



If you think research is expensive try disease.

OUR MISSION

To improve health by for medical research through recognition of advocacy, and education



The Power of Collaboration

At the Lasker Foundation, we witness the importance of collaboration every day-from the science we honor with our Awards to the central role of mentoring in our education programs and the effectiveness of joining voices in our advocacy work. In this issue, you will read about many examples of collaboration's impact and importance in advancing Lasker's mission of improving health by accelerating support for medical research.

At the 2024 Awards ceremony, we celebrated scientists whose breakthroughs reflected a deep commitment to collaboration. Consider the words of James Chen (2024 Basic Award winner). After citing the importance of mentors during his career, he acknowledged the "dream team" in his lab responsible for the discovery of cGAS and cGAMP. Read about how Joel Habener, Svetlana Mosjov, and Lotte Bjerre Knudsen (2024 Clinical Award winners) each contributed to the transformative development of GLP-1 drugs. And learn about the partnership between Salim and Quarraisha Abdool Karim (2024 Public Service Award winners), who worked together to address HIV and other pandemics in South Africa and around the globe.

We also benefit from the power of collaboration in our education programs that support the next generation of medical researchers. For example, we partnered with the International Biomedical Research Alliance to create the Lasker Lessons in Leadership talks, which allow students in the Oxford-Cambridge Scholars program to hear from role models in science. In reading this report, you will learn about our newest partnerships with early-career researchers themselves, including our support of APSA (the American Physician Scientists Association) and AJIA (the American Junior Investigator Association). Read also about our partnership with the National Institutes of Health (NIH), the Lasker Clinical Research Scholars program that supports

Collaboration also is key to our ability to effectively advocate for medical research. We are pleased to work with organizations such as Research!America and ACT for NIH to raise awareness of the importance of federal funding for NIH and other federal research agencies. Our memberships in the STEMM Opportunity Alliance and in the Coalition for Trust in Health & Science allow us to join with other organizations to ensure diversity in research and build public trust in science. An exciting outcome of our collaboration with Research!America is the expansion of their microgrant program to now include Lasker-sponsored awards that support young scientists to develop innovative curricula to foster science communication and public engagement. We are grateful to our colleagues in other philanthropic organizations who collaborate with us to achieve our goals. For example, through our participation in the Science Philanthropy Alliance, we help encourage and advise a diverse array of philanthropists to support discovery science. We are especially thankful to you for having joined us in this important work. Your support and collaboration inspire us each day. As you read about our progress over the past year, please know that the power of coming together with you propels our work forward. Together, we can ensure that

science will continue to make our world healthier-for all!

"We cannot live for ourselves alone. Our lives are connected by a thousand invisible threads, and along those sympathetic fibers, our actions run as causes and return to us as results." Herman Melville

Letter

young clinician-scientists to work in the Clinical Center on the NIH campus. Participants in these education programs represent multiple early-career stages in medical researchfrom MD/PhD students to junior faculty. An unanticipated and powerful outcome of these previously siloed programs is that the linkage Lasker offers has encouraged moreadvanced participants to mentor, and thus inspire, their junior colleagues.

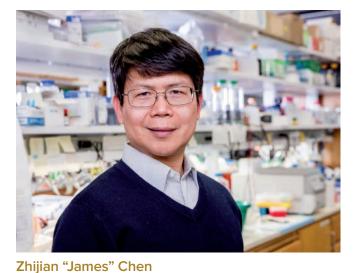
Betsy Nabel Main A.

Elizabeth G. Nabel Chair, Board of Directors

Claire Pomeroy President

Awards Program

Please join us in congratulating our 2024 Lasker Award winners, whose research breakthroughs have had a profound impact on human health.



