

8-2024

Dean's Research Newsletter, August 2024

Neil W. Schluger

Follow this and additional works at: https://touro scholar.touro.edu/nymc_som_research_newsletter



Part of the [Medical Education Commons](#), and the [Medical Sciences Commons](#)



Dear Members of the NYMC Community,

As we embark on another academic year, I am pleased to share the latest issue of the research newsletter that once again showcases the innovative research of our dedicated community of scholars working to advance health care in various areas.

Our community continues to play a vital role in understanding and responding to the COVID-19 pandemic, as highlighted by two studies on vaccines and asthma. In addition, this issue highlights important research on geriatric trauma care, racial inequities in foster care placement, hidradenitis suppurativa, pediatric cardiology, reproductive health, and more. It is particularly gratifying to see that many of these research endeavors are collaborative efforts between our students and faculty, emphasizing the critical role our faculty play as mentors to our future health care professionals.

Our collective efforts in research and education continue to propel us forward in our mission to improve health outcomes locally and globally. Thank you for your unwavering commitment to excellence and for being a part of our vibrant academic community. Together, we will continue to make a difference in the lives of those we serve.

Sincerely,

Neil W. Schluger, M.D.
Dean of the School of Medicine
Professor of Medicine



[Follow the SOM on Facebook](#)

[Follow the SOM on Instagram](#)

COVID-19 Symptoms During the Omicron Surge Differ Between Boosted and Vaccinated Non-Boosted Individuals

Those vaccinated against COVID-19 who had also received the booster vaccine had a significantly lower frequency of body and muscle aches but a significantly higher frequency of nasal congestion and sore throat than those vaccinated who had not received the booster vaccine,



according to a new study by **Marisa Montecalvo, M.D.**, professor of medicine; Elizabeth Drugge, Ph.D., M.P.H. '12, associate professor of epidemiology; and Gary Wormser, M.D., professor of medicine, pharmacology, and of pathology, microbiology, and immunology, published in *Vaccines*. The study also found that as more time passed since receiving the booster vaccine, the rates of fever and cough significantly increased.

“NYMC’s requirement that faculty, staff, and students report all confirmed SARS-CoV-2 infections to Health Services and to report on symptoms to be released from isolation allowed us to study the clinical manifestations of SARS-CoV-2 infections early during the Omicron variant surge from the date of symptom onset to release from isolation and to compare vaccine-boosted versus vaccinated non-boosted individuals,” says Dr. Montecalvo, who also serves as the director of health services at NYMC.

“When the Omicron variant first emerged in 2021, it appeared that Omicron infections had a better outcome compared with earlier variants,” says Dr. Montecalvo. “However, the rapid rise of breakthrough infections in vaccinated individuals and infections in individuals with a prior SARS-CoV-2 infection demonstrated that both vaccine immunity and natural immunity offered less than optimal protection against Omicron infection.” [Read more.](#)

Asthma Found to Have Profound Impact on COVID-19 Patients in New Study

Patients with asthma hospitalized for COVID-19 experienced a much more severe outcome than those without asthma, according to a [new study](#) that was conducted by NYMC faculty and presented by **Antony Arumairaj, M.D.**, assistant professor of medicine, at the American Thoracic Society International Conference in May.

The study, which included more than 300,000 adults hospitalized with COVID-19 as reported by the National Inpatient Sample 2020, was initiated after previous studies offered conflicting evidence about asthma's impact on COVID-19 outcomes.

“There are some clinical studies which showed that it was a protective factor. Some said it was a high-risk factor,” said Dr. Arumairaj. “So, we decided to do a national patient sample analysis.”

According to their analysis, patients with asthma were nearly twice as likely to be hospitalized for COVID-19 and almost five times more likely to die compared to patients without asthma. [Read more.](#)



Shock Index Critical Predictor of Outcomes for Elderly Trauma Patients

Shock index (SI), a known indicator of unfavorable outcomes in trauma, was found to be a more robust predictor of prognosis in geriatric patients with severe trauma as compared to younger patients in a new study by NYMC faculty that was recently published in *The Journal of Surgical Research*.

