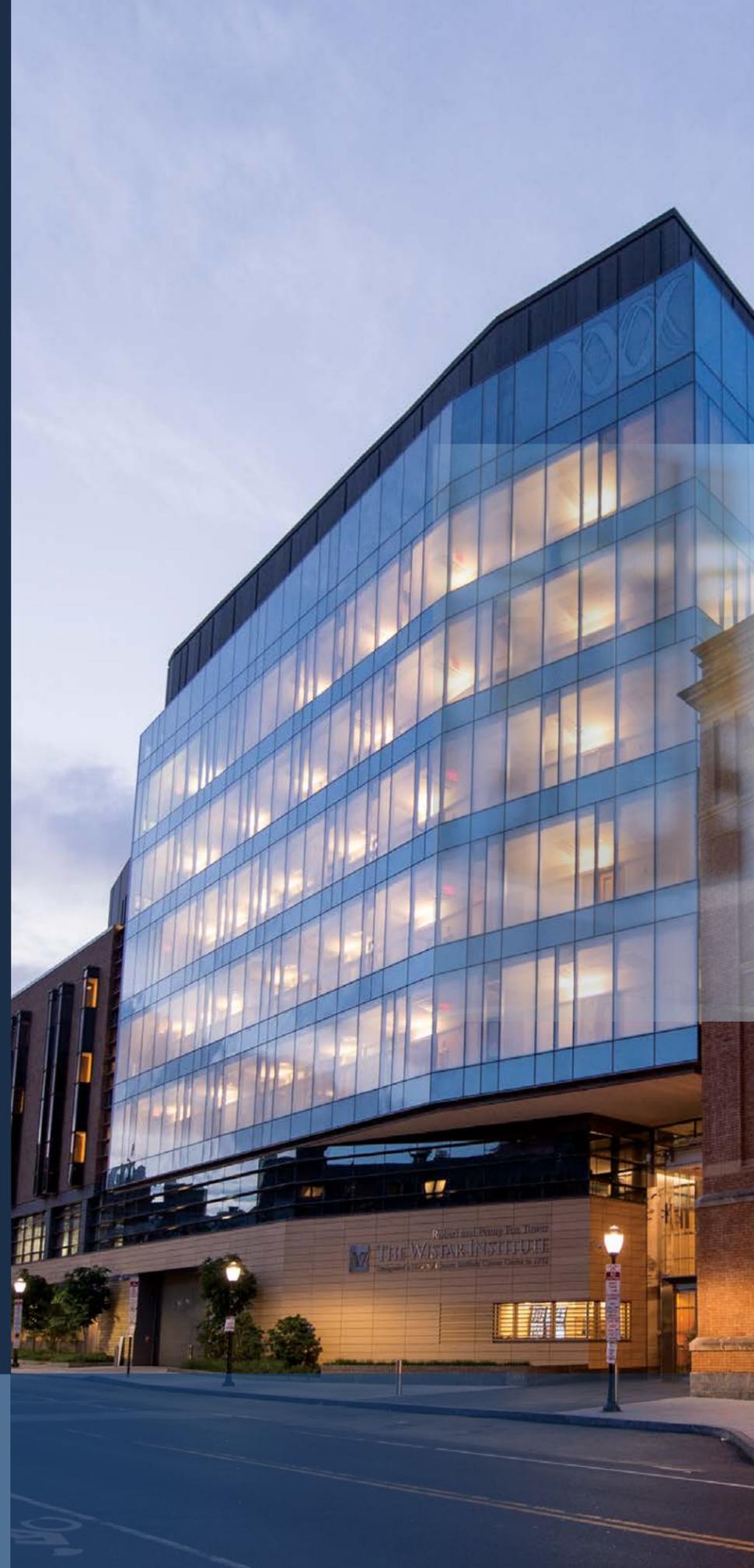
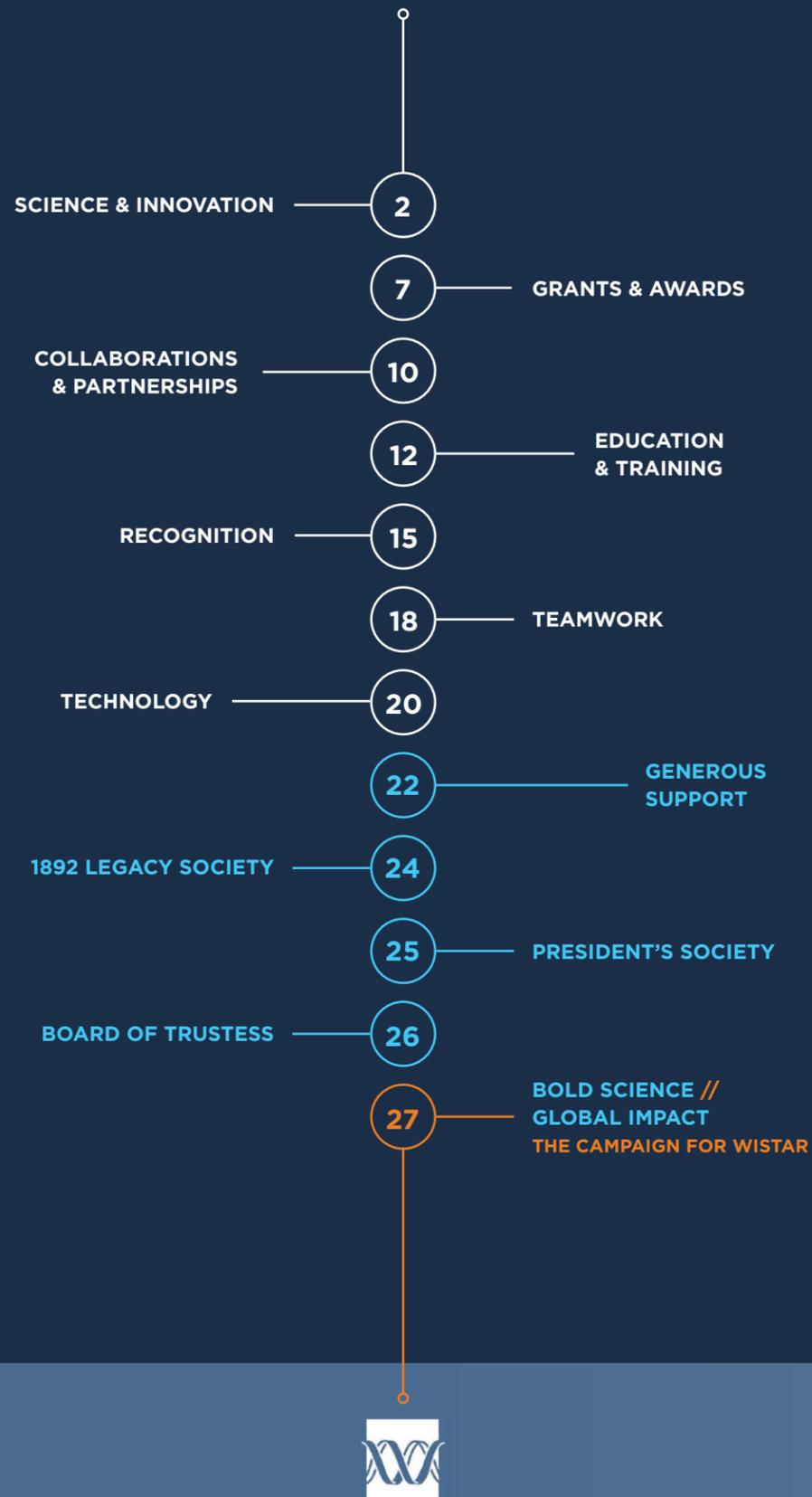




2023: A YEAR OF

**DISCOVERY**

2023: A Year of Discovery



DISCOVERY ADVANCED BY LEADERSHIP

The *Philadelphia Business Journal* named Wistar President and CEO Dr. Dario C. Altieri as one of the Most Admired CEOs of 2023, recognizing his steadfast commitment to community collaboration, excellence in science and innovation, and the transformative power of foundational research.

