THE

BLAVATNIK AWARDS For Young Scientists









2024

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 scientific and engineering disciplines in three categories:



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



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.

"The Blavatnik Awards are valuable because they support the work of scientists worldwide who see beyond the walls of their labs and geographical borders. Our awardees use their support to take novel approaches in their research that advance scientific knowledge. This is where science triumphs and innovative solutions for our many global challenges will be found."

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



LEN BLAVATNIK
FOUNDER
ACCESS INDUSTRIES AND
BLAVATNIK FAMILY FOUNDATION

ESTABLISHED BY:







BLAVATNIK AWARDS IN ISRAEL, IN COLLABORATION WITH:

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





Our Impact

Blavatnik scholars are transforming revolutionary ideas and advances in science and technology into reality.

- Repairing spinal cord injury with synthetic fibers
- Tracking penguin populations with satellites and machine learning
- Creation of the first human brain organoids
- Solving the "Black Hole Paradox" and correcting Stephen Hawking's 1974 formula
- First CRISPR-based test for COVID-19
- Artificial materials to manipulate the properties of waves
- Enhanced recyclability of everyday plastics
- Artificial intelligence that converts brain activity into speech
- Developing wood-based building materials that are stronger than steel
- FDA-approved digital medicines for children with attention disorders
- Uncovering the origins of the Dead Sea Scrolls
- Dividing water into its basic elements, hydrogen and oxygen, to make cheaper, greener hydrogen fuel
- Wearable robotics that improve mobility and quality of life for people with physical disabilities
- Detecting water and other life-signaling molecules from planets beyond our solar system
- Wearable ultrasound to provide live and continuous monitoring of bodily functions
- Affordable solar cells with record-breaking performance

AND MANY MORE ON BLAVATNIKAWARDS.ORG



Boosting Careers & Economic Growth

Since its founding in 2007, the Blavatnik Awards for Young Scientists have made significant and multifaceted impacts on the career trajectories of Blavatnik Awards scholars.







To date, Blavatnik Awards honorees have *launched 72 companies*, 50 of which founded after their recognition, creating jobs and driving economic growth worldwide.



Amprius Inc. (NYSE: AMPX) was founded by 2017 Blavatnik National Award Laureate, Yi Cui to develop and manufacture the highest energy density lithium-ion batteries in the world. It's currently valued at \$129.56 million and is now traded on the NYSE.



Three-time Blavatnik National Awards Finalist Viviana Gradinaru founded Capsida Biotherapeutics to scale up a new class of targeted, non-invasive gene therapies for patients with debilitating and life-threatening disorders. Capsida is currently valued at \$195 million.



2019 Blavatnik Awards UK Laureate Philipp Kukura, recognized for his scientific method to weigh molecules using light, started a company called Refeyn. Their devices are being used worldwide, with over 250 labs utilizing the technology and releasing 200 publications. Refeyn is valued at over \$250 million and has over 150 employees.



Sila Nanotechnologies, founded by two-time Blavatnik National Awards Finalist Gleb Yushin, is a battery manufacturer that produces lithium-silicon batteries using nanoengineered silicon particles. It was recently valued at \$3.3 billion.



2019 Blavatnik Awards UK Laureate Henry Snaith founded Oxford PV, the first company to scale manufacturing of perovskite-on-silicon solar cells, achieving world-record efficiency. The company is currently valued at \$224 million.

Our **History**

2007

are created to celebrate outstanding postdoctoral and faculty scientists in New York, New Jersey, and Connecticut.



The Blavatnik Awards

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.

2014

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

2018

האקדמיה הלאומית הישראלית למדעים المجمـع الوطـــــــــي الإســــــرائيلي للعلــــوه 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.

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.

2020

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

U.S. NATIONAL



UNITED KINGDOM



2018

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

By the close of 2024, the Blavatnik Awards will have will have awarded prizes totaling US\$17.4 million to over 450 young scientists and engineers.

2024

The Blavatnik Family Foundation announces 2012 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.

2024 Blavatnik Regional Awards for Young Scientists

Acknowledging and celebrating 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.



"Given my current work at the Science Philanthropy
Alliance and my previous role at the National Science
Foundation, I can say with absolute confidence that
unrestricted funds like the Blavatnik Awards, particularly
at this stage in a scientist's career, are of immeasurable
value. ...And it would be easy to think of the Award as
purely financial...but it is useful to remember the kind
of support they can give is beyond monetary."

