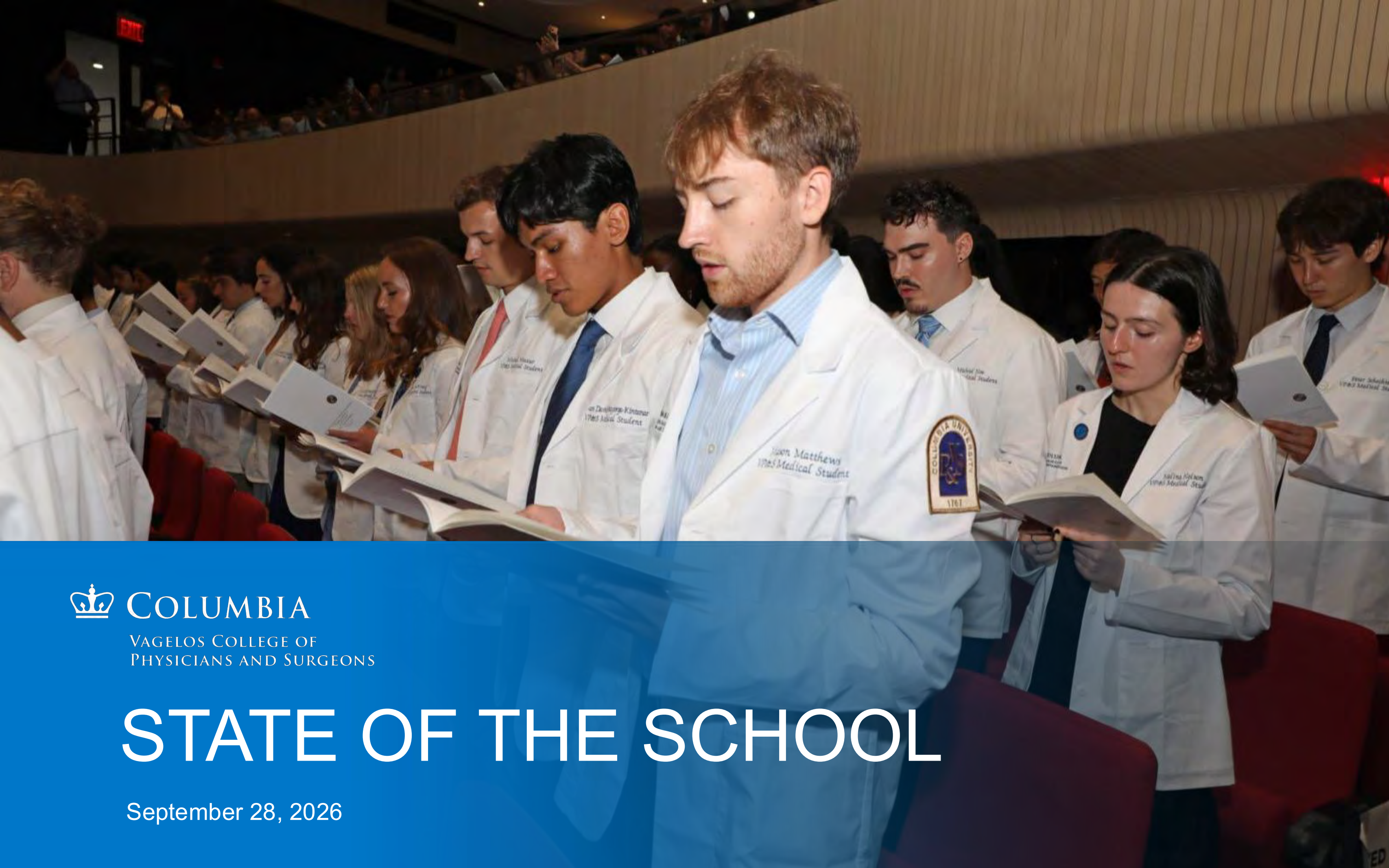




 COLUMBIA
VAGelos COLLEGE OF
PHYSICIANS AND SURGEONS

STATE OF THE SCHOOL

September 28, 2026

We transform human health by
driving discovery, advancing care,
and educating leaders.

VP&S Strategic Plan



PRIORITY 1

Build the Best Environment for Our People



PRIORITY 2

Create the Clinical Care Model of the Future



PRIORITY 3

Drive Discovery to Transform Human Health



PRIORITY 4

Elevate Education Across the Continuum



PRIORITY 5

Prioritize Partnership to Advance Community Health



Build the Best Environment
for Our People

Welcoming New Senior Leadership and Chairs



Emile Bacha, MD

Chair, Department of
Surgery



Gwyneth Card, PhD

Chair, Department of
Neuroscience



Timothy Crimmins, MD

Deputy Chief Executive Officer
of ColumbiaDoctors,
Deputy Vice Dean for Clinical Affairs



Noémie Elhadad, PhD

Vice Dean for AI
Initiatives



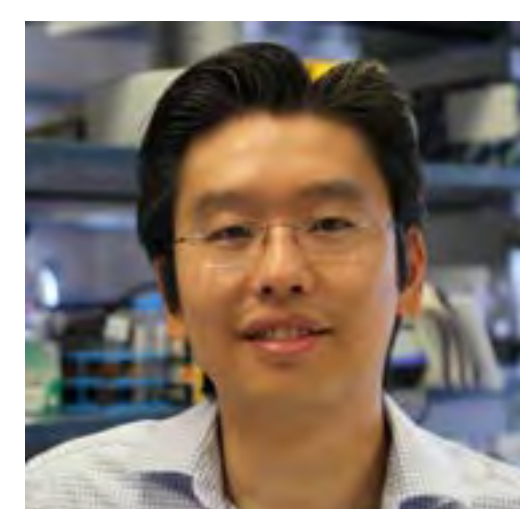
Andrew B. Lassman, MD

Vice Dean of Clinical Trials



Ojas Shah, MD

Chair, Department of Urology



Harris Wang, PhD

Chair, Department of
Systems Biology

Help Us Enhance Well-Being – 2026 Survey

Survey led by Office of Well-Being expands beyond well-being to capture day-to-day experiences of growth, workload, belonging, and support

- Survey is brief, anonymous, and open to all CUIMC employees
- Findings to be shared
- First two surveys shaped changes at the individual, local, and systems levels
- Chance to win a complimentary lunch at Faculty Club
(Personal info for the drawing held separately from survey info)

Take the Survey



New Programs to Enhance Well-Being

- **Faculty Peer Support Following Difficult Outcomes**
Skills-based training program to support first responders after patient-related traumatic events
- **Skills for Emotional Education & Development (SEED)**
Expanding to group format
- **Relational Effectiveness at Work Initiative**
Teaches and develops core skills for communication, collaboration, and team performance



Nurturing Leadership & Mentorship

Building Excellence in Academic Mentorship (BEAM)

- Supports faculty with competency-based mentorship skills
- Helps satisfy requirements for federally funded training programs

