LASKER FOUNDATION

2015

Annual Report

The mission of the Albert and Mary Lasker Foundation

is to improve health by accelerating support for

medical research through recognition of research excellence,

public education and advocacy.

LETTER FROM THE CHAIR AND PRESIDENT



MIKE OVERLOCK
Chair
Albert and Mary Lasker Foundation



CLAIRE POMEROY, MD, MBA
President
Albert and Mary Lasker Foundation

2015 was a special year for the Lasker Foundation as it marked the 70th anniversary of the Lasker Awards. Created to celebrate the importance of medical science and to show that investing in medical research improves human life, the mission of the Lasker Awards is as relevant today as it was 70 years ago.

In 2015, the Lasker Awards continued the tradition of recognizing groundbreaking biological discoveries, paradigm-shifting clinical research that impacts people worldwide, and courageous and timely humanitarian work in public health. These achievements drew wide public attention at a critical moment as Congress and our broader society debate the significance of increasing the budgets of the nation's biggest medical research agencies.

Over this past year, the Lasker Foundation also expanded its education and advocacy efforts to inform the public about powerful discoveries in medicine and to raise awareness that support for research is of vital importance for the future of medical science. Our University, Public, and Lasker APSA Lectures were well received. Five new NIH-Lasker Clinical Research Scholars started work on the National Institutes of Health campus and the Lasker Lessons in Leadership program expanded its skills-training for MD-PhD students.

Our success is shared with our partners. We thank the International Retinal Research Foundation with whom we join to convene workshops on key questions in vision research. We are grateful to iBiology; together we created videos that share the wonders of science. And we appreciate the opportunity to work with the NIH and with the International Biomedical Research Alliance to support the NIH Oxford-Cambridge Scholars Program.

The Lasker Foundation has had a very successful year full of positive change, which would not have been possible without your support. On the occasion of the 70th birthday of the Lasker Awards, let us all come together to make certain that through the continuous pursuit of the Lasker mission we can ensure better health for all.

Mike Overlock

Claire Pomeroy









Please join us in congratulating our 2015 Lasker Award winners:

Albert Lasker Basic Medical Research Award

Stephen J. Elledge and Evelyn M. Witkin

For discoveries concerning the DNA-damage response – a fundamental mechanism that protects the genomes of all living organisms.



STEPHEN J. ELLEDGE
Brigham and Women's Hospital
Harvard Medical School
Boston, MA, USA



EVELYN M. WITKIN Rutgers University New Brunswick, NJ, USA

Lasker~DeBakey Clinical Medical Research Award

James P. Allison

For the discovery and development of a monoclonal antibody therapy that unleashes the immune system to combat cancer.



JAMES P. ALLISON University of Texas MD Anderson Cancer Center Houston, TX, USA

Lasker~Bloomberg Public Service Award

Médecins Sans Frontières (MSF)

For bold leadership in responding to the recent Ebola outbreak in Africa and for sustained and effective frontline responses to health emergencies.



MÉDECINS SANS FRONTIÈRES (Doctors Without Borders)





Mike Overlock, Joseph Goldstein, James Allison, Claire Pomeroy

In grateful appreciation of the following sponsors of the 2015 Lasker Awards Program:

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Bloomberg Philanthropies

The Estate of Frances Lasker Brody

The DeBakey Medical Foundation

The International Retinal Research Foundation

The Daniel E. Koshland, Jr. Fund

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Solomon H. and Elaine Snyder

Alfred and Jill Sommer

Russell W. Steenberg and Patricia M. Colbert

Robert Tjian

Elias and Nadia Zerhouni





Lasker Awards Society Members

Mrs. William McCormick Blair, Jr.

*Mr. William McCormick Blair, Jr.

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*Frances Lasker Brody

Susan Lasker Brody

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*Emil Frei III

William and Neen Hunt

*Daniel E. Koshland, Jr.

*James F. McCollom, Jr.