FRANCE A. CÓRDOVA

PRESIDENT, SCIENCE PHILANTHROPY ALLIANCE FORMER DIRECTOR, NATIONAL SCIENCE FOUNDATION

ABOVE: France A. Córdova hosting the 2023 Blavatnik Awards for Young Scientists Ceremony at the American Museum of Natural History,

Meet the 2024 Blavatnik Awards **Regional Laureates**

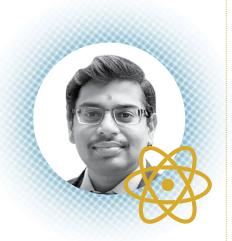
ARNAUD VANDEN BROECK 2024 Regional Laureate in Chemical Sciences The Rockefeller University

Arnaud Vanden Broeck, PhD, has made significant strides in understanding how ribosomes—the molecular machines responsible for protein synthesis—are assembled in human cells. Despite the crucial role of ribosomes, much of our previous understanding of eukaryotic ribosome assembly came from studies of yeast. By using advanced techniques like genome editing and cryo-electron microscopy (cryo-EM), Vanden Broeck successfully mapped the structure of key assembly intermediates in human cells. His discoveries shed light on the unique mechanisms and factors involved in human ribosome assembly, offering a new model for how these critical cellular components are formed. This work fills longstanding gaps in our knowledge and lays the groundwork for treating cancers and diseases related to ribosome dysfunction.



RAGHAVENDRA PRADYUMNA POTHUKUCHI 2024 Regional Laureate in Physical Sciences & Engineering Yale University

Direct human-to-computer interfaces have been the realm of science fiction for decades, yet they instill our imaginations with the possibilities of such technologies. Advances led by Raghavendra Pradyumna Pothukuchi PhD, give us glimpses into what these interfaces might look like. Through research of the "brain-memex"— a system that links computers with the human brain—Pothukuchi has developed computer architectures, partly inspired by the brain, to support processing, memory retrieval, and cognition that promise to be a powerful foundation for developing these interfaces. Pothukuchi's work has already unlocked new possibilities for neurological treatments, with mouse trials already in planning at Yale.



SHIRA WEINGARTEN-GABBAY 2024 Regional Laureate in Life Sciences The Rockefeller University

Shira Weingarten-Gabbay, PhD, is developing high-throughput tools to expose hidden proteins in viral genomes, called "viral dark matter." One key to a successful pandemic response is the development of effective vaccines and treatments. This requires a fundamental understanding of how viruses engage with the immune system and the information encoded in their genomes. By identifying hidden proteins, Weingarten-Gabbay's work accelerates the development of antiviral strategies, enhancing our ability to respond when future viral threats emerge. During the SARS-CoV-2 pandemic, Weingarten-Gabbay's tools identified novel SARS-CoV-2 peptides that could be recognized by the immune system, informing vaccine design.



2024 Blavatnik National Awards for Young Scientists

Celebrating America's most innovative and promising independent academic 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. Beginning in 2024, five short-listed nominees in each category are named Finalists, each receiving US\$15,000 in unrestricted funds. Laureates and Finalists are selected by a jury composed of some of the United States' most distinguished scientists and engineers.



"The Blavatnik Award is a tremendous recognition, instrumental for my career advancement in terms of visibility, opportunities for networking, and direct support of my research effort."

ANDREA ALÙ

2021 BLAVATNIK NATIONAL AWARDS LAUREATE Einstein Professor of Physics, Director of the Photonics Initiative at the Advanced Science Research Center, Professor of Electrical Engineering, The Graduate Center, City University of New York (CUNY)

Meet the 2024 Blavatnik Awards National Laureates

MARKITA DEL CARPIO LANDRY 2024 National Laureate in Chemical Sciences University of California, Berkeley

Chemical behavior at the smallest scales of biology still holds many secrets to how life operates. Markita del Carpio Landry, PhD, engineers these small-scale chemistries of life, using very small particles to uncover new insights and tools for biology. Landry has applied new nanobiotechnology towards a wide range of tasks, from measuring the transfer of chemicals between synapses in the brain to bioengineering plant genetics. Landry's strategies for applying nanobiotechnology tools are already paving the way for more resilient crops and new treatments for neurological disease ranging from neurodegeneration to autism spectrum disorders.



