



Volume 28 | January 2022

The Newsletter of Pathology and Laboratory Medicine at Weill Cornell Medicine

### Inside the Issue



Chairman's Message Massimo Loda, MD



Research Highlights Matthew Greenblatt, MD, PhD



Scholarly Productivity



COVID-19 Biobank Melissa Cushing, MD



Respiratory Pathogen Dashboard Lars F. Westblade, PhD



Publications



Welcome Faculty



Upcoming Symposiums





Faculty and Staff Service



In Memoriam C. Richard Minick, MD

## Welcome from the Chairman

The past two years has challenged us in ways we never could have imagined. But despite the current surge in infection and spread of variants, our medical college, particularly the Department of Pathology and Laboratory Medicine, rose to the occasion to assist in the efforts to create an innovative clinical test to identify the presence of the COVID virus in patients. Our faculty and staff demonstrated incredible residence and fortitude to deal with the pandemic crisis in a meaningful way.

I'm thankful for everyone's efforts in addressing the challenges of the global pandemic, while still working to realize the strategic goals that I articulated when I first arrived almost three years ago. I look forward to working with you to create a fully integrated, academic pathology department to: provide the highest quality education, research, and CLIA-based diagnostic tests; foster integration of the Department of Pathology with the fabric of WCM and NYP, which is centered on innovation in anatomic, molecular and computational pathology as well as laboratory medicine; and, finally, create a dynamic hub for scientific excellence that utilizes cutting - edge, sophisticated molecular pathology approaches to study human disease.

Our gifted faculty make coming to work here everyday such a pleasure and honor. The Vice Chairs of this department, as well as the rest of the Pathology faculty, have worked diligently to help us realize these goals.

I'm proud that we graduated six residents and eight fellows, and we were particularly pleased to see that they each secured outstanding positions. We also welcomed the new residents to our program in July 2021. We wish them the best as they go through an intense and transformative period in their professional training.

I hope you find this edition of our e-newsletter to be interesting and informative, and I welcome your feedback. Please be sure to follow us on **Twitter**, **Facebook**, **Instagram**, and **YouTube** for daily updates and information about our department and colleagues.

Sincerely yours,

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Massimo Loda, MD

David D. Thompson Professor and Chairman of Pathology and Laboratory Medicine Pathologist-in-Chief, NewYork-Presbyterian Hospital/Weill Cornell Medical College

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## Chairman's Message

Dr. Massimo Loda has a clear vision for where he wants to lead the Department of Pathology and Laboratory Medicine. To bring this vision to life, we created the following video, which will anchor our new website.

We hope you enjoy this video, featuring Dr. Loda and several of our colleagues.









## Research: Matthew Greenblatt, MD, PhD



Matthew Greenblatt, MD, PhD Associate Professor of Pathology and Laboratory Medicine

Dr. Matthew Greenblatt joined the Department of Pathology and Laboratory Medicine, Divisions of Experimental Pathology and Clinical Pathology, in July 2015. Dr. Greenblatt also serves in the Core and Hematology/Coagulation labs as an attending pathologist and has a graduate school appointment in the BCMB allied program. He is the Associate Director of the pathology residency program, coordinator for clinical pathology education and the Vice Chair of the Institutional Animal Care and Use Committee. Dr. Greenblatt received a combined MS/BS from Yale University in molecular biophysics and biochemistry, with his MS thesis performed in the laboratory of Dr. Sankar Ghosh on innate immune signaling (Zhang et al., Science 2004). He next completed an MD/PhD at Harvard, with PhD thesis work performed in the laboratory of Dr. Laurie Glimcher (Greenblatt et al., JCI 2010; Greenblatt et al. J Exp Med 2010; Greenblatt et al. PNAS 2013). Subsequently, he completed residency in clinical pathology at Brigham and Women's Hospital in 2015, serving as chief resident. During residency and early after his faculty appointment, he obtained several "transition to independence" awards that allowed bypassing a traditional postdoctoral fellowship, including an NIH Director's Early Independence Award (DP5), a Burroughs Wellcome Career Award for Medical Scientists, and young investigator awards from the March of Dimes and Musculoskeletal Transplant Foundation. He was elected a member of the American Society of Clinical Investigation in 2021.

## "The overall goal for the Greenblatt lab is to **build a "tree" identifying all of the cell types** making up bone and the differentiation pathways linking these cells."