Solomon Snyder

Alfred and Jill Sommer

Martin Tolchin

*Deceased

THE AWARDS SOCIETY ACCEPTS DEFERRED GIFTS THROUGH ESTATE PLANNING.

The Lasker Foundation thanks Robert Tjian and the Howard Hughes Medical Institute for in-kind contributions.



Stephen Elledge, Mike Overlock, Claire Pomeroy, Evelyn Witkin

Lasker Public Lecture in honor of Lasker APSA Lecture Al Sommer

What are the mechanisms underlying neurodegenerative diseases such as Alzheimer's, Amyotrophic Lateral Sclerosis (ALS) and Parkinson's, and are there promising new therapies?



These and other questions were the focus of the 2015 Lasker Public Lecture in honor of Al Sommer given by Gregory Petsko, professor of neurology and neuroscience at Weill Cornell Medical College.

The free public lecture was held on August 18, 2015, at the Bell House in Brooklyn, New York, and was co-hosted with the Secret Science Club, a science lecture, arts, and performance series based in Brooklyn. The August event attracted 350 attendees for

Lasker University Lecture



Mary-Claire King made a free, public address at the Morehouse School of Medicine in Atlanta on Thursday, March 19. 2015. to discuss Inherited Breast Cancer: From Gene Discovery to Public Health. Mary-Claire King received the 2014 Lasker~Koshland Award for

Special Achievement in Medical Science for the discovery of the BRCA1 gene locus that causes hereditary breast cancer and for deploying DNA strategies that reunite missing persons or their remains with their families. Her work has touched many families around the world.

The Lecture inspired a collaborative effort between Valerie Montgomery Rice, president of the Morehouse School of Medicine, and Mary-Claire King, of the University of Washington, to develop an MD-PhD program for Morehouse medical students.



Distinguished epidemiologist and ophthalmologist Alfred Sommer gave a talk titled Peregrinations of a Physician-Scientist: Sight and Life at the 2015 Annual Meeting of the American Physician Scientists Association (APSA) in Chicago,

Ilinois. A truly inspirational account, the presentation told the stories of how a small team of three people, including Alfred Sommer, worked to contain a smallpox outbreak in refugee camps in India containing millions of people who had fled the Civil War in East Pakistan in 1971, and how he later demonstrated that vitamin A supplements can save millions of children in the developing world from blindness and death.

Alfred Sommer won the 1997 Lasker Award for Clinical Medical Research for the discovery that vitamin A gives children the biochemical strength to recover from life-threatening infections that are common in most of the poorest nations on earth.

"As a physician-scientist trainee, it can be very discouraging to look ahead and see how far one has to go. The Lasker-APSA lecture series is a very effective means to combat that discouragement, inspiring trainees with the stories and examples of physicianscientists like Alfred Sommer who have had such a tremendous impact on human health." Alex Adami, President-Elect, APSA



Left to right: Paul Rothman (Johns Hopkins University), Ivayla "Eve" Geneva (APSA), Alfred Sommer (Johns Hopkins University), Claire Pomeroy (Albert and Mary Lasker Foundation), Daniel DelloStritto (APSA)

PARTNERSHIPS

iBiology Partnership

The Lasker Foundation established a valuable partnership with iBiology to create open-access free videos that convey the excitement of modern biology and the process by which scientific discoveries are made. In the summer of 2015, the Foundation set up a green-screen studio in its offices to produce Lasker/iBiology videos. The first video, shot in October, featured Ron Vale, professor of cellular and molecular pharmacology at the University of California, San Francisco and the founder of iBiology. Dr. Vale gave an introductory seminar about the science of molecular motor proteins.



Another exciting aspect of this partnership is the annual iBiology Young Scientist Seminar (YSS) video series, co-produced with the Lasker Foundation, in which graduate students and postdocs give talks about their research and discoveries. The goal of the series is to help young scientists build communication skills in telling compelling research stories using narrative, analogies, and visuals. Five such videos were produced in 2015. Participants, who were selected through a video competition process, attended a multiday workshop led by the Alan Alda Center for Communicating Science, a leading organization in training scientists to give effective talks.



