Read the full article in CUIMC Newsroom.

Useful Information

How to get your news story published on department website/newsletter – For interesting and relevant news stories that you wish to get published on our department website and/or in our newsletter, please use our online submission form at https://form.jotform.com/pathnews/news-submission-form. Contact PathNews@cumc.columbia.edu if you have any questions.

How to reserve a conference room – To reserve a Pathology conference room, please refer to our general room reservation and use policy at https://www.pathology.columbia.edu/conference-room-reservation.

GRANTS AWARDED (SINCE FEBRUARY 2021)

PI	Sponsor	Title
Osama Al Dalahmah, MD, PhD	Hereditary Disease Foundation	Nancy S. Wexler Young Investigator Prize
Edmund Au, PhD	National Institute of Neurological Disorders and Stroke	Studying the Molecular Regulation of MGE Projection Neuron Identity by St18
Francesca Bartolini, PhD	Alzheimer's Association	Pathogenic Role of Tubulin Tyrosine Ligase and Delta-2 Tubulin in AD
Francesca Bartolini, PhD and Ottavio Arancio, MD, PhD	Sergey Brin Family Foundation	Therapeutic Potential of Tubulin Tyrosine Ligase Up-Regulation in Alzheimer's Disease
Peter Canoll, MD, PhD	National Institutes of Health	Targeting Go and Grow in Glioblastoma
Eunhee Choi, PhD	National Institute of Diabetes and Digestive and Kidney Diseases/NIH/DHHS (P30 pilot grant through Diabetes Center)	Insulin receptor-MAD2 complex in obesity-related cancer
Eunhee Choi, PhD	2021-2022 Irving Institute Collaborative and Multidisciplinary Pilot Research – Integrating Special Populations (CaMPR-ISP) pilot award (Internally funded)	Molecular pathogenesis of severe insulin resistance syndromes
Eunhee Choi, PhD	Pilot and Feasibility Award from the Columbia University Digestive and Liver Disease Research Center (CU-DLDRC) (Internally Funded)	Spatiotemporal regulation of insulin signaling in the liver
Catherine Clelland, PhD	National Institute on Aging	Tetrahydrobiopterin Effects on Cognitive Function in Alzheimer's Disease: Biochemical, Molecular and Cognitive Analysis
Phyllis Faust, MD	National Institute of Neurological Disorders and Stroke/NIH/DHHS	Deep Dive: Mapping the Neuropathology of Essential Tremor and Exploring the Molecular Underpinnings of Neurodegeneration
Kevin Gardner, MD, PhD	National Cancer Institute	The Linkage Between Race, Kaiso and the Tumor Microenvironment in Breast Cancer Health Disparities
Gregg Gundersen, PhD	National Institute on Aging/ NIH/DHHS	Nucleoskeleton-Cytoskeleton Connections and Cell Polarity in Aging (1-year R01 supplement)

GRANTS AWARDED (SINCE FEBRUARY 2021)

PI	Sponsor	Title
Rebecca Haeusler, PhD	National Heart, Lung, and Blood Institute	Mechanisms Linking Insulin Action with Lipoprotein Metabolism
Gunnar Hargus, MD	National Institute of Neurological Disorders and Stroke/NIH/DHHS	Elucidating the role of microglia and neurotrophin receptor p75 on neuronal degeneration in frontotemporal dementia
Carol Mason, PhD	National Institute of Neurological Disorders and Stroke/NIH/DHHS	Molecular mechanisms of glial-mediated synapse alterations in Fragile X syndrome
Laura Beth McIntire, PhD	National Institute on Aging/ NIH/DHHS	Acyl chain remodeling and regional lipid dysregulation in Alzheimer's disease
Umrao Monani, PhD	Sarepta Therapeutics	A Novel lncRNA for the Treatment of Glut1 Deficiency Syndrome
Yueqing Peng, PhD	National Institute of Neurological Disorders and Stroke	Basal Forebrain Cholinergic Dysfunction in Sleep-Related Epilepsy
Li Qiang, PhD	NIH/National Institute of Diabetes and Digestive and Kidney Diseases	Preclinical Validation of PPARg Acetylation Inhibitors for Diabetes Prevention and Treatment
Li Qiang, PhD	School of Engineering and Applied Science, Columbia University	Molecular Scavenger Engineering to Treat Visceral Obesity
Michael Shelanski, MD, PhD	National Institute on Aging	Targeting Caspase-2 in Alzheimer's Disease
Markus Siegelin, MD	National Institute of Neurological Disorders and Stroke/NIH/DHHS	HDAC inhibitors reverse the Warburg Effect and Elicit Metabolic Vulnerabilities in Model Systems of Glioblastoma
Janet Sparrow, PhD	National Eye Institute	Instrumentation for Animal-Dedicated In Vivo Eye Imaging by Spectral Domain Optical Coherence Tomography
Sandeep Wontakal, MD, PhD	National Institute of Neurological Disorders and Stroke/NIH/DHHS	Transcriptional Control of Motor Neuron Maturation
Andrew Yates, PhD and Donna Farber, PhD	National Institute of Allergy and Infectious Diseases	Modeling the Ecology of Tissue-Resident T Cells
Lori Zeltser, PhD	Klarman Family Foundation	Genetic Influences on Susceptibility to Anorexia
Lori Zeltser, PhD	National Institute of Diabetes and Digestive and Kidney Diseases/ NIH/DHHS	Developmental Programming of Brown Adipose Tissue Sympathetic Tone