Albert Lasker Basic Medical Research Award

For the discovery of the cGAS enzyme that senses foreign and self DNA, solving the mystery of how DNA stimulates immune and inflammatory responses

Lasker~Bloomberg **Public Service Award**

For illuminating key drivers of heterosexual HIV transmission; introducing life-saving approaches to prevent and treat HIV; and statesmanship in public health policy and advocacy



Quarraisha Abdool Karim CAPRISA/Columbia University



Lasker~DeBakey Clinical

UT Southwestern Medical Center

Medical Research Award For the discovery and development of GLP-1–based drugs that have revolutionized the treatment of obesity



Joel Habener Massachusetts General Hospital



Lotte Bjerre Knudsen Novo Nordisk



Svetlana Mojsov The Rockefeller University

Salim S. Abdool Karim CAPRISA/Columbia University

Awards Luncheon

The 2024 Lasker Award winners were announced on September 19, and the Awards were presented on September 27 at the Pierre Hotel in New York City.



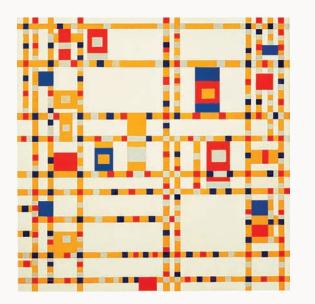








1-The 2024 Lasker Award winners and their Winged Victory statuettes with President Claire Pomeroy (first left) and Medical Research Jury Chair Joe Goldstein (first right); 2-Lotte Bjerre Knudsen speaks to Lasker Clinical Award co-winner Joel Habener; 3-Lasker Basic Award winner Zhijian "James" Chen talks to Board member Marshall Fordyce; 4-Lasker Public Service Award winners Quarraisha Abdool Karim and Salim S. Abdool Karim with Public Service Jury Chair Margaret Hamburg (far left) and Claire Pomeroy (far right); and 5-Lasker Clinical Award winner Svetlana Mojsov presents remarks during the Awards Ceremony luncheon.



Art and Science

In his annual exploration of the parallels between great science and great artwork, Lasker Medical Research Awards Jury Chair Joseph Goldstein discussed how a late masterpiece by the Dutch painter Piet Mondrian drew inspiration from boogie-woogie music—and how the experimentation, improvisation, and boundary pushing of Mondrian's art suggests innovative approaches to scientific problems.

Piet Mondrian. Broadway Boogie Woogie (1942 to 1943). Oil on canvas. 50 × 50 in. Museum of Modern Art, New York, 73.1943. Image credit: ©2024 Mondrian/Holtzman Trust.

Education



Lasker Essay Contest

Now in its 11th year, the Lasker Essay Contest engages early-career scientists and clinicians in discussions about important questions in policy, medicine, and the role of biomedical research in our society. This year, we asked participants to identify a scientific question that is insufficiently addressed in biomedical research today. The winning essays were published in the July 15 issue of the Journal of Clinical Investigation.

Meet our 2024 winners:

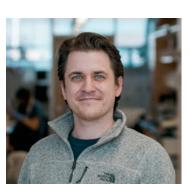
Kevin S. Blake, Washington University in St. Louis

Kevin received his PhD in biology and biomedical sciences from Washington University in St. Louis. He investigates the diversity and evolution of antibiotic resistance in human and environmental microbiomes, with a focus on the sequence–structure–function dynamics of the tetracycline destructase family of antibiotic-inactivating enzymes. He is interested in writing about science for general audiences. In his free time, he enjoys running, reading, and playing with his dog.

Essay: "Missing microbiomes: global underrepresentation restricts who research will benefit"

Catherine M. Bridges, Lexington Medical Center in West Columbia; Medical University of South Carolina

Catherine earned her MD/PhD from the Medical University of South Carolina, where she studied the role of microglia in a mouse model of MEF2C haploinsufficiency syndrome (a rare neurodevelopmental disorder). She is a transitional-





From top clockwise: Kevin Blake, Andrea Maxwell, Catherine Bridges

year intern at Lexington Medical Center in West Columbia, South Carolina. She matched into residency in diagnostic radiology. Her research interests involve applying radiological techniques in women's health. In her free time, she enjoys spending time with her husband, playing board games, and gardening.

Essay: "Illuminating maternal sepsis: a call for improved recognition and prevention"

Andrea M. Maxwell, University of Minnesota Medical School

Andrea is a sixth-year MD/PhD student at the University of Minnesota. Her thesis work focuses on sex/gender differences in the roles of social support, stress, and brain function in alcohol misuse. She plans to pursue clinical training in psychiatry, focusing on addiction and reproductive psychiatry. Outside work, she likes to camp, travel, take care of her backyard chickens, and read and write for fun. Essay: "What happens to the brain during pregnancy?"





