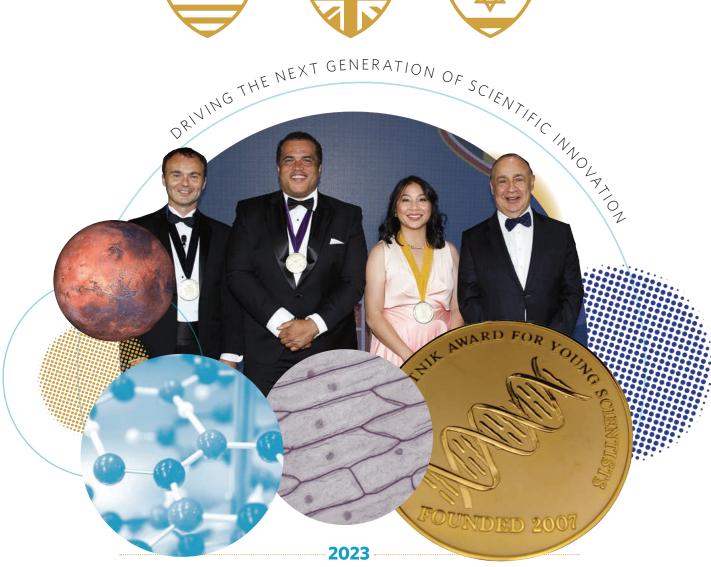
BLAVATNIK AWARDS For Young Scientists









The Blavatnik Awards for Young Scientists honor exceptional young scientists and engineers by celebrating their extraordinary achievements, recognizing outstanding promise, and accelerating innovation through unrestricted funding.



Key Features of

The Blavatnik Awards for Young Scientists

Open to researchers working in more than 36 different scientific and engineering disciplines in three categories:



The Blavatnik Award for Young Scientists in **Chemistry**



The Blavatnik Award for Young Scientists in **Physical Sciences & Engineering**



The Blavatnik Award for Young Scientists in **Life Sciences**

- Recognize and support outstanding young scientists and engineers early in their careers when additional funding and recognition have the greatest impact on their work.
- Honorees are selected based on the quality, novelty, and impact of their research, and their potential for further significant contributions to science.
- Offer the largest unrestricted prizes ever created for early-career scientists.
- Connect alumni with a network of their peers throughout the world to foster collaboration.

"Our Finalists and Laureates are genuinely exceptional — the very best chosen from amongst the very best."

NICHOLAS B. DIRKS PRESIDENT AND CEO THE NEW YORK ACADEMY OF SCIENCES

Established by:

BLAVATNIK FAMILY FOUNDATION

Administered by:



Blavatnik Awards in Israel, in collaboration with:

האקדמיה הלאומית הישראלית למדעים المجمـع الوطــــني الإســـرائيلي للعلــوم والآداب THE ISRAEL ACADEMY OF SCIENCES AND HUMANITIES



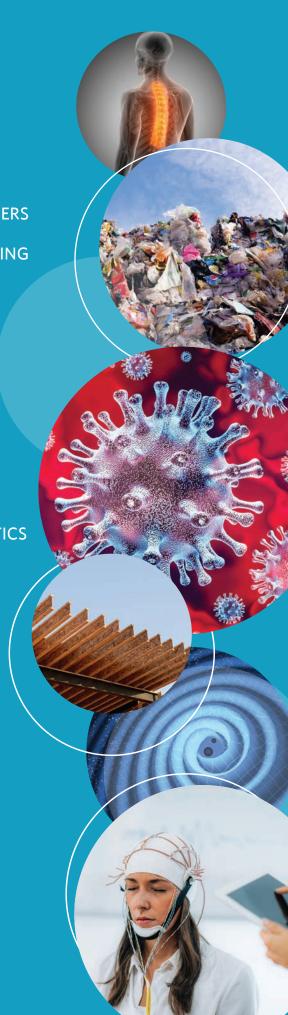


Our Impact

BLAVATNIK SCHOLARS ARE BRINGING REVOLUTIONARY IDEAS AND ADVANCES IN SCIENCE AND TECHNOLOGY INTO REALITY.

- REPAIRING SPINAL CORD INJURY WITH SYNTHETIC FIBERS
- SOLVING THE "BLACK HOLE PARADOX" AND CORRECTING STEPHEN HAWKING'S 1974 FORMULA
- USING ARTIFICIAL INTELLIGENCE TO CONVERT BRAIN ACTIVITY INTO SPEECH
- DEVELOPING TECHNOLOGY THAT COULD PROVIDE AFFORDABLE EYEGLASSES TO BILLIONS OF PEOPLE
- FORMING THE FIRST ATOMIC-LEVEL DESCRIPTION OF SARS-COV-2 SPIKE PROTEIN
- DISCOVERING GRAVITATIONAL WAVES
- ENHANCING THE RECYCLABILITY OF EVERYDAY PLASTICS.
- CREATING FLEXIBLE PLASTIC FIBERS WITH THE SAME PROPERTIES AS SPIDER SILK
- DEVELOPING BEAMS STRONGER THAN STEEL MADE OUT OF WOOD
- 40+ COMPANIES LAUNCHED, CREATING JOBS AND DRIVING ECONOMIC GROWTH

AND MANY MORE ON BLAVATNIKAWARDS.ORG



Science Knows No Borders

60% OF BLAVATNIK AWARDS HONOREES ARE IMMIGRANTS TO THE COUNTRY IN WHICH THEY WERE RECOGNIZED.