### **Research Focus**

For many years, our understanding of the cells making up bone was limited to knowing that there are bone-forming osteoblasts, cartilage-forming chondrocytes, and bone-resorbing osteoclasts. It was unclear if all osteoblasts or chondrocytes were the same, what stem cells provided the source of these cells throughout life, and what

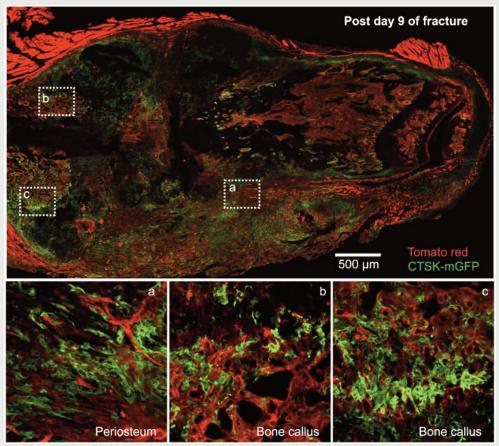
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differentiation steps these stem cells take to generate the cells that ultimately form bone. The overall goal for the Greenblatt lab is to build a "tree" identifying all of the cell types making up bone and the differentiation pathways linking these cells.

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**Tracing the contribution of a periosteal stem cell to fracture healing.** A mouse line was constructed where a new population of periosteal stem cells and their daughter cells were labeled in green using CathepsinK-cre with other cell types labeled in red. These mice underwent femur fracture and visualization of the periosteal stem cell lineage 9 days later, showing extensive contributions of this cell to the intact periosteum (a) and mineralizing regions of the fracture callus (b, c). Adapted from Debnath et al. *Nature* 2018.



## Scholarly Productivity



Dr. Nicholas Brady was among the recipients of the JumpStart award. The Jumpstart Program supports investigators during the critical period of career development spanning from the completion of research training to the early years on faculty at Weill Cornell Medicine.

He will study neuroendocrine prostate cancer (NEPC), a particularly deadly form of the disease that can result from prior prostate cancer treatment.

### Read More

Dr. Amy Chadburn attended the 1st International Symposium on Castleman Disease virtual meeting as a co-moderator and speaker on September 16, 2021 and was an invited speaker at the Society of Hematopathology/European Society of Hematopathology Workshop 2021 on November 5, 2021. She participated in the United States and Canadian Academy of Pathology (USCAP) meeting on October 13-15, 2021 at the "Hematopathology Tasting Menu" and "Oakstone Educational Course." She served as a member on the American Society for Clinical Pathology (ASCP) Annual Meeting 2021 Advisory Board and is also a member representative of the Academic Handbook Working Committee at Weill Cornell Medicine.

**Dr. Robert DeSimone** presented at the Association for the Advancement of Blood and Biotherapies (AABB) Annual Meeting in October of 2021. He gave a presentation entitled: "Optimizing electronic medical records for the transfusion service with workflows, clinical decision support and dashboards," and moderated an oral abstract session related to pediatric and adult transfusion medicine adverse events.

**Dr. Nancy Du** presented at the National Sun Yat-sen University in Taiwan in August of 2021 and gave a presentation entitled: "Identification



of metastatic factors in mouse model by somatic gene transfer." She also presented a talk entitled: "Low-dose CO halts cancer metastasis," at the Chemical Biology of Carbon Monoxide Symposium in Portugal in October of 2021. Dr. Du was appointed the session co-chair of the 2021 Annual Meeting with the Association of Chinese Americans in Cancer Research and served as a reviewer of the 2021 Annual Symposium at the Neuroendocrine Research Foundation.

**Dr. Hamza Gokozan** presented a talk at the Association for Molecular Pathology's Annual Meeting in November of 2021 entitled: "Utilization of next generation sequencing in cytopathology samples," and earned a Certificate of Recognition for completion of the Ultrasound Guided Fine-Needle Aspiration Advanced Practical Pathology Program (USFNA AP3) from the College of American Pathologists. The USFNA AP3 combines intense continuing medical education coursework with rigorous assessments resulting in an objective designation of demonstrated expertise.

**Dr. Syed Hoda** was invited to present Grand Rounds in the pathology departments of The

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National Guards Hospital, Riyadh, Saudi Arabia, in February 2021, and New York University Medical Center, New York, NY, in June 2021. Dr. Hoda was invited to speak at the National Breast Conference hosted by Central Hospital in Qingdao, China, in December 2021. Dr. Hoda was also invited to speak on various aspects of breast pathology at the Emirates Surgical Pathology Conference in Dubai, UAE, in December 2021.



Dr. Massimo Loda has been appointed the Editor-in-Chief of Molecular Cancer Research, one of the nine highly-respected journals published by the American Association for Cancer

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Research (AACR). Additionally, Dr. Loda is serving as Interim Director of the Meyer Cancer Center, one of the top-ranked clinical and medical research centers in the country, integrating scientific inquiry, clinical studies, and precision oncology to advance the standard of cancer care.



## Scholarly Productivity continued

Dr. Juan Miguel Mosquera was a NCI Reviewer for the Cancer Biomarkers Study Section (CBBS) and guest Speaker at the virtual XXXIII Meeting of the Latin American Society of Pathology and presented the "Key role of pathology in the era of precision oncology" on September 25-26, 2021. In recognition of National Hispanic Heritage month, Dr. Mosquera was profiled in a social media campaign by Weill Cornell Medicine.