Subashan Vadibeler

Subashan Vadibeler, University of Leeds; University of Oxford, UK

Subashan is a doctor at St. James's University Hospital, where he researches health inequities. Born and raised in Malaysia, he attended medical school at the University of Malaya, during which he developed an interest in urban poverty, child health, and the immune system. He later matriculated at Oxford University, where he researched immune evasion mechanisms in cancers and viruses. He aspires to become a clinician-scientist working toward solutions for tropical infectious diseases. He finds balance through long-distance running.

Essay: "The (unresolved) antibody paradox"

to help them develop.



Sarah Voss



Sarah Voss, Johns Hopkins School of Medicine

In the suburbs of Fort Worth, Texas, Sarah spent her childhood as a nationally ranked springboard diver until she hopped off the diving board and into the research lab. Her undergraduate research experiences catapulted her into PhD work at Johns Hopkins School of Medicine, where she studies bacterial defense systems and fundamental phage biology. In her free time, she loves to paint, rock climb, and practice yoga

Essay: "The enemy of my enemy is my friend"

Education (cont'd)

Lasker Clinical Research Scholars

This initiative supports early-career medical researchers for five to seven years, allowing them to conduct independent translational and clinical research at the National Institutes of Health (NIH). In 2024, we welcomed four new scholars, bringing the total to 48. Several have become tenured, including three more in 2024.

Lisa J. McReynolds National Cancer Institute

Lisa McReynolds studies inherited predisposition to hematopoietic malignancies, combining genomic and epidemiological approaches



to understand their causes. Her goal is to identify genes and clinical features that will help clinicians recognize patients with germline genetic predispositions, ultimately to tailor therapies, aid transplant donor selection, and improve genetic counseling. Andrea Lisco National Institute of Allergy and Infectious Diseases Andrea Lisco focuses on delineating the determinants of persistence, regression, or



progression of human papillomavirus (HPV)–related diseases. His goal is to improve clinical outcomes in immunocompromised patients with severe diseases related to HPV.



to understand the epigenetic regulation of tumor growth and of neuroendocrine cell surface receptors to identify therapeutic targets to treat PNETs.



Bloc Seps worl the r and duri ther



Jeffrey R. Strich National Heart, Lung, and Blood Institute

Sepsis is a leading cause of death worldwide. Jeffrey Strich focuses on the role of neutrophil heterogeneity



and associated spleen tyrosine kinase expression during bacterial sepsis, with the goal of developing therapeutic targets for bacterial sepsis.

Education (cont'd)

Lasker Lessons in Leadership

In collaboration with the International Biomedical Research Alliance (IBRA) and the National Institutes of Health (NIH) Oxford–Cambridge Scholars Program, the Lasker Foundation hosted Lasker Lessons in Leadership on May 16, 2024, in Bethesda, Maryland. We were excited to return to an in-person event for the first time since 2019.

This year, three NIH Oxford–Cambridge Scholars—Yasemin Cole, Kritika Singh, and Henry Taylor—interviewed Yuk Ming Dennis Lo. Lo won the 2022 Lasker Award for his discovery of fetal DNA in maternal blood, which led to noninvasive prenatal testing for Down syndrome. He discussed how he became interested in noninvasive testing and shared what he has learned over the years about turning new technology into clinically useful applications. His biggest piece of advice for the students: write a patent; it changes how you think about your work.



Left to right: Kritika Singh, Dennis Lo, Yasemin Cole, and Henry Taylor



The Oxford–Cambridge Scholars met with several Lasker Laureates; Lasker Board members; and Lasker Foundation, IBRA, and NIH leaders at the May 16 dinner after the lecture featuring Dennis Lo.