ARGENTINA • AUSTRALIA • AUSTRIA • BELARUS • BELGIUM • BOSNIA AND HERZEGOVINA •

CANADA • CHINA • COLOMBIA • CROATIA • CZECH REPUBLIC • EGYPT • FRANCE • GERMANY

- GREECE HONG KONG HUNGARY INDIA IRAN IRELAND ISRAEL ITALY JAPAN •
- LATVIA LEBANON MALAYSIA MEXICO MOROCCO NETHERLANDS NEW ZEALAND
- NIGERIA PALESTINE PERU POLAND PORTUGAL ROMANIA RUSSIA SERBIA ●
- SINGAPORE SLOVAKIA SLOVENIA SOUTH AFRICA SOUTH KOREA SPAIN SWEDEN •
- SWITZERLAND TAIWAN TURKEY UK UKRAINE URUGUAY USA UZBEKISTAN

THE BLAVATNIK AWARDS RECOGNIZE OUTSTANDING YOUNG FACULTY AND POSTDOCTORAL RESEARCHERS IN 36 SCIENTIFIC DISCIPLINES.

- Agricultural & Animal Sciences
- Analytical Chemistry
- Applied Mathematics
- Astrophysics & Cosmology
- Atomic, Molecular & Optical Physics
- Biochemistry & Structural Biology
- Biomedical Engineering & Biotechnology
- Chemical Biology
- Chemical Engineering
- Civil Engineering
- Clinical Medicine & Epidemiology

- Computational Biology, Bioinformatics & Systems Biology
- Computer Science
- Condensed Matter Physics
- Developmental Biology
- Ecology & Evolutionary Biology
- Electrical Engineering
- Environmental Chemistry
 & Biogeochemistry
- Genetics & Genomics
- Green Chemistry
- Immunology
- Inorganic & Solid-State Chemistry

- Materials Science & Nanotechnology
- Mechanical & Aeronautical Engineering
- Microbiology
- Molecular & Cellular Biology
- Neuroscience
- Nuclear & Plasma Physics
- Organic Chemistry
- Particle Physics
- Physical Chemistry
- Physical Earth Sciences
- Polymer Chemistry
- Synthetic Chemistry
- Theoretical Chemistry
- Theoretical Physics

Our History

2007

2014

The Blavatnik National Awards are created to honor faculty scientists across the United States, and the first Laureates in Life Sciences, Physical Sciences & Engineering, and Chemistry are announced. Each Laureate receives a \$250,000 prize.

The Blavatnik Regional Awards continue to honor postdoctoral scientists in New York, New Jersey, and Connecticut. 2018

האקדמיה הלאומית הישראלית למדעים المجمــع الوطـــــــي الإســـــرائيلي للعلـــوم والآداب THE ISRAEL ACADEMY OF SCIENCES AND HUMANITIES



The first Blavatnik Awards in the United Kingdom and Israel are conferred. In Israel, The New York Academy of Sciences collaborates with the Israel Academy of Sciences and Humanities in administering the awards.

U.S. NATIONAL



The Blavatnik Awards

are created to celebrate

outstanding postdoctoral and

faculty scientists in New York,

New Jersey, and Connecticut.



2012

The Blavatnik Family Foundation announces doubling of the prize money for Winners and Finalists starting in 2013. 2014

The Blavatnik Family Foundation and The New York Academy of Sciences host the first annual Blavatnik Science Symposium. 2019

The first annual Blavatnik Awards in the United Kingdom Symposium is hosted in London. The symposium opens its doors to the public to give Blavatnik Scholars from the United Kingdom the opportunity to communicate their research to students and science enthusiasts.



Blavatnik Scholars take on the COVID-19 pandemic, discovering new ways to predict and detect disease spread, identifying effective treatments, and researching new vaccine technologies.



THE BLAVATNIK
AWARDS
CELEBRATE THEIR
15TH
ANNIVERSARY





2023

By the close of 2023, the Blavatnik Awards will have recognized over 430 young scientists and engineers and awarded prizes totaling \$15.4 million.

2018

Three women are named Blavatnik Regional Awards Winners, marking the first time in Blavatnik Awards history that the top prize is concurrently awarded to women scientists in each of the three disciplinary categories.

2022 & 2023 Blavatnik Regional Awa

Regional Awards for Young Scientists

Acknowledge and celebrate the excellence of outstanding postdoctoral scientists and engineers who work in New York, New Jersey, and Connecticut.