**Drs. Juan Miguel Mosquera** and **Andrea Sboner** played **key roles** in saving the life of AML patient Cheryl Bonder, who was featured on the cover of the summer 2021 edition of the **Weill Cornell Medicine Summer 2021 Magazine**.

Dr. Momin Siddiqui was elected Vice President of The American Society of Cytopathology (2021-2022) and will subsequently serve as President-electand President in the following years. Dr. Siddiqui was moderator and faculty at the Multidisciplinary Masterclass on Breast Cancer at the American Hospital of Paris on July 9th, 2021, and faculty at the Interactive Microscopy, Contemporary Cytopathology: A Practical Approach at United States and Canadian Academy of Pathology (USCAP) in Palm Springs, California on September 18th -20th, 2021. He served as faculty and workshop chair at the Rapid On-Site Evaluation (ROSE) & Triage of Fine Needle Aspirations at the 43rd European Congress of Cytology (ECC) in Wroclaw, Poland in October of 2021. While attending the ECC meeting, Dr. Siddiqui presented during the Respiratory Tract: "The predicament of "atypia" in cytopathology," and also spoke at the American Society of Cytopathology Companion Meeting, and at the "Different Faces of High-Grade Urothelial Carcinoma, Urine Symposium."

**Dr. Paul Simonson** has been selected by the AIDS Malignancy Consortium (AMC) Executive Committee to participate in its AMC Lab/Translational Scholar Award Program. The name of his project is "Kaposi sarcoma characterization via CODEX imaging and viral mRNA analysis."



### **Patents and Inventions**

Methods for treating metastatic cancer using low dose carbon monoxide U.S. Patent Application No.: 63/052567 Inventors: Nancy Du and Augustine Choi

### Nanotherapy targeting metastatic factor RHAMM positive tumors

U.S. Patent Application No.: #093873-1270 Inventors: Ching-Hsuan Tung, Nancy Du, Seung Koo Lee, and Xiang Chen

**Drs. Amy Chadburn** and **Ethel Cesarman** served as Dr. Paul Simonson's mentors.

**Dr. Tan Ince** was appointed the NRG Oncology Pathology Committee Vice Chair. NRG brings together the National Surgical Adjuvant Breast and Bowel Project (NSABP), the Radiation Therapy Oncology Group (RTOG), and the Gynecologic Oncology Group (GOG).

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**Dr. James Solomon** was appointed Medical Director of the Clinical Genomics Laboratory here at Weill Cornell Medicine.

**Dr. Jessica Tyler** was the Editor for a special issue of the eLife Journal on "Aging, Geroscience, and Longevity," with over 200 submissions and ~50 published papers. Dr. Tyler also presented "Using yeast replicative aging to determine the drivers of aging and longevity" at the Aging and Neurodegeneration Symposium at Cornell University during the October 26-27 meeting.

**Dr. Sarina Yang** received the Young Investigator Award from AACC Therapeutic Drug Monitoring and Clinical Toxicology Division in September 2021.

**Dr. Zhen Zhao** became a member of the Task Force on Outcome Studies in Laboratory Medicine (TF-OSLM) of the International Federation of Clinical Chemistry and Laboratory Medicine (IFCC), and presented "Implementation of cardiac troponin in risk stratification and management for COVID-19 patients," at the Siemens Healthineers Knowledge Sharing Webinar in Taipei, Taiwan in September 2021.

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## COVID-19 Biobank



Melissa Cushing, MD Professor of Pathology and Laboratory Medicine Vice Chair of Clinical Pathology Director of the Clinical Laboratories

Early in the COVID-19 Pandemic, the Division of Clinical Pathology obtained IRB approval to collect and store leftover samples drawn for clinical purposes from patients with COVID-19. These samples were used

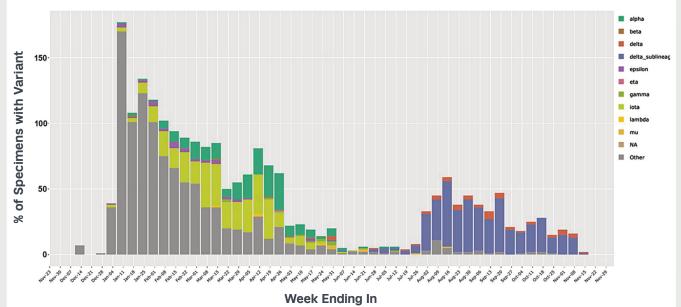
to establish a COVID-19 research biobank and to validate new COVID diagnostic and serologic tests. Samples primarily from nasopharyngeal swabs and peripheral blood were collected, processed, and stored in the Institutional Biobanking Core (IBC). This effort was led by Sophie Rand, Data Operations Engineer for the Department of Pathology; Maria Salpietro, Biorepository Core Director; Melissa Cushing, MD, Vice Chair of Laboratory Medicine; and the Laboratory Directors of Microbiology, the Central Laboratory and Molecular Pathology. A parallel effort was led by Betsy Ross, MD, PhD, Professor of Neuroscience, Brain and Mind Research Institute, to establish a repository of prospectively collected specimens from consented patients. Consent