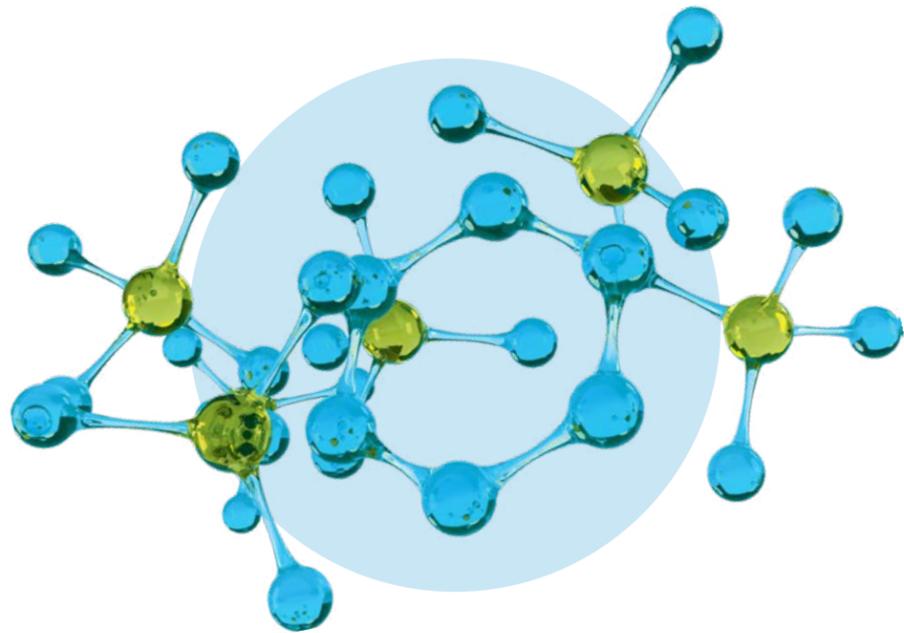


*“I’ve had the privilege to lead The Wistar Institute for eight years now, and I continue to be inspired by all the people I have the opportunity to work with. To be recognized this way is truly a great personal and professional honor.”*

**Dr. Dario C. Altieri**  
 PRESIDENT AND CHIEF EXECUTIVE OFFICER, THE WISTAR INSTITUTE  
 DIRECTOR, ELLEN AND RONALD CAPLAN CANCER CENTER  
 ROBERT AND PENNY FOX DISTINGUISHED PROFESSOR, IMMUNOLOGY,  
 MICROENVIRONMENT AND METASTASIS PROGRAM

# A YEAR OF DISCOVERY ADVANCED BY SCIENCE & INNOVATION

In 2023, our scientists continued Wistar’s record of groundbreaking discoveries that help generate therapies for some of the world’s most pervasive health issues. Key highlights included breakthroughs in ways to address cancer risk, technologies that revolutionize the study of vaccines and immunotherapies, and award-winning educational and training programs that are making a lasting global impact on biomedical research.



## JANUARY

**Wistar researchers develop machine learning software** to study the expression of cancer-related viruses. viRNAtap — named for its ability to trap and rapidly characterize difficult-to-identify cancer-related viral RNA sequences in tumors — allows scientists to identify divergent and mutated viruses in disease tissues. This promising use of machine learning, which surpasses current sequencing technologies, is accepted for publication in [Nature Communications](#).

## FEBRUARY

**Identification of a gene signature** now allows researchers to more accurately assess cancer risks and optimize therapeutic choices using machine learning to predict the functioning of P53 variants. This advancement of personalized medicine is reported in [PNAS](#).



## MARCH

**An international team of researchers** led by The Wistar Institute’s lead scientist on HIV-cure research publishes a review in the *Journal of Leukocyte Biology* supporting evidence that long COVID reflects tissue injuries to a patient’s system. Their review underscores the vulnerabilities of individuals with the disease and the immune consequences of their system responding to COVID.



**Wistar researchers zero in on a promising plant-based compound** called hopeaphenol, which targets HIV reservoirs that persist in people living with HIV despite the presence of anti-HIV therapy.

*“Our work will advance efforts to identify therapy strategies to avoid tissue injury leading to long COVID from that initial infection.”*

**Dr. Luis J. Montaner**  
HERBERT KEAN, M.D., FAMILY PROFESSOR; DIRECTOR OF THE HIV-1 IMMUNOPATHOGENESIS LABORATORY AND LEADER OF THE HIV RESEARCH PROGRAM WITHIN THE VACCINE & IMMUNOTHERAPY CENTER



A YEAR OF DISCOVERY ADVANCED BY  
**SCIENCE & INNOVATION**



**APRIL**

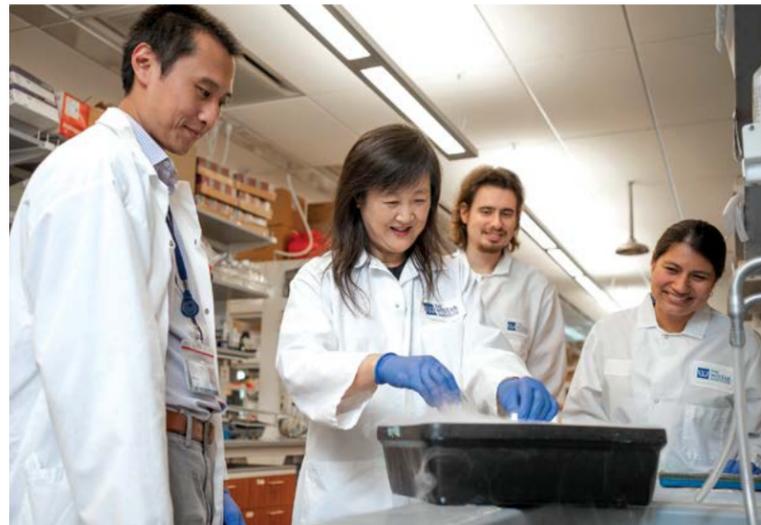
**Wistar’s Dr. Luis J. Montaner joins local and international dignitaries** in Vietnam’s Ho Chi Minh City to mark the start of the AMOHI Clinical Trial investigating the impact of medications for opioid use disorder on immune recovery in response to antiretroviral therapy. The launch is the culmination of two major grants from the National Institute on Drug Abuse.

**MAY**

**Wistar researchers successfully engineer** a linked molecule that enables a three-modality therapy to improve outcomes for melanoma. Their work connects a cytokine and an antibody — ordinarily administered separately — and then engineers a combination that is pro-inflammatory enough to fight cancer cells, but not so inflammatory as to cause complications or reduce survival outcomes.