“The SI has emerged as a valuable tool for assessing the degree of shock in trauma patients, providing a simple yet effective means to evaluate circulatory compromise based on vital signs and help health care providers make critical triage decisions and effectively allocate and prioritize resources,” says **Kartik Prabhakaran, M.D.**, professor of surgery. “Our findings underscore the critical significance of the SI as an invaluable prognostic indicator in geriatric patients facing severe



trauma.”

Notably, the study reveals a heightened predictive strength of the SI in the elderly compared to younger counterparts. “Geriatric patients with each 0.1 increase in SI face a 12.3 percent higher risk of mortality, accentuating the SI’s role in predicting life-threatening consequences,” says Dr. Prabhakaran. “The study also illuminates a compelling link between increased SI values and certain medical interventions in geriatrics, indicating a 31.8 percent increased likelihood of blood transfusions and 64.8 percent increased odds of undergoing major surgical intervention. These results highlight the SI’s potential to guide clinical decision-making and optimize care strategies for elderly individuals.” [Read more.](#)

Grants Corner

Hasan Ahmad, M.D., associate professor of medicine, received a \$375,096 grant from Novartis Pharmaceuticals for “A Randomized, Double-blind, Placebo-controlled Multicenter Study to Evaluate the Effect of Inclisiran on Preventing Major Adverse Cardiovascular Events in High-risk Primary Prevention Patients (VICTORION-1 PREVENT)/Protocol Number CKJX839D12302.”

Fawaz Al-Mufti, M.D., associate professor of neurology, neurosurgery, and of radiology, received a \$54,845 grant from Cerenovus for “Retrospective Real-World Evidence Study Real World Evidence Study to Characterize the Performance and Safety of the CEREGlide™ 71 Intermediate Catheter for Aspiration Neurothrombectomy.”

Malik Bissier, Ph.D., assistant professor of cell biology and anatomy and of physiology, received a \$40,000 grant from the American Thoracic Society for “LSD1 as a Target for Restoring Endothelial Cell Function for PAH.”

Mitchell Cairo, M.D., professor of pediatrics, medicine, cell biology and anatomy, and of pathology, microbiology, and immunology, received a \$200,000 grant from the Pediatric Cancer Foundation for “Reducing the Burden of Oncologic Chemotherapy and Radiation Exposure Utilizing Targeted Immunotherapy in Children, Adolescents and Young Adults with Lymphoma”; a \$56,959 grant from Kadmon Corporation for “KD025-218, A Phase 2, Open-label, Multicenter Study to Evaluate the Safety and Efficacy of Belumosudil in Black or African American, American Indian or Alaska Native, and Native Hawaiian or Other Pacific Islander Participants with Chronic Graft Versus Host Disease (cGVHD) After At Least 2 Prior Lines of Systemic Therapy”; and a \$5,000 grant from Alex’s Lemonade Stand Foundation for a student researcher for “Investigating the Effects of Targeted Chimeric Antigen Receptor Natural Killer Cells Armored with Tumor-Attracting Chemokine Receptors Combined With a Novel Immunomodulator in the Treatment of Osteosarcoma.”

Victor Garcia, Ph.D., assistant professor of pharmacology, received a \$85,000 grant from Orion Biotechnology Canada Limited for “Orion Biotechnology: Investigating GPR75 blockade in diet-induced obesity and beyond.”

Christine Hom, M.D., clinical assistant professor of pediatrics, received a \$399,211 grant from AbbVie, Inc. for “Systemic Juvenile Idiopathic Arthritis: Efficacy, Safety, and Pharmacokinetics of Upadacitinib in Pediatric Subjects with Active Systemic Juvenile Idiopathic Arthritis.”

Mark Hurwitz, M.D., professor and chair, Department of Radiation Medicine, received a \$258,714 grant from Merck Sharp & Dohme LLC for “A Phase 3, Randomized, Double-blind, Placebo-controlled Clinical Trial to Study the Efficacy and Safety of Pembrolizumab (MK-3475) in Combination With Chemoradiotherapy (CRT) versus CRT Alone in Participants with Muscle-invasive Bladder Cancer (MIBC) (KEYNOTE-992).”