genetic testing for both prospectively collected specimens and select leftover clinical specimens was also coordinated by Dr. Ross and her team. In collaboration with Weill Cornell Research Informatics (RI), the newly established Division of **Computational and Systems** Pathology designed and implemented from NYGC are processed by database tables to store clinical information for stored specimens to support querying for reporting, list generation for research projects, and linkage to clinical and laboratory data. The Division of Computational and Systems Pathology is led by Vice Chair, Luigi Marchionni, MD, PhD, and his team working on the COVID-19 biobanking and sequencing project includes Sophie Rand, Dr. David Brundage, Dr. Claudio Zanettini, and Dr. Eddie Imada.

The biobanking and accompanying data infrastructure have enabled multiple research activities, ranging from research feasibility assessments to identification of specimens for viral sequencing (the latter in partnership with the New York Genome Center (NYGC). Raw viral sequencing data bioinformaticians in the Division of Computational and Systems Pathology. SARS-CoV-2 variant results have been linked back to all positive specimens in 2021 and stored for research use. A dashboard has been established to monitor the dominant SARS-CoV-2 variants over time (Figure A). To access research specimens:

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FIG. A VARIANTS OVER TIME



## **Respiratory Pathogen Dashboard**



Lars F. Westblade, PhD Associate Professor, Pathology and Laboratory Medicine Director, Clinical Microbiology Service

During the winter months, respiratory pathogen (RP) testing is the center of the universe for every Clinical Microbiology Laboratory (CML). Regardless of whether the pathogen is a novel coronavirus or an old foe such as influenza A, efficiency is central to the testing process, as is the laboratory's ability to survey RP activity to inform local epidemiology. Since the beginning of the COVID-19 pandemic the NewYork-Presbyterian (NYP)/Weill Cornell Medical Center (WCMC) CML has adopted 10 different RP testing platforms and assays. This was a necessary step to curtail test and reagent shortages brought about by the pandemic. As one can imagine, the rapid implementation of so many platforms and assays was not without consequence, with test ordering and operational inefficiencies observed. Additionally, it was extremely difficult to curate the resultant data for epidemiologic purposes.

With that in mind, the NYP/WCMC CML collaborated with multiple colleagues (notably Dr. Jean Scofi, from the Department of Emergency Medicine, and Caroline Wu, from the NYP analytics team) throughout the NYP and WCMC family to develop solutions to facilitate optimal RP test ordering and surveillance. A novel electronic clinical decision support (CDS) algorithm to optimize RP test ordering was adopted. The CDS algorithm considers the patient's age (pediatric vs. adult), location (emergency department, inpatient, or outpatient), and clinical indication for testing (asymptomatic vs. symptomatic, admission vs. discharge, immune status, etc.) to channel specimens to the optimal testing platform. Simply put, the CDS algorithm ensures that the right RP test is ordered for the right patient at the right time, and with the right priority. This approach has significantly simplified the ordering process and offered a level of diagnostic stewardship that was

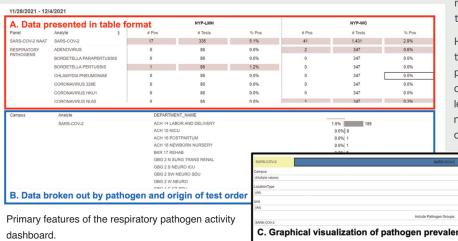
non-existent prior to the pandemic.

However, improving the ordering process addresses only half the problem. RP test data must be presented cleanly, clearly, and

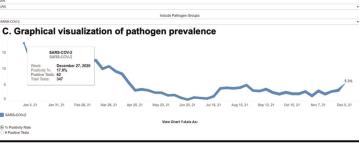
in real time to define local epidemiologic trends. An elegant solution was hatched: a dashboard displaving these data in both table and graphic form, thus, allowing assessment of RP prevalence and trends over time (Figure). The dashboard is interactive and can be queried to display results for single or multiple RPs over a given time frame. In addition, the location of the patient at the time of the order can be easily determined. Since its introduction, the dashboard has revolutionized the dissemination of this valuable information to our patient-facing colleagues and simultaneously permitted a deeper understanding of local RP trends.