Virginia Kneeland Frantz Society Mentoring Awards

- **Ignite Award for Mentorship Excellence for early career faculty**

Jordan Gabriela Nestor, MD, MS, Assistant Professor of Medicine

- **Catalyst for Change Award for Mentorship Excellence for mid-career faculty**

Penelope Lema, MD, Professor of Emergency Medicine

- **Dr. Anne L. Taylor Legacy of Excellence in Mentorship Award**

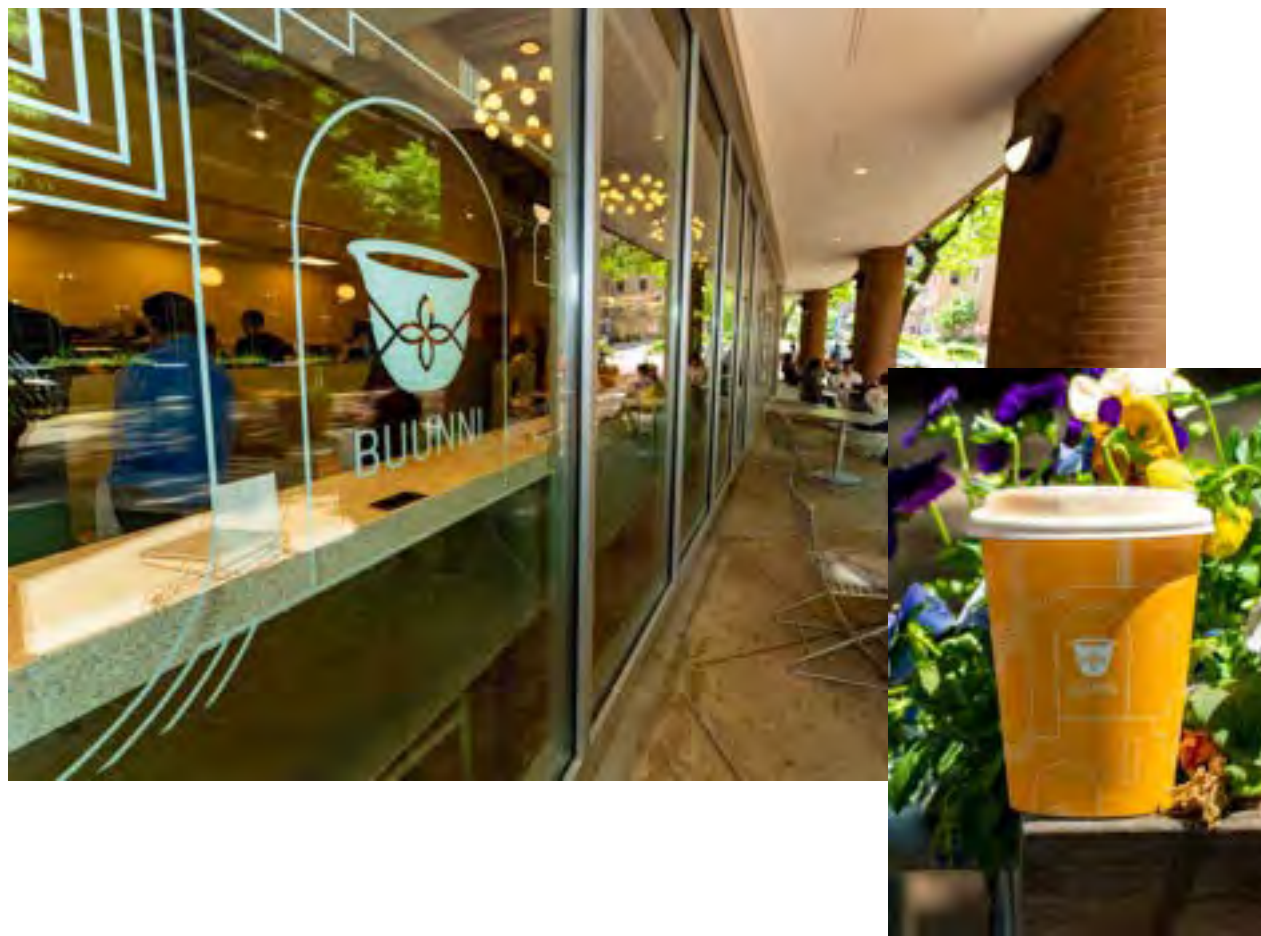
Christine H. Rohde, MD, MPH, Professor of Plastic and Reconstructive Surgery



New Campus Amenity Spaces

Buunni Coffee locations in Black and Hammer/Haven Plaza

- Hammer location features expanded seating for dining, studying, and informal gatherings



Boogie Lab, 169th St. and Broadway (formerly Coogan's)

- Artisan bakery, food, and bar operated by Delmonico's Hospitality Group



Harnessing and Implementing AI

AI at VP&S Initiative is leading education and training on AI, focusing on innovations and responsible use

- Symposia, clinical AI curriculum, AI Training Center, GME AI scholarship program, and OHDSI Summer School
- Access to tools to analyze sensitive data, with CUIMC IT
- AI Governance Committee reviews protocols and tools

Monthly AI at VP&S Forum will connect investigators who are using, developing, and advancing AI methods





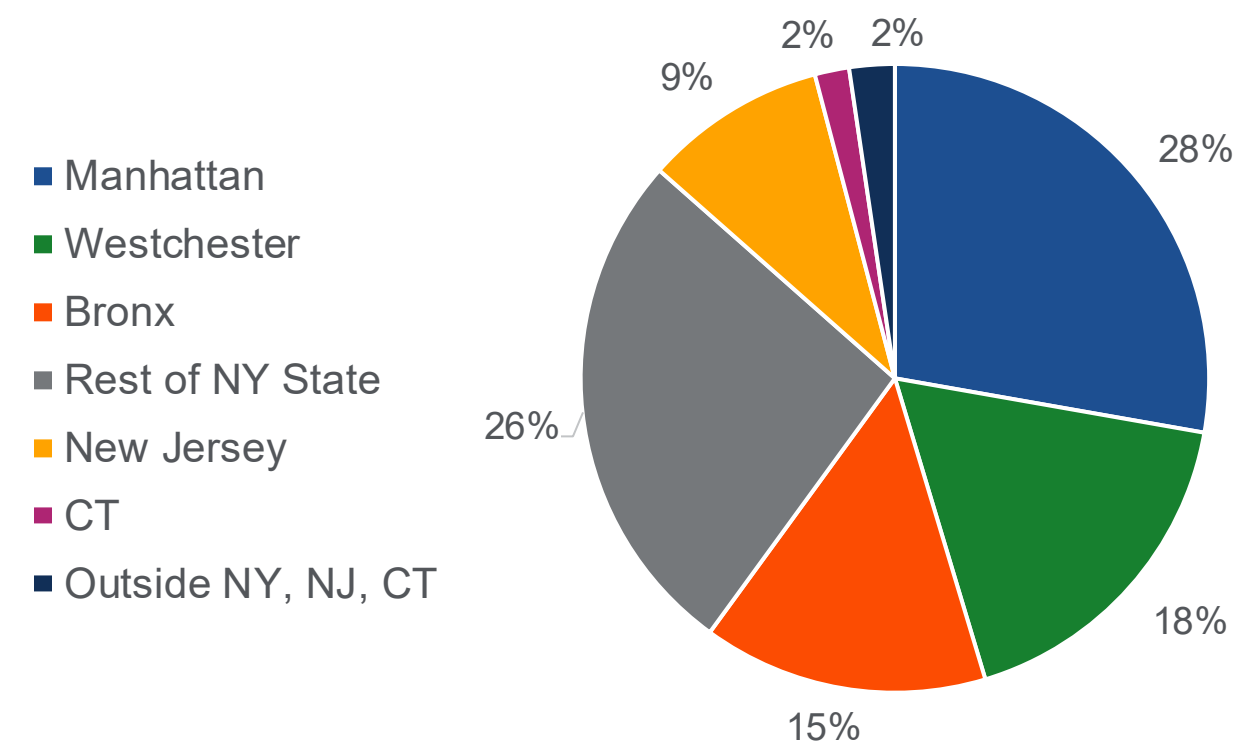
Create the Clinical Care
Model of the Future

Reaching Tri-State Patients

100+ sites—Midtown Manhattan to Westchester/Rockland, New Jersey, and Connecticut

- Unique Patients: 488,264
- Total Outpatient Visits: 2.16 million
- New Outpatient Visits: 342,000
- Gross Revenue: \$1.3 billion
- RVUs: 8.8 million
- Community health outreach interactions up 403% between 2022–2025

Where Our Patients Live (% of visits)