Young scientists are nominated by research institutions across the New York region, and Laureates and Finalists are selected by a group of senior scientists and engineers from institutions in this Tri-State Area. Laureates are awarded US\$30,000 each and Finalists are awarded US\$10,000 each in unrestricted funds.

est all not on

ABOVE: Michal Lipson, 2010 Blavatnik Regional Awards Winner-Faculty

"There are a few awards for young scientists, but almost all of them are based on proposals that you submit, and not on the actual work that you do as a young scientist. The Blavatnik Awards is true recognition of the work of young scientists; it is unique in that sense. There is no equivalent."

MICHAL LIPSON

MEMBER, NATIONAL ACADEMY OF SCIENCES
EUGENE HIGGINS PROFESSOR OF ELECTRICAL ENGINEERING
AND PROFESSOR OF APPLIED PHYSICS
COLUMBIA UNIVERSITY
MEMBER, BLAVATNIK NATIONAL AWARDS SCIENTIFIC ADVISORY COUNCIL

Meet the Blavatnik Awards

Regional Laureates

2022



WEN ZHANG
2022 Regional Laureate
in Chemistry
Cornell University

Wen Zhang, PhD, is harnessing electrochemistry to promote reactions of carbon-based compounds without relying on rare materials. He is making advances in the burgeoning field of electrochemical synthesis by demonstrating the ability to manipulate carbon bonds to synthesize molecules for drugs without transition metals. Zhang's work is sparking a wave of new methods for sustainably synthesizing chemicals for drugs and other medicinally-relevant compounds.

2023



JOONHO LEE
2023 Regional Laureate
in Chemistry
Harvard University
(previously Columbia University)

Joonho Lee, PhD, is developing state-of-the-art quantum chemistry algorithms for classical and quantum computers. Lee's work aims to provide a microscopic understanding of emergent functional materials, including solar cells, electrocatalysts for the hydrogen economy, and optoelectronics.



XIAOLONG LIU
2022 Regional Laureate in
Physical Sciences & Engineering
University of Notre Dame
(previously Cornell University)

Xiaolong Liu, PhD, is developing new microscopic imaging techniques, like the high-speed scanning Josephson-tunneling microscopy technique (SJTM), which are equipping scientists with novel tools to explore exciting problems in quantum physics. The SJTM has already been successfully used in uncovering mysteries about superconductors and electron superfluids—an electronic version of a fluid, much like water, that contains no resistance to flow.



ZOE YAN

2023 Regional Laureate in

Physical Sciences & Engineering
University of Chicago
(previously Princeton University)

Zoe Yan, PhD, is developing the first quantum gas microscope on single, ultracold molecules and applying this technique to explore important phenomena relevant to high-temperature superconductors and other quantum materials. Yan's work opened a new venue to study complex quantum phenomena previously inaccessible by other instruments and holds great potential in future quantum technologies.



JOSEFINA DEL MÁRMOL 2022 Regional Laureate in Life Sciences Harvard Medical School (previously The Rockefeller University)

Josefina del Mármol, PhD, is providing the first structural snapshot of odor detection by an olfactory receptor from any species at the near-atomic level. Using cryo-electron microscopy, del Mármol supplied the first conclusive evidence that DEET targets insect olfactory receptors, supporting the hypothesis that DEET 'scrambles' the olfactory signal to 'confuse' mosquitos.



YANXIANG DENG
2023 Regional Laureate
in Life Sciences
University of Pennsylvania
(previously Yale University)

Yanxiang Deng, PhD, is developing a novel microfluidic method for "spatial-omics" to profile expression of RNA, proteins, and epigenetic markers across spatially organized groups of cells in tissues. Deng's work has allowed us to construct a map of how RNA, proteins, and epigenetic markers are expressed across groups of cells with respect to cells' relative positions. This work provides critical insight about how cells in different regions change their behavior during processes like development and disease.

2023 Blavatnik National Awards for Young Scientists

Celebrate America's most innovative and promising faculty-rank scientists and engineers.

Nominations are accepted from US-based research institutions and the Blavatnik National Awards Scientific Advisory Council. Every year, one nominee in each category is named a Blavatnik National Awards Laureate and awarded US\$250,000 in unrestricted funds, with additional nominees recognized as Finalists. Laureates and Finalists are selected by a jury composed of some of the United States' most distinguished scientists and engineers.



ABOVE: 2021 Blavatnik National Awards Laureate Kay Tye with Nicholas B. Dirks, President and CEO, The New York Academy of Sciences

"The freedom to take risks, asking big, complicated or left-field questions without worrying about failure, and being able to do this near the beginning of your career, without a constant eye on promotion and the need to impress can only be to the benefit of science. And that is exactly the spirit behind these awards."