**JUNE**

**A new study by Wistar scientists** published in *Nature Communications* shows that a type of brain cell called an astrocyte plays an important role in promoting brain metastasis by recruiting a specific subpopulation of immune cells. The team hopes to identify the best therapeutic window for treating and stopping this process.



**JULY**

**Wistar researchers uncover** how the p53 gene triggers immune function and, in turn, kills tumors — a critical discovery for the 4.5 million people who possess inherited mutations in p53 and are at increased risk of cancer. The collaborative work — which uses CRISPR engineering, the creation of tumor cell lines, and machine learning using bioinformatic approaches to create a gene signature — is published in *Cancer Discovery*.



**AUGUST**

**Study results identifying** a potential target for gastric cancers associated with Epstein-Barr Virus are published in the journal *mBio*.

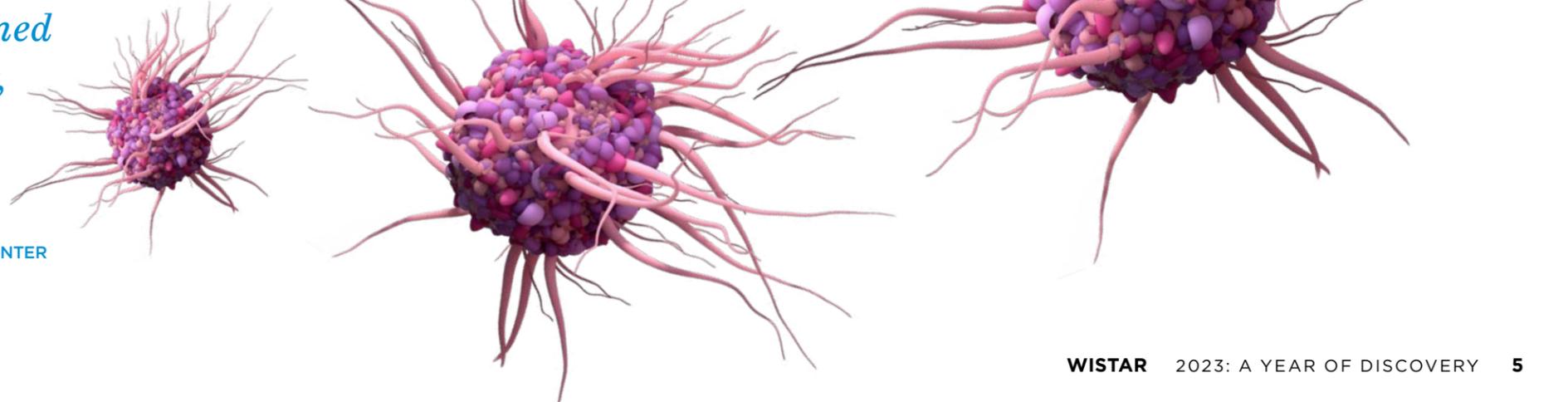
IN 2023,  
Wistar  
scientists  
authored or  
co-authored  
135 published  
journal  
articles.



*“This work could not have happened in any other place except Wistar, where our environment is so collaborative and cutting edge.”*

**Dr. Maureen Murphy**

DEPUTY DIRECTOR, ELLEN AND RONALD CAPLAN CANCER CENTER  
AND IRA BRIND PROFESSOR AND PROGRAM LEADER IN THE  
MOLECULAR & CELLULAR ONCOGENESIS PROGRAM



A YEAR OF DISCOVERY ADVANCED BY  
**SCIENCE & INNOVATION**



**SEPTEMBER**

**Using immunosensitization** — the process of guiding the immune system to the cancer — a Wistar team drastically reduces tumor growth to the point of completely wiping out triple-negative breast cancer in some experiments in preclinical models.

**NOVEMBER**

**Scientists from Wistar’s Vaccine & Immunotherapy Center** engineer novel monoclonal antibodies to activate the body’s immune system against hard-to-treat ovarian cancer. The collaborative work, published in *Science Advances*, uses a new target on “natural killer” cells known as Siglec-7, which may be a hoped-for key to engaging the immune system, shrinking tumors, and prolonging survival from ovarian cancer.

**DECEMBER**

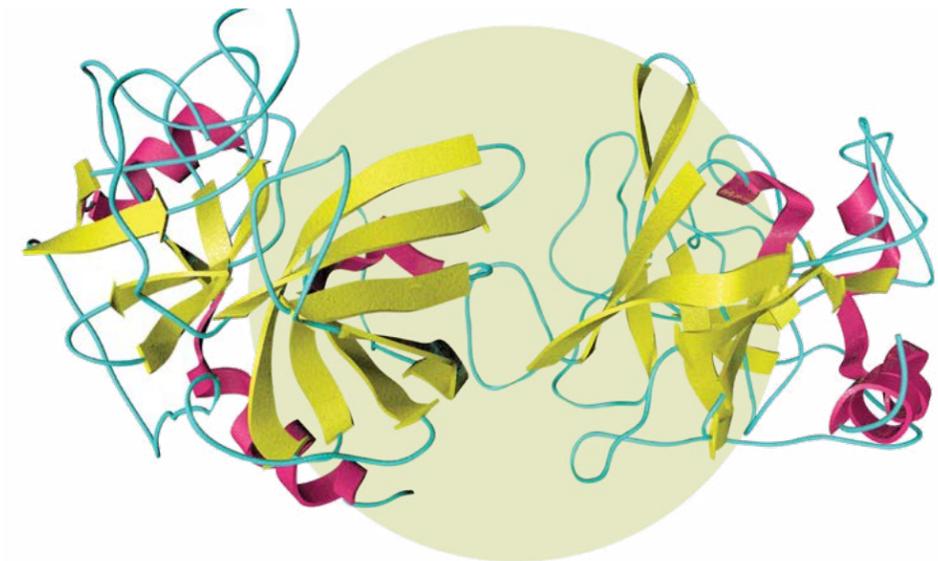
**Wistar scientists**, under the direction of Dr. Noam Auslander, assistant professor in the Molecular & Cellular Oncogenesis Program, develop a new tool to help identify cancer-associated microbes by using machine learning technology.



A YEAR OF DISCOVERY ADVANCED BY  
**GRANTS & AWARDS**

As the nation’s first independent, nonprofit biomedical research institute, Wistar discoveries are made possible through generous grants from a wide range of sources, including federal sources and private foundations.

In 2023, this support enabled us to fuel new discoveries in cancer, immunology, and infectious disease.



**JANUARY**

**Dr. Noam Auslander**, assistant professor in the Molecular & Cellular Oncogenesis Program, is named a Michelson Prize laureate by The Michelson Medical Research Foundation and the Human Immunome Project. The award supports early-career investigators and their work advancing the immunology, vaccine, and immunotherapy field. Dr. Auslander’s lab develops machine learning approaches to detect microbes in cancer and immune diseases.



A YEAR OF DISCOVERY ADVANCED BY  
**GRANTS & AWARDS**

**JANUARY**

**Drs. Luis J. Montaner and Mohamed Abdel-Mohsen** continue their collaborative work on a project funded by a two-year Target Grant from amfAR, The Foundation for AIDS Research. The project explores genetically engineered “natural killer” cells as HIV therapy.

**MARCH**

**Wistar celebrates a quarter century of community-based academic research collaboration** with the Philadelphia Foundation in fighting health care inequities faced by vulnerable populations. An \$80,000 grant from the Robert I. Jacobs Fund expands ongoing Wistar research into ways to prevent, treat, and ultimately cure HIV to include pilot studies on SARS-CoV-2 and monkeypox vaccination outcomes in those living with HIV, as well as a study of persons with a prior history of monkeypox infection.