Diwakar Jain, M.D., professor of medicine, received a \$273,442 grant from Janssen Research and Development, LLC for “A Phase 3, Randomized, Double-blind, Placebo-controlled, Event-driven Study to Demonstrate the Efficacy and Safety of Milvexian, an Oral Factor XIa Inhibitor, After a Recent Acute Coronary Syndrome LIBREXIA-ACS.”

Igor Laskowski, M.D., Ph.D., associate professor of surgery, received a \$63,525 grant from Altrazael Life Science, Inc. for “Randomized Clinical Trial to Compare Transforming Powder and Standard of Care Dressing Therapies to Heal Diabetic Foot Ulcers.”

Suguru Ohira, M.D., associate professor of surgery, received a \$233,940 grant from W.L. Gore &

Associates, Inc. for “Evaluation of the GORE Ascending Stent Graft (ASG device) in the Treatment of Lesions of the Ascending Aorta (Protocol No. ASG 22-02).”

Chioma Okeoma, Ph.D., professor of pathology, microbiology, and immunology, received a \$97,364 grant from the National Institutes of Health for “ProteinSimple Jess System for Protein Analysis at NYMC.”

Helen Perakis, M.D., assistant professor of surgery, received a \$152,250 grant from Altrazael Life Science, Inc. for “Randomized, Controlled, Open-Label, Parallel Group, Multi-Center, Prospective Phase 4 Study Comparing the Efficacy of Transforming Powder Dressing to NPIAP Recommended Standard of Care Therapies in Stage 2, 3 and 4 Pressure Injuries.”

Marcello Rota, Ph.D., associate professor of physiology, received a \$300,000 grant from the American Heart Association for “Sympathovagal Balance Conditions of Manifestation of Cardiometabolic Syndrome.”

Gunjan Shukla, M.D., assistant professor of medicine, received a \$301,337 grant from Boston Scientific Corporation “A Prospective Randomized Multicenter Global Study Comparing Pulsed Field Ablation versus Anti-Arrhythmic Drug Therapy as a First Line Treatment for Persistent Atrial Fibrillation.”

Katrina Stidham, M.D., associate professor of otolaryngology, and assistant professor of neurosurgery, received a \$6,825 grant from Advanced Bionics LLC for “Retrospective Study of Advanced Bionics Recipient Outcomes with Single-Sided Deafness and Asymmetric Hearing Loss” Dr. Stidham in collaboration with **Christine Colasacco**, SOM Class of 2025, received a \$10,720 grant from MED-EL Corporation for “Utilization of intra-operative IFT matrix to rule out electrode tip fold-over peri-operatively.”

Christopher Whitehurst, Ph.D., assistant professor of pathology, microbiology, and immunology and of biochemistry and molecular biology, received a \$222,750 grant from the National Institutes of Health for “Targeting EBV's Deubiquitinating Activity for Therapy.”

Dazhong Xu, Ph.D., associate professor of pathology, microbiology, and immunology, and **Marietta Lee, Ph.D.**, professor emeritus of biochemistry and molecular biology, received a \$206,198 grant from the National Institutes of Health for “The role of DNA Polymerase Delta 4 in Lung Carcinogenesis Induced by Genotoxic Carcinogens.”

Study Highlights Racial Inequities in Foster Care Placement Following Non-Accidental Trauma

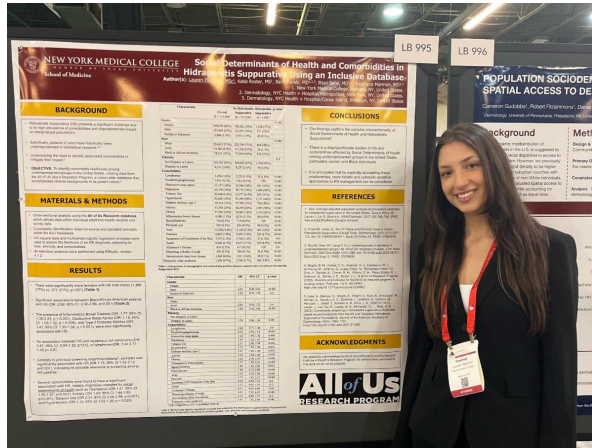
Non-accidental trauma (NAT) is a leading cause of traumatic death and disability in children, with many of these victims later placed in foster care. A new study conducted by NYMC faculty and students found that neighborhood disadvantage—marked by a lack of economic and social resources—is an independent predictor of discharge to foster care. The study, recently published in the *Journal of Pediatric Surgery*, also revealed that Black children were disproportionately overrepresented in both the NAT population they studied and among those placed in foster care.