BRITNEY E. SCHMIDT 2024 National Laureate in Physical Sciences & Engineering Cornell University

Understanding ice-ocean interactions is crucial for predicting the impacts of climate change and exploring planetary habitability. Britney E. Schmidt, PhD, and her team designed, built, and deployed lcefin, a remotely operated vehicle that provides unprecedented insights into Antarctic ice shelf melting and ocean circulation. Schmidt's work solves key problems in ice dynamics and interaction with the ocean and offers novel comprehensive views of sub-ice environments. Critically, this research shows how interactions between the ice, ocean, and seafloor control how glaciers respond to the warming ocean. Schmidt also applies Earth-based ice studies to solar system icy worlds to further our understanding of extraterrestrial environments. Schmidt's contributions have earned widespread recognition, including inclusion in Time Magazine's 100 Most Influential People of 2023.



CIGALL KADOCH 2024 National Laureate in Life Sciences Dana-Farber Cancer Institute and Harvard Medical School

Genome sequencing studies revealed that genes encoding understudied macromolecular machines, called ATP-dependent chromatin remodelers, are extensively mutated and serve as key cellular vulnerabilities in human cancer. In a series of groundbreaking studies, Cigall Kadoch, PhD, and her team deciphered how these large complexes regulate DNA accessibility and gene expression. The Kadoch Lab also unraveled how disease-causing mutations impact their structure and function in an expanding list of diseases, that includes cancer, neurodevelopmental disorders and immunodeficiencies. Kadoch has built upon these discoveries to develop novel therapeutics, which are being tested in clinical trials and could revolutionize the treatment of diverse maladies.



2024 Blavatnik Awards for Young Scientists in the



United Kingdom ANK AWAR

Recognizing and supporting outstanding 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.

R YOUNG SCIENTISTS UNITED KINGDOM



"There are many prizes for senior scientists often at a time when they don't need them and frequently years after they've made their big discoveries. It is a really nice change to see scientists rewarded early in their career when they have many great things ahead of them."

SIR VENKI RAMAKRISHNAN NOBEL LAUREATE

President Emeritus, The Royal Society Member, The Blavatnik Awards in the UK Scientific Advisory Council

Meet the 2024 Blavatnik Awards Laureates in the United Kingdom

ANTHONY P. GREEN 2024 UK Laureate in Chemical Sciences The University of Manchester

Anthony P. Green, PhD, studies and designs enzymes—nature's catalysts—which speed up almost all of the biochemical processes needed for life. He was recognized for the targeted engineering of enzymes to catalyze new chemical reactions not possible using conventional techniques. Building from fundamentals of synthetic chemistry, Professor Green designs and evolves bespoke enzymes to perform valuable chemical reactions, unlocking synthetic pathways never seen before in chemistry labs or in nature. His research allows the chemical industry to develop more efficient and environmentally benign ways to solve global challenges, from making new pharmaceuticals, agrochemicals, or biofuels to breaking down environmental pollutants such as plastics.



RAHUL RAVEENDRAN NAIR 2024 UK Laureate in Physical Sciences & Engineering The University of Manchester

Rahul R. Nair, PhD, conducts research in two-dimensional (2D) material-based membranes, using the technology to solve real-world global challenges. Professor Nair's work on graphene oxide and other 2D material membranes highlights their potential in various real-world applications: water filtration and seawater desalination, organic solvent nanofiltration, and intelligent membranes for filtration and biomedical uses. Additionally, his research has provided valuable insights into the movement of water and other molecules in nanocapillaries, as those movements differ from their behavior on the macro scale.



NICHOLAS MCGRANAHAN 2024 UK Laureate in Life Sciences University College London

Nicholas McGranahan, PhD, is developing computational analyses to understand how tumors have developed and how they might be treated. Dr. McGranahan's work has laid a foundation for exploring tumor development as an evolutionary process. He has developed tools to permit researchers to understand the genetic faults that have accumulated during a tumor's development and to evaluate how these can be harnessed to predict the tumor's future trajectory. His tools also allow researchers to determine how we might design more effective cancer treatments, which are specific to each individual tumor.



2024 Blavatnik Awards for Young Scientists in



Israel

Celebrating and supporting outstanding young research scientists in Israel.