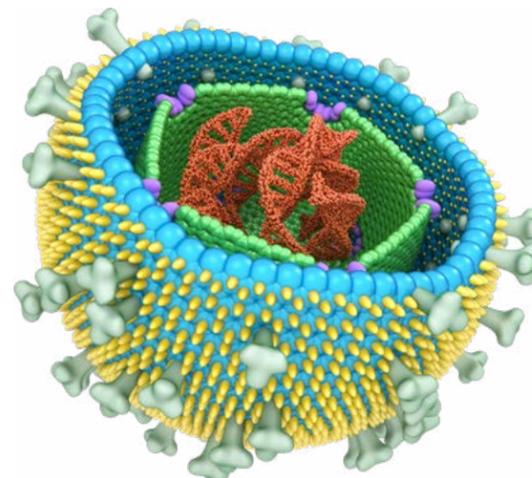
**JULY**

**An innovative National Cancer Institute-funded Wistar/Harvard collaboration** brings together experts in epigenetics, metabolomics, and drug discovery to investigate the link between Epstein-Barr Virus and epithelial cancers and, ultimately, identify better and more selective therapeutic targets.



*“The discovery could be a missing link in the ‘shock and kill’ approach to HIV treatment that has been a focus of research for the past several years.”*

**Dr. Mohamed Abdel-Mohsen**  
ASSOCIATE PROFESSOR, VACCINE & IMMUNOTHERAPY CENTER



**OCTOBER**

**Dr. Daniel Claiborne, Casper Wistar Fellow**, is using two newly acquired grants, one from amfAR, The Foundation for AIDS Research, and another from The Campbell Foundation, to explore using supercharged CAR T immune cells as nontraditional HIV therapy. The Caspar Wistar Fellows Program prepares the next generation of scientific leaders for independence as principal investigators.

**NOVEMBER**

**GSK awards The Wistar Institute a \$100,000 grant** toward the expansion of its Biomedical Technician Training Program, enabling it to reach even more students and working professionals.



**DECEMBER**

**The American Lung Association presents a COVID-19 Respiratory Virus Research Award** in the amount of \$100,000 per year for up to two years to Wistar Associate Professor Dr. Mohamed Abdel-Mohsen for his lab’s research exploring a COVID connection to lung disease.

**Two Wistar scientists receive grants totaling \$250,000** from the WW. Smith Charitable Trust. The funds will allow Dr. Noam Auslander to assess how certain ancient viruses that are native to our genome can affect how cancer responds to drug treatments, while Dr. Ian Tietjen will investigate whether a certain African bark extract can be used to activate the “hidden” HIV viral reservoir and make the virus vulnerable to a treatment that would eliminate it entirely.

*“By working together across different modalities, there’s an opportunity for each of us to learn from the synergy and expertise of the other investigators.”*

**Dr. Paul Lieberman**  
HILARY KOPROWSKI, M.D., ENDOWED PROFESSOR AND DIRECTOR OF THE CENTER FOR CHEMICAL BIOLOGY AND TRANSLATIONAL MEDICINE



# A YEAR OF DISCOVERY ADVANCED BY COLLABORATIONS & PARTNERSHIPS

Wistar Science relies on the strength of our collaborations and partnerships to transform the discoveries and inventions of our researchers into new medicines and diagnostics. In 2023, we partnered with a range of institutions locally, nationally, and beyond to further our knowledge and bring meaningful solutions one step closer to those who need them.



## MAY

Wistar scientists in Philadelphia continue to deepen a fruitful international collaboration with computational chemistry experts from the University of Buea Centre for Drug Discovery in Cameroon to identify plant-based medicinal compounds that may



hold potential for treating HIV. In a collaboration that advances both research programs — and human health worldwide — Wistar exchanges knowledge in laboratory techniques and research infrastructure for advanced computer modeling expertise for screening therapeutic compounds found in African plants.

Biotech startups in the tri-state region get a boost from Wistar’s newly formed strategic collaboration with the Pennsylvania Biotechnology Center and the Baruch S. Blumberg Institute. The collaboration — designed to collectively support the seeding, launching, and maturation of life science startups — will feature a translational sciences seminar series.



## JUNE

Wistar and the federally qualified health center Philadelphia FIGHT honor pediatric HIV researcher Dr. Deborah Persaud of the Johns Hopkins University School of Medicine at the 27th Annual Jonathan Lax Memorial Award Lecture, held in person and streamed to a global research and lay audience.

*“Joining forces to develop novel therapies against high-priority pathogens with future pandemic potential is an important step for global health.”*

Dr. Luis J. Montaner  
WISTAR VACCINE & IMMUNOTHERAPY CENTER

## JULY

Wistar scientists team up with clinic and service providers at Philadelphia FIGHT and the BEAT-HIV Community Advisory Board in a new, more intentional community engagement model to achieve deeper insights and drive greater participation among the target community in HIV research.



*“This is a very unique, dynamic model because we are all working together. The scientists dream up the roadmap to implement cure research with collaborators. And then the community makes the dream our own. I don’t see how we can’t succeed.”*

William B. Carter  
CHAIRMAN, BEAT-HIV COMMUNITY ADVISORY BOARD

## Clinical Collaboration Fund

A culture that fosters collaboration is key to Wistar’s success as a discovery engine. Resources to bolster those efforts are the transformative difference.

With funds raised from the **Bold Science // Global Impact** Campaign, Wistar will establish a Clinical Collaboration Fund to establish and nurture growing partnerships with local, national, and international clinicians and health systems, strengthening the bridge between Wistar research and patient treatment.

For more information on the Clinical Collaboration Fund and other Collaboration & Partnership Campaign priorities, visit [boldscience.wistar.org](https://boldscience.wistar.org) or scan this QR code.



**Bold Science // Global Impact**  
THE WISTAR INSTITUTE

# A YEAR OF DISCOVERY ADVANCED BY EDUCATION & TRAINING

Building a pipeline of talent has always been central to The Wistar Institute’s mission. Through the Hubert J.P. Schoemaker Education and Training Center, our goal is to advance a well-trained, sustainable life sciences workforce — comprising a diverse and inclusive talent pipeline — for the benefit of our region and beyond. In 2023, we continued to expand our offerings to even more individuals, from high school all the way through to working adults looking to expand their opportunities.



## FEBRUARY

More than 175 postdoctoral, graduate, and undergraduate students from several academic institutions throughout the Philadelphia region exchange updates and generate ideas on peer-driven research at the inaugural Wistar Trainee Research Symposium.

*“At Wistar, you feel part of something that is making breakthroughs. You feel like you can be someone who can make a discovery, too.”*

**Rickelle Wescott**  
RESEARCH EXPERIENCE FOR UNDERGRADUATES, PRE-MED TRACK,  
HAMPTON UNIVERSITY

## JUNE

Fox 29 Good Day Philadelphia viewers are introduced to Wistar’s Biomedical Technician Training Program, which prepares the next generation of workers for positions in biomedical science labs. A recent graduate describes the training alongside world-renowned Wistar researchers as the “golden ticket” for full-time employment in the growing life sciences industry. Wistar is expanding the number and size of cohorts and training experiences thanks to recent National Science Foundation funding.