Stable Growth in Providers and Physicians

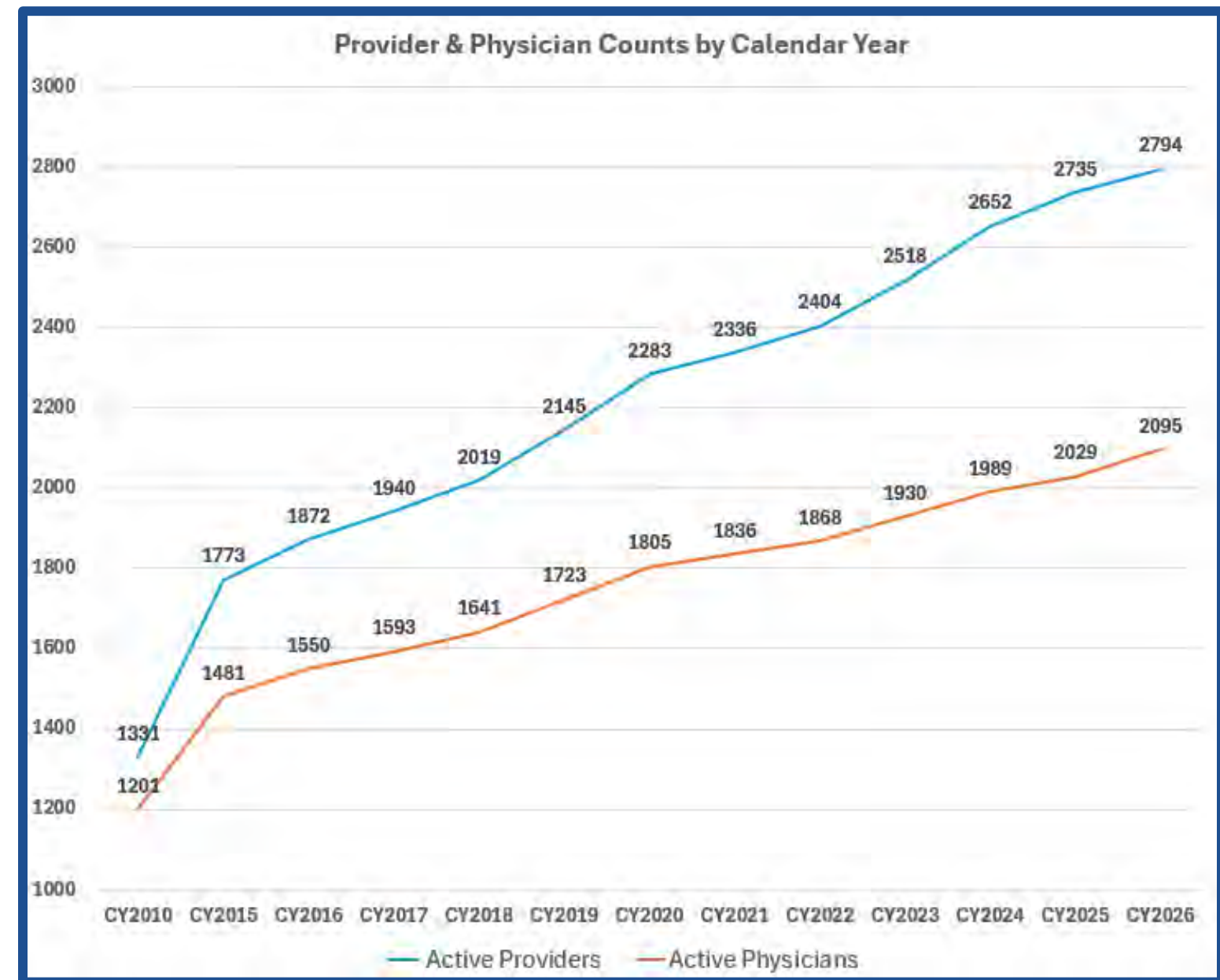
Providers up 50% since 2010

- 4.3% annual increase

Physicians up 37% since 2010

- 3.2% annual increase

Clinical faculty retention remains stable at 91% year over year



Timeframe: Jan 1–Dec 31
Data Source: IntelliCred

Strengthening Patient Safety with Artificial Intelligence

**Led by our Center for Patient Safety Science,
\$2 million grant awarded by MCIC**

- Read entire medical records consistently to detect errors and adverse events
- Measure safety across every patient, all the time
- Strengthen investigation of serious events

Collaborators include NewYork-Presbyterian, Cornell, Johns Hopkins, Rochester, Yale



Center for Patient Safety Science

Expanding Population Health

52,800 attributed primary care patients; grew 48% from 2023 to 2026

- Added Medicare ACO management in 2026, along with commercial populations
- Quality measures now exceed 90th percentile in performance
 - Colorectal screening: +18 percentage points (FY24 to FY26)
 - Diabetes control: +16.5 percentage points (FY25 to FY26)
 - Breast and cervical cancer screening, childhood immunizations and well visits
- Post-discharge transitional care management supports safe, seamless, coordinated transitions
- Commercial programs delivered \$7 million in 2024 and project over \$8 million in 2025

Strengthening our Partnership with NewYork-Presbyterian

NYP Strategic Plan

- In conjunction with Columbia and Weill Cornell, NYP has launched strategic planning process to advance patient-centered, sustainable growth

Finances

- Redesigning the financial relationship between NYP and Columbia

The Beacon

- Outpatient space for ophthalmology, hematology, and transplant
- Emerging novel cell and gene therapies
- Advanced imaging center
- Ambulatory operating rooms
- Advanced image-guided endoscopy suites

The Beacon

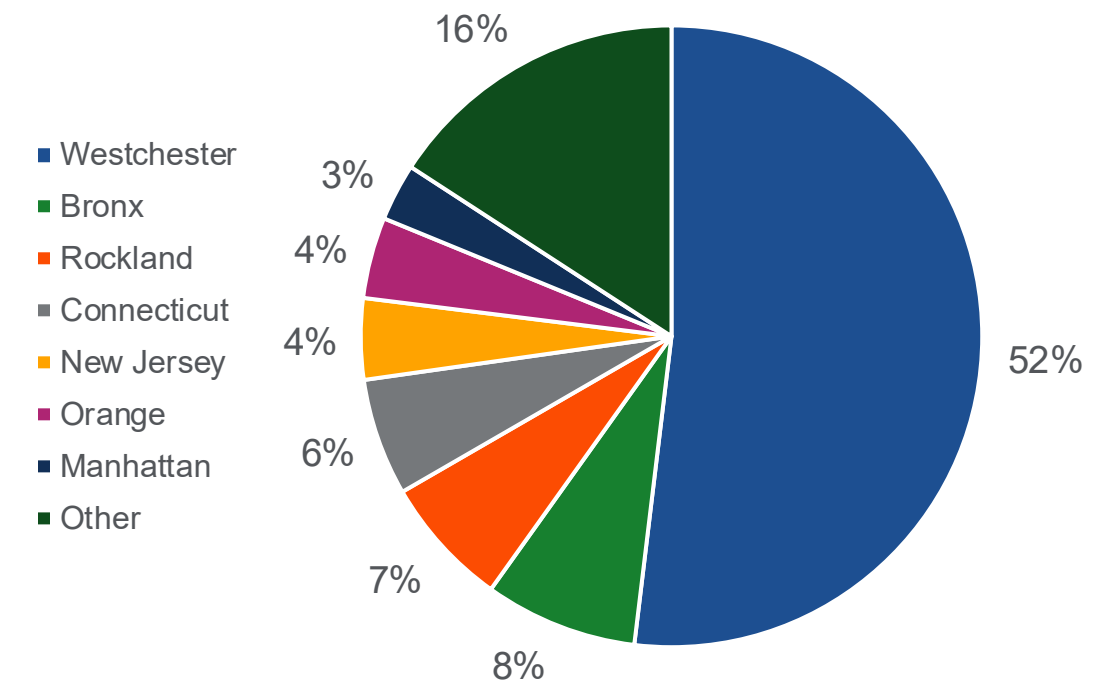


First Anniversary of The One

Opened Sept '25 in White Plains—centerpiece of Westchester expansion

- Comprehensive services: cardiovascular, children's health, men's health, neurosciences, women's health, and more
- 250+ providers, 80+ specialties, 100+ staff
- 140,000+ patient visits
 - 55,000 unique patients
 - 67% with commercial insurance
 - 21% new to Columbia; 16% new to the enterprise (Columbia, NYP, Weill Cornell)
- 26 acre campus
- 180 exam and procedure rooms

New Enterprise Patients by Location



Supporting Employee Wellness

New **ColumbiaDoctors Now** employee referral service for CUIMC and Service Corp employees to get the care they need, when they need it

- Speeding access to care for employees
 - Obtain timely appointments
 - Complex appointment coordination across specialties
- Priority access in key services, including primary care, cardiology, neurology, orthopedics, and ophthalmology—more to come



Dedicated Employee Line:
(212) 342-3669 (CDNOW)

Call today for personalized help
scheduling your appointment

Groundbreaking Firsts in Gene Therapy

Lab Discovery Turned Silence into Sound

- Developed gene therapy with Regeneron
- Therapy delivered to three children at CUIMC
- Received FDA approval in April 2026



THE WALL STREET JOURNAL.
FDA Approves First-Ever Gene Therapy to Restore Hearing

Lawrence R. Lustig, MD
Chair, Department of
Otolaryngology—
Head & Neck Surgery

Giving Sickle Cell Patients More Options

- Gene therapy using base editing eliminated serious sickle cell complications
- Four CUIMC patients in multicenter trial
- CUIMC is one of the few centers in the world involved in all sickle cell gene therapy trials



nature
A turning point for gene editing in severe blood disorders

Positive results from several trials with ex vivo gene editing suggest that reactivating fetal hemoglobin in sickle cell disease and β -thalassemia is now a reliable therapeutic strategy after years of uncertainty.