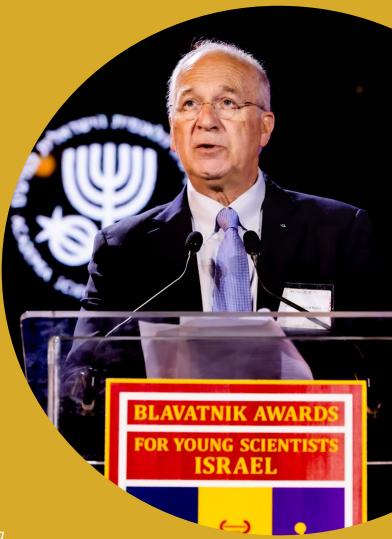
Each year, one nominee in each category is named a Blavatnik Awards Israel Laureate and awarded US\$100,000 in unrestricted funds. Nominations are accepted from all universities in Israel and from the Blavatnik Awards Israel Scientific Advisory Council. Laureates are selected by a jury of world-recognized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

"Looking through the list of past Blavatnik Awards Laureates, one is struck by the amazing quality of their achievements both before and after winning the prize. They all continue to exhibit impressive scientific leadership, making new and surprising discoveries, inspiring their colleagues, and students worldwide."

DAVID HARELPRESIDENT

The Israel Academy of Sciences and Humanities



האקדמיה הלאומית הישראלית למדעים ועה האקדמיה ועפרבים ועה וערבים ו



Meet the 2024 Blavatnik Awards Laureates in Israel

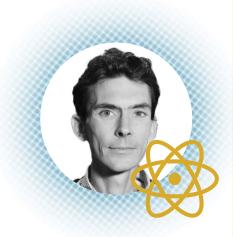
MORAN SHALEV-BENAMI 2024 Israel Laureate in Chemical Sciences Weizmann Institute of Science

Moran Shalev-Benami, PhD, studies signaling pathways in the human brain to decipher the crucial link between the molecular and physiological levels of brain activity. Dr. Shalev-Benami has been in the vanguard of the movement in structural biology to use cryo-electron microscopy (cryo-EM) to visualize the structure of central nervous system receptors at the atomic level to gain insight into their function. She is leading discoveries showing how the brain regulates appetite and how light could be used to modify brain activity. Her work could not only facilitate novel drug discovery to ameliorate human disease but also contribute to development of novel research and therapeutic technologies in the field of neurobiology.



THOMAS VIDICK 2024 Israel Laureate in Physical Sciences & Engineering Weizmann Institute of Science

Thomas Vidick, PhD, is pioneering research in quantum complexity and cryptography that explores the capabilities of quantum computing. One of Vidick's most astonishing results formulates an equivalence between two seemingly unrelated computational models based on quantum mechanics and computational complexity. Vidick's work holds promise to not only shape the development of 21st century quantum networks for secure communication and computation, but also has far-reaching consequences beyond the field of computer science. It represents a significant milestone in the quest to understand the power and limitations of quantum computing, and opens new avenues for research at the intersection of computer science, mathematics and quantum physics.



SCHRAGA SCHWARTZ 2024 Israel Laureate in Life Sciences Weizmann Institute of Science

Schraga Schwartz, PhD, is mapping and quantifying RNA modifications through the development of novel analytical methods. Detecting RNA modifications and understanding how, why, and when cells choose to use RNA modifications is critical for understanding the biology of living organisms and the development of RNA-based medicine. By combining chemical, molecular biological, and computational approaches, his lab was able to develop the first approaches for detecting distinct types of RNA modifications. Schwartz's work not only advances our understanding of a set of significant regulatory mechanisms in our cells, but it also provides insight on human genetic pathologies and paves the way for making use of RNA modifications as therapeutic modalities and targets.