## JULY

Wistar’s High School Program for Biomedical Research prepares next-gen scientists for exciting careers in life sciences research. Now in its 30th year, this innovative summer program

offers a real-life dose of how science and medicine work at the cellular level in Wistar’s state-of-the-art biomedical research labs alongside the scientists who make discoveries happen.

## AUGUST

Wistar kicks off its second Biomedical Technician Training Program cohort, preparing students with a high school equivalency for meaningful career opportunities in the burgeoning biotech workforce. The 24-week paid high-touch workforce training model offers graduates — many from disadvantaged communities — a direct path to full-time, career-ladder employment and is an essential step to meet the talent needs in the region’s rapidly growing cell and gene therapy sector.



*“We can tell students about these things, but when they actually get to contribute to the real research going on at Wistar, that’s when you see the spark.”*

**Dr. Kristy Shuda McGuire**  
DEAN OF BIOMEDICAL STUDIES



54 students from four Wistar summer Education & Training programs earn completion certificates during a combined recognition event featuring a keynote address, poster presentations, and reception.

A YEAR OF DISCOVERY ADVANCED BY  
**EDUCATION & TRAINING**



**254** TOTAL PARTICIPANTS IN WISTAR'S  
EDUCATION & TRAINING PROGRAMS

**59%** WOMEN



**18+**  
ACADEMIC AND INDUSTRY  
PARTNERS

**140+**  
ADDITIONAL  
STUDENTS

**AUGUST**

Wistar's 12-week NSF-funded summer Research Experiences for Undergraduates Program fully immerses 16 students in biomedical science experiments under the guidance of a Wistar mentor scientist in one of the Institute's 37 active labs. The program encourages STEM student innovators from underrepresented groups to pursue graduate education and eventual careers that will advance the life sciences in new directions.

*"The collaborative nature of Wistar when I was a postdoc was so important to my development. I was thrilled to come back and help support other postdocs the way I was supported."*

Dr. Italo Tempera  
ASSOCIATE DIRECTOR FOR CANCER RESEARCH  
CAREER ENHANCEMENT

**NOVEMBER**

Wistar trainees, researchers, staff, and family members don their sneakers, stretch their hamstrings, and take to the sidewalks of University City for the annual Wistar Champion Run for Research, raising more than \$5,000 to support training, education, and the development of our next generation of biomedical researchers.

**Global Studies Program**

Exchanges of science and scientific methods across institutions around the world enrich knowledge, foster a diverse pipeline of talent, and accelerate the discovery of new therapies and cures.

With funds raised from the **Bold Science // Global Impact Campaign**, The Wistar Institute will establish a **Global Studies Program** to elevate our presence on the global academic stage and pilot our highly successful training and workforce development initiatives abroad.

For more information on the plans for the Global Studies Program and other Education & Training Campaign

priorities, visit [boldscience.wistar.org](https://boldscience.wistar.org) or scan this QR code.



**Bold Science // Global Impact**  
THE WISTAR INSTITUTE

A YEAR OF DISCOVERY ADVANCED BY  
**RECOGNITION**

The talents of Wistar researchers and leadership are often recognized by peer organizations and outside associations for exceptional contributions to biomedical research and a commitment to the global science community. We're also proud to honor other diverse collaborators and inspirational leaders in the field, who serve as models for our own researchers and aspiring future scientists.



**APRIL**

Internationally recognized tropical and emerging disease vaccinologist **Dr. Maria Elena Bottazzi** of Baylor College of Medicine in Texas keynotes Wistar's Women & Science Program on Tropical Medicine Catalyzing Equity in the Vaccine Sciences. Dr. Bottazzi, who was a 2022 Nobel Peace Prize nominee and named among Forbes Latin American's 100 Most Powerful Women in Central America, is co-creator of a patent-free, open science COVID-19 vaccine technology that led to development of vaccines suitable for global access.



**JULY**

**Dr. Hildegund Ertl**, professor in Wistar's Vaccine & Immunotherapy Center, receives the Rosalind Franklin Society Award in Science, which recognizes outstanding peer-reviewed research by women and underrepresented minorities in STEM fields.



A YEAR OF DISCOVERY ADVANCED BY  
**RECOGNITION**

**JULY**

**Dr. David Weiner, who directs one of the world's most recognized research teams in the field of DNA vaccines and immunotherapies, is recognized with a 2023 Distinguished Research Award for Gene and Cell Therapy from MolecularCloud, a free platform for the biomolecular community. Dr. Weiner is the W.W. Smith Charitable Trust Distinguished Professor in Cancer Research, Immunology, Microenvironment and Metastasis Program.**



**SEPTEMBER**

**Wistar President and CEO Dr. Dario C. Altieri is honored by the Justinian Foundation and Society of Philadelphia for exemplifying the highest qualities of leadership and integrity. The Justinians, who espouse the advancement of professional, academic, civil, and cultural excellence, recognize Wistar's role under Dr. Altieri's leadership in preparing a diverse and inclusive talent pipeline in Philadelphia for the greater good of our global community.**



**NOVEMBER**

**Wistar presents its 2023 Helen Dean King Award, celebrating outstanding science achievement by women, to Dr. Cori Bargmann of The Rockefeller University. Dr. Bargmann is recognized for her work exploring the genetic and neural circuit mechanisms of behavior in pursuit of understanding how genes influence decisions. The award is named after a well-respected geneticist and member of Wistar's research staff from 1908 to 1950, Dr. Helen Dean King — the first female scientist to work at Wistar.**



**DECEMBER**

**The Philadelphia Business Journal selects Dr. Dario Altieri, Wistar President and CEO, as one of Philadelphia's Most Admired CEOs leaving a mark on Greater Philadelphia and beyond.**



**The Society for Melanoma Research (SMR) presents Dr. Meenhard Herlyn with the Founders Award to commemorate his work in creating an organization that has been integral to the advancement of melanoma research. Dr. Herlyn founded SMR in 2003 to bring together clinicians and researchers against melanoma.**



**MELANOMA WALK**



**\$100,000 MILESTONE FOR TEAMS ELBO AND PATIO**

Congratulations to Eleanor Armstrong (orange sweatshirt), Pat Dean (green shirt), and the entire Team Elbo and Team Patio crew on surpassing \$100,000 lifetime raised in support of melanoma research at The Wistar Institute!

To learn more about the 8th Annual Melanoma Fundraising Walk that took place on October 15, 2023, and how you can raise funds in support of Wistar Science, scan the QR code or visit [wistar.org/give-join/fundraising-wistar/](https://wistar.org/give-join/fundraising-wistar/)



# A YEAR OF DISCOVERY ADVANCED BY TEAMWORK

Our people are the heart of our work, from world-renowned researchers making new discoveries to expert administrative staff and exceptional Trustees who help advance Wistar’s mission.

## JANUARY



**Michael Criscuolo** joins The Wistar Institute as vice president of Development. Criscuolo’s expertise in health care fundraising and knowledge of Philadelphia’s life sciences community will help secure

philanthropic support to advance Wistar’s global leadership in the areas of cancer research and in the development of vaccines and immunotherapy.

## MARCH



Legal and life sciences expert **Squire Servance**, founder and managing partner of Syridex Bio, joins the Wistar Board of Trustees, serving on the Audit, Business Development, and Scientific Advisory committees.