“Previous studies evaluating race and NAT have shown similar results with Black children disproportionately overrepresented in both the NAT and foster care populations,” says **Irim Salik, M.D.**, (above left) associate professor of anesthesiology and co-author of the study. “These findings are likely due to multiple factors. Systemic racism places Black families at higher risk for lower socioeconomic status, increased poverty, lower parental education, and higher family stress— all risk factors for abuse and family welfare involvement. Additionally, both conscious and unconscious bias within the health care system leads to increased screening and referral of Black children to Child Protective Services, resulting in higher foster care placements.”

“Any information that sheds light on injury prevention in this patient population can profoundly improve healthcare in pediatric patients who are victims of NAT,” says **Sonali Dadoo**, (above right) SOM Class of 2025, who presented the study at the Ninth Annual Meeting of the Pediatric Trauma Society National

Hidradenitis Suppurativa Presents Significant Health Challenge for Marginalized Populations



Hidradenitis Suppurativa (HS), a persistent and sometimes debilitating inflammatory skin condition, presents a significant health challenge due to its high prevalence of comorbidities and disproportionate impact on marginalized populations, according to a study conducted by NYMC students, faculty, and residents.

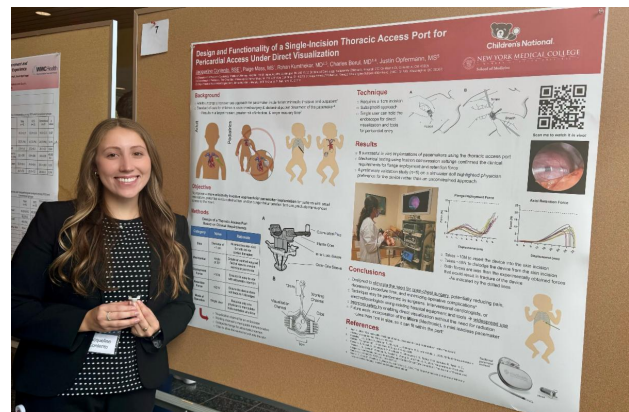
“Patients of color have historically been underrepresented in biomedical research, a fact that underscores the need to identify associated comorbidities to mitigate the impact of HS among diverse populations,” says **Lauren Fleshner, M.Sc.**, SOM Class of 2027, lead author of the study that she presented at the Society for Investigative

Dermatology conference in Dallas, Texas, in May.

“We found that females and African Americans were three times more likely to be afflicted with HS,” says Fleshner. “HS patients were also more likely to suffer from several comorbidities—inflammatory bowel disease, obstructive sleep apnea, type 2 diabetes mellitus, and contrary to previous screening recommendations, psoriasis.” [Read more.](#)

SOM Student Helps Pioneer New Tool for Pediatric Pacemaker Implantation

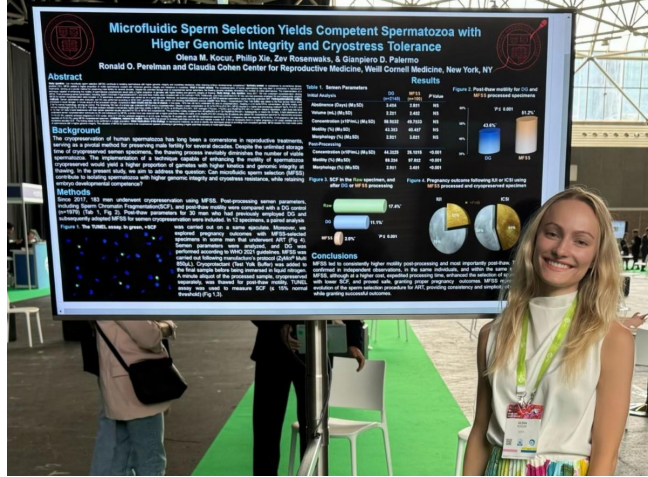
After just one year of medical school, **Jacqueline Contento**, SOM Class of 2027, is already making an impact on the field of pediatric cardiology with [the development of a medical device that would potentially allow for minimally invasive pacemaker implantation in infants](#). Contento, who holds an undergraduate biomedical engineering degree from Duke University, worked with a team at the Sheikh Zayed Institute for Pediatric Surgical Innovation at Children’s National Hospital in Washington, D.C., to create PeriPath, a single-use, low-cost pericardial access tool.