COVID-19 Related Publications

SINCE FEBRUARY 2021

Histologic Correlates of Gross Hematuria Following Moderna COVID-19 Vaccine in Patients with IgA Nephropathy
Kudose S, Friedman P, Albajrami O, **D'Agati VD**
Kidney International

The New York State SARS-CoV-2 Testing Consortium: Regional Communication in Response to the COVID-19 Pandemic
Crawford JM, Aguero-Rosenfeld ME, Aifantis I, Cadoff EM, Cangiarella JF, Cordon-Cardo C, Cushing M, Firpo-Betancourt A, Fox AS, **Furuya Y**, Hacking S, Jhang J, Leonard DGB, Libien J, Loda M, Mendu DR, Mulligan MJ, Nasr MR, Pecora ND, Pessin MS, Prystowsky MB, Ramanathan LV, Rauch KR, Riddell S, Roach K, **Roth KA**, Shroyer KR, Smoller BR, **Spitalnik SL**, Spitzer ED, Tomaszewski JE, Waltman S, Willis L, Sumer-King Z.
Academic Pathology

Minimal change disease and acute kidney injury following the Pfizer-BioNTech COVID-19 vaccine
D'Agati VD, Kudose S, Bomback AS, Adamidis A, Tartini A.
Kidney International

COVID-19 neuropathology at Columbia University Irving Medical Center/New York Presbyterian Hospital
Kiran T Thakur, Emily Happy Miller, Michael D Glendinning, **Osama Al-Dalahmah**, Matei A Banu, Amelia K Boehme, Alexandra L Boubour, Samuel S Bruce, Alexander M Chong, Jan Claassen, **Phyllis L Faust, Gunnar Hargus, Richard A Hickman**, Sachin Jambawalikar, Alexander G Khandji, Carla Y Kim, Robyn S Klein, Angela Lignelli-Dipple, Chun-Chieh Lin, Yang Liu, Michael L Miller, Gul Moonis, Anna S Nordvig, Jonathan B Overdevest, Morgan L Prust, **Serge Przedborski**, William H Roth, Allison Soung, **Kurenai Tanji, Andrew F Teich, Dritan Agalliu**, Anne-Catrin Uhlemann, **James E Goldman, Peter Canoll**
Brain

A randomized double-blind controlled trial of convalescent plasma in adults with severe COVID-19
Max R. O'Donnell, Beatriz Grinsztejn, Matthew J. Cummings, Jessica E. Justman, Matthew R. Lamb, Christina M. Eckhardt, Neena M. Philip, Ying Kuen Cheung, Vinay Gupta, Esau João, Jose H. Pilotto, Maria Pia Diniz, Sandra Wagner Cardoso, Darryl Abrams, Kartik N. Rajagopalan, Sarah E. Borden, Allison Wolf, Leon Claude Sidi, Alexandre Vizzoni, Valdilea G. Veloso, Zachary C. Bitan, Dawn E. Scotto, Benjamin J. Meyer, Samuel D. Jacobson, Alex Kantor, Nischay Mishra, Lokendra V. Chauhan, Elizabeth F. Stone, Flavia Dei Zotti, Francesca La Carpia, **Krystalyn E. Hudson**, Stephen A. Ferrara, Joseph Schwartz, **Brie A. Stotler**, Wen-Hsuan W. Lin, **Sandeep N. Wontakal**, **Beth Shaz**, Thomas Briese, **Eldad A. Hod, Steven L. Spitalnik**, Andrew Eisenberger, and Walter I. Lipkin
The Journal of Clinical Investigation