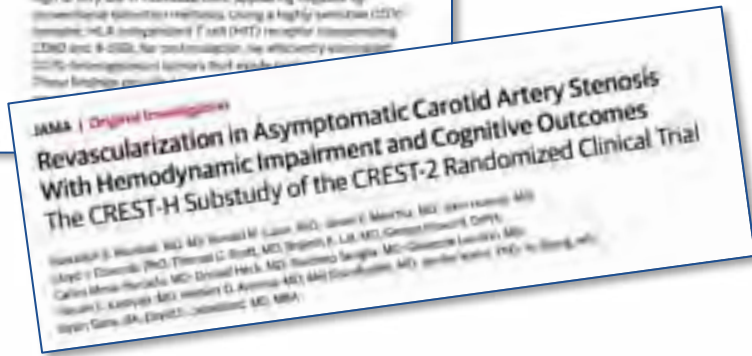
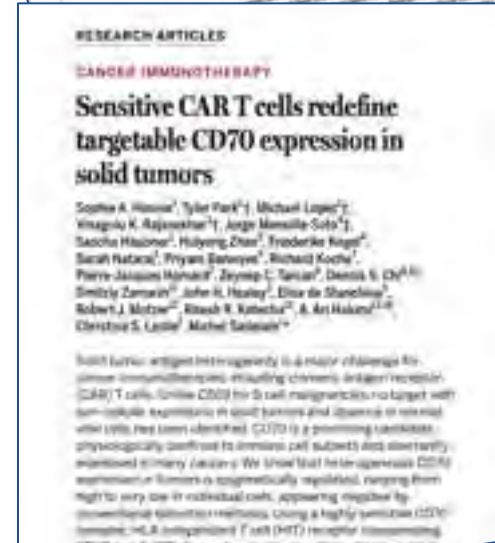
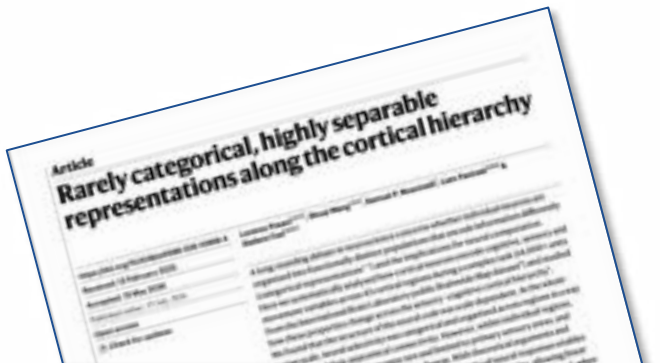
Markus Y. Mapara, MD
Professor of Medicine,
Hematology



Drive Discovery to
Transform Human Health

Exceptional Scholarship

VP&S researchers published 5,330 papers globally





21
Publications



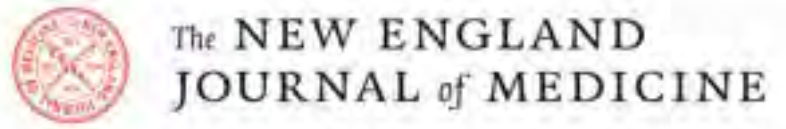
23
Publications



11
Publications



24
Publications



27
Publications



Research Breakthroughs

Science



Ivaylo Ivanov, PhD
Professor of
Microbiology &
Immunology



Samuel Sternberg, PhD
Associate Professor of
Biochemistry & Molecular
Biophysics



Harris Wang, PhD
Chair and Professor of
Systems Biology



Andrew Marks, MD
Chair and Professor of
Molecular Cardiology

JOURNAL OF CLINICAL INVESTIGATION

Cell



Chi-Min Ho, PhD
Assistant Professor of
Microbiology &
Immunology



Meseret Haile
Doctoral student
Microbiology & Immunology

Science Translational Medicine



Stergios Zacharoulis, MD
Associate Professor of
Pediatrics



Elisa Konofagou, PhD
Professor of Radiology

Faculty Recognitions

Association of American Physicians



Christine Kim Garcia, MD, PhD

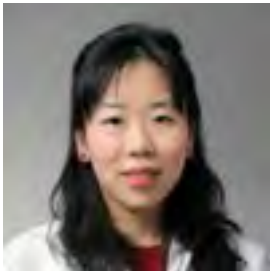


Krzysztof Kiryluk, MD



Hiroshi Nakagawa, MD, PhD

American Society for Clinical Investigation



Elaine Wan, MD



Elizabeth Oelsner, MD, DrPH

Harrington Discovery Institute Scholars



Suzanne Lentzsch, MD, PhD



Steven Marx, MD

Blavatnik Award for Young Scientists Finalist



Samuel Sternberg, PhD

American Association for the Advancement of Science



Yiping W. Han, PhD

National Academy of Sciences



Hashim Al-Hashimi, PhD

American Association for Cancer Research



Anil Rustgi, MD



Cory Abate-Shen, PhD

National Academy of Medicine, Tang Prize, BBVA Foundation Frontiers of Knowledge



Michel Sadelain, MD, PhD

American Academy of Arts and Sciences



Michael Shadlen, MD, PhD

2026 Emerging Leaders in Health and Medicine, National Academy of Medicine



Nicholas Arpaia, PhD

Freeman Hrabowski Scholars, HHMI



Mustafa Aydoğan, PhD



Vikram Gadagkar, PhD

Early Career Honorees

MIRA for
Early-Stage
Investigators (R35)



Philippe Batut, PhD
Assistant Professor of
Genetics & Development

NCI Stephen I. Katz
Early-Stage
Investigator (R37)



Chia-Wei Cheng, PhD
Assistant Professor of
Genetics & Development

Mark Foundation
Emerging Leader
Award



Christine Chio, PhD
Assistant Professor of
Genetics & Development

Rita Allen
Foundation Scholar



Naomi Latorraca, PhD
Assistant Professor of
Biochemistry & Molecular
Biophysics

Feldstein Medical
Foundation &
NYFIRST Grant



Akanksha Thawani, PhD
Assistant Professor of
Biochemistry & Molecular
Biophysics

MIRA (R35)



Xuebing Wu, PhD
Assistant Professor of
Medical Sciences
(Medicine and
Systems Biology)

Irving Institute Turns 20

Irving Institute founded in 2006, with support from the Irving family and Columbia University