*“Wistar scientists are doing ambitious science, but the educational component and STEM equity is equally critical, and Wistar is leading the way training the next leaders in the life sciences space.”*

**Squire Servance**  
WISTAR TRUSTEE



**Dr. Maureen Murphy** is named deputy director of Wistar’s NCI-designated Ellen and Ronald Caplan Cancer Center, a position in which she helps guide the center’s growth by expanding research initiatives

and collaboration, education and training programs, and recruitment to fast-track innovative basic cancer research discoveries into future transformative drugs and therapies. Dr. Murphy also serves as program leader of Wistar’s Molecular & Cellular Oncogenesis Program, associate vice president for Faculty Affairs, and principal investigator of the Training Grant in Cancer Biology.

## MAY



Former Philadelphia City Solicitor **Sozi Tulante, Esq.**, joins the Wistar Board of Trustees. He brings his extensive background in corporate and intellectual property law, policy matters, regulatory issues, and a record of building and leading diverse and sophisticated teams.

## JULY



Wistar welcomes virology expert **Dr. Alexander Price** as a new assistant professor in the Gene Expression and Regulation Program of the Ellen and Ronald Caplan Cancer Center. In his new Price Lab at Wistar, Dr. Price will focus on how viruses regulate and exploit RNA transcription and processing.

## AUGUST



Life sciences consultant and entrepreneur **Joy Taylor** is appointed Wistar trustee, offering critical vision and insight as Wistar continues to build a life science ecosystem centered on excellence, collaboration, education, and innovation.

## SEPTEMBER



Computational biologist **Dr. Avi Srivastava** is recruited as an assistant professor in Wistar’s Gene Expression and Regulation Program. The Srivastava Lab brings expertise in advanced computational methods used to establish powerful predictive research tools in cancer biology.



Wistar recruits **Dr. Jesper Pallesen** as assistant professor in the Vaccine & Immunotherapy Center. An expert in the fields of virology, immunobiology, and structural biology, Dr. Pallesen uses cryo-electron

microscopy, computational modeling, and atomic-level analysis of protein structures to discern the underlying architecture of proteins and viruses – an understanding crucial to his goal of developing vaccine-design technology.

## OCTOBER



**Dean Stoios** joins Wistar as Chief Financial Officer. Stoios brings to the role more than 25 years of experience in strategic planning, financial management, and driving successful growth in the private and academic sectors.

## DECEMBER



Wistar welcomes **Dr. Aleister Saunders** and **Dr. Patrick Oates** to its Board of Trustees. Dr. Saunders serves as Executive Vice Provost of the Office of Research & Innovation at Drexel University, and Dr. Oates is Senior Vice President of Business Development & Strategic Planning for EMSCO Scientific, Inc.



**Dr. Filippo Veglia**, a prior staff scientist at Wistar, is recruited to its Immunology, Microenvironment and Metastasis Program as an assistant professor. Dr. Veglia studies glioblastoma, the most lethal form of brain cancer,

in hopes that he can uncover potential weaknesses that could be targeted for treatment.

## Scientific Talent Fund

Medical breakthroughs begin in bright minds: the creative, courageous imaginations of our current and future research faculty, as well as our alumni who honed their skills at the Wistar Institute.

With funds raised from the **Bold Science // Global Impact Campaign**, Wistar will establish a Scientific Talent Fund to ensure that the organization remains highly competitive in its ability to attract, recruit, and retain world-class talent.

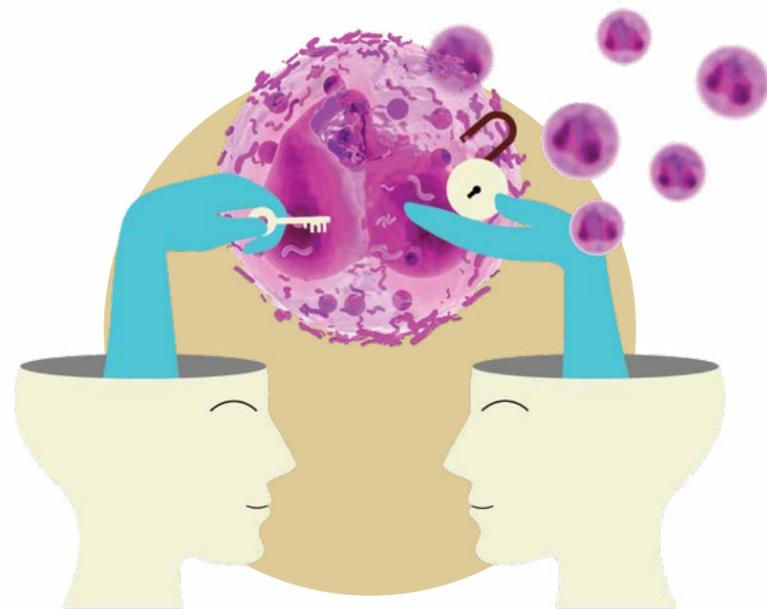


For more information on the plans for the Scientific Talent Fund and other Biomedical Research Campaign priorities, visit [boldscience.wistar.org](https://boldscience.wistar.org) or scan this QR code.

**Bold Science // Global Impact**  
THE WISTAR INSTITUTE

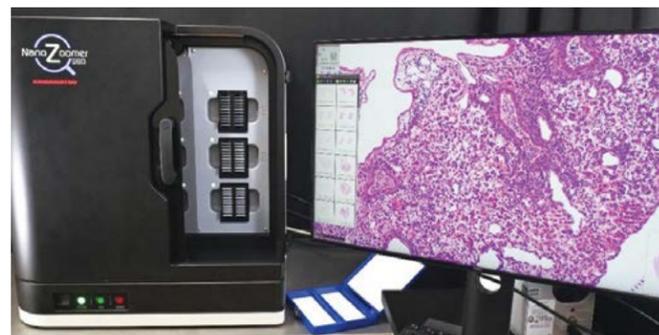
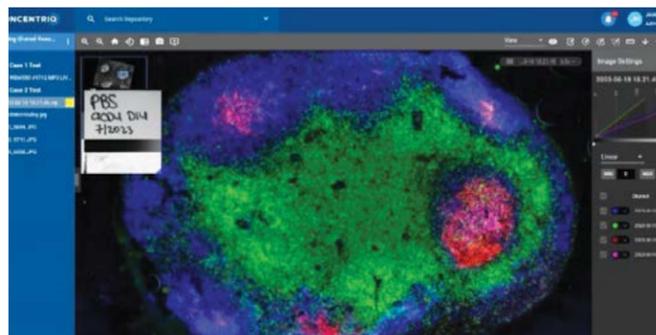
# A YEAR OF DISCOVERY ADVANCED BY TECHNOLOGY

State-of-the-art technology is the backbone of biomedical research, enabling scientists and researchers to unlock disease pathways and find cures. Its importance lies not only in its ability to generate data, but also in its power to transform that data into actionable insights that benefit humanity on a global scale.



In 2023, Wistar added a number of new technology offerings that elevate our world-class scientists' capacity to approach every research question with a laser focus on therapeutic potential. Among them are instruments that provide Wistar scientists with

deeper insights for cell tissue phenotyping, cell-cell interactions, cellular processes and biomarker discovery; precision tools for preclinical modeling; next-generation fluorescent imaging; and powerful, high-resolution image construction.



*“Wistar Science is advanced by unmatched access to technology, expertise, and amazing core facilities.”*

Samantha Soldan, Ph.D.  
STAFF SCIENTIST

## NANOSTRING GEOMX DIGITAL SPATIAL PROFILER (DSP)\*

A powerful tool for examining cellular interactions, tissue heterogeneity, pathogenicity, and response to therapy.