“Currently, neonates, infants, children, and even some adults with congenital heart disease cannot undergo the standard outpatient procedure to implant cardiac therapy leads for pacing, defibrillation, or cardiac resynchronization. This is due to their small blood vessels, venous obstructions, and congenital anomalies that prevent transvenous access to the heart,” says Contento. “The current approach has been for these patients to have pacing or defibrillator leads implanted via open chest surgery. PeriPath has the potential to offer an alternative – a smaller incision will have many benefits to patients, including a smaller scar, less risk of infection, and shorter hospital stay.” [Read more.](#)

SOM Student Advances Reproductive Health Science on the Global Stage

Olena Kocur, SOM Class of 2027, is



passion about reproductive health and science. This passion has resulted in [multiple publications in medical journals](#) and, most recently, three poster presentations at the 40th Annual Meeting of the European Society of Human Reproduction and Embryology in Amsterdam, Netherlands, in July.

“The field of reproductive health and science fascinates me, particularly because there remains a vast amount of knowledge yet to be discovered,” says Kocur. “The potential to contribute to groundbreaking advancements in this area is incredibly appealing. My ultimate dream is to pursue a career in reproductive medicine, where I can make a meaningful

impact for couples seeking to grow their family.”

Among the studies presented at the conference was a [study that focused on identifying male gamete fertilization dysfunction](#). “Historically, women have often been blamed for infertility. However, we are finding men and women are equally likely to contribute to a couple’s infertility,” says Kocur. “In fact, about one-third of infertility cases are attributed to female factors, another one-third to male factors, and the remaining third to a combination of both partners or unexplained reasons.” [Read more.](#)

Neuroscience Summer Research Forum Showcases Student Work



Nearly 50 SOM students had the opportunity to showcase their research in the field of neuroscience through both oral and poster presentations at the Neuroscience Summer Research Forum on July 8. Research projects encompassed a wide range of topics from neuroinflammation in subarachnoid hemorrhage and epilepsy to lumbar spinal fusion in the elderly and evaluating CAR T-cell therapy for treating autoimmune disease. The research conducted is a result of the students’ participation in the Summer Neuroscience Research Program, an annual opportunity, from May to July for NYMC students between the first and second years of medical school, to participate in clinical research, receive supplementary neuroscience didactics, an introduction to research methodology, and observe neurosurgical procedures in the OR.

Research Resource Corner

The following are helpful links to resources available to faculty and students to support research.

- [Library Databases](#)
- [National Inpatient Sample Data Set Access](#)
- [Library Research Assistance](#)
- [Guide to Scholarly Publishing](#)
- [Systematic Review Guide](#)
- [Office of Research Administration](#)
- [Human Subject Research](#)
- [IRB Policies and Procedures](#)
- [Intramural Funding Opportunities](#)

- [Core Facilities and Shared Resources](#)

The **Research Repository on LEO** (*available to matriculated students*) provides centralized access to numerous resources designed to assist students in all stages of their research endeavors -- from locating a project and mentor to creating a plan for research productivity, analyzing data, and generating a scholarly product. Highlights of the site include a listing of prospective, NYMC-affiliated faculty mentors and resources for funding conference presentations.

Current students can access the Research Repository by logging into LEO/LCMS+ and under "COURSES", search for: Yr999 - 2024-2025 - SOM - Research (RESEARCH).