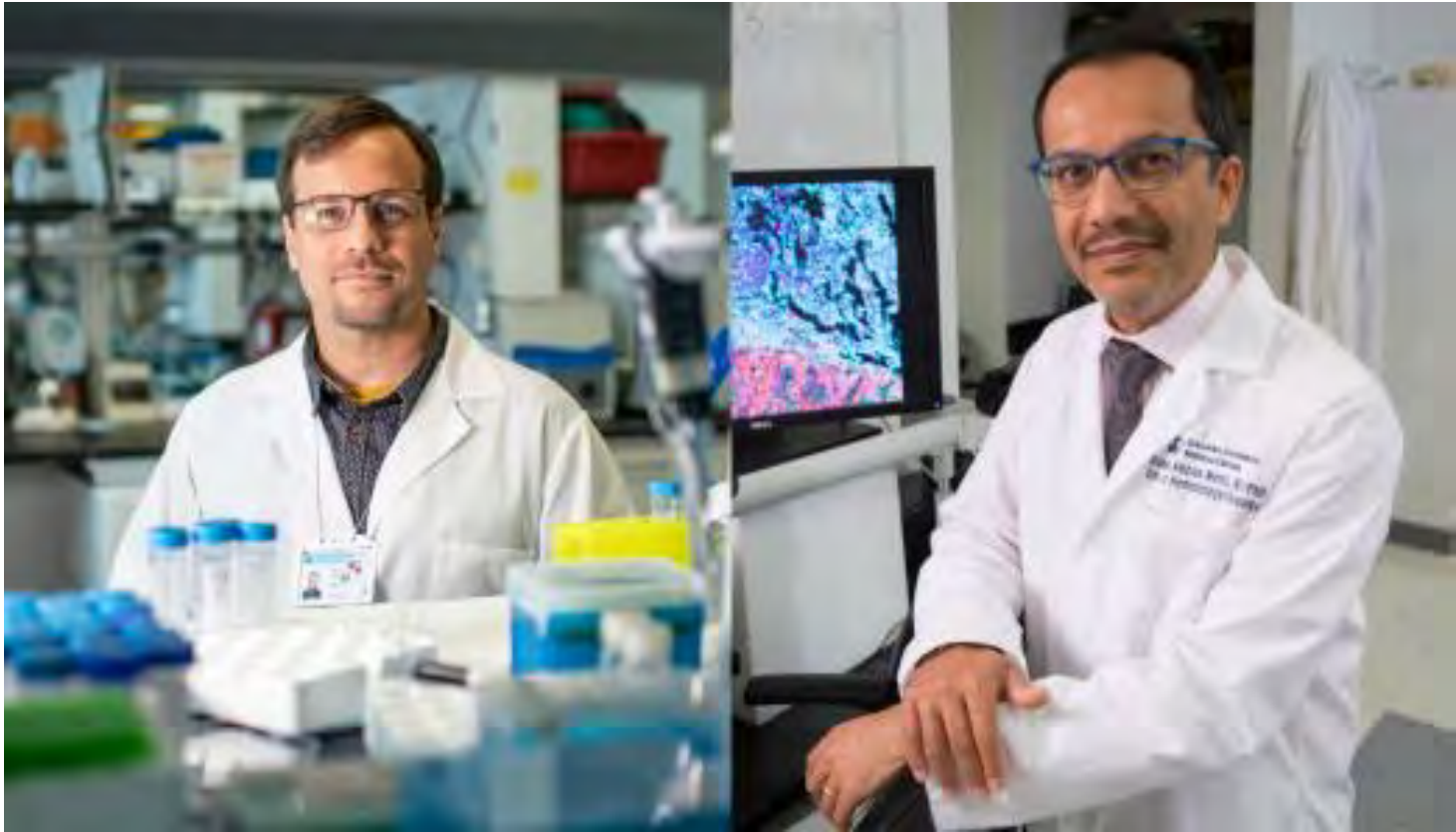
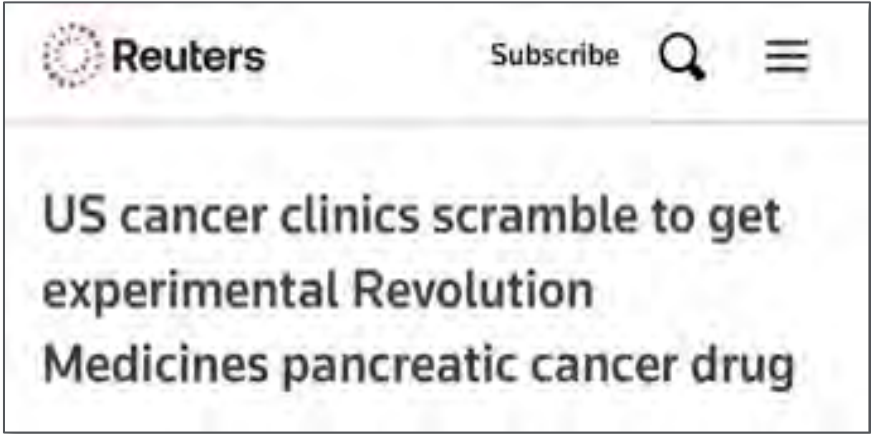
- \$75 million CTSA grant recently renewed
- Institute transformed research across full translational spectrum



HICCC Leads the Battle Against Cancer

Herbert Irving Comprehensive Cancer Center propelled landmark breakthrough in pancreatic cancer treatment

- Treatment approved by FDA in August—nearly doubles survival rate



Kenneth Olive, PhD
Associate Professor of Medicine

Gulam Manji, MD, PhD
Associate Professor of Medicine



CICET Advances Cell Therapy Breakthroughs

Trustees designated as an Institute: Columbia Institute for Cell Engineering and Therapy

- Opened two studies testing CAR-T in autoimmune disease (lupus and MS)
- GMP facility qualified; manufactured first product
- Will be Columbia's first genetically engineered cell therapy clinical study to be submitted to FDA—first patient infusion expected early 2027



Supporting Physician-Scientists

Physician-Scientist Assembly, May 2026

- Addressed issues including education, training, funding, and administrative needs



Institutional K Mentored Research Career Development Awards

- With the Irving Institute, institutionally funded pilot program to support early career MD physician-scientists

VP&S Next-Gen PSTP

- New R38 grant for research pathways in infectious diseases and immunology
- Pairs resident-investigators with NIAID-funded research preceptor



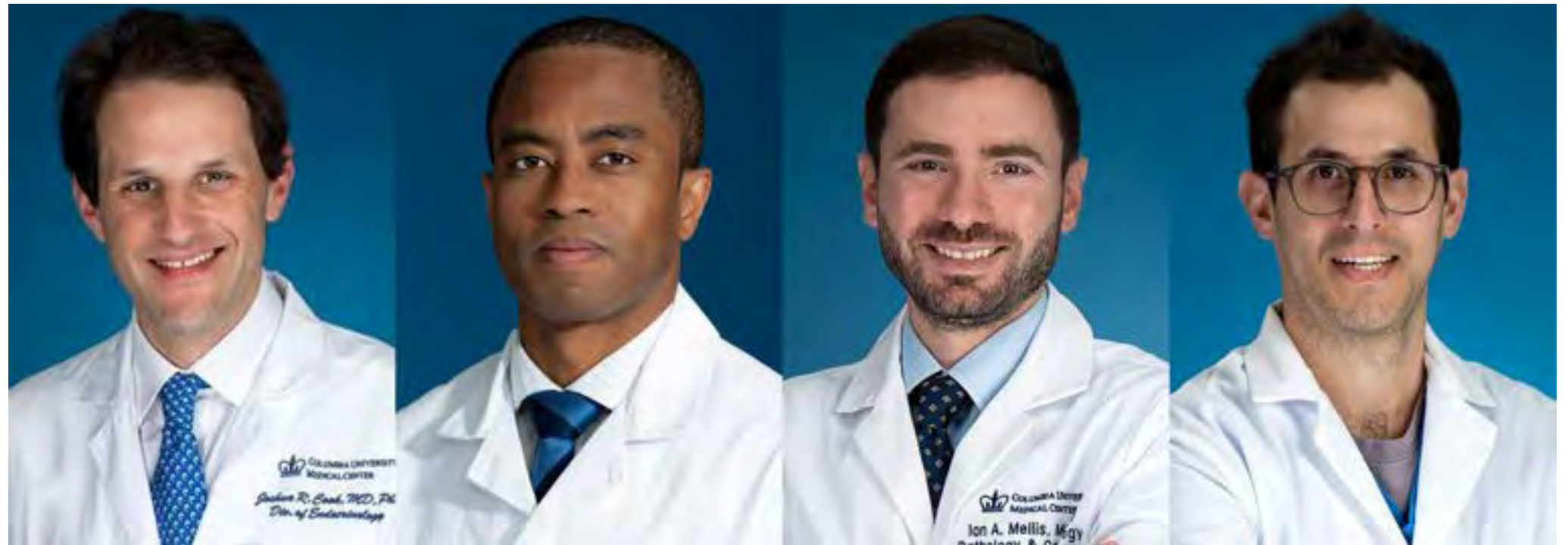
Honoring a Legacy of Giving



Lou Gerstner (1942-2025)