Lectures

APSA Lecture

David Huang



David Huang at the 2024 Lasker~APSA Lecture

Lasker Laureate David Huang delivered the 2024 Lasker~ APSA Lecture, titled "Seeing Small and Aiming Big," at the annual meeting of the American Physician Scientists Association (APSA) on April 6. Huang is the associate director and director of research at the Casey Eye Institute, the Wold Family Endowed Chair in Ophthalmic Imaging, and professor of ophthalmology and of biomedical engineering at Oregon Health & Science University (OHSU). Huang spoke about the development and clinical impact of optical coherence tomography (OCT), for which he won the 2023 Lasker Award, along with James Fujimoto and Eric Swanson. OCT revolutionized ophthalmology, allowing rapid detection of diseases of the retina that impair vision. The lecture was produced in partnership with APSA, with the goal of mentoring and inspiring the next generation of clinical researchers.

To further that goal, the Lasker Foundation expanded its collaboration with APSA by sponsoring a session called "Interviewing an Icon." On April 5, Alex Waldman, APSA president, interviewed Betsy Nabel, chair of the advisory board of ModeX Therapeutics, at the APSA annual meeting.



Alex Waldman interviewed Betsy Nabel for a Lasker-sponsored session, "Interviewing an Icon."

Public Lecture

Tom Cech

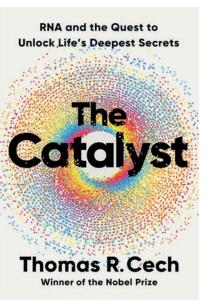


Lasker Laureate Tom Cech delivered the 2024 Lasker Public Lecture in Honor of Al Sommer on June 5. The online lecture, "RNA and the Quest to Unlock Life's Deepest Secrets," was given in partnership with the Secret Science Club.

Cech's lecture coincided with both the release of his popular science book, *The Catalyst:* In his lecture, Cech acknowledged the history of molecular biology, which over the last

RNA and the Quest to Unlock Life's Deepest Secrets, and the publication of his guest essay in the New York Times, "The Long-Overlooked Molecule That Will Define a Generation of Science." half century has made DNA a focus in scientific endeavors and given it a central role in the narrative of discovery. But he also showed that a quiet revolution has recently taken place: the dawning of the RNA age. He discussed how RNA holds the key to the intricate machinery of our cells, how it defines life's origins, and the revelations that have situated it at the center of biology's greatest mysteries.

From how life began to what makes us human and why we age, RNA's role is impressive: it can support and improve life, cause and cure diseases, and even remodel DNA through CRISPR technology. Cech recounted his momentous discovery that RNA can catalyze biochemical reactions; his work on telomerase, the "fountain of youth" enzyme; and the work of brilliant colleagues who have informed and inspired RNA research.



Communications

In 2024, we released the third set of videos from our "Ask A Scientist" series, added seven episodes to our "Classic Lasker" podcast, and continued to increase the Foundation's visibility on social media.

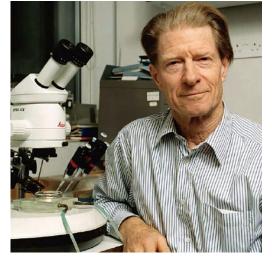
Newsletter

Featuring articles, videos, podcasts, and Lasker news, our newsletter has more than 2,600 subscribers worldwide. We featured individual Laureates, including Joan Steitz, John Gurdon, Daniel Koshland, and Carol Greider, and highlighted discoveries and breakthroughs in basic and clinical research to showcase the contributions of many scientists and Lasker Laureates.





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(clockwise) Image from October newsletter: Carol Greider surfing; image from April newsletter: John Gurdon in his lab; image from February newsletter: Joan Steitz in the Swiss Alps in the 1970s, looking at a map, her husband standing, Jerry Adams and Suzanne Cory sitting, two scientists now at the Walter and Eliza Hall Institute of Medical Research. Australia





"Ask a Scientist" Video Series

From January to May 2024, we released more than 40 short videos on our social media channels. The third installment of this popular series featured Lasker Laureates, "Share Your Research" competition winners, and Lasker Jury and Board members. Scientists discussed an array of topics, such as failures and successes, accessing information, and inspiration and perseverance. In light of the high level of engagement from our followers, we have produced a fourth installment with more than 60 videos to be published in 2025.