4

Blavatnik Science Scholars

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 were established in 2007 to honor young faculty 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 G Gehrke '11 Steve Gubser '08 Zoltan Haiman '10 Kristian 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 Bayelier '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 Charalampos Kalodimos Tarun Kapoor '07 Scott Keeney '07 Philip Kim '07 Jun Korenaga '11 Eric Lai '08 Wei Min '12 Colin Nuckolls '07

Kenneth Shepard '08

Daniel Sigman '09

16

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 Jian 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 Valentino Tosatti '11

POSTDOCTORAL FINALISTS

Alexei Aravin '08 Roberto Bonasio '11 Bi-Sen Dina '13 Matthew Evans '08 Emily Hodges '13 Valerie Horsley '08 Andreas Keller '08 Mariangela Lisanti '13 Mary Kay Lobo '11 Jason Macgurn '13 Shaun Olsen '11 Nicolas Reyes '10 Aanel Sfeir '10 Xiankai Sun '13 Ruth Van De Water '11 Shobha Vasudevan '08 In 2014, the Blavatnik Awards expanded into the National Awards to honor young faculty across the United States and the Regional Awards to honor postdoctoral researchers in New York, New Jersey, and Connecticut.

Mohammad Hajiaghayi

Christy Haynes '17-'19

Asegun Henry '21 '23

Ryan Hayward '18

Ive Hermans '19

Mark Hersam '17

Weizhe Hona '23

Jacob Hooker '22

Patrick E. Hopkins

Liangbing Hu '19-'22

Rustem Ismagilov '15

Michael Jewett '19

Cigall Kadoch '20 '23

Jonathan Kagan '14 '15

Sergei V. Kalinin '16 '17

Mansi Kasliwal '22

Ali Khademhosseini

Subhash Khot '19 '20

Nevan Krogan '15 '16

Jure Leskovec '17-'19

Zachary Lippman '18

Stavros Lomvardas '17

Maureen Long '20

Yueh-Lin Loo '15

Julius Lucks '20

Ian Maze '23

Harmit Malik '14 '15

Raffaella Margutti '22

Luciano Marraffini '15

Sarkis Mazmanian '14

Jason McLellan '22

Shirley Meng '18 '19

Houra Merrikh '20 '21

Brian Metzger '18 '19

Garret Miyake '23 '24

Wei Min '19-'21

Rob Knight '14-'16

Hakho Lee '15

Hening Lin '15

Chang Liu '22

Han Li '23

'14 '15

Bo Huana '16-'18

Sun Hur '20 '21

Ali Javey '14

Liang Jiang '22

Shirlev Ho '23

'14 '22 '23

Ali Hajimiri '14

′20

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 Sved Jafar '15 Cigall Kadoch '24 Sergei V. Kalinin '18 Markita del Carpio Landry '24 Heather J. Lvnch '19 Svitlana Mayboroda '23 Brian Metzger '20 Hosea M. Nelson '22 Ana Maria Rey '19

US NATIONAL FINALISTS

Michael Rape '16

Marin Soljačić '14

Conor Walsh '22

Feng Zhang '17

Rachel Wilson '14

Kay Tye '21

Melanie Sanford '17

Britney E. Schmidt '24

Mohamed Abou Donia '22 Aditva Akella '20 '21 Andrea Alù '16-'20 Anima Anandkumar '24 Polina Anikeeva '20 '22 '24 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 118 119 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 '24 Brandi Cossairt '21 Joseph Cotruvo, Jr. '24 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 Casev 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 Wei Gao '24 Neil Garg '18 '20 Nathan Gianneschi '17 David Ginger, Jr. '16 Antonio Giraldez '16 '17 Ruben Gonzalez '14 Alexey V. Gorshkov '24 Elena Gracheva '20 Viviana Gradinaru '19-'21

Kristen Grauman '20 '21

Jenny Greene '16

Julia Greer '16 '17

Markus Greiner '15

Kaivu Guan '21 '24

Mohammad Hafezi

19 20

Prashant Jain '20 '21 '23 Jeremiah Johnson '19 '23 Rebekka Klausen '21 '22 Franziska Michor '17 '18

Joseph Mougous '18 '19 Seth Murray '19 '20 David Nagib '24 Alison Narayan '23 Nicholas Navin '19 Benjamin Neale '22 Celeste Nelson '17 '18 Hosea Nelson '21 '22 Graham Neubig '21 David Nicewicz '19 Teri Odom '14 '16 Aydogan Ozcan '14-'16 '20 Noah Palm '23 Sergiu Paşca '22 '23 '24 Abhay Pasupathy '15 Gary Patti '20 Bradley Pentelute '17 '18 Emily Pentzer '22 Noah Planavsky '21 Kerri Pratt '23 Stanley Qi '21-'23 Sohini Ramachandran '24 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 Sevedsavamdost '19 Marvam Shanechi '23 '24 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 '24 Dmitri Talapin '17 Benjamin tenOever '19 Christoph A. Thaiss '24 Alice Ting '14 '15 Tommaso Treu '17 Benjamin Tu '17-'19