- Funded 76 junior investigators since 2008
- Leveraged \$428 million over 18 years

2026 Gerstner Scholars



Joshua Cook, MD, PhD
Assistant Professor of
Medicine

Brian Gill, MD
Assistant Professor of
Neurological Surgery

Ian Mellis, MD, PhD
Assistant Professor of
Pathology & Cell Biology

Alexander Nectow, MD, PhD
Instructor in Medicine

Supporting Faculty Research

Cartwright Award

- Achievements in human pathology, physiology, or therapeutics



Xuebing Wu, PhD

Assistant Professor
of Medical Sciences

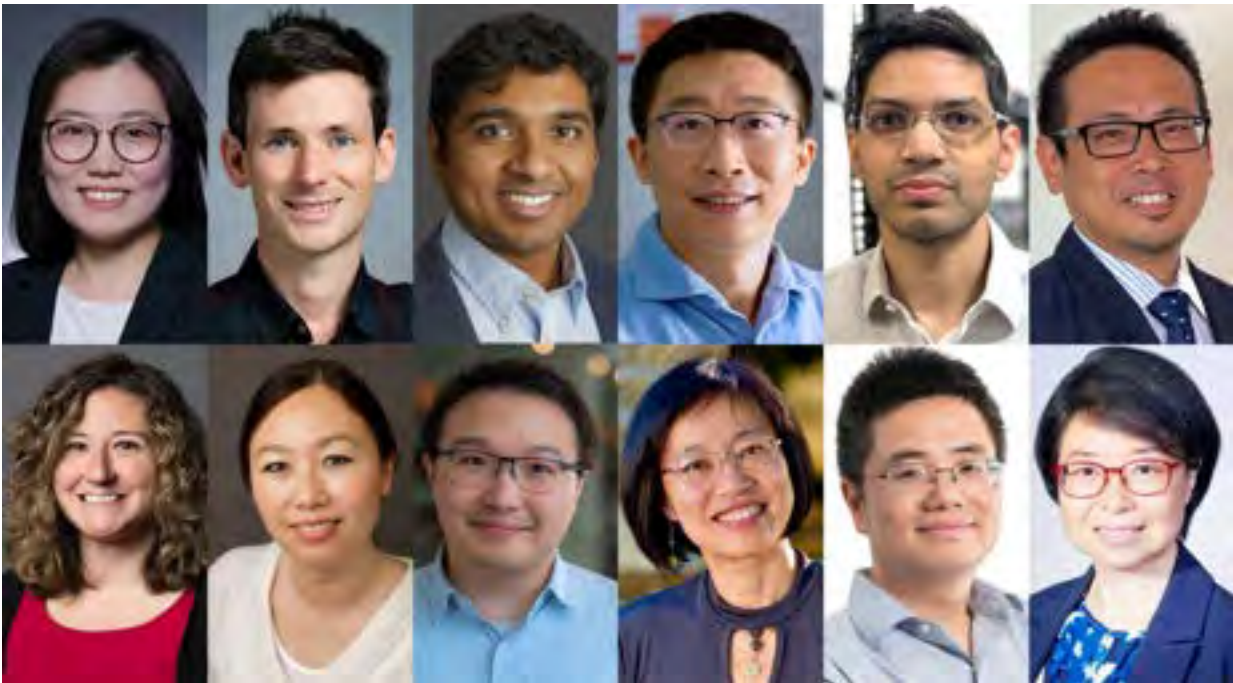


Benjamin Izar, MD, PhD

Associate Professor
of Medicine

Schaefer Research Scholars

- Supports exploration of new research directions and international collaboration; 12 VP&S faculty awarded in FY26



Johnson Award

- Paradigm-shifting contributions to biomedical sciences



Dmitriy Aronov, PhD

Associate Professor
of Neuroscience

Building Research Funding Resilience

Diversification

Working group identified faculty-led priorities for research collaborations, industry engagement, and advocacy



Expanded Faculty Support

"How-to" grant seminars, expanded central office support to help navigate non-NIH sponsors



Supported Continuity

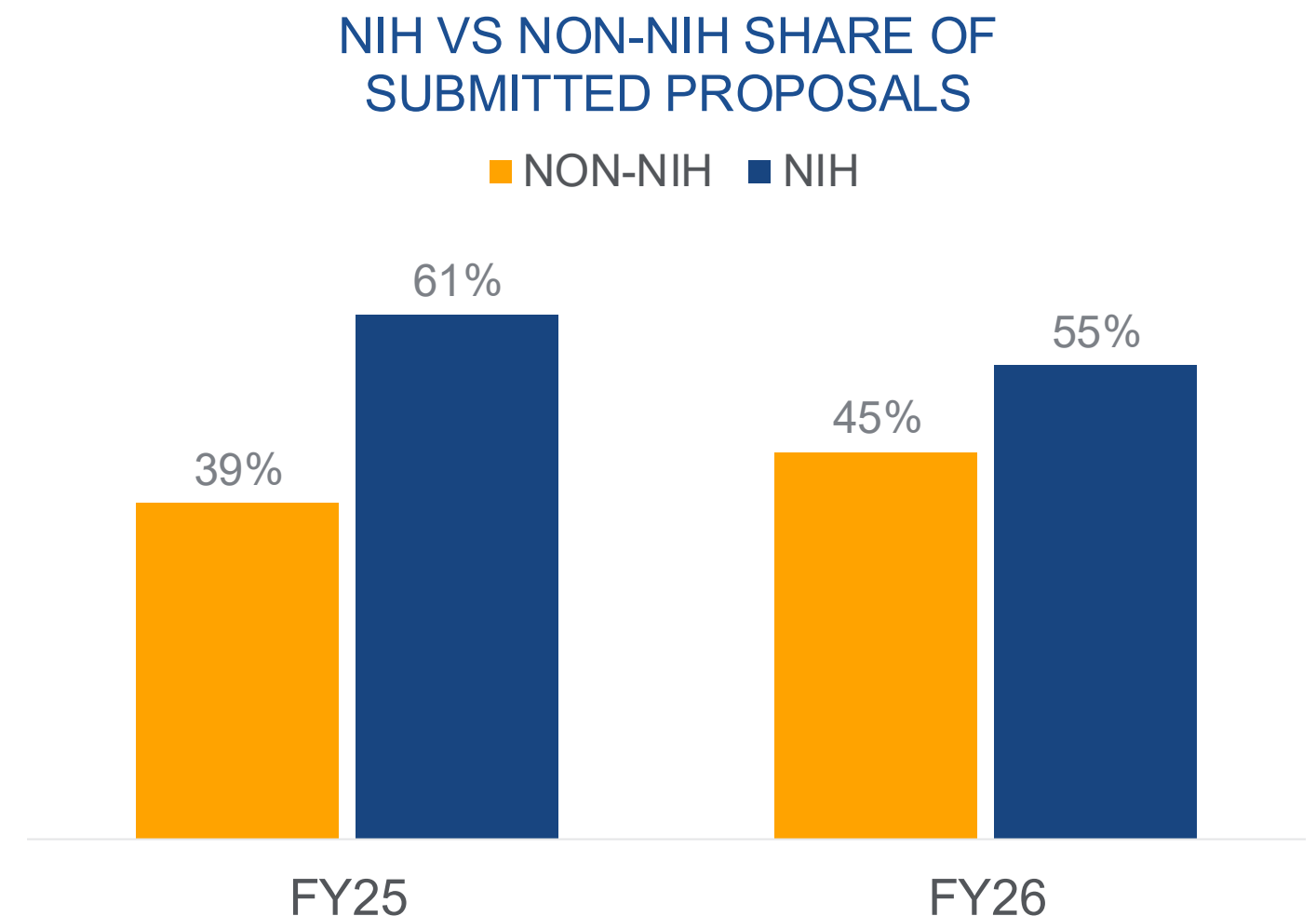
Bridge funding to maintain research mission during challenging funding environment