MICHAEL W. YOUNG

NOBEL LAUREATE
RICHARD AND JEANNE FISHER PROFESSOR
VICE-PRESIDENT FOR ACADEMIC AFFAIRS
THE ROCKEFELLER UNIVERSITY

Meet the 2023 Blavatnik Awards

National Laureates

SHANNON BOETTCHER 2023 National Laureate in Chemistry

University of Oregon

Shannon Boettcher, PhD, is creating sustainable, electrochemical methods central to transforming simple mixtures of water and atmospheric gases into fuels, plastics, fertilizers, and other chemicals. Boettcher's work is grounded in the mechanistic science of understanding electrochemical reactions on the surfaces of electrified solids, particularly under practical conditions where catalysts change in structure and composition. His work builds a foundation for the development of new technologies by addressing key knowledge gaps in understanding and controlling the rates of ion- and electron-transfer across interfaces. Discoveries made in Boettcher's laboratory are now being applied to improve industrial processes for hydrogen production and carbon capture, establishing him both as a global leader in research and in society's transition to a green future.



SVITLANA MAYBORODA

2023 National Laureate in Physical Sciences & Engineering University of Minnesota

Svitlana Mayboroda, PhD, is using applied mathematics to provide physicists with a new fundamental understanding of the behavior of matter at nanometer scales—insights that are relevant for today's ability to control and manipulate atomic structures. Mayboroda and her collaborators have invented an elegant technique known as localization landscape theory, which solves some long-standing problems in condensed matter physics. This mathematical framework reveals hidden structures that guide the behavior of waves at the atomic level, explaining why waves do not propagate in complex or disordered materials. Mayboroda's ground-breaking work is leading to improvements in crucial 21st-century technologies like LED lighting, semiconductors, and solar cells.



WILLIAM ANDEREGG 2023 National Laureate in Life Sciences The University of Utah

The research of William Anderegg, PhD, examines the interaction of plant ecology and climate change, from the scale of cells to forest ecosystems. Specifically, he addresses how drought and climate change affect the plant-soil-atmospheric systems, including tree physiology, species interactions, and biosphere-atmosphere feedbacks. His work overturns a 40-year foundational theory on how stomata—pores on leaves that facilitate photosynthesis—behave in order to improve carbon gain and minimize water loss, and in turn, how this affects global forests' response to climate change. As a leading voice in the field of climate change, Anderegg's discoveries are already informing climate solutions, global policies, and public health. Also recognized for his postdoctoral research in 2016, he is the first ever winner of the Blavatnik Regional Award to be awarded the Blavatnik National Award.



2023 Blavatnik Awards for Young Scientists in the United Kingdom



Recognize and support outstanding young scientists and engineers working in England, Wales, Scotland, and Northern Ireland.

Talented young academic staff across the UK are nominated by their university or research institution, or by members of the Blavatnik Awards UK Scientific Advisory Council. Each year, one nominee in each category is named a Blavatnik Awards UK Laureate and awarded £100,000 in unrestricted funds, with two Finalists in each category each receiving £30,000 in unrestricted funds. Laureates and Finalists are selected by a jury of distinguished scientists based in the UK.



ABOVE: 2020 Blavatnik Awards in the UK Chemistry honorees celebrate at the awards ceremony in London, UK.



Meet the 2023 Blavatnik Awards

Laureates in the United Kingdom

SUSAN PERKIN 2023 UK Laureate in Chemistry University of Oxford

As Professor of Physical Chemistry at the University of Oxford, Susan Perkin, DPhil, studies the intersection of physical chemistry, liquid matter, electrolytes, interfaces, and interaction forces. She was recognized for experimental observations using a custom-built instrument that she modified, called the Surface Force Balance, to determine the mechanical, optical, electrostatic, and dynamic properties of fluids. Her findings reveal important information about liquids, leading to a range of outcomes from creating better grid storage for renewable energy to understanding the origin of cellular life.



CLARE BURRAGE 2023 UK Laureate in Physical Sciences & EngineeringUniversity of Nottingham

Looking at the universe, galaxies are not only re-collapsing, but they are beginning to fly apart with ever increasing speed. While the solution to this mystery is almost unknown, nearly all attempts at an explanation introduce dark energy. Professor of Physics at the University of Nottingham, Clare Burrage, PhD, examines cosmology, dark energy, modified gravity, and new physics. She was recognized for theoretical predictions that have guided the development of entirely new experiments to probe the nature of dark energy — one of the biggest challenges in modern cosmology — in a compact, laboratory setting.



KATIE DOORES 2023 UK Laureate in Life Sciences King's College London

As a Reader in Molecular Virology at King's College London, Virologist and Immunologist Dr. Katie Doores, DPhil, specializes in virology, immunology, and glycobiology (the study of the structure, biosynthesis, and biology of carbohydrates). She was recognized for paradigm-shifting discoveries in the characterisation of antibody responses to viral infections, including the persistent and acute human infections HIV-1, hantaviruses, phleboviruses, and SARS-CoV-2.



2023 Blavatnik Awards for Young Scientists in



Israel

Celebrate and support outstanding young faculty-rank scientists in Israel.

Each year, one nominee in each category is named a Blavatnik Awards Israel Laureate and awarded US\$100,000 in unrestricted funds. Nominations are accepted from all universities in Israel and from the Blavatnik Awards Israel Scientific Advisory Council. Laureates are selected by a jury of world-recognized researchers working in Israel.