Peter Turnbaugh '21

Vinod Vaikuntanathan '22

Sinisa Urban '14

Edward Valeev '16

Harris Wang '23

David Veesler '22 '23

Kilian Weinberger '21

Leor Weinberger '16

Emily Weiss '18-'20

Jessica Werk '23

Wei Xiong '24

Ashvin Vishwanath '15

Anastasia Volovich '16-'18

Shena 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

Xiaowei Hou '14 Direna Alonso Curbelo '21 Wenyan Jiang '21 William Anderega '16 Josefina Del Mármol '22 Nicole J. Lake '24 Yanxiana Dena '23 Jinzhong Lin '15 Laura Duvall '19 Yang Liu '15 Netta Engelhardt '19 Xianwen Mao '20 Antonio Fernández-Ruiz Luka Mesin '21 Hani Goodarzi '15 Kate Meyer '16 Clément Hongler '14 Carla Nasca '19 June Huh '17 Arthur Neuberger '24 Andrew Ilott '17 Adam Overvia '23 Ning Jia '20 Jérémie Palacci '14 Chenhao Jin '21 Wilhelm Palm '17 Joonho Lee '23 Eunvong Park '17 Jian Li '16 Aavishkar Patel '24 Xiaolong Liu '22 Dennis Perepelitsa '15 Chao Lu '17 Rachel Perry '16 Tomoyasu Mani '16 Irina Petrushina '21 Shruti Naik '18 Shruti Puri '20 Arash Nikoubashman '15 Peter Schauss '18 Jeremy Palmer '14 Marc Schneeberger Pané Raghavendra Pradyumna Pothukuchi '24 Ataman Sendoel '17 Shira Weingarten-Privanka Sharma '18 Gabbay '24 Maxim Shcherbakov '21 Adrian Price-Whelan '20 Ziv Shulman '15 Panteleimon Rompolas Douglas Stanford '17 Amy R. Strom '24 Lingyan Shi '18 Erik Henning Thiede '21 Daniel Straus '21 Valerie Tornini '23 Arnaud Vanden Broeck Chiara Trovatello '24 '24 Eli Visbal '16 Lu Wei '18 Liling Wan '19 Zoe Yan '23 Brittany White-Mathieu Juntao Ye '19 '23 Nicolás Young '15 Matthew Yankowitz '19 Wen Zhang '22 Kuang Yu '16

Yaping Zang '19

Yifei Zhang '20

Zhe Zhang '18

Qiancheng Zhao '23

Xiaoming Zhao '21

Daniel Zegarra-Ruiz '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 Clare Burrage '23 Matthieu Gagnon '16 Shuai Gao '22 Katie Doores '23 Xiang Gao '15 Micah Goldblum '23 Lucia Gualtieri '18 Alan Healy '17 Kim Jelfs '22 Chia Wei (Wade) Hsu '17 Jiaoyang Huang '22 Juan D. Jiménez '24 '24 Rahul R. Nair '24 Konstantinos Nikolopoulos '19 Ewa Paluch '19 Elena Meirzadeh '23

Susan Perkin '23 Henry Snaith '18 **UK FINALISTS** Jade Alglave '23 Timothy Behrens '18 '19 Gonçalo Bernardes '22 Tanmay Bharat '24 Jayne Birkby '24 John Briggs '18 Ian Chapman '20 Claudia De Rham '18 Yiliang Ding '24 Fernanda Duarte '24 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 Mehul Malik '24 John Marioni '21 David P. Mills '21 Artem Mishchenko '21

Rachel O'Reilly '19

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

UK LAUREATES

M. Madan Babu '18 Timothy Behrens '20 Matthew Brookes '22 Stephen L. Brusatte '21 Claudia De Rham '20 Sinéad Farrington '21 Andrew Goodwin '18 Amaury Triaud '20 Anthony P. Green '24 Sonja Vernes '22 Edze Rients Westra Philipp Kukura '19 '20 '21 Madeline Lancaster '22 Daniele Leonori '21 Nicholas McGranahan