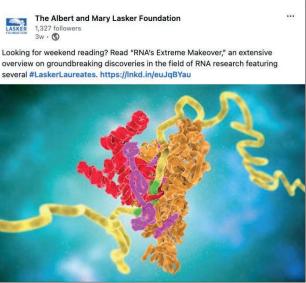


The Lasker Foundation uses its social media channels to share updates about Lasker programming, illuminate the latest biomedical research, and interact with scientists from all over the world. We continue to enjoy steady engagement from our more than 7,600 followers.





Social Media



We have joined the new platform Bluesky.



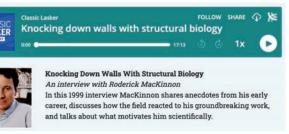
Podcast

We continued the "Classic Lasker" podcast, releasing seven

new episodes. "Classic Lasker"



episodes are adapted from archival interviews of Lasker Laureates, giving these fascinating stories a fresh platform. 2024's episodes included Christopher Reeve (aka Superman), Nancy Brinker (founder of the Susan G. Komen Breast Cancer Foundation), and Albert Starr and Alain Carpentier (inventors of prosthetic heart valves). 2024 concludes this 17-part series; we will launch a new series in 2025.



Advocacy & Partnerships

ACT for NIH

Our partnership with ACT for NIH focuses on increasing the budget of the National Institutes of Health, with the ultimate goal of bringing more medical advances to more patients.

American Junior Investigator Association (AJIA)

Lasker partners with AJIA, a recently created group that supports early-career physician–scientists during the transition from their training to their first faculty positions.

American Physician Scientists Association (APSA)

Our long-term collaboration with APSA is going strong. In addition to the annual Lasker Lecture, we have sponsored the session "Interviewing an Icon" and seven regional APSA conferences at universities across the country (September 2024 through July 2025).

Coalition for Trust in Health & Science

Lasker is pleased to join the other 90 members of this group as they strive to ensure that everyone is empowered to make informed and personally appropriate health decisions for themselves, their families, and their communities on the basis of accurate, understandable, and evidence-based information.

Research!America (R!A)

We are honored that Lasker President Claire Pomeroy has joined the Board of Research!America. Through a partnership between Lasker and R!A, Civic Science Scholar Fanuel Muindi has continued his important work of identifying and filling gaps in scientists' communication training. The Lasker Foundation's collaboration with R!A further expanded in 2024, with two gatherings on science communication/civic science training: a policy forum and a convening of educators. The Lasker Foundation is now partnering with R!A to support microgrants to early-career scientists who are developing public engagement curriculum programs.

Science Philanthropy Alliance (SPA)

Lasker President Claire Pomeroy continues to serve on the Advisory Board of SPA, a group of organizations dedicated to increasing philanthropic support for basic scientific research.

STEMM Opportunity Alliance

Lasker is proud to be a member of a network of hundreds of cross-sector partners—from education, to research, to workforce—committed to adding 20 million STEMM workers to the US economy by 2050.

President's Presentations

March 13, "Envisioning Yourself in the C-suite," Woodlands Academy, Forest Hills, IL

August 19, "The Future of Research" podcast, Harris Search Associates' Innovator Series

September, "Research Funding and Young Scientists," as mentioned in "A Nickel Ain't Worth a Dime Anymore," ASH Clinical News,

https://ashpublications.org/ashclinicalnews/news/8035

LIFE SCI 불

Lasker President Claire Pomeroy co-chairs the Life Sciences NYC Advisory Council. The Council advises the city's Economic Development Corporation in its work to grow the life sciences ecosystem, including expanding and diversifying the workforce, catalyzing the creation of companies, stimulating the economy, and contributing to improved health for all.

Leadership



IN THE SPOTLIGHT: Elizabeth Nabel

Elizabeth Nabel loves to help others. Her impressive résumé—which includes working as an interventional cardiologist; heading a vascular biology lab; being a hospital CEO; serving as director of the National Heart, Lung, and Blood Institute (NHLBI); and co-founding a biotech company—has been fueled by her passion for using science and medicine to improve lives. She views each title as a "unique position that gives you an opportunity to advance science and medicine."

When Nabel became the NHLBI director, she championed the Heart Truth–Red Dress campaign. She brought together 75 nonprofit groups interested in women's health and engaged a marketing firm to help get the message out that heart disease can affect women, not just men.