A molecular single-cell lung atlas of lethal COVID-19
Melms JC, Biermann J, Huang H, Wang Y, Nair A, Tagore S, **Katsyv I**, Rendeiro AF, Amin AD, Schapiro D, Frangieh CJ, Luoma AM, Filliol A, Fang Y, Ravichandran H, Clausi MG, Alba GA, Rogava M, Chen SW, Ho P, Montoro DT, Kornberg AE, Han AS, Bakhoum MF, Anandasabapathy N, Suárez-Fariñas M, Bakhoum SF, Bram Y, Borczuk A, Guo XV, **Lefkowitch JH, Marboe C, Lagana SM, Del Portillo A**, Zorn E, **Markowitz GS**, Schwabe RF, Schwartz RE, Elemento O, **Saqi A, Hibshoosh H**, Que J, Izar B
Nature

Author Correction: Lead compounds for the development of SARS-CoV-2 3CL protease inhibitors
Iketani S, Forouhar F, Liu H, Hong SJ, Lin FY, Nair MS, Zask A, Huang Y, Xing L, Stockwell BR, **Chavez A,** Ho DD.
Nature Communications

Inhibitors of coronavirus 3CL proteases protect cells from protease-mediated cytotoxicity
Resnick SJ, Iketani S, Hong SJ, Zask A, Liu H, Kim S, Melore S, Lin FY, Nair MS, Huang Y, Lee S, Tay NES, Rovis T, Yang HW, Xing L, Stockwell BR, Ho DD, **Chavez A**.
Journal of Virology

COVID-19 tissue atlases reveal SARS-CoV-2 pathology and cellular targets
Delorey TM, Ziegler CGK, Heimberg G, Normand R, Yang Y, Segerstolpe Å, Abbondanza D, Fleming SJ, Subramanian A, Montoro DT, Jagadeesh KA, Dey KK, Sen P, Slyper M, Pita-Juárez YH, Phillips D, Biermann J, Bloom-Ackermann Z, Barkas N, Ganna A, Gomez J, Melms JC, **Katsyv I**, Normandin E, Naderi P, Popov YV, Raju SS, Niezen S, Tsai LT, Siddle KJ, Sud M, Tran VM, Vellarikkal SK, Wang Y, Amir-Zilberstein L, Atri DS, Beechem J, Brook OR, Chen J, Divakar P, Dorceus P, Engreitz JM, Essene A, Fitzgerald DM, Fropf R, Gazal S, Gould J, Grzyb J, Harvey T, Hecht J, Hether T, Jané-Valbuena J, Leney-Greene M, Ma H, McCabe C, McLoughlin DE, Miller EM, Muus C, Niemi M, Padera R, Pan L, Pant D, Pe'er C, Pfiffner-Borges J, Pinto CJ, Plaisted J, Reeves J, Ross M, Rudy M, Rueckert EH, Siciliano M, Sturm A, Todres E, Waghray A, Warren S, Zhang S, Zollinger DR, Cosimi L, Gupta RM, Hacohen N, Hibshoosh H, Hide W, Price AL, Rajagopal J, Tata PR, Riedel S, Szabo G, Tickle TL, Ellinor PT, Hung D, Sabeti PC, Novak R, Rogers R, Ingber DE, Jiang ZG, Juric D, Babadi M, Farhi SL, Izar B, Stone JR, Vlachos IS, Solomon IH, Ashenberg O, Porter CBM, Li B, Shalek AK, Villani AC, Rozenblatt-Rosen O, Regev A
Nature

COVID-19 Related Publications

SINCE FEBRUARY 2021

Disparity between levels of anti-RBD IgG and anti-nucleocapsid protein IgG antibodies in Covid-19 recovered kidney transplant patients
Chih-Chao Chang, George Vlad, Elena-Rodica Vasilescu, Syed A. Husain, **Ya Nan Liu**, Wei-Zen Sun, Ming-Fu Chang, **Nicole Suciu-Foca**, and Sumit Mohan
Kidney International

Longitudinal profiling of respiratory and systemic immune responses reveals myeloid cell-driven lung inflammation in severe COVID-19
Peter A.Szabo, PranayDogra, Joshua I.Gray, Steven B.Wells, Thomas J.Connors, **Stuart P.Weisberg**, Izabela Krupska, Rei Matsumoto, Maya M.L.Poon, Emma Idzikowski, Sinead E.Morris, Chloé Pasin, **Andrew J.Yates**, Amy Ku, Michael Chait, Julia Davis-Porada, Xinzheng V.Guo, Jing Zhou, Matthew Steinle, Sean Mackay, **Anjali Saqi,** Matthew R.Baldwin, Peter A.Sims, Donna L.Farber
Immunity

Tissue-specific immunity for a changing world
Stuart P.Weisberg, Basak B.Ural, Donna L.Farber
Cell