2015 YSS Winners: John Schell, Jayme Dyer, Andrew Nosal, Daniela Robles-Espinoza, Jianjin Shi

IRRF Partnership

The Lasker Foundation's collaboration with the International Retinal Research Foundation (IRRF) had a very productive year. The Initiative on Restoring Vision to the Blind was published in the online journal *Translational Vision Science and Technology (TVST)* as a special edition; an independent print version of the report was also produced. In addition, the partners hosted a Special Interest Group meeting at the 2015 Association for Research in Vision and Ophthalmology (ARVO) meeting in May, attended by more than 400 vision scientists. The forum highlighted the Initiative's work to assess technical hurdles that must be addressed in order to advance research in amblyopia and put forward proposals for innovative strategies to accelerate research aimed at restoring photoreceptor function in blind eyes.



Lasker / IRRF Initiative on Amblyopia, July 2015 summer workshop, Woods Hole, MA

In 2015, the IRRF launched its latest study, the Initiative on Amblyopia. This condition, commonly known as "lazy eye", is a vision development disorder in which an eye fails to achieve normal visual acuity, even with prescription glasses or contact lenses. It is a major cause of visual loss in children, affecting 2–3% of people worldwide. During the summer, two workshops involving a total of 50 participants identified critical knowledge gaps in the variety of abnormalities causing the vision deficits that characterize amblyopia.

NIH Lasker Clinical Research **Scholars**

In 2015, the National Institutes of Health (NIH) selected five researchers to be the new NIH Lasker Clinical Research Scholars as part of a joint initiative with the Albert and Mary Lasker Foundation to foster the next generation of great clinicianscientists. This highly competitive program provides talented, early-stage researchers the opportunity to carry out independent clinical and translational research for five to seven years at the NIH. The new scholars join the five previously selected Lasker Clinical Research Scholars: Andrea Apolo, Hans Ackerman, Falk Lohoff, Nehal Meta, and Jessica Gill.

"The NIH hopes to serve as a catalyst for a national effort to nurture clinician-scientists by providing these talented scholars with the opportunities and protected research time they need to thrive," said NIH Director Francis S. Collins. "With ten scholars now at the NIH, it's thrilling to see the Lasker Scholars Program vision taking flight."







REBECCA BROWN (NIDDK) CHRISTIAN HINRICHS (NCI) BETH KOZEL (NHLBI)





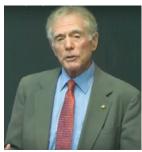
ARMIN RAZNAHAN (NIMH) NATALIE SHAW (NIEHS)

Breakfast at Lasker

The 2015 Breakfast at Lasker event took place the morning of the Awards Ceremony and welcomed junior scientists to join the winners of the 2015 Lasker Awards for an informal discussion. Participants included the NIH/Lasker Scholars, NIH Oxford/Cambridge scholars, and the Lasker Essay Contest winner. Students asked questions about ethics in science and medicine, discussed how to stay creative in their research, and talked about the importance of standing up to skeptics in the broader research community. The event was moderated by Lasker Board Member Jordan Gutterman.

Lasker Lessons in Leadership

In 2015, the Lasker Foundation established an exciting new program called Lasker Lessons in Leadership. These talks, given by top scientists in the biomedical field, provide strategies in developing leadership skills to MD-PhD students. The program is a collaboration with the International Biomedical Research Alliance and the National Institutes of Health (NIH) Oxford-Cambridge Scholars Program.



The inaugural lecture took place on May 19, 2015, on the NIH main campus in Bethesda, Maryland and was given by Ralph Snyderman from Duke University. It was titled From Brooklyn to Lab Bench to Board Room: Lessons Learned. In his talk, Dr. Snyderman commented

on the importance of carefully choosing a career path and mentors, giving personal examples of life-changing decisions that he had made.