The campaign sponsors several events each year, including the signature Red Dress Collection fashion show during New York Fashion Week (2024 marked the 22nd Red Dress Collection). Since the campaign's launch in the early 2000s, many educational initiatives have arisen to increase women's awareness of their risk of heart disease, significantly changing patient care. Heart disease is no longer considered just a man's disease but a disease that can affect anyone.

"I have always viewed the outcome of my work—scientific advances, policy outcomes—as far more important than titles," Nabel says. What she enjoyed most about the Red Dress campaign was that everyone involved focused on the outcome, not gaining credit for their respective

foundations or institutes. "This campaign," she says, "is a great example of how, when you harness shared passion for a cause, one plus one can equal a hundred." Nabel embraces that same results-oriented attitude in her personal life. Her husband also is a doctor and researcher. When asked to describe navigating the career choices of two physician–scientists in the same household, she said that sometimes they do things that advantage one person and sometimes they do things that advantage the other person. "As long as you are moving ahead and are not doing things to hold each other back, then the sum total is an advance for both people."

As Nabel has moved between scientific sectors, she has become more convinced that no one sector alone academia, government, industry, or philanthropy—can bring scientific advances to people. The entire ecosystem must work together.

To that end, Nabel has filed 17 patents, including one for developing the method of introducing transduced cells into blood vessels or the heart to treat diseases, and another for coating stents with DNA to express recombinant genes to treat diseases. Nabel points out that without protecting the intellectual property of a basic research discovery, catching the interest of industry is impossible. That means that an important discovery that could improve people's health outcomes might never get to market.

With her many successes, one might think that Nabel couldn't pick her proudest accomplishment. Yet she has a ready answer: she is proudest of the people she has had the opportunity to work with and mentor. Mentoring, guiding, advising, and helping others has been a source of great satisfaction.

"Education is one of the most important activities we as doctors and scientists participate in during our careers," she says, whether that means educating a single patient and their family, training a student in the lab, or enhancing health literacy in an entire community.

As the new chair of the Lasker Foundation Board, Nabel is looking forward to working with President Claire Pomeroy and the Board to tell stories of award-winning discoveries and to further educate the public about the importance of supporting scientific and medical advances.

Board of Directors



2024

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President **Claire Pomeroy**

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Past Chair Anthony B. Evnin

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Elizabeth G. Nabel Chair



Christopher W. Brody



Claire Pomeroy President





Joseph L. Goldstein



Katalin Karikó



E. Albert Reece



Russell W. Steenberg

Elias A. Zerhouni

New Members

The Lasker Foundation welcomed two new members to our Board of Directors this year. Katalin Karikó (2021 Lasker~DeBakey Clinical Medical Research Award for modified mRNA vaccines) is a professor at the University of Szeged, Hungary, and an adjunct professor at the University of Pennsylvania. Mary-Claire King (2014 Lasker~Koshland Special Achievement Award in Medical Science for breast cancer genetics and human rights) is the American Cancer Society Professor in the Department of Medicine and the Department of Genome Sciences at the University of Washington.



Marshall W. Fordyce Secretary & Treasurer



Jordan U. Gutterman



Mary-Claire King



Anthony B. Evnin Past Chair



Margaret A. Hamburg



Sherry Lansing



Donors

In grateful appreciation to the following donors in 2024:

ACT for NIH Foundation Anonymous (2) Bloomberg Philanthropies O'Donnell Foundation Roche Family Foundation Sherry Lansing Foundation The DeBakey Medical Foundation The Daniel E. Koshland, Jr. Fund The Estate of Frances Lasker Brody The Estate of Martin Tolchin

Franklin Berger Christopher W. and Barbara Brody Donna de Varona and John Pinto Judith Ehrlich Anthony B. and Judith Evnin Saraleah and Marshall W. Fordyce Joseph L. Goldstein Margaret A. Hamburg

The Lasker Foundation thanks the Howard Hughes Medical Institute for in-kind contributions. William H. Hammond
Katalin Karikó
Mary-Claire King
Elizabeth G. and Gary Nabel
Trina and Mike Overlock
Claire Pomeroy and
William Preston Robertson
E. Albert Reece
Alfred and Jill Sommer
Russell W. Steenberg and
Patricia M. Colbert
Elias A. and Nadia Zerhouni

Lasker Society Members Mrs. William McCormick Blair, Jr. Christopher and Barbara Brody *Frances Lasker Brody *Susan Lasker Brody W. Michael Brown *Purnell W. Choppin

The Lasker Society accepts deferred gifts through estate planning. For more information, please contact us.