Faculty are Meeting the Moment

Faculty have maintained NIH submissions while also diversifying their proposals

- From FY25 to FY26, total submitted proposal volume remained stable
- Submitted proposal mix shifted toward non-NIH, up to 45% from 39% of total submissions
- Increased submissions to foundations (+18%) and industry sponsors (+39%)



**Award decisions are pending for many FY26 submissions*

Diversifying Our Research Portfolio

- **Merck:** research agreement with Columbia to pursue a cure for HIV
 - David Ho, MD (Infectious Diseases)
- **Meta:** research agreement for generalizable foundation models for single cell morphology as an approach to overcoming “batch effects”—a problem that arises broadly in machine learning
 - Wolfgang Pernice, PhD (Neurology)
- **The Linda and Mike Mussallem Foundation:** research agreement with Columbia for valve preservation and functional testing platform for pediatric heart valve replacement
 - Emile Bacha, MD (Surgery)
 - Giovanni Ferrari, PhD (Surgery)

Pursuing High-Risk, High-Reward Research

ARPA-H grants support cutting-edge research

NOVA Knee: first "living" 3D-printed knee, one of first ARPA-H projects to move to preclinical stage

- Nadeen Chahine, PhD, Professor of Biomechanics;
Clark Hung, PhD, Professor of Orthopedic Science

HARMONI: AI-powered wearable monitoring for mother and baby's health during labor

- Matthew Hoffman, MD, Professor of Ob/Gyn;
William Fifer, PhD, Professor of Medical Psychology;
Nicolo Pini, PhD, Associate Research Scientist, Psychiatry

CLARUM: genetic tests to speed diagnosis of lymphatic system defects

- Carrie Shawber, PhD, Associate Professor of Reproductive Sciences



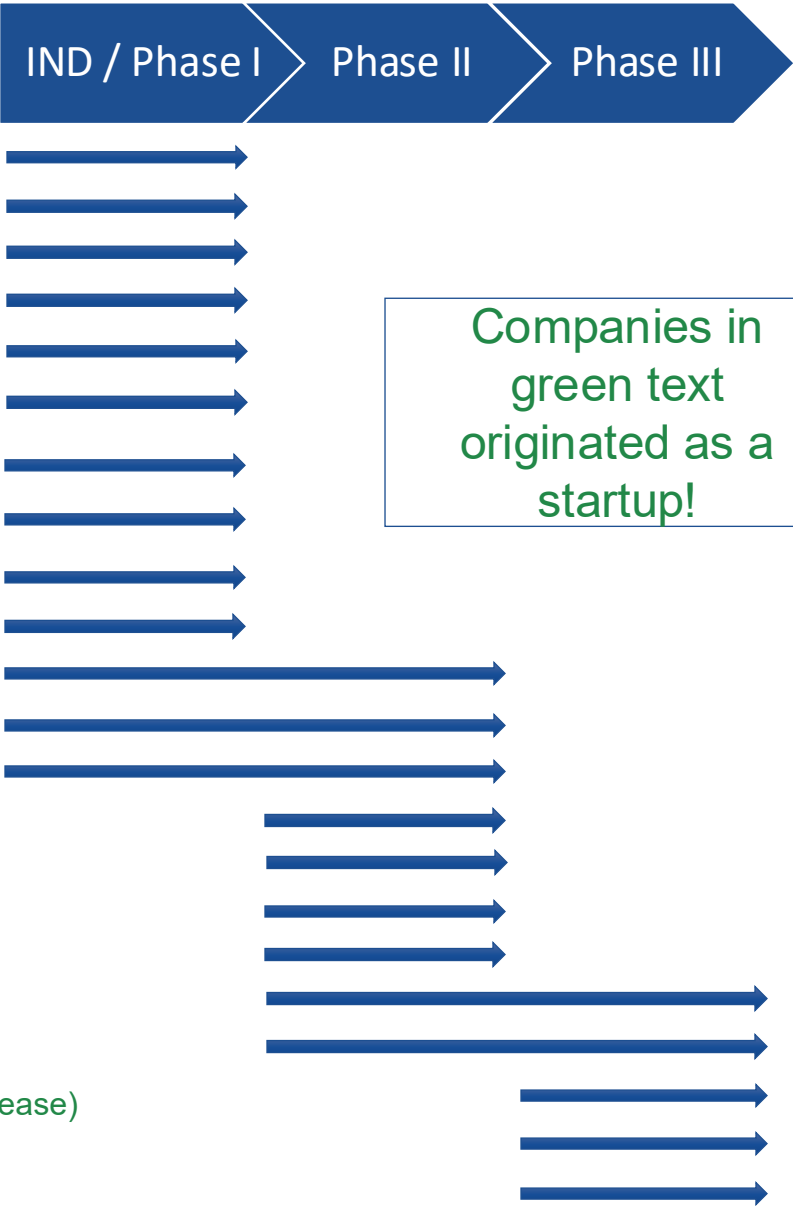
The New York Times
*Federal Agency Unveils Three
Potential Osteoarthritis Treatments*

Innovating From Bench to Bedside



Konstantin Petrukhin, PhD
Professor of Ophthalmic Science

<u>Company</u>	<u>PI</u>	<u>Indication</u>
	• Gu	Cancer
	• Vunjak-Novaković	Tissue-engineered bone/cartilage
	• Fisher	Cancer
	• Mukherjee	Pi3k-Associated Disease
	• Sames	Major Depressive Disorder
	• Sames	Opioid Use Disorder
	• Arancio	Alzheimer's treatment
	• Stockwell/Wichterle	Toxic ER stress
	• Frattini	Cancer
	• Modak	Urinary catheters
	• Abeliovich	Parkinson's disease
	• Racaniello	Cancer
	• Mukherjee	Acute myeloid leukemia
	• Chess/Jiang	Type 1 diabetes
	• Landry	Cocaine overdose
	• Greene	Glioblastoma
	• Cantor	Respiratory disorders
	• Washington	Ophthalmic disorders
	• Marks	Cardiac, skeletal, neuro
	• Lentzsch	Light-chain amyloidosis (advanced disease)
	• Landry	Galactosemia
	• Petrukhin	Dry AMD/Stargardt disease



Tackling Ultra-Rare Diseases

KYGEVVI: the only FDA-approved treatment for TK2D, a form of muscular dystrophy that causes rapid muscle wasting

- Michio Hirano, MD, Professor of Neurology, began investigating TK2D 20 years ago at Columbia
- At age 2, Arturito was the first in the US to receive treatment; today, he attends high school, learning to use walker
- Hirano awarded 2026 Muscular Dystrophy Association's Legacy Award for Achievement in Clinical Research





Elevate Education Across the Continuum

Celebrating Our Reaccreditation

Liaison Committee on Medical Education (LCME) approved full accreditation of VP&S MD program for maximum eight-year term

- All 12 standards met, with two needing continued monitoring
- Next visit in 2033-2034



Our 2026 VP&S MD Graduates

131 MD graduates

- Most matched specialties: Internal Medicine; Neurology; Psychology; Anesthesiology
- 62 matched in New York City
- 42 matched in NYP/Columbia categorical/advanced program
- 9 MD/PhDs
- 64 men, 67 women
- 31 students from backgrounds underrepresented in medicine



100% Match Rate for 2026 MD Grads

Since 2017, VP&S match rate has consistently exceeded the national match rate

	2026	2025	2024	2023	2022	2021	2020	2019	2018	2017
VP&S	100%	99.3%	98.6%	99.3%	99%	96.2%	98.5%	96.3%	99.4%	98.2%
National	93.5%	93.5%	92.3%	93.7%	92.9%	92.8%	93.7%	93.9%	94.3%	94.3%



About Our Class of 2030 Students

140 students from 30 states

- 118 MD students
- 10 MD/PhD students
- 10 Columbia Bassett students
- 2 Oral & Maxillofacial Surgery students
- 73 men, 67 women
- 49 colleges represented
- 5 first-generation college students