The second presentation, titled The Art of Publishing, took place on August 4, 2015 and was given by Dan Littman, professor of molecular immunology at New York University School of Medicine. The talk focused on what it takes to turn a good research into a successful publication in today's competitive academic environment. Students asked questions about writing and publishing scientific articles, and gained insights about the review process. The discussion was led by a panel of mentors that included senior scientists and journal editors.



Lasker Essay Contest

2015 was the second year of the Lasker Essay Contest program, which was created to spur discussion among young scientists and future clinicians about the big questions in biology and medicine today, and to build skills in communicating important medical and scientific issues to broader audiences.

Participants in the 2015 contest were asked to consider the most important fundamental mystery in biology today that, if unlocked by basic research, would yield the greatest dividends for human health.

The contest was open to medical school students and fellows; doctoral students and postdoctoral fellows in biomedical research; graduate students in public health programs; and graduate students in other health professions programs at U.S.-accredited institutions.

The Foundation received 150 essays. The winners received monetary awards to be applied toward their educational expenses.



First place winner, David Hill is a postdoctoral fellow at the University of Michigan in Ann Arbor. David studies the molecular mechanisms that guide microbial colonization of the neonatal intestine.



Second place winner, Joseph Rathkey was born in Seoul, Korea, and grew up in Portland, Oregon. Joseph is currently working towards an MD and a PhD in immunology at Case Western Reserve University.



Third place winner, Stephanie Ng is currently a psychiatry resident at Yale University School of Medicine with interests in health services research, public policy, and child and adolescent psychiatry.



Third place winner, Omar Toubat is a second-year medical student at the University of Southern California Keck School of Medicine.

Lasker Internship Program

In 2015, the Lasker Foundation was pleased to invite college and graduate students to join the team for summer and fall internships.





MICHAEL BUREL New York University School of



EMILY HOELZLI **Bard College**

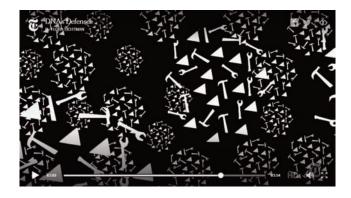


EVELYN I ITWINOFF New York University School of Medicine

"One of my most valued experiences was attending the Lasker Lessons in Leadership at the NIH (National Institutes of Health). Learning about Dr. Ralph Synderman's career evolution inspired me to see healthcare in a broader context with endless opportunities." Yadeni Abagaro

COMMUNICATIONS

In 2015, we expanded our efforts to reach a larger audience and broaden the scope of the Lasker Foundation's impact. We grew our social media accounts adding followers that include scientists, educators, communicators, policy makers, and members of the public. We also worked with esteemed science videographer, Flora Lichtman, to create video materials featuring the 2015 Lasker Awards winners and their work.



A NEW WEBSITE FOR LASKER

Another major communications milestone in 2015 has been the re-design of the Foundation's website aimed at elevating our image to match the organization's enduring prestige. The new website features a more attractive and user-friendly layout, including a responsive design for mobile devices to provide easier access from smart phones and tablets, and allowing more intuitive browsing of our rich record of Lasker Awards and program initiatives.



2016 ESSAY CONTEST

Essay topic: Which fundamental discoveries in basic medical research have not been clinically explored and translated into better human health?



The 2015 Award Winners

Recognizing discoveries

ADVOCACY

Claire Pomeroy published several opinion pieces in 2015, in which she advocated for medical research, discussed social health issues, and raised important questions regarding gender equality in research.