LabArchives Electronic Lab Notebook, a cloud-based electronic lab notebook (ELN) that makes organizing, storing, and sharing lab data fast, simple, and accessible on all digital platforms, is now available at no cost to everyone in the NYMC community.

Faculty, Resident, and Student Publications and Accolades

The following includes a selection of recent publications by SOM faculty, residents, and students. View the full list of **publications**.

Debra Bessen, Ph.D., professor of pathology, microbiology and immunology; and **John Fallon, M.D., Ph.D.**, adjunct professor of pathology, microbiology, and immunology and of medicine, published "[Recombinational Exchange of M-Fibril and T-Pilus Genes Generates Extensive Cell Surface Diversity in the Global Group A Streptococcus Population](#)" in *MBio*.

Amy Brown, M.D., M.Be., assistant professor of pediatrics; **Yehudit Pollack, M.D.**, assistant professor of pediatrics; **Joshua Vazhappilly**, SOM Class of 2025; **Carrighan Perry**, SOM Class of 2025; **Erica Thomas**, SOM Class of 2025; Sankaran **Krishnan, M.D., M.P.H.**, associate professor of pediatrics; and **Allen Dozor, M.D.**, professor of pediatrics, published "[Relationship Between FEV\(1\)/FVC and Age in Children With Asthma](#)" in *Pediatric Pulmonology*.

Kanishka Uttam Chandani, M.D., internal medicine resident, and **Sajid Siddiq, M.B.B.S.**, clinical assistant professor of medicine, published "[Racial Disparities in Cardiovascular and Cerebrovascular Adverse Events in Patients with Non-Hodgkin Lymphoma: A Nationwide Analysis](#)" in *Medicina*.

Muhammet Celik, M.D., psychiatry resident, published "[Analysis of Nonfatal Suicide Attempts and Demographic Characteristics of US Military Veterans With Opioid Use Disorder: A Descriptive VA Medical Center Study](#)" in *The American Journal on Addictions*.

Siri Drangsholt, M.D., assistant professor of urology and of obstetrics and gynecology; **Cassidy Lleras**, SOM Class of 2025; **Rebecca Kindler**, SOM Class of 2025; **Bracha Pollack**, SOM Class of 2025; **Aleksandr Harutyunyan**, SOM Class of 2025; **Matan Grunfeld**, SOM Class of 2025; **Yehuda Gejerman**, SOM Class of 2025; **Moshe Bulmash**, SOM Class of 2025; **Rahim Hirani**, SOM Class of 2025; **Patrick Popiel, M.D.**, assistant professor of urology and of obstetrics and gynecology; and **Elizabeth Drugge, Ph.D., M.P.H. '12**, associate professor of epidemiology, published "[Active Compared With Passive Voiding Trials After Midurethral Slings Surgery: A Systematic Review](#)" in *Obstetrics and Gynecology*.

Saam Foroshani, SOM Class of 2025; **Avrohom Karp**, SOM Class of 2025; **Wilbert Aronow, M.D.**, professor of medicine; and **Gregg Lanier, M.D.**, associate professor of medicine, published "[The Role of Phosphodiesterase 9A Inhibitors in Heart Failure](#)" in *Expert Opinion on Investigational Drugs*.

Patricia Gerbarg, M.D., clinical assistant professor of psychiatry and behavioral sciences, published "[Breath-Focused Mind-Body Therapy for Global Mental Health: War and Other Mass Disaster s](#)" in *Academia Mental Health and Well-Being*.

Vasiliki Gregory, SOM Class of 2025; **Kenji Okumura, M.D.**, instructor of surgery; **Junichi Shimamura, Ph.D.**, assistant professor of surgery; **David Spielvogel, M.D.**, professor of surgery; **Masashi Kai, M.D.**, associate professor of surgery; and **Suguru Ohira, M.D., Ph.D.**, associate professor of surgery, published "[Impact of Left Ventricular Unloading on Outcome of Heart Transplant Bridging With Extracorporeal Membrane Oxygenation Support in New Allocation Policy](#)" in the *Journal of the American Heart Association*.