The Blavatnik Awards in Israel are administered jointly by The New York Academy of Sciences and the Israel Academy of Sciences and Humanities

FOR YOUNG SCIENTISTS

"While COVID has reminded us that we may not know what novel threats or drastic changes may appear tomorrow, we can be certain that our scientific capabilities along with our national resilience and international partnerships will be key to overcoming them."

ISAAC HERZOG
PRESIDENT OF ISRAEL
SPEAKING AT THE 2021 BLAVATNIK AWARDS FOR
YOUNG SCIENTISTS IN ISRAEL CEREMONY

האקדמיה הלאומית הישראלית לכודעים וلمجمــع וلوطـــني الإســــرائيلي للعلــوم والآداب THE ISRAEL ACADEMY OF SCIENCES AND HUMANITIES



Meet the 2023 Blavatnik Awards

Laureates in Israel

RINA ROSENZWEIG 2023 Israel Laureate in Chemistry

Weizmann Institute of Science

The healthy function of our bodies' cells relies on the carefully orchestrated interactions of thousands of function-specific proteins. When these interactions break down because proteins misfold or aggregate, severe neurodegenerative conditions like Alzheimer's, Parkinson's, and Huntington's diseases can occur. Rina Rosenzweig, PhD, is uncovering the secrets behind our cells' innate quality control system, molecular chaperones: a specific class of proteins that assists other proteins to fold, refold, and repair themselves. Rosenzweig has developed deep insight into how specific molecular chaperones prevent and reverse protein misfolding and aggregation on an atomic level. The discovery of this "molecular switch" will hopefully lead to the development of novel therapeutic agents that target Parkinson's and other aggregation-related disorders.



ZVIKA BRAKERSKI 2023 Israel Laureate in Physical Sciences & EngineeringWeizmann Institute of Science

Zvika Brakerski, PhD, is a pioneer in cryptography. He has continually introduced novel cryptographic solutions with far-reaching practical implications on the security of cloud computing and quantum computing. Brakerski developed the first efficient encryption algorithm that allows computers to directly perform computations on encrypted data without the need to first decrypt them. In other words, the cloud computers do not know the data they are processing at all. His algorithm, dubbed FHE (fully homomorphic encryption), has huge potential to improve the security of cloud computing, and is now developed and implemented by many companies worldwide.



SHAI CARMI 2023 Israel Laureate in Life Sciences The Hebrew University of Jerusalem

Shai Carmi, PhD, uses genetic data and mathematical modeling to illustrate the past and inform the future. His research combines data analysis and algorithms to fill in gaps in human history and improve methods for genetic testing. Carmi's work has focused on developing methods that use genetic data to understand the current and past demography of isolated populations. Through the pioneering analysis of DNA sequences from present-day and 14th-century Ashkenazi Jews, Carmi's work discovered a previously unknown division among the medieval population and estimated how remarkably small the population remained throughout the Middle Ages. Carmi is also spearheading the application of genetic risk prediction techniques in Israel, in hopes of identifying high-risk individuals and informing efforts of personalized screening and prevention.



Blavatnik Science Scholars

In the sixteen years since the Awards were first conferred in 2007, the Blavatnik Awards for Young Scientists program has built an exceptional network of honorees whose members together represent one of the most dynamic, innovative, and cross-disciplinary communities in the world.

The Blavatnik Awards are established in 2007 to honor young faculty and postdoctoral researchers in New York, New Jersey, and Connecticut.

In 2014, the Blavatnik Awards expanded to honor young faculty across the United States and postdoctoral researchers in New York, New Jersey, and Connecticut.

FACULTY WINNERS

Andrei Bernevig '12 David Blei '13 Léon Bottou '07 Paul Chirik '09 Jason Fridley '12 Alison Galvani '12 Carmala Garzione '09 Johannes Gehrke '11 Steve Gubser '08 Zoltán Haiman '10 Kristjan Haule '13 Patrick Holland '13 Samie Jaffrey '13 Laura Landweber '08 Michal Lipson '10 George Malliaras '07 Szabolcs Márka '11 Ruslan Medzhitov '07 Thomas Muir '08 Assaf Naor '12 Evgeny Nudler '10 Rebecca Oppenheimer '09 Frans Pretorius '13 Shai Shaham '09 Song-Hai Shi '10 Milan Stojanovic '07 Leslie Vosshall '07

FACULTY FINALISTS Robert Anderson '11 Antje Baeumner '07 Daphne Bavelier '08 Christoph Bregler '07 Geoffrey Coates '07 '08 Michael Collins '12 Elza Erkip '10 David Evans '10 Antonio Giraldez '07 Tamas Horvath '09 Lam Hui '09 Christine Jacobs-Wagner '08 Charalampos Kalodimos '11 Tarun Kapoor '07 Scott Keenev '07 Philip Kim '07 Jun Korenaga '11 Eric Lai '08 Wei Min '12 Colin Nuckolls '07 Kenneth Shepard '08

Saeed Tavazoie '08 Olga Troyanskaya '11 Kathryn Uhrich '07 Neal Weiner '10 Gerard Wysocki '11 Denis Zorin '09