Fielddeployable, rapid diagnostic testing of saliva for SARSCoV2
Shan Wei, Hemant Suryawanshi, Alexandre Djandji, Esther Kohl, Stephanie Morgan, **Eldad A. Hod, Susan Whittier, Kevin Roth**, Raymond Yeh, Juan Carlos Alejaldre, Elaine Fleck, Stephen Ferrara, Daniel Hercz, David Andrews, Lilly Lee, Kristopher A. Hendershot, Joshua Goldstein, Yousin Suh, **Mahesh Mansukhani** & Zev Williams
Scientific Reports - Nature

Apheresis Physician Well-Being During the COVID-19 Pandemic: Results of a Survey
Tanhehco YC, Li Y, Zantek ND, Becker J, Alsammak M, Mikesell K, Wu DW, Foster T, Chhibber V, Saint Martin M, Wehrli G.
Transfusion

Cycle Thresholds Among Solid Organ Transplant Recipients Testing Positive for SARS-CoV-2
Theodore DA, Greendyke WG, Miko B, **Whittier S, Green DA**, Shoucri S, Verna EC, Zucker J, Sobieszczyk ME, Aaron JG, Scully BE, Saiman L, Pereira M, Furuya EY.
Transplantation

Pretest Symptom Duration and Cycle Threshold Values for Severe Acute Respiratory Syndrome Coronavirus 2 Reverse-Transcription Polymerase Chain Reaction Predict Coronavirus Disease 2019 Mortality
Miller EH, Zucker J, Castor D, Annavajhala MK, Sepulveda JL, **Green DA, Whittier S**, Scherer M, Medrano N, Sobieszczyk ME, Yin MT, Kuhn L, Uhlemann AC.
Open Forum Infectious Diseases

The use of therapeutic plasma exchange as adjunctive therapy in the treatment of coronavirus disease 2019: A critical appraisal of the current evidence
Lu W, Kelley W, Fang DC, Joshi S, Kim Y, Paroder M, **Tanhehco Y**, Tran MH, Pham HP.
Journal of Clinical Apheresis

Outcomes of Neonates Born to Mothers With Severe Acute Respiratory Syndrome Coronavirus 2 Infection at a Large Medical Center in New York City
Dumitriu D, Emeruwa UN, Hanft E, Liao GV, Ludwig E, Walzer L, Arditi B, Saslaw M, Andrikopoulou M, Scripps T, Baptiste C, Khan A, Breslin N, Rubenstein D, Simpson LL, Kyle MH, Friedman AM, Hirsch DS, Miller RS, Fernández CR, Fuchs KM, Keown MK, Glassman ME, Stephens A, Gupta A, Sultan S, Sibblies C, **Whittier S**, Abreu W, Akita F, Penn A, D'Alton ME, Orange JS, Goffman D, Saiman L, Stockwell MS, Gyamfi-Bannerman C.
JAMA Pediatrics

ABO blood group and COVID-19: a review on behalf of the ISBT COVID-19 working group
Goel R, Bloch EM, Pirenne F, Al-Riyami AZ, Crowe E, Dau L, Land K, Townsend M, Jecko T, Rahimi-Levene N, Patidar G, Josephson CD, Arora S, Vermeulen M, Vrielink H, Montemayor C, Oreh A, Hindawi S, van den Berg K, Serrano K, So-Osman C, Wood E, Devine DV, Spitalnik SL; ISBT COVID-19 Working Group.
Vox Sang

Direct diagnostic testing of SARS-CoV-2 without the need for prior RNA extraction
Wei S, Kohl E, Djandji A, Morgan S, **Whittier S, Mansukhani M, Hod E**, D'Alton M, Suh Y, Williams Z.
Scientific Reports

The impact of COVID-19 and social distancing on people with Parkinson's disease: a survey study
Feeney MP, Xu Y, Surface M, Shah H, Vanegas-Arroyave N, Chan AK, Delaney E, **Przedborski S,** Beck JC, Alcalay RN.
NPJ Parkinson's Disease

COVID-19 Related Publications

SINCE FEBRUARY 2021

A Postmortem Portrait of the Coronavirus Disease 2019 (COVID-19) Pandemic: A Large Multiinstitutional Autopsy Survey Study
Hooper JE, Padera RF, Dolhnikoff M, da Silva LFF, Duarte-Neto AN, Kapp ME, Lacy JM, Mauad T, Nascimento Saldiva PH, Rapkiewicz AV, Wolf DA, Felix JC, Benson P, de Almeida Monteiro RA, Shanes E, Gawelek KL, Marshall DA, McDonald MM, Muller W, Priemer DS, Solomon IH, Zak T, Bhattacharjee MB, Fu L, Gilbert AR, Harper HL, Litovsky S, Lomasney J, Mount SL, Reilly S, **Sekulic M**, Steffensen TS, Threlkeld KJ, Zhao B, Williamson AK.
Archives of Pathology & Laboratory Medicine