I have often stated to my clinical colleagues that they could be forgiven for thinking clinical microbiology practices had not changed significantly since the time of Louis Pasteur. However, borne out of necessity to respond to one of the most defining events of our time and with a "when life gives you lemons, make lemonade" mentality, I hope I have convinced you that clinical microbiology has firmly entered the informatics age and is set for an exciting journey.

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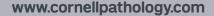


- A. Data are tabulated to allow users to determine the percent positivity of a given pathogen.
- B. Users can also determine the percent positivity of a pathogen based upon the ordering location.
- C. Graphical display where trends in prevalence can be visualized.



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## Publications

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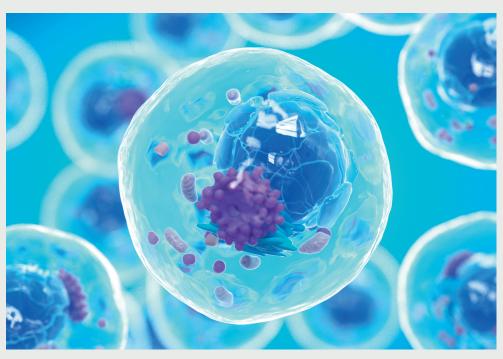
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For a Full List of Publications





## Welcome Faculty

### **Breast Pathology**



William (Sam) Towne, MD joins the department as Instructor in Pathology and Laboratory Medicine in January 2022. He received his bachelor of arts degree in biochemistry from Oberlin

College in 2012. He then

received his medical degree from Temple University in 2017, after which, he completed a residency in anatomic and clinical pathology at NewYork-Presbyterian Hospital/Weill Cornell Medical College. He completed his residency in 2021, and is presently doing a breast pathology fellowship at our institution.

#### **Clinical Microbiology**



Rebecca Marrero Rolon, MD joined the department as Assistant Professor of Clinical Pathology and Laboratory Medicine and

Associate Medical Director of the Microbiology Laboratory in January 2022.

She received her bachelor of science degree (magna cum laude) in biology from the University of Puerto Rico in 2007, and then her doctor of medicine degree from the San Juan Bautista School of Medicine in 2015. After which, she completed post doctoral training in anatomic and clinical pathology as a resident at NYP-WCM in 2019. She then completed a medical microbiology fellowship at the Mayo Clinic College of Medicine and Science in 2020.

#### Dermatopathology



### Linglei Ma, MD, PhD

joined the department as Assistant Professor of Clinical Pathology and Laboratory Medicine (Interim) in October 2021. She received her MD degree from Beijing University in



1994, and then did a dermatology residency at that institution, finishing her training in 1996. In 2001, she completed PhD training in the Department of Biological Chemistry at The Johns Hopkins University Medical School in Baltimore, Maryland. From 2001 to 2004, she did an anatomic pathology residency at Yale New Haven Hospital. Afterwards, she completed a dermatopathology fellowship at NYU.

#### **Gastrointestinal and Pathology**



**Erika Hissong, MD** joined the department as Assistant Professor of Pathology and Laboratory Medicine in October 2021. Dr. Hissong received her BA degree in Biochemistry in 2010 from Anderson University in

Anderson, IN and her M.D. degree from Indiana University in 2014. Erika completed her pathology training at Weill Cornell Medicine as a resident

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and a fellow in Gastrointestinal and Liver Pathology in 2020.

### **Gastrointestinal and Pathology**



**Gloria Young, MD** joined the department as Assistant Professor of Clinical Pathology and Laboratory Medicine (Interim) in October 2021. She received her Bachelor of Arts degree in Mathematics from

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Wellesley College in 1996, and her Master of Arts and M.D. degree from Boston University School of Medicine. She completed her MD degree in 2005. After which, she was a resident in anatomical and clinical pathology at NYP/Weill Cornell Medicine from 2005 to 2009. She then completed a fellowship in oncological surgical pathology from Memorial Sloan Kettering as well as a fellowship in gastrointestinal pathology from Memorial Sloan Kettering.

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## Welcome Faculty continued

#### Gynecological and Perinatal Pathology



#### Annacarolina Da Silva, MD

joined the department as Assistant Professor of Pathology and Laboratory Medicine in October 2021. She received her MD degree from Brazil in 2002 and an MSc degree in Oncology in

2010. She then did a residency and fellowship training from 2003-2007 in Brazil followed by additional residency and fellowship training in Boston at the Mass General Hospital, the Dana-Farber Research Institute and the Brigham and Women's Hospital from 2014-2021.

### **Molecular Hematopathology**



Yahya Al-Ghamdi, MD joined the department as Assistant Professor of Clinical Pathology and Laboratory Medicine in August 2021. Yahya received his medical degree (MBBS) from the Umm Al-Qura

University College of Medicine in Saudi Arabia. After which, he became a post-doctoral fellow in molecular immuno-hematology at Johns Hopkins University. Following his laboratory training at Hopkins, he became a resident in anatomic and clinical pathology at Rush University Medical Center in Chicago, Illinois. Following his clinical training in Chicago, he was a clinical fellow in Hematopathology and Molecular Pathology at NewYork-Presbyterian Hospital/Weill Cornell Medicine.