To make a donation, please visit our website at www.laskerfoundation.org/about-us/donate

Looking Ahead

LASKER AWARDS The 2025 Lasker Awards will be celebrated in September.

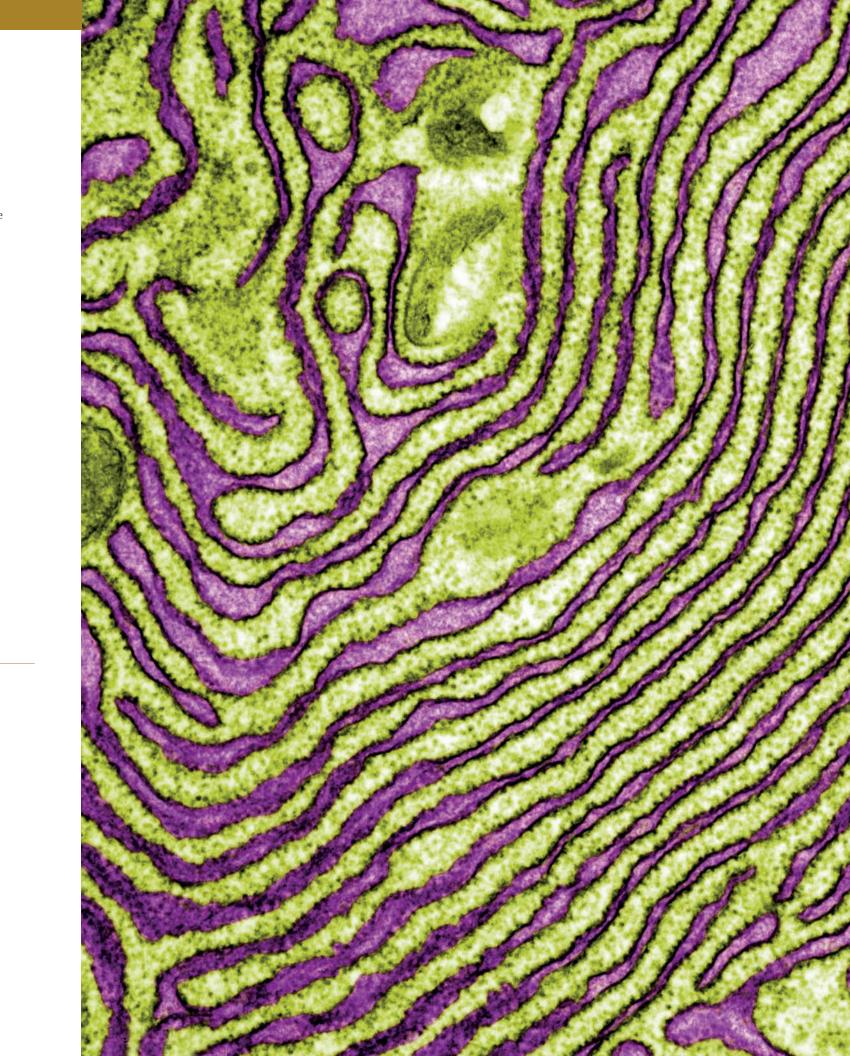
ESSAY CONTEST

The 2025 Lasker Essay Contest will close March 31. Winners will be announced in July.

LESSONS IN LEADERSHIP

Drew Weissman and Katalin Karikó, 2021 Lasker Laureates, will give a presentation on November 18.

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John J. Connolly *Michael E. DeBakey James W. and *Anne B. Fordyce William and Neen Hunt *Daniel E. Koshland, Jr. Trina and Mike Overlock Paula Simon Solomon H. Snyder Alfred and Jill Sommer *Martin Tolchin

*Deceased



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