Trophoblast damage with acute and chronic intervillositis: disruption of the placental barrier by severe acute respiratory syndrome coronavirus 2
Larisa Debelenko, Igor Katsyv, Alexander M Chong, Leonore Peruyero, **Matthias Szabolcs**, Anne-Catrin Uhlemann
Human Pathology

Carbapenemase-producing Enterobacterales causing secondary infections during the COVID-19 crisis at a New York City hospital
Gomez-Simmonds A, Annavajhala MK, McConville TH, Dietz DE, Shoucri SM, Laracy JC, Rozenberg FD, Nelson B, Greendyke WG, Furuya EY, **Whittier S**, Uhlemann AC.
The Journal of Antimicrobial Chemotherapy

Identification of Immunohistochemical Reagents for In Situ Protein Expression Analysis of Coronavirus-associated Changes in Human Tissues
Szabolcs M, Sauter JL, Frosina D, Geronimo JA, Hernandez E, Selbs E, Rapkiewicz AV, Rekhtman N, Baine MK, Jäger E, Travis WD, Jungbluth AA.
Applied Immunohistochemistry & Molecular Morphology

At-Home Testing for Sexually Transmitted Infections During the COVID-19 Pandemic
Carnevale C, Richards P, Cohall R, Choe J, Zitaner J, Hall N, Cohall A, **Whittier S, Green DA**, Sobieszczyk ME, Gordon P, Zucker J.
Sextually Transmitted Disease

Third-trimester placentas of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)-positive women: histomorphology, including viral immunohistochemistry and in-situ hybridization
Smithgall MC, Liu-Jarin X, Hamele-Bena D, Cimic A, Mourad M, **Debelenko L, Chen X**.
Histopathology

Useful Information

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 www.giving.cuimc.columbia.edu/ways-give/gifts-securities for more information.

In Memoriam

Ernest April, MD (1939-2021)

BY PAULETTE BERND, MD
Professor of Pathology and Cell Biology

We are saddened to announce the death of Dr. Ernest W. April who retired from the Department of Pathology and Cell Biology in 2016 after 49 years at Columbia University.

Dr. April passed away on June 6th, 2021, in New York City, at the age of 81. He was born on November 6th, 1939, in Salem, Massachusetts. Dr. April earned his undergraduate degree at Tufts University during which time he served in the US Naval Reserve. After graduating, he served in the US Navy for 3 years as an Engineer. Dr. April earned his PhD in anatomy from Columbia University's College of Physicians and Surgeons in 1969 where he remained for his entire career.

Dr. April had a broad and significant impact on multiple generations of department members, trainees, and students. His research focused on the study of liquid crystals in biological systems, and he published over 20 papers in distinguished journals. Dr. April became the course director of gross anatomy in 1971 and served in that position until 2009. During the 1970s he initiated an annual tradition to honor the anatomical donors; Columbia was one of the first schools to do so and these services are now performed at all medical schools. Dr. April also published several anatomical textbooks and review books.

Dr. April is survived by his wife, Lauren Helm, MD, son, Geoffrey, and a granddaughter. We offer then our deep condolences.

Tanya Carter (1972-2021)

BY GEOFFREY LONGMORE

It is with heavy hearts that we announce the passing of Ms. Tanya Carter on Sunday June 13, 2021. She was an important and vibrant member of the department for many years and will be dearly missed.

Tanya S. Carter was born to the late Geneva P. Carter and Ricardo A. Carter on December 3, 1972 in Paterson, New Jersey. She graduated from Rosa L. Parks School of the Performing Arts high school, majoring in Music and studied French and continued her education at Rutgers University-Newark, earning a Bachelor of Arts in Psychology in 2000. She was a devoted member of her church and sang in the choir.

Tanya loved to travel and was an excellent chef who specialized in international foods. Her favorite pasttime was watching Japenese soap operas.

I met Tanya on July 2013 while working for the Clinical Revenue Office as part of the Medicare Team in Fort Lee, New Jersey. She sat in the cubicle across from me and we would always share stories about our nieces and nephews. I transferred to the Pathology and Cell Biology billing office and we kept in contact. When a position became available within the department, I encouraged Tanya to interview for the role because I knew first-hand the expertise and vast knowledge of billing, especially regarding Medicare, she had. I was happy to have Tanya become part of the Pathology and Cell Biology Team! Now, not only did I have a former co-worker with me, but also someone that had become a dear friend. The billing team could always rely on her to assist with Medicare issues, billing questions, system questions, questions about New Jersey where she lived or just to see her smile. I, along with the rest of the Pathology and Cell Biology billing office, and the department at large, will forever miss our coworker and our friend - Ms. Tanya Carter.