Kirsty Penkman '20 Kathy Niakan '19 Máire O'Neill '19

Matthew Powner '21 Themis Prodromakis '21 Erin Saupe '22 Andrew Saxe '23 Anja Schmidt '22 James A. Screen '23 Pontus Skoglund '23 Samuel D. Stranks '24 Eleanor Stride '20 Stephen Thomas '22

ISRAEL LAUREATES

Moran Bercovici '19 Erez Bera '19 Zvika Brakerski '23 Shai Carmi '23 Charles Diesendruck '18 Ronen Eldan '22 Ido Kaminer '21 Rafal Klajn '21 Anat Levin '18 Emmanuel Levy '20 Oded Rechavi '18 Michal Rivlin '19 Rina Rosenzweig '23 Guy Rothblum '20 Schraga Schwartz '24 Moran Shalev-Benami '24 Menny Shalom '22 Noam Stern-Ginossar '22 Igor Ulitsky '20 Thomas Vidick '24 Yossi Yovel '21

Blavatnik Science Scholars In the News

EDWARD CHANG | 2015 Blavatnik National Award Laureate Woman with paralysis can speak by thinking with a brain implant and AI

- NBC News | August 23, 2023
- Smithsonian Magazine | August 28, 2023

Bilingual brain implant helps stroke survivor communicate in Spanish and English

- NBC News | May 28, 2024
- U.S. News & World Report | May 29, 2024

LIANG JIANG | 2022 Blavatnik National Awards Finalist New codes could make quantum computing ten times more efficient

Quanta | August 25, 2023

PARDIS SABETI | 2x Blavatnik National Awards Finalist Stopping the next global pandemic before it starts

- **STAT** | August 9, 2023
- NPR | September 25, 2023

Al models are getting bigger, along with the data sets used to train them. But scaling down could solve some big Al problems

• Scientific American | November 21, 2023

ANDREW LEVAN | 2018 Blavatnik Awards UK Finalist Discovers tellurium, an element rarer than platinum, in kilonova explosion

- Astronomy Magazine | October 25, 2023
- Space.com | October 26, 2023
- Physics World | November 3, 2023

ALI HAJIMIRI | 2014 Blavatnik National Award Finalist A wild, futuristic plan to put solar panels in space

• **CNN** | December 27, 2023

WEI MIN | 2012 Blavatnik Regional Finalist and 3x National Finalist

Bottled water contains quarter million invisible nanoplastic particles in a liter of bottled water, with levels 100times higher than previously estimated

- Associated Press | January 8, 2024
- Seattle Times | January 8, 2024
- TIME | January 8, 2024
- The Hill | January 8, 2024
- The New York Times | January 11, 2024
- The Washington Post | January 9, 2024
- CNN | March 22, 2024

HOWARD CHANG | 2014 Blavatnik National Awards Finalist Why women have more autoimmune diseases; study points to the X chromosome

- The New York Times | February 1, 2024
- Women's Health Magazine | February 7, 2024
- National Geographic | April 5, 2024

STEVE BRUSATTE | 2021 Blavatnik Awards UK Laureate Marking 40 years since dinosaur fossils were found on the Isle of Skye

• **BBC News** | February 13, 2024

MATTHEW POWNER | 2021 Blavatnik Awards in the UK Finalist

Pantetheine, a crucial chemical for life can form in conditions found on early Earth

• New Scientist | February 22, 2024

MARK HERSAM | 2017 Blavatnik National Award Finalist New Al Circuitry That Mimics Human Brains Makes Models Smarter

• Scientific American | February 27, 2024

CLAUDIA DE RHAM | 2021 Blavatnik Awards UK Laureate Launches new book The Beauty of Falling: A life in Pursuit of Gravity

- New Scientist | March 26, 2024
 The Guardian | April 21, 2024
- **JUN KORENAGA** | 2011 Blavatnik Regional Awards Finalist Total Solar Eclipses Are Cosmic Coincidences That Won't Last Forever

• Scientific American | March 12, 2024

BETH SHAPIRO | 2016 Blavatnik National Awards Finalist Q&A: What the 'de-extinction' of woolly mammoths can teach us

• STAT | April 4

KIM JELFS | 2022 Blavatnik Awards in the UK Laureate And collaborators discover a new type of porous material that can store greenhouse gases

MSN | April 26, 2024

BLAVATNIK FAMILY FOUNDATION

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See more at www.blavatnikfoundation.org.

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