POSTDOCTORAL WINNERS

Sreekanth Chalasani '09 Ofer Feinerman '09 Andrey Feklistov '12 Jonathan Fisher '13 Michael Hahn '12 Andrew Houck '08 Robert Johnston '12 lian Li '16 Yaron Lipman '10 Haitao Liu '10 Elisa Oricchio '12 Franck Oury '11 Eva Pastalkova '09 Alexander Pechen '09 Andrey Pisarev '08 Rachel Rosen '13 Daniela Schiller '10 Nicholas Stavropoulos '12 Valentino Tosatti '11

POSTDOCTORAL FINALISTS

Alexei Aravin '08 Roberto Bonasio '11 Bi-Sen Ding '13 Matthew Evans '08 Emily Hodges '13 Valerie Horsley '08 Andreas Keller '08 Mariangela Lisanti '13 Mary Kay Lobo '11 Jason McGurn '13 Shaun Olsen '11 Nicolas Reyes '10 Agnel Sfeir '10 Xiankai Sun '13 Ruth Van de Water '11 Shobha Vasudevan '08

US NATIONAL LAUREATES

Andrea Alù '21 William Anderegg '23 Janelle Ayres '18 Emily Balskus '19 Phil Baran '16 Shannon Boettcher '23 Clifford Brangwynne '20 Christopher Chang '15 Edward Chang '15 David Charbonneau '16 Adam Cohen '14 Yi Cui '17 Neal K. Devaraj '18 William Dichtel '20 Mircea Dincă '21 Elaine Hsiao '22 Syed Jafar '15 Sergei V. Kalinin '18 Heather J. Lynch '19 Svitlana Mayboroda '23 Brian Metzger '20 Hosea M. Nelson '22 Ana Maria Rey '19 Michael Rape '16 Melanie Sanford '17 Marin Soljačić '14 Kay Tye '21 Conor Walsh '22 Rachel Wilson '14 Feng Zhang '17

US NATIONAL FINALISTS

Mohamed Abou Donia '22 Aditva Akella '20 '21 Andrea Alù '16-'20 Polina Anikeeva '20 '22 Emily Balskus '18 Phil Baran '14 '15 Matthew Becker '17 Kivanc Birsov '23 Helen Blackwell '14 Shannon Boettcher '21 Alexandra Boltasseva '18 Alexei Borodin '16 Edward Boyden '18 Clifford Brangwynne '18 '19 Kristen Brennand '22 Luis Campos '18 '20 Garnet Chan '14 '16

Christopher Chang '14 Howard Chang '14 Peng Chen '14 Xin Chen '16 Kaushik Chowdhury '23 Ivan Corwin '23 Brandi Cossairt '21 Bianxiao Cui '15 '18 Yi Cui '14-'16 Chiara Daraio '19 Paul Dauenhauer '21 Nicolas Dauphas '17 Cory Dean '20 William Dichtel '17 '19 Mircea Dincă '18 Jennifer Dionne '23 Matthew Disney '15-'17 Guangbin Dong '20 '22 Pieter Dorrestein '16 Abigail Doyle '22 Xiangfeng Duan '15 '18 '19 Gordana Dukovic '22 Casey Dunn '16 Mohamed El-Naggar '17 Michael Fischbach '15-'17 '21 Eric S. Fischer '23 Eric Ford '15 Jonathan Fortney '18 Danna Freedman '21-'23 Renee Frontiera '22 Neil Garg '18 '20 Nathan Gianneschi '17 David S. Ginger '16 Antonio Giraldez '16 '17 Ruben Gonzalez '14 Elena Gracheva '20 Viviana Gradinaru '19-'21 Kristen Grauman '20 '21 Jenny Greene '16 Julia Greer '16 '17 Markus Greiner '15 Kaiyu Guan '21 Mohammad Hafezi '19 '20 Mohammad Hajiaghayi '20 Ali Hajimiri '14 Christy Haynes '17-'19 Ryan Hayward '18 Asegun Henry '21'23 Ive Hermans '19 Mark Hersam '17 Shirley Ho '23 Weizhe Hong '23 Jacob Hooker '22

Patrick E. Hopkins '14'22'23 Liangbing Hu '19-'22 Bo Huang '16-'18 Sun Hur '20 '21 Rustem Ismagilov '15 Prashant Jain '20 '21 '23 Ali Javey '14 Michael Jewett '19 Liang Jiang '22 Jeremiah Johnson '19 '23 Cigall Kadoch '20 '23 Jonathan Kagan '14 '15 Sergei V. Kalinin '16 '17 Mansi Kasliwal '22 Ali Khademhosseini '14 '15 Subhash Khot '19 '20 Rebekka Klausen '21 '22 Rob Knight '14-'16 Nevan Krogan '15 '16 Hakho Lee '15 Jure Leskovec '17-'19 Han Li '23 Hening Lin '15 Zachary Lippman '18 Chang Liu '22 Stavros Lomvardas '17 Maureen Long '20 Yueh-Lin Loo '15 Julius Lucks '20 Harmit Malik '14 '15 Raffaella Margutti '22 Luciano Marraffini '15 lan Maze '23 Sarkis Mazmanian '14 Jason McLellan '22 Shirley Meng '18 '19 Houra Merrikh '20 '21 Brian Metzger '18 '19 Franziska Michor '17 '18 Wei Min '19-'21 Garret Miyake '23 Joseph Mougous '18 '19 Seth Murray '19 '20 Alison Narayan '23 Nicholas Navin '19 Benjamin Neale '22 Celeste Nelson '17 '18 Hosea M. Nelson '21 Graham Neubig '21 David Nicewicz '19 Teri Odom '14 '16 Aydogan Ozcan '14-'16 '20 Noah Palm '23