## NANOSTRING COSMX SPATIAL MOLECULAR IMAGER (SMI)\*

Allows researchers to see fresh/frozen samples at single-cell and subcellular resolution.

## LEICA STELLARIS 8 3X TauSTED SYSTEM\*

This brand-new confocal microscope brings the power of next-generation fluorescent imaging to Wistar, using state-of-the-science imaging physics technology to achieve nonpareil resolution — down to about 30 nanometers — allowing scientists to see things as small as certain virus particles.

\*Made possible with a \$2M **Bold Science // Global Impact** Campaign contribution from The Horace W. Goldsmith Foundation, in addition to funding from the Estate of Robert A. Fox.

## HAMAMATSU NANOZOOMER S60 SLIDE SCANNER SYSTEM

Combining powerful image construction technology with “set it and forget it” efficiency, this slide scanner renders dozens of high resolution 40X macro images at a time.

## SMALL ANIMAL RADIATION RESEARCH PLATFORM (SARRP)

This precision radiation instrument for preclinical modeling allows scientists to administer exact doses of radiation to cells to study cancer, the immune system, and more.



## Technology Advancement Fund

With funds raised from the **Bold Science // Global Impact** Campaign, Wistar will establish a Technology Advancement Fund to continue to equip researchers at The Wistar Institute with the tools and resources necessary to drive innovation, accelerate scientific breakthroughs, and improve human health.

For more information on the Technology Advancement Fund and other Biomedical Research Campaign priorities, visit [boldscience.wistar.org](https://boldscience.wistar.org) or scan this QR code.



**Bold Science // Global Impact**  
THE WISTAR INSTITUTE

# A YEAR OF DISCOVERY ADVANCED BY **GENEROUS SUPPORT**

Wistar’s independent nonprofit status creates a platform for our researchers to do original thinking and breakthrough research while also providing a community of collaboration not often found in larger medical and academic institutions. It is through the incredible generosity of our donors that we are able to expand and accelerate our progress on groundbreaking research programs to solve some of the greatest global public health challenges of our time.

**Wistar extends our deepest admiration and appreciation for the below individuals, foundations, and corporations, whose lifetime support of the Institute totaled \$1,000,000 or more at the conclusion of 2023.**

## **\$25 MILLION+**

Anonymous

## **\$10 MILLION+**

Ellen and Ronald Caplan  
Penny and Robert\* Fox  
Bill & Melinda Gates Foundation  
The Pew Charitable Trusts  
Wellcome Trust

## **\$5 MILLION+**

Anonymous  
Dr. Miriam & Sheldon G. Adelson Medical Research Foundation  
The G. Harold & Leila Y. Mathers Charitable Foundation  
W.W. Smith Charitable Trust

## **\$1 MILLION+**

Anonymous	F. M. Kirby Foundation, Inc.
American Cancer Society	Susan G. Komen Breast Cancer Foundation
amfAR	The Jayne Koskinas Ted Giovanis Foundation for Health and Policy
Mr. and Mrs. Douglas S. Briggs	Mrs. Diane M. Lafferty
Ira Brind and Stacey Spector	Edward Mallinckrodt, Jr. Foundation
CEPI	Mr. Ken Nimblett
Mrs. Eleanor Davis	Ovarian Cancer Research Alliance
Dr. Susan Dillon and Dr. William Wong	Philadelphia Foundation
The Ellison Medical Foundation	PTS Foundation
Stan* and Arlene Ginsburg Family Foundation	Mr. and Mrs. Gerald B. Rorer
Joseph and Jane Goldblum	Mrs. Anne Faulkner Schoemaker
The Horace W. Goldsmith Foundation	Sibley Memorial Hospital
Ruth and Richard Horowitz	The V Foundation for Cancer Research
Innisfree	Daniel Wheeler and Amy Fox
Herbert Kean, M.D. and The Honorable Joyce S. Kean	

*“Wistar is a place where we have an opportunity to make a difference for all mankind.”*

Ellen and Ronald Caplan

1892  
**LEGACY SOCIETY**  
 — THE WISTAR INSTITUTE —

The Wistar Institute's 1892 Legacy Society was established to honor and recognize individuals who are thoughtfully providing for the future of Wistar through a Legacy Gift.

We deeply appreciate the commitment to the enduring efforts of Wistar made by the following living individuals who have included Wistar in their long-term financial or estate plans. In recognition of their long-lasting impact, we proudly affirm that they are members of the 1892 Legacy Society.

**JOIN THE 1892 LEGACY SOCIETY**  
 You Decide How You Give.

Uncover the giving option that works best for your goals.

There are several ways to establish a Legacy Gift, including bequests, beneficiary designations, and various financial vehicles that provide either upfront or deferred support to Wistar.

These gifts can often also enable individuals to make a contribution to Wistar at a level that may not have been possible at an earlier stage of life or during their lifetime. Such gifts also offer certain tax benefits and can provide advantages such as a lifetime income to the donor or others.

Most importantly, all Legacy Gifts give our supporters the opportunity to achieve their philanthropic goals in a way that is both meaningful and attainable for them and their families.

We are glad to assist you in determining a Legacy Gift that will best suit your needs and have a lasting impact on the future of Wistar.

**Already included Wistar in your estate plan?**

Let us know so we can immediately welcome you as a member of the 1892 Legacy Society and recognize you today for your generosity. To learn more contact Brittany McCrimmon, Director of Development, at 215.495.6856 or email at [bmccrimmon@wistar.org](mailto:bmccrimmon@wistar.org)  
[wistar.plannedgiving.org](http://wistar.plannedgiving.org)



**Thank You,  
 Legacy Society  
 Members!**

- Anonymous
- Francis X. Bresnan
- Ira Brind
- June H. Chern
- Dr. Matthew J. Cohen
- Lisa Dykstra
- Dr. Kendra B. Eager
- Ms. Joan M. Farkas and Mr. Bruce T. Downs
- Mrs. Inez Flicker
- Bruce A. and Gale S. Gillespie
- Mr. and Mrs. Stanley\* Ginsburg
- Dr. Alfred E. Goldman
- Mr. and Mrs. Bruce A. Goodman
- Joseph Grusemeyer
- Mr. Saul Janson
- Dr. and Mrs. Russel E. Kaufman
- Herbert Kean, M.D. and The Honorable Joyce S. Kean
- Mr. and Mrs. Joseph D. Kestenbaum
- Ms. Deborah Komins
- Mrs. Diane M. Lafferty
- Glorita P. Maida\*
- Mr. and Mrs. Kurtis L. Meyer
- Ken Nimblett
- Ms. Rosetta Perno
- Mr. and Mrs. Timothy P. Pesce
- Dr. Harry Rosenthal
- Mrs. Anne Faulkner Schoemaker
- Emily Brown Shields
- Mr. James B. Wistar

\*Passed away in 2023

THE WISTAR INSTITUTE  
**PRESIDENT'S  
 SOCIETY**



**The “What?”**

The Wistar Institute's President's Society is home to Wistar supporters who provide an essential source of funding for Wistar through their annual giving.

**The “How?”**

President's Society memberships are granted to those with cumulative giving of \$1,000 or more to The Wistar Institute within a calendar year.

**The “Why?”**

Basic Science is where breakthroughs begin. It is the origin of all vaccines, drugs, trials, therapies, and cures. It is the first step in transforming health and saving lives.