IMAGE ABOVE: TANYA CARTER (THIRD FROM RIGHT) SURROUNDED BY HER BILLING OFFICE COLLEAGUES

New Administrative Staff

Angelic Pla
Director, Human Resources and Academic Affairs

We are pleased to announce that **Ms. Angelic Pla** has been appointed director of human resources and faculty affairs in the Department of Pathology and Cell Biology. Ms. Pla joined our department effective June 28, 2021. She serves as the department's principal resource on matters related to human resources and faculty academic affairs

Angelic has been working at Columbia University for the past six years as a senior benefits specialist and human resources professional. Most recently, she was the assistant director for human resources in the Department of Facilities Management and Campus Services at CUIMC. She has successfully developed and launched professional development programs and served on various taskforces to improve Columbia processes, programs, and culture such as performance management, employee engagement, and diversity awareness. She is both a Society for Human Resource Management (SHRM) and Strategic HR Business Partner (SHRBP) certified professional. In January 2021, she was elected President of the Association of Healthcare Human Resources Administrators of Greater New York (AHHRA – Greater NY).

Angelic earned two master's degrees from Columbia University in Applied Analytics and Social Work and holds a bachelor's degree in Psychology from Stony Brook University. We are excited to have her join the Department of Pathology and Cell Biology where she will continue to provide guidance, advice, and consultation to administrators, staff, and faculty on a broad range of human resources and academic affairs matters.

Angelic can be reached via e-mail at amp2219@cumc.columbia.edu or via phone at (212) 342-4112.

Kate Stutzel
Revenue Cycle AR Manager

Ms. Kate Stutzel joined the Department as the new revenue cycle AR manager on April 19, 2021. Kate works with the revenue cycle team to provide oversight and management to the operations and day-to-day billing activities performed by the team. She joins us from her prior role of enrollment manager for the FPO's Provider Enrollment Group. Prior to this, she worked as the billing manager for Columbia University's Department of Neurology.

Kate earned her BA at New York University and her Master's in Public Health with a concentration in Healthcare Administration from Columbia University's Mailman School of Public Health. Kate has more than 10 years of experience in the healthcare industry, and we are excited to have her as part of our central administration team.

Kate can be reached via email at ks2833@cumc.columbia.edu or via phone at (212) 305-7399.

New Administrative Staff

Courtney Tulli
Human Resources Coordinator

We are pleased to welcome **Ms. Courtney Tulli** to the Department of Pathology & Cell Biology in her new role as human resources coordinator. Courtney will be responsible for all aspects of the Department's payroll transactions and timekeeping administration. She will also assist with various human resources related activities, including hiring and terminations, promotions, attendance, temporary staffing, leave management, and visa applications/extensions. She began her new role on June 1, 2021.

Courtney has attained a Bachelor of Science degree in Public Health from Syracuse University. She brings with her hospital human resource experience, payroll experience, and project management experience managing data and payroll for ten different departments. Most recently, developing and implementing a program for weekly COVID-19 testing for all staff in her most recent role as HR coordinator for a Nursing and Rehabilitation Center. In her previous experience with Hackensack Meridian Health and Saint Joseph's Health, she worked closely with physicians and medical staff securing additional resources and providing support as needed related to hospital staff changes.

Courtney can be reached at ct3061@cumc.columbia.edu or via phone at (212) 305-7164.

New Staff Updates

Promotions

Melissa Carter, CPC, CPPM, RHIA

Associate Director, Clinical Revenue

Congratulations to Melissa Carter in her new role as associate director of clinical revenue. As associate director, Melissa will be responsible for the organization and strategic planning of the day-to-day activities of the revenue cycle and practice management areas, providing leadership and administrative oversight of all revenue cycle functions.

Melissa can be reached at mc2356@cumc.columbia.edu or via phone at (212) 305-9275.

New Graduates

Melissa Carter, associate director of clinical revenue, graduated from the Columbia University Mailman School of Public Health. Melissa received an EXEC MHA/MPH in Healthcare Management.

Maria Kouimanis, senior financial analyst, graduated from the Columbia University School of Professional Studies. Maria received an MS in Nonprofit Management.

Courtney Sinn, manager of academic affairs, graduated from the Columbia University School of Professional Studies. Courtney received an MS in Human Capital Management.

Congratulations to you all!

New Residents

Courtney Connely, MD - AP/CP

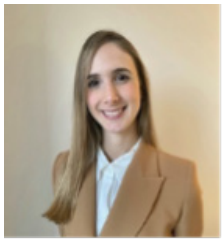
BS – Tufts University, Biochemistry, magna cum laude
MD – SUNY Downstate (AOA)

Completed projects on DNA mismatch repair genes and PDL1/PD1 expression in cervical cancer, drug resistance sequencing in bacteria, and E2H2 expression in ovarian carcinoma.