### Transfusion Medicine



Angie Muniz, MD joined the department as Assistant Professor of Clinical Pathology and Laboratory Medicine and Medical Director of Education, Quality and Regulatory Affairs for Transfusion Medicine and



the University of Puerto Rico in 1994, and her degree in allopathic medicine from the Ponce School of Medicine in Puerto Rico in 2000. She did her internship in internal medicine at the Jacobi Medical Center in the Bronx, and then did a residency in anatomical and clinical pathology at Montefiore Medical Center from 2001 to 2005. Subsequent to this training, she did fellowships in transfusion medicine at the NIH and a fellowship in surgical pathology at the Allegheny Hospital in Pittsburgh, Pennsylvania. from 2009 to 2011.

#### **Translational Pathology**



Tania Pannellini, MD, PhD joined the department as Assistant Professor of Research in Pathology and Laboratory Medicine and Manager-Core Director of the Multiparametric In Situ Imaging (MISI) Laboratory

in September 2021. Tania obtained her medical degree from the Hospital SS Annunziata, G. d'Annunzio University, Chieti, Italy in 2000, and did post-doctoral/residency training in Anatomic and surgical pathology at the Hospital SS Annunziata, G. d'Annunzio University, Chieti, Italy from 2000-2004. She received her PhD in Experimental Pathology and Oncology at the G. d'Annunzio University, Chieti, Italy in 2009.



Stacia Semple, MD joined the department at Assistant Professor of Clinical Pathology and Laboratory Medicine at NYP Lower Manhattan Hospital in August 2021. Dr. Semple received her

Bachelor of Science degree from Sophie Davis School of Biomedical Sciences and a Doctor of Medicine from Albany Medical School. She did a residency in anatomical and clinical pathology at Montefiore Medical Center from 2016 to 2020. She is board certified in Anatomic and Clinical Pathology, followed by a six-month fellowship at the New York Blood Center at Northshore University Hospital at Northwell Health.



Todd Sirkanjanapong, MD joined the department as

joined the department as Assistant Professor of Clinical Pathology and Laboratory Medicine at NYP Brooklyn Methodist in September 2021. Todd received his MD, degree

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in Bangkok, Thailand, and then did a AP/CP residency at SUNY Downstate in 2008. He finished a surgical pathology fellowship at NYU in 2009 and completed a cytology fellowship and women's health (combined breast and GYN) pathology fellowship at Albert Einstein College of Medicine in 2010 and 2011.

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## Upcoming Symposiums





APRIL 29, 2022 Daniel M. Knowles Lectureship Ann M. Gronowski, PhD Washington University School of Medicine, St. Louis, MO



JUNE 1-3, 2022 Master Class in Preoperative Bleeding Management Melissa Cushing, MD



JUNE 22-23, 2022 Cancer Metabolism and Inflammation Symposium Jorge Moscat, PhD

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## Newly Awarded Grants

### United States Department of Defense (DOD) -Incoming Subaward

Title: Treat Implant loosening of Percutaneous Osseointegrated Prosthetic Limbs with Intermittent Parathyroid Hormone

Principal Investigator: **Matthew Greenblatt, MD, PhD** Period of Support: 09/01/2021-08/31/2024 Total Direct Costs: \$54,117

# The Pershing Square Sohn Cancer Research Alliance

Title: Evolution and antigenicity of complex amplicons

Principal Investigator: **Marcin Imielinski, MD, PhD** Period of Support: 07/01/2021-06/30/2024 Total Direct Costs: \$545,454

### National Institutes of Health (R37)

Title: Cell-of-Origin Footprints of Passenger Mutations in Human Lung Cancer Principal Investigator: **Marcin Imielinski, MD, PhD** Period of Support:09/23/2021-08/31/2026 Total Direct Costs: \$1,718,599

### **Breast Cancer Research Foundation**

Title: Isolation and Characterization of Metastatic Breast Cancer Cell-of-Origin Principal Investigator: **Tan Ince, MD, PhD** Period of Support:10/01/2021-09/30/2022 Total Direct Costs: \$158,333

### National Institutes of Health (RM1) -Incoming Subaward

Title: Structure, Function, and Dynamics of Large Molecular Complexes that Execute and Regulate Genome Function

Principal Investigator: **Steven Josefowicz, PhD** Period of Support: 04/01/2021- 03/31/2022 Total Direct Costs: \$170,022

### National Institutes of Health (SBIR) -Incoming Subaward

Title: Leveraging functional genomics to create an epigenetic toolbox for inflammation research and drug discovery