**The “Wow!”**

**PRESIDENT'S SOCIETY MEMBER GIVING:**

- sustains our ongoing, groundbreaking research and funds novel science projects at their earliest stages;
- supports our education initiatives from high school to postdoctoral work as well as workforce development programs, funneling diverse talent into well-paying jobs in the life sciences;
- helps us attract and retain top talent;
- funds new technology and equipment;
- bridges unanticipated gaps in grant funding; and
- enables Wistar to pivot quickly to respond to emerging needs like COVID-19; and so much more!

*“I'm really grateful for my doctors and everything that got me to this point, but my cancer treatment actually started with the research at places like The Wistar Institute and I wanted to be a part of the beginning.”*

Elizabeth Pesce  
 CANCER SURVIVOR AND  
 WISTAR PRESIDENT'S SOCIETY  
 MEMBER

**Thank you to our 2023 President's Society members!**



Join this exclusive network of leaders with a gift to The Wistar Institute today:  
[wistar.org/give-join](http://wistar.org/give-join)

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*“Our science has never been more prominent,  
and it has never had more impact than today.”*

**Richard M. Horowitz**  
CHAIR, BOARD OF TRUSTEES

# Bold Science // Global Impact

## THE CAMPAIGN FOR WISTAR

Wistar’s global reputation and impact reflect a unique combination of strengths: a nimble organization that values collaboration above competition, where impact prevails over bureaucracy.

A once-in-a-century pandemic has shown the world that scientific freedom, agility, and cooperation can rechart the course of human health when given ample capacity and investment.

Our bold action now will propel long-lasting improvements to health and the life sciences through our biomedical research and educational initiatives.

Rooted in The Wistar Institute’s strategic plan, the **Bold Science // Global Impact** Campaign for Wistar will enable a transformative investment to bolster and propel key new initiatives across our three foundational pillars.



### BIOMEDICAL RESEARCH

*Following the science and cultivating curiosity to find answers and identify solutions for today’s most pressing scientific problems; our bold objectives include:*

- Expand and ensure evergreen scientific talent.
- Ensure access to the most advanced technologies and research capabilities.
- Sustain and advance our focus on cancer, immunology and infectious diseases to develop the medicines of tomorrow, new life-saving vaccines and next-generation immunotherapeutics.



### EDUCATION & TRAINING

*Building a pipeline of talent through outreach, mentorship, and an investment in bright young minds; our bold objectives include:*

- Secure sustainable funding for Wistar’s core education and workforce development programs.
- Expand the continuum of Wistar educational programs to create a diverse, inclusive life sciences talent pipeline.



### COLLABORATION

*Taking a team science approach—locally and globally—that advances basic research discoveries to lifesaving clinical therapies; our bold objectives include:*

- Broaden Wistar connections to clinicians, patients and specimens.
- Leverage internal award mechanisms and expand the Wistar Science Discovery Fund endowment to advance and accelerate Wistar discoveries into clinical trials with external collaborators.

## BOLD ACHIEVEMENTS

With more than \$52 million raised to date, the **Bold Science // Global Impact** Campaign for Wistar is already having a transformational impact on the Institute. Here are some of the bold achievements made possible through Campaign support thus far.

Five newly-created, endowed professorships in Cancer Research, Vaccines & Immunology, and HIV & Infectious Diseases



Endowment of the Biomedical Research Technician Apprenticeship Program



Significant technology acquisitions in Microscopy, Mass Spectrometry, and Spatial Profiling



Foundation of a new Center for Advanced Therapeutics devoted to the custom design and development of tailored next-generation immunotherapy-based medicines

Expansion of Cancer Center funding

Establishment of new Principal Investigator Accelerator Awards to fund innovative, early-stage research projects



Expansion of core educational cohorts, including the Biomedical Technician Training program, high school program, and college programs



Funding of a Pandemic Preparedness Program for emerging threats

Launch of new International Postdoctoral Fellowship

Equipment acquisitions for the state-of-the-art Training Laboratory

## BOLD OPPORTUNITIES

We invite you to be among the visionary donors to the **Bold Science // Global Impact** Campaign for Wistar. Contributions will fuel our remaining Campaign priorities, including:

**Scientific Talent Fund**  
 Caspar Wistar Fellowship renewal  
**Technology Advancement Fund**  
 Endowed Dean of Biomedical Studies  
 Education endowments  
**Global Studies Program**  
 Biomedical Technician Training Program expansion  
 High school program expansion  
**International Postdoctoral Fellowship**  
 Clinical Collaboration Fund  
 Wistar Science Discovery Fund endowment expansion

*“With Wistar Science we can fulfill both a dream and a promise. Where discovery solves big problems, knowledge improves lives and innovation creates new futures — this is our moment.”*

Dr. Dario C. Altieri

**BOLD IDEAS CHANGE LIVES. BOLD SUPPORT MAKES IT POSSIBLE.**



**SUPPORT**

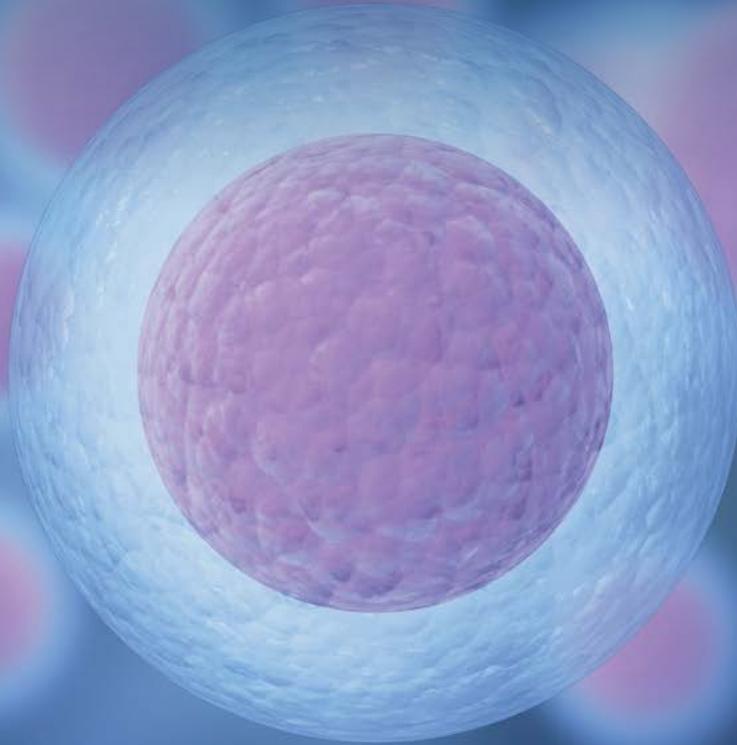
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Scan this QR code to learn more.



3601 Spruce Street | Philadelphia, PA 19104

[WISTAR.ORG](http://WISTAR.ORG)



A Cancer Center Designated by the  
National Cancer Institute

**The Wistar Institute is the nation's first nonprofit biomedical research organization. And since its earliest days, philanthropy has played a key role in advancing Wistar Science and its breakthrough discoveries. If you want to learn more about how you can support Wistar Science, visit [wistar.org/give-join](http://wistar.org/give-join). The Wistar Institute is a 501(c)(3), tax ID# 23-6434390, and all gifts are tax deductible to the full extent allowed by law.**

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