Niyati Tuksharbhai Desai, MD - AP/CP

MBBS – Government Medical College, Seurat, India
MD – C.U. Shah Medical College, India
Residency – Clinical Microbiology, Mumbai, India

Post-doctoral research – Massachusetts General Hospital Cancer Center and Biomarker Discovery Lab with Drs. David Ting, Miguel Rivera, and Vikram Deshpande, working on LINE-1 repeat RNA in colon carcinoma as a means of molecular classification, circulating tumor cell research, RNA-ISH in FFPE tissues in tuberculosis and on host response to SARS-CoV-2 pulmonary infection.



Michelle Andrea Garlin, MD – AP/CP

MD – Universidad Central de Venezuela-Jose Maria Vargas
U California San Diego - Applied Bioinformatics Certificate
Harvard TH Chan School of Public Health – Principles and Practice of Clinical Research

Post-doctoral research – Massachusetts General Hospital Liquid Biopsy Consortium, Hakho Lee, PhD, extracellular vesicles and circulating tumor cells. MGH Center for Systems Biology, Miles Miller, PhD, targeted drug delivery.

Yin Guo, MD, PhD – AP/CP

MD – Zunyi Medical University, China
PhD – Vanderbilt University, Microbiology and Immunology with Edward Sherwood, MD, PhD, working on the immunopathology of sepsis with special reference to NK cells and IL15 and potential immunotherapies for sepsis.

New Residents

Ian Alexander Mellis, MD, PhD – CP

BA – Amherst College, Mathematics and (Molecular Biology & Informatics)
MD, PhD – Perelman School of Medicine, University of Pennsylvania, Genomic and Computational Biology Graduate Group with Arjun Raj, PhD. Visualized and quantified RNA editing with single cell resolution and studied neurodegenerative disorders. Also, SARS-CoV2 test results and tracking with the Department of Clinical Informatics.

Dr. Roy G. Williams Award for basic medical research, University of Pennsylvania.

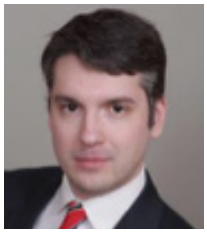
Maelle Saliba, MD – AP/CP

MD – Universite Saint-Joseph, Beirut, Lebanon
Residency in Anatomic Pathology – American University of Beirut Medical Center

Fellowship in head and neck pathology – Memorial Sloan Kettering Cancer Center with Ronald Ghossine, MD, Nora Katabi, MD, and Bin Xu, MD, PhD

Dennis Shem, DMD, OP

University of CA, Berkley – BA in Molecular and Cell Biology & BA in Psychology, with Distinction
Temple University, Kornberg School of Dentistry – Doctor of Dental Medicine
NYP Weill-Cornell – General Practice Residency
Memorial Sloan Kettering – Dental Oncology Fellowship



Evan Waldron, MD, PhD – CP

BA – Vassar, Biochemistry
MD, PhD – Rutgers, Microbiology, Biochemistry and Molecular Genetics with Matthew Neiditch, PhD, Bacterial diffusible signal factors, X-ray crystallography and correlation with biochemistry.

NSMS Faculty Organization Outstanding PhD student award

New Fellows

Abdullah Almuqate, B.HS.c., MD – Cytopathology

MD – Cumming School of Medicine, University of Calgary, Canada
Residency in Anatomic Pathology – University of Calgary, Calgary, AB, Canada
Fellowship in Hematopathology – University of Pennsylvania

Bilal Azab, PhD - Laboratory Genetics and Genomics

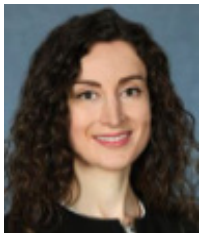
PhD (Human and Molecular Genetics): Virginia Commonwealth University
"Approaches for enhancing cancer gene therapy utilizing chimeric adenoviral delivery vehicles"
Tenured Associate Professor and Molecular Research Core, Acting Director: University of Jordan

Prior work experience at Prevention Genetics, Marshfield.

Diane Chen, MD – GI/Liver

BA, University of Hawaii at Manoa
MD, University of Hawaii John A. Burns School of Medicine
Residency, Columbia University Irving Medical Center - NewYork–Presbyterian Hospital
Academic Interests: Gastrointestinal and hepatic pathology

Hobbies: Hiking, visiting botanical gardens, Japanese tea ceremony, and eating.