Daniel Sigman '09

In 2018, the Blavatnik Awards expanded to honor young faculty in the United Kingdom and Israel.

Sergiu Paşca '22 '23 Abhay Pasupathy '15 Gary Patti '20 Bradley Pentelute '17 '18 Emily Pentzer '22 Noah Planavsky '21 Kerri Pratt '23 Stanley Qi '21-'23 Oliver Rando '16 Michael Rape '14-'16 Leonardo Rastelli '14 Antonis Rokas '17 Yuriy Román '22 Antonina Roll-Mecak '16 Jared Rutter '15 Pardis Sabeti '16 '17 Melanie Sanford '14 '15 Robert Schmitz '22

Mohammad Seyedsayamdost '19 Maryam Shanechi '23 Beth Shapiro '16 Mikhail Shapiro '21 Ryan Shenvi '20 Robert Shepherd '22 William Shih '14 Amit Singer '16 Sara Skrabalak '21 Michael Strano '14 '15 '17 '21 Joseph Subotnik '18 '19 Yogesh Surendranath '23 Dmitri Talapin '17 Benjamin tenOever '19 Alice Ting '14 '15 Tommaso Treu '17 Benjamin Tu '17-'19 Peter Turnbaugh '21 Siniša Urban '14 Vinod Vaikuntanathan '22 Edward Valeev '16 David Veesler '22 '23 Ashvin Vishwanath '15 Anastasia Volovich '16-'18 Harris Wang '23 Kilian Weinberger '21 Leor Weinberger '16 Emily Weiss '18-'20 Jessica Werk '23

Sheng Xu '23

Nieng Yan '19 '20

Gene Yeo '18 '19

Ahmet Yildiz '21

Peng Yin '14 '15

Andrea Young '21'22 Guihua Yu '21-'23 Joel Yuen-Zhou '20 Gleb Yushin '17 '18 Martin Zanni '14 Feng Zhang '15 '16 Wenjun Zhang '21 Yi Zuo '15

REGIONAL LAUREATES

Direna Alonso-Curbelo '21 William Anderegg '16 Josefina Del Mármol '22 Yanxiang Deng '23 Laura Duvall '19 Netta Engelhardt '19 Antonio Fernández-Ruiz '20 Hani Goodarzi '15 Clément Hongler '14 June Huh '17 Andrew Ilott '17 Ning Jia '20 Chenhao Jin '21 Joonho Lee '23 Jian Li '16 Xiaolong Liu '22 Chao Lu '17 Tomovasu Mani '16 Shruti Naik '18 Arash Nikoubashman '15 Jeremy Palmer '14 Adrian Price-Whelan '20 Panteleimon Rompolas '14 Lingvan Shi '18 Daniel Straus '21 Lu Wei '18 Zoe Yan '23 Juntao Ye '19 Nicolás Young '15 Wen Zhang '22

REGIONAL FINALISTS

Zahra Abdollahnejad '20 Derya Akkaynak Yellin '19 Samuel Bakhoum '18 James Daniel Brandenburg '22 Andrew Bridges '22 Stephen Brohawn '14 Rosemary Cater '22

Xi Chen '16

Dilek Colak '14 Nathaniel Craig '14 Igor Dikiy '19 Knut Drescher '14 Amelia Escolano '20 Allyson Friedman '15 Niankai Fu '18 Matthieu Gagnon '16 Shuai Gao '22 Xiang Gao '15 Micah Goldblum '23 Lucia Gualtieri '18 Alan Healy '17 Xiaowei Hou '14 Chia Wei (Wade) Hsu '17 Jiaoyang Huang '22 Wenyan Jiang '21 Jinzhong Lin '15 Yang Liu '15 Xianwen Mao '20 Elena Meirzadeh '23 Luka Mesin '21 Kate Mever '16 Carla Nasca '19 Adam Overvig '23 Jérémie Palacci '14 Wilhelm Palm '17 Eunyong Park '17 Dennis Perepelitsa '15 Rachel Perry '16 Irina Petrushina '21 Shruti Puri '20 Peter Schauss '18 Marc Schneeberger Pané '20 Ataman Sendoel '17 Priyanka Sharma '18 Maxim Shcherbakov '21 Ziv Shulman '15 Douglas Stanford '17 Erik Henning Thiede '21 Valerie Tornini '23 Eli Visbal '16 Liling Wan '19 Brittany White-Mathieu '23 Matthew Yankowitz '19 Kuang Yu '16 Yaping Zang '19 Daniel Zegarra-Ruiz '22 Yifei Zhang '20 Zhe Zhang '18