Spotlight on MS in Human Nutrition

Providing a foundation for careers in nutrition, research, medicine, healthcare for over 60 years

- Research collaborations across 25+ departments
- Publications in leading journals, presentations at national and international conferences
- Expanded coursework and training in competencies
- Local and global education and engagement initiatives
- Worldwide CME courses in metabolism, diabetes, and obesity
- Strengthened networking and mentoring among alumni and current students



Supporting Our Educators' Development

Educator Development Certificate

- Second cohort of evidence-based, faculty-driven professional development series for clinician-educators

LEARN (Leadership in Education and Advancement through Research and Networking)

- Launched September 2026—series for those involved or interested in education research and scholarship



Broadening Access to Medical Education

Creating pathways for students across NYC, the US, and the world

- **STEM Quest**
Technical skills (coding, solar physics, surgery demos) for NYC middle and high school students
- **Visiting Student Intern and Short-Term Visitor programs**
Introduce high school and college students from NYC, US, and globally to biomedical sciences
- **Yonsei University | HICCC Exchange Program**
Undergrad students from South Korea work in HICCC labs while living on campus
- **Independent Schools Foundation Pre-College Medical Emerging Program**
Immersive 2-week learning for Hong Kong high schoolers



Launching New VIBRE Biomedical PhD Programs

- Welcomed first cohort of 62 students in September 2026
- New academic model to give PhD students greater freedom, encourage and accelerate intellectual risk-taking
- Spans three programs—Biomedical Life Sciences (BLS), Biomedical Informatics, and Neurobiology and Behavior, with new tracks in BLS





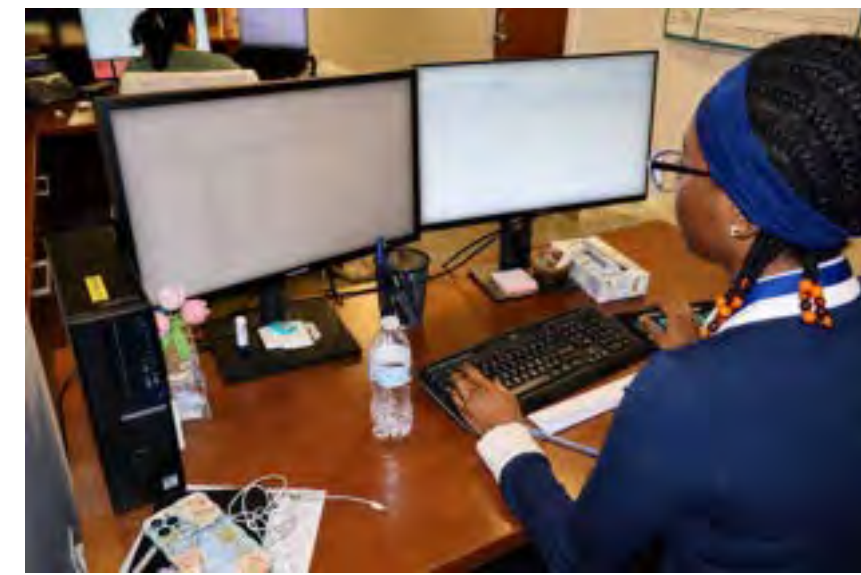
Prioritize Partnership to
Advance Community Health

Opening Doors to Our Neighbors

Summer Youth Employment Program: 30 VP&S departments provided NYC youth with meaningful workplace experiences and exposure to health, science, and University career pathways

Project Medical Education: gives community leaders a firsthand look at CUIMC's mission across research, education, patient care, and service

Community CHAT: launched in 2026, faculty present on topics that matter most to local residents—18 talks by 21 faculty to 10 community-based organizations



Supporting Community Preparedness

Programs across Upper Manhattan and the Bronx focused on health education, emergency skills

- **Community Ready / Comunidad Preparada:** prepares 3,700+ residents across Harlem, Washington Heights, Inwood, and the Bronx with lifesaving skills
- **Project ADAM Save Lives Affiliate:** with NYP and Weill Cornell, helps local schools establish strong cardiac response skills
- **PRO-SALUD:** equips Spanish-speaking residents with Community Health Worker competencies



Expanding Representation in Clinical Trials

CONNECT (Community Health Worker Outreach and Navigation Network for Enhancing Representation in Clinical Trials)

- Community-based education and referral program to increase awareness, trust, and participation in clinical research
- Engages individuals and communities historically excluded from clinical trials
- Supports researchers in promoting studies



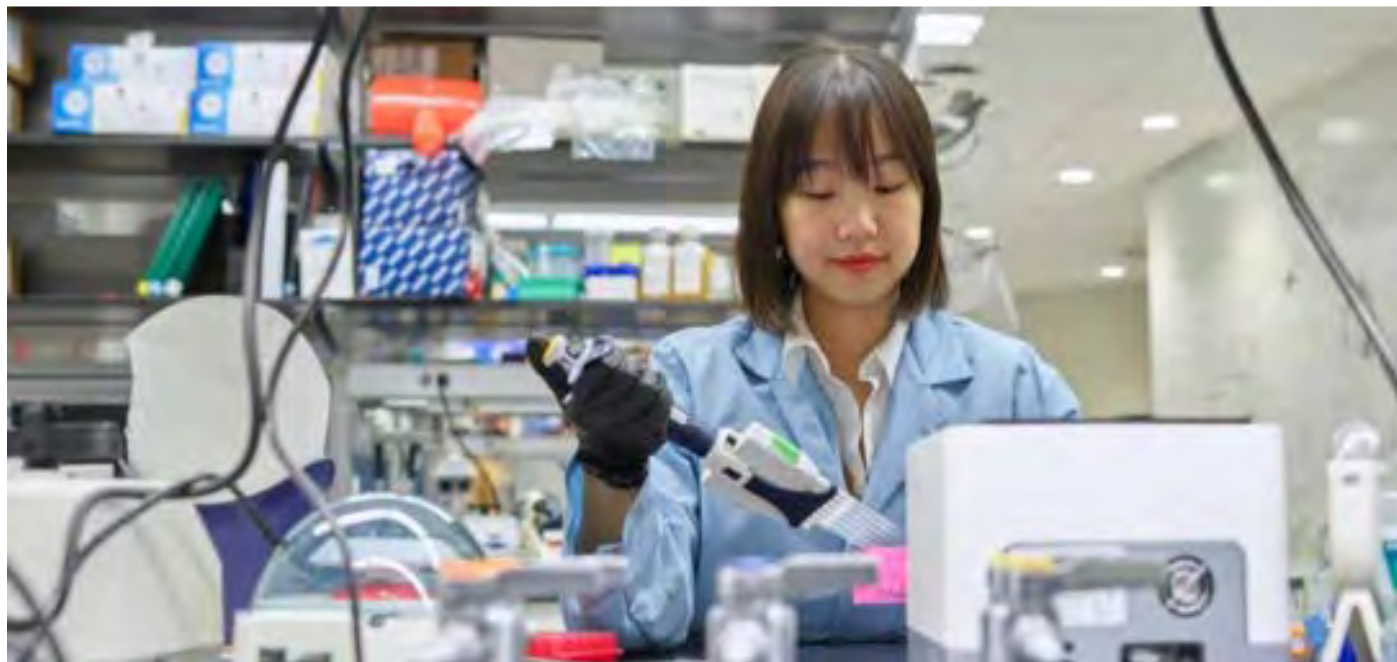
Advocating for Healthcare and Research





The Vagelos Effect

In Gratitude



New Home for Pioneering Research

First all-electric biomedical research building in NYC

- Opening October 20th
- World-class facility will set new standards for sustainability
- Biophilic elements and natural, renewable materials
- State-of-the-art laboratories and community engagement spaces
- "Collaboration corners" to facilitate interactions and idea-sharing



Thank You to Our Community!



COLLEGE OF PHYSICIANS AND SURGEONS
SCHOOL OF MEDICINE · COLUMBIA UNIVERSITY
A·D·1767 A·D·1926



630

West 168th Street

COLUMBIA

Vagelos
College of
Physicians
and Surgeons