Marvin Medow, Ph.D., professor of pediatrics and associate professor of physiology; and **Julian Stewart, M.D., Ph.D.**, professor of pediatrics, physiology, and of medicine, published "[Phenylephrine Alters Phase Synchronization Between Cerebral Blood Velocity and Blood Pressure in ME/CFS With Orthostatic Intolerance](#)" in the *American Journal of Physiology. Regulatory, Integrative and Comparative Physiology*.

Kenji Okumura, M.D., instructor of surgery; **Abhay Dhand, M.D.**, associate professor of medicine; **Ryosuke Misawa, M.D., Ph.D.**, assistant professor of surgery; **Hiroshi Sogawa, M.D.**, professor of surgery; **Gregory Veillette, M.D.**, associate professor of surgery; and **Seigo Nishida, M.D., Ph.D.**, professor of surgery, published "Potential Association of Blood Transfusion in Deceased Donors With Outcomes of Liver Transplantation in the United States" in *The Journal of Surgical Research* .

Mehmet Ozkaynak, M.D., professor of pediatrics; **Wen Luo, Ph.D.**, assistant professor of pediatrics; **Yanling Liao, Ph.D.**, associate professor of pediatrics; **Janet Ayello, M.S.**, research assistant professor of pediatrics; and **Mitchell Cairo, M.D.**, professor and vice chair of pediatrics, and professor of medicine, cell biology and anatomy, and of pathology, microbiology, and immunology, published "Efficiently Targeting Neuroblastoma With the Combination of Anti-ROR1 CAR NK Cells and N-803 In Vitro and In Vivo in NB Xenografts" in *Molecular Therapy: Oncology* .

Kathryn Spanknebel, M.D., dean of faculty and academic affairs and associate professor of surgery, published "Surgery Clerkship Directors' Perceptions of the COVID-19 Pandemic's Impact on Medical Student Education" in the *Journal of the American College of Surgeons* .

Rachel Stern, SOM Class of 2025; **Moses Bibi, M.D. '24**; and **Martin Keltz, M.D.**, professor of obstetrics and gynecology, published "Premature Ovarian Insufficiency After Coronavirus Disease 2019 (COVID-19): Autoimmune Follicle-Stimulating Hormone (FSH) and FSH Receptor Blockade" in *Obstetrics and Gynecology* .

Carl Thompson, Ph.D., professor of physiology, **Jason Jacobson, M.D.**, associate professor of medicine; **Sudhir Jain, Ph.D.**, associate professor of pathology, microbiology, and immunology; and **Marcello Rota, Ph.D.**, associate professor of physiology, published "Phosphorylation of Cardiac Sodium Channel at Ser571 Anticipates Manifestations of the Aging Myopathy" in the *American Journal of Physiology. Heart and Circulatory Physiology* .

Anaz Uddin, SOM Class of 2025; **Chirag Gandhi, M.D.**, professor and chair, Department of Neurosurgery, and professor of neurology and of radiology; **Stephan Mayer, M.D.**, professor of neurology and of neurosurgery; and **Fawaz Al-Mufti, M.D.**, associate professor of neurology, neurosurgery, and of radiology, published "Ultra-Early Hemostatic Therapy for Acute Intracerebral Hemorrhage: An Updated Review" in *Cardiology in Review* .

Zachary Valley, SOM Class of 2025; **Avrohom Karp**, SOM Class of 2025; and **David Garber, M.D.**, assistant professor of otolaryngology, published "Safety and Adverse Events of Medialization Thyroplasty: A Systematic Review" in *The Laryngoscope* .

Jeff Xu, M.D., associate professor of anesthesiology, **Jared Pisapia, M.D.**, assistant professor of neurosurgery; and **Muhammad Shabsigh, M.D.**, assistant professor of anesthesiology, published "Corrigendum to "Ultrasound-Guided Cervical Cervicis Plane Block for Postoperative Pain Control in Cervical Spine Surgery: A Technical Note"" in *World Neurosurgery* .



New York Medical College | 40 Sunshine Cottage Road | Valhalla, NY 10595 US

[Unsubscribe](#) | [Update Profile](#) | [Constant Contact Data Notice](#)



Try email marketing for free today!