Qiancheng Zhao '23

Xiaoming Zhao '21

UK LAUREATES M. Madan Babu '18

Timothy Behrens '20

Matthew Brookes '22 Stephen Brusatte '21 Clare Burrage '23 Claudia De Rham '20 Katie Doores '23 Sinéad Farrington '21 Andrew Goodwin '18 Kim Jelfs '22 Philipp Kukura '19 Madeline Lancaster '22 Daniele Leonori '21 Konstantinos Nikolopoulos '19 Ewa Paluch '19 Kirsty Penkman '20

UK FINALISTS

Susan Perkin '23

Henry Snaith '18

Jade Alglave '23 Timothy Behrens '18 '19 Gonçalo Bernardes '22 John Briggs '18 Ian Chapman '20 Claudia De Rham '18 Matthew Fuchter '20 Stephen Goldup '20 Sarah Haigh '22 Robert Hilton '18 Gustav Holzegel '19 Jesko Köhnke '23 Philipp Kukura '18 Igor Larrosa '19 Andrew L. Lawrence '23 Andrew Levan '18 John Marioni '21 David P. Mills '21 Artem Mishchenko '21 Kathy Niakan '19 Máire O'Neill '19 Rachel O'Reilly '19 Matthew Powner '21 Themis Prodromakis '21 Erin Saupe '22 Andrew Saxe '23 Anja Schmidt '22 James A. Screen '23 Pontus Skoglund '23 Eleanor Stride '20

Stephen Thomas '22 Amaury Triaud '20 Sonja Vernes '22 Edze Rients Westra '20 '21

ISRAEL LAUREATES

Moran Bercovici '19 Erez Berg '19 Zvika Brakerski '23 Shai Carmi '23 Charles Diesendruck '18 Ronen Eldan '22 Ido Kaminer '21 Rafal Klain '21 Anat Levin '18 Emmanuel Levy '20 Oded Rechavi '18 Michal Rivlin '19 Rina Rosenzweig '23 Guv Rothblum '20 Menny Shalom '22 Noam Stern-Ginossar '22 Igor Ulitsky '20 Yossi Yovel '21

Blavatnik Science Scholars

In the News

William Dichtel (2020 Blavatnik National Awards Laureate)

Destroying "forever chemicals" PFAs The New York Times | August 18, 2022 NBC News | August 19, 2022

William Anderegg (2016 Blavatnik Regional Awards Winner; 2023 Blavatnik National Awards Laureate)

Discovering climate change is making pollen allergies worse *The Atlantic* | May 3, 2023

Heather J. Lynch (2019 Blavatnik National Awards Laureate)

Finding penguins adapt to climate change CNN | March 27, 2023

Liangbing Hu (4x Blavatnik National Awards Finalist)

Creating moldable wood

<u>Chemistry World | February 20, 2023</u>

Ali Hajimiri (2014 Blavatnik National Awards Finalist)

Designing a space-based solar power plant *Medium* | December 1, 2022

Andrew Levan (2018 Blavatnik UK Awards Finalist)

Observing the brightest gamma-ray burst Space.com | March 28, 2023 New Scientist | October 17, 2022 Quanta | October 26, 2022

Julius Lucks (2020 Blavatnik National Awards Finalist)

Detecting water contamination with biosensors Science News | February 8, 2023

Amaury Triaud (2020 Blavatnik UK Awards Finalist)

Discovering a habitable exoplanet *Smithsonian* | September 9, 2022

Tommaso Treu (2017 Blavatnik National Awards Finalist)

Observing the earliest galaxies

<u>Washington Post</u> | November 17, 2022

<u>CNN</u> | November 17, 2022

Yossi Yovel (2021 Blavatnik Awards Israel Laureate)

Discovering plants "cry" under stress CNN | April 3, 2023 | Washington Post | April 4, 2023 | Haaretz | March 30, 2023 | The New York Times | March 30, 2023 |

Leslie B. Vosshall (2007 Blavatnik Regional Awards Winner-Faculty)

Deciphering mosquito attraction

Washington Post | October 18, 2022

Scientific American | October 18, 2022

NPR | October 22, 2022

Vinod Vaikuntanathan (2022 Blavatnik National Awards Finalist)

Identifying vulnerabilities in machine learning systems <u>Quanta | March 3, 2023</u>



"It may be a cliché at this point, but they're the canary in the coal mine for climate change because they're so closely tied to those sea ice conditions."

HEATHER J. LYNCH
2019 BLAVATNIK NATIONAL AWARDS
LAUREATE ON THE MIGRATION OF
GENTOO PENGUINS.
SPEAKING TO SMITHSONIAN MAGAZINE
FEBRUARY 8, 2022

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