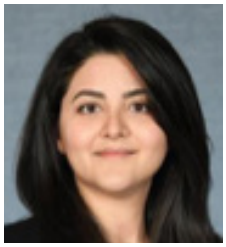


Simona De Michele, MD – GI/Liver

Classical Lyceum Diploma, Liceo classico Tommaso Fazello, Italy
MD, Universita' degli Studi dell'Insubria, Italy
Thesis topic: Allergic asthma in childhood, quality of life assessment in patients treated with SLIT vs pharmacological therapy

Residency, AP/CP, Columbia University Irving Medical Center/NewYork–Presbyterian Hospital

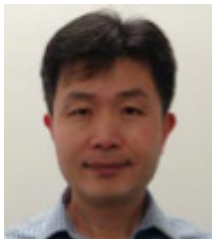
New Fellows



Mitra Dowlatshahi, MD – Surgical Pathology

BA – Physics and Mathematics: Harvard University
MD: Harvard Medical School
Academic Interests: Immunology

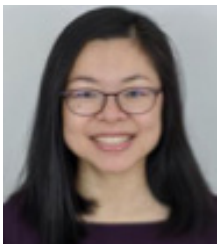
Hobbies: Hiking, kayaking, and DIY anything.



Meng-Chang Hsiao, PhD - Laboratory Genetics and Genomics

PhD (Genetics): University of Alabama at Birmingham
"Decoding NF1 intragenic copy number variations"
MS (Biotechnology and Bioscience): National Taiwan Ocean University

Prior work experience at Jackson Laboratory, Farmington as well as Sema4, Branford.



Xiaoyan Huang, MD - Hematopathology

MD, Tongji Medical College

Residency, SUNY Downstate Medical Center

Geetha Jagannathan, MD, Renal Pathology

MBBS: Vinayaka Mission's Medical College

Residency in Pathology: Thomas Jefferson University Hospital

Surgical pathology assistant: Johns Hopkins Medicine

New Fellows

Irena Manukyan, M.D., Ph.D - Molecular Genetic Pathology

MD: Yerevan State Medical University, Yerevan, Armenia
PhD (Molecular and Cell Biology): SUNY Downstate Medical Center, Brooklyn, NY.
Dissertation: Calcineurin and Jak2 signaling afford cardioprotection via upregulation of CryAB gene
Valedictorian, graduating class, Molecular and Cell Biology.

Residency (Pathology): National Cancer Institute, Bethesda Maryland

Mike Miller , MD PhD - Neuropathology

BS, Integrative Neuroscience, biochemistry and evolutionary studies, Summa Cum Laude, Binghamton University
MD, PhD: Icahn School of Medicine at Mount Sinai
Residency, Pathology: New York Presbyterian Hospital - Columbia University Medical Center

Academic Interests: Integrative neuroscience, neuropsychiatric illness, neurodevelopment
Hobbies: Running/walking, technology and website design, coffee.

Kenneth Ofori, MD – Hematopathology

MB, CHB: University of Ghana

MHS: Johns Hopkins Bloomberg School of Public Health

Residency: Columbia University Medical Center in New York

Madhulata Pantrangi, PhD - Laboratory Genetics and Genomics

PhD (Genetics): University of Delhi
"Fruit-specific over-expression of polyamine biosynthesis genes affects diverse aspects of fruit development and quality in tomato"
MSc (Biotechnology): Pondicherry University

Prior work experience at Prevention Genetics, Marshfield.

Yu Sun, MD PhD – Neuropathology

M.B. Second Military Medical University, China.
Ph.D. Albany Medical College, Center for Neuropharmacology & Neuroscience.
Residency. Columbia University Medical Center in New York

Enjoys reading, gardening and traveling.

Graduate Program

Recent Theses Defended

Sara Viragova, Dalerba Lab, June 18
"Phenotypic dissection and therapeutic manipulation of cell differentiation programs in the salivary gland epithelium and human Adenoid Cystic Carcinomas"

Kendra Johnson, Troy Lab, June 18
"Non-apoptotic caspase-8 signaling mediates retinal angiogenesis"

Vladislav Korobeynikov, Shneider Lab, July 6
"Therapeutic strategies targeting FUS toxicity in amyotrophic lateral sclerosis: from a novel mouse model of disease to the first-in-human study"

Timothy Zhong, Acharyya Lab, July 6
"Systemic regulation of cancer metastasis"

Aidan Quinn, Ferrando Lab, July 19
"Microproteins and epigenetic remodeling in cancer and aging"

William Raab, Dalerba Lab, July 23
"CDX2 as a predictive biomarker of drug response in colon cancer"

Yoon A. Kim, Santa-Maria Perez Lab, July 28
"Epitranscriptomic Alterations in Alzheimer's Disease: The Role of MicroRNA Methylation in the Regulation of Tau Proteostasis"

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