Pomeroy C. Will support for biomedical research be dead on arrival? *The Hill.* January 29, 2015

Pomeroy C. Measles and the tragic seduction of pseudoscience. *FoxNews*. February 6, 2015

Pomeroy C. "Empress of All Maladies": Mary Lasker. *The Hill*. March 20, 2015

Pomeroy C. Congressional myopia: Without support for research, there will be no medical breakthroughs. *Huffington Post*. April 23, 2015

Pomeroy C. The U.S can't afford its myopia regarding medical research. *Forbes.com*. May 19, 2015

Pomeroy C. Prescription for a healthier nation: Support our most vulnerable (foster) kids. *FoxNews*. August 24, 2015

Pomeroy C. The Lasker Awards at 70. *JAMA*. September 15, 2015

Pomeroy C. Gender equality in science will require cultural shift. *Scientific American*. Jan 1, 2016 (available online December 15, 2015)



Image credit: Scientific American

LOOKING AHEAD

Lasker Awards

The 2016 Lasker Award winners will be announced on Monday, September 12, and the Awards will be presented on **Friday, September 23**, at the Pierre Hotel in New York City.

APSA Lecture

The 2016 APSA lecture will be presented by Nobelist **Michael Brown** on **April 15** at the APSA Annual Conference in Chicago, Illinois. Michael Brown won the 1985 Albert Lasker Basic Medical Research Award for discovering the cell surface receptor that binds circulating LDL and removes cholesterol from the bloodstream.

Public Lecture in honor of Al Sommer

In 2016, the Lasker Foundation will once again bring a lecture to the Bell House in Brooklyn. Lasker Public Lectures are free and open to the public.

Essay Contest

The 2016 Lasker Essay contest will open on **February 26**. Winners of the contest will be announced in late May.

Lessons in Leadership

Linda Fried dean of the Mailman School of Public Health at Columbia University presented on Thursday, January 14, at the NIH. The next talks will be given by Lasker Jurors Craig Thompson and Jeremy Nathans, on March 31 and November 9, respectively.

Lasker/iBiology videos

The filming of the 2016 iBiology videos produced at the Lasker offices began on February 4, with a lecture by **C. David Allis**, professor at The Rockefeller University.

OFFICE AND STAFF HIGHLIGHTS

In 2015, the Lasker Foundation moved to an exciting new home – the historic Chrysler building, deemed by many to be one of the most elegant structures in New York City.

The Foundation also welcomed several new staff members. The Lasker team is now comprised of: Claire Pomeroy, President; David Keegan, Senior Program Director; Beatrice Renault, Chief Strategy Officer; Maya Brainard, Science Communication Officer; Kate Guthrie, Project Manager; Lucy Rinaldi, Chief Investment Officer; Karen Wright, Program Administrator; and Courtney Nandagiri, Administrative Manager.

BOARD OF DIRECTORS



Left to right: George Noon, Alfred Sommer, James Fordyce (Chair-emeritus), Elias Zerhouni, Christopher Brody, Mike Overlock (Chair), Chris Jones, Claire Pomeroy, Sherry Lansing, Robert Tjian, Russell Steenberg, Jordan Gutterman, Anthony Evnin, Marshall Fordyce, George Roche

Not pictured: Barbara Barrett, John Considine, Joseph Goldstein, Solomon Snyder

LASKER JURY



Seated, left to right: Michael Brown, J. Michael Bishop, Lucy Shapiro, Joseph Goldstein (Jury Chair), Titia de Lange, Paul Nurse, James Rothman

Middle row, left to right: Tom Maniatis, Huda Zoghbi, Robert Horvitz, Erin O'Shea, Eric Kandel, Diane Mathis

Third row, left to right: Harold Varmus, Craig Thompson, Marc Tessier-Lavigne, Richard Lifton, Bruce Stillman, Gregory Petsko, Charles Sawyers, Martin Raff, Dan Littman, Jeremy Nathans

PUBLIC SERVICE AWARD JURY

Alfred Sommer (*Jury Chair*), Barbara Barrett, Chris Jones, Sherry Lansing, Mike Overlock (*ex officio*), Robert Tjian, Elias Zerhouni



405 Lexington Avenue
32nd Floor, Suite A
New York, NY 10174
TEL 212 286-0222 FAX 212 286-0924

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