Principal Investigator: **Steven Josefowicz, PhD** Period of Support: 05/01/2021-05/04/2022 Total Direct Costs: \$92,091



#### **National Science Foundation**

Title: Collaborative Research: SCH: Integrated Analysis of Single-Cell and Spatially Resolved Omics Data

Principal Investigator: **Luigi Marchionni, MD, PhD** Period of Support: 09/01/2021- 08/31/2025 Total Direct Costs: \$147,436

#### National Institutes of Health (R01)

Title: Interferon regulation by NBR1-driven chaperone-mediated autophagy in stellate cells in liver cancer

Principal Investigator: **Jorge Moscat, PhD** Period of Support: 12/01/2021- 11/30/2026 Total Direct Costs: \$1,485,421

### United States Department of Defense (DOD)

Title: Novel Complex Structural Variants And Epigenetic Alterations Link The Genomes Of Prostate Cancer In African Americans With Outcome Disparity. Principal Investigator: **Juan Miguel Mosquera, MD** Period of Support: 08/15/2021- 08/14/2023 Total Direct Costs: \$741,658

#### STARR Cancer Consortium

Title: Defining the evolution and tumor microenvironment interactions of classic Hodgkin lymphoma through single-cell multi-omics and genetically engineered mouse models Principal Investigator:

#### Seung Ha (Anna) Nam, MD (Co-PI)

Period of Support: 01/01/2022-12/31/2023 Total Direct Costs: \$364,000

#### STARR Cancer Consortium

Title: Early intervention for the prevention of blood cancer development Principal Investigator: Seung Ha (Anna) Nam, MD (Co-PI) Period of Support: 01/01/2022-12/31/2023 Total Direct Costs: \$182,000

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### Newly Awarded Grants continued

#### **Weill Cornell Medicine Internal Grants**

#### JumpStart Program

Title: Targeting Drivers of tumor heterogeneity to block neuroendocrine prostate cancer progression Principal Investigator: **Nicholas Brady, PhD** Period of Support:07/01/2021-06/30/2024 Total Direct Costs: \$300,000

### WCM SPORE in Prostate Cancer Career Enhancement Program

Title: Targeting drivers of tumor heterogeneity to block the progression to NEPC Principal Investigator: **Nicholas Brady, PhD** Period of Support: 09/01/2021- 08/31/2022 Total Direct Costs: \$50,000

### WCM Prostate Cancer SPORE Developmental Research Program

Title: A versatile patient derived prostate cell culture system Principal Investigator: **Tan Ince, MD, PhD** 

Period of Support: 08/01/2021- 07/31/2022 Total Direct Costs: \$75,000

### WCM Prostate Cancer SPORE Developmental Research Program

Title: Therapeutic targeting the neuroendocrine prostate cancer stroma Principal Investigator: **Maria Diaz-Meco, PhD** and **Jorge Moscat, PhD** Period of Support: 09/01/2021- 08/31/2022 Total Direct Costs: \$75,000

**Clinical & Translational Science Center (CTSC)** 

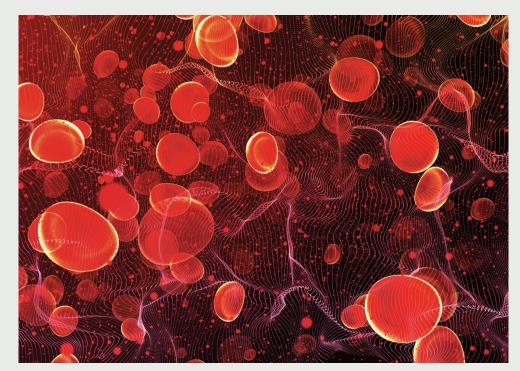
Title: Small molecule inhibitors of G3BP1 reinvigorate SPOP tumor suppressor Principal Investigator: **Pengbo Zhou, PhD** Period of Support: 07/01/2021-06/30/2022 Total Direct Costs: \$50,000

### Seed Grant for Collaborative Multi-Investigator Projects

Title: A microbial delivery system for anti-colorectal cancer ubiquibodies Principal Investigators: **Pengbo Zhou, PhD** and

Matthew DeLisa, PhD

Period of Support: 01/01/2022-12/31/2022 Total Direct Costs: \$75,000



### Seed Grant for Collaborative Multi-Investigator Projects

Title: A machine learning approach to integrated multidrug resistance surveillance and clinical decision support

Principal Investigators: Lars Westblade, PhD (Co-PIs:Casey Cazer, PhD and Yiye Zhang, PhD) Period of Support: 01/01/2022-12/31/2022 Total Direct Costs: \$75,000

### Industry Sponsored Research Agreements

#### Predictive Oncology, Inc.

Title: SRA: TumorGenesis, Inc – Ovarian cancer cell based panning project Principal Investigator: **Tan Ince, MD, PhD** Period of Support: 08/11/2021-08/10/2022 Total Direct Costs: 94,880

#### Novartis Pharmaceuticals Corp.

Title: Evaluation of eltrombopag interference in total bilirubin, direct bilirubin and creatinine clinical chemistry tests Principal Investigator: **Zhen Zhao, PhD** Period of Support: 10/26/2021-10/25/2022 Total Direct Costs: \$74,000

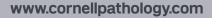
### Fellowships

American Association for Cancer Research Title: Role of the linker histones H1 In lymphomas Principal Investigator: Antonin Papin, PhD (postdoc in Cesarman Lab) Period of Support: 07/01/2021- 06/30/2023 Total Direct Costs: \$120,000

#### Fondazione AIRC per la ricerca sul cancro

Title: Deciphering the role of androgen receptor in spatially resolved mesenchymal populations in prostate cancer Principal Investigator: **Filippo Pederzoli, PhD (postdoc in Loda Lab)** Period of Support: 01/01/2022- 12/31/2023

Total Direct Costs: \$142,198





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## Faculty and Staff Service



## Thank you to our dedicated faculty and staff

|                         | Years of<br>service |                               | Years of<br>service |
|-------------------------|---------------------|-------------------------------|---------------------|
| Sharon Clark            | 30                  | Cynthia M. Magro, MD          | 15                  |
| Selina Chen-Kiang, PhD  | 25                  | Chenyi Yang, MD, PhD          | 15                  |
| Shefali G. Shah         | 25                  | Annarita Di Lorenzo, PhD      | 10                  |
| Shuhua Cheng, PhD       | 20                  | Matthew B. Greenblatt, MD, Ph | D 10                |
| Ann-Marie Ewell         | 20                  | Francesca Khani, MD           | 10                  |
| David C. Wilkes, PhD    | 20                  | Cathleen Matrai, MD           | 10                  |
| Lea Esther S. Benguigui | 15                  | Juan Miguel Mosquera, MD      | 10                  |
| Melissa M. Cushing, MD  | 15                  | Ji-Hye Paik, PhD              | 10                  |
| Leticia Dizon           | 15                  | Andrea Sboner, PhD            | 10                  |
| Bing He                 | 15                  |                               |                     |

# Happy Retirement



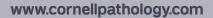
Rebecca Baergen, MD 24 Years of Service



Yao Tseng Chen, MD, PhD 30 Years of Service

Best wishes on your new journey!

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## In Memoriam C. Richard Minick, MD



Professor Emeritus of Pathology and Laboratory Medicine at Weill Cornell Medicine

Dr. C. Richard Minick (1936-2021), Professor Emeritus of Pathology and Laboratory Medicine at Weill Cornell Medicine, Cornell University, died on Long Island, New York on November 5, 2021 at the age of 85. Dr. Minick will be remembered for his extraordinary contributions to the role of cell injury and inflammation in the pathogenesis of atherosclerosis. His innovative work helped to focus scientific research on the role of immunological and viral injury in the development of cardiovascular disease. Dr. Minick published 42 substantive research papers and 19 book chapters in the field of atherosclerosis research.

Dr. Minick was a native of Sheraton, Wyoming where he received his Bachelor of Science degree from the University of Wyoming in 1956. He matriculated at Cornell University Medical College that year, and received his M.D. degree at this medical college in 1960. He was an intern, resident and chief resident in Pathology at The New York Hospital until he completed such training in 1965. In the 1960s and 70s, he rose through the academic ranks and was promoted to Professor of Pathology in 1976. For his meritorious service to the medical college, he was elected Professor Emeritus of Pathology in 2001, but continued teaching at the medical center until 2009. He truly excelled in medical "The dominant influence of Dr. Minick in the field of cardiovascular research... was his enthusiasm for bench research and medical education."

school teaching, and students appreciated his erudition. He won many teaching awards at Cornell.

A boarded pathologist, Dr. Minick served on many medical college committees and became an integral part of the fabric of this institution. He was a member of the general faculty council, the executive faculty council, the Committee of Review, and several search and compliance committees. Moreover, he also was successful in obtaining grant support from the NIH and the American Heart Association in the 1960's-1980's.

Most notably, Dr. Minick took great pride in teaching the next generation of medical students, residents, and young scientist, many of which have become noted investigators in their own right. A great hallmark of his distinguished career are the people that he trained, and he was very proud of those individuals.

The dominant influence of Dr. Minick in the field of cardiovascular research, including his power for attracting investigators into this field, was his enthusiasm for bench research and medical education. This ebullience will be missed by the community of cardiovascular pathologists working in the field of atherosclerosis today.

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Left to right: Y.T. Chen; J. Mouradian; A. Chadburn; C.R. Minick; R. L. Alonso.

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