SCHMIDT
SCIENCE
FELLOWS

Annual Report 2018~2019

Developing the next generation of science leaders to transcend disciplines, advance discovery, and solve the world's most pressing problems.

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Executive Director's Review

Schmidt Science Fellows is a community of people – Fellows, alumni, Reviewers, Selectors, Principal Investigators, Global Meeting speakers, and many partners and supporters – committed to advancing interdisciplinary science for global benefit and dedicated to changing the way science is done.

This Annual Report is an opportunity to thank the members of our growing community for their commitment to our mission, to reflect on the progress in standing up this Fellowship organization, and to celebrate the work of the people at the center of Schmidt Science Fellows – our Fellows.

Why Schmidt Science Fellows?

As a neuroscientist and psychologist who worked at the intersection of those two fields, I have personally witnessed the power of interdisciplinary science to accelerate discovery. Yet, I also know the challenges of being a scientist at the boundary of two disciplines: it is rare to receive training in how to conduct interdisciplinary science; career and funding infrastructures do not always support cross-disciplinary working; and there is a pressing need for new ways to connect like-minded interdisciplinary scientists to do more together than they can do alone.

The Schmidt Science Fellows program seeks to tackle these challenges. We are not only a funding scheme for postdoctoral research, we are so much more:

- a training program that seeks to equip our Fellows with the skills they need to be the next generation of science leaders;
- a community of like-minded scientific risk-takers with ambitions to tackle society's most pressing challenges;
- advocates for the power of interdisciplinary science to advance discovery.

Gratitude

Our progress has been possible thanks to the input, expertise, and commitment of an extensive community of individuals and organizations who have supported the early days of the program. We are so grateful to Eric and Wendy Schmidt for their philanthropic vision and commitment to invest in people with a vision to change the world and to provide them with the tools and networks they need to do so.

We are indebted to our colleagues at Schmidt Futures for recognizing the critical need for a community of scientists with the knowledge and ability to work across disciplinary boundaries, for their visionary leadership in launching the organization, for their continued guidance on our governing board, and for their personal commitment to our Fellows.

We extend deep thanks to our colleagues at the Rhodes Trust for establishing this partnership with Schmidt Futures, for their operational support, and for their deep commitment to bringing emerging leaders from around the world together from all disciplines who are impatient with the way things are and have the courage to act.

We are also deeply thankful for the Fellows who have helped to co-create the program and make it what it is today. Our Fellows are among the most committed and dedicated early-career scientists globally, with ambitions to make an impact on society. I am proud of the progress of our 2018 Fellows and inspired by the evident potential of our second cohort, our 2019 Fellows. From our 2018 group, we have Fellows who are moving into faculty roles, not-for-profit leadership positions, setting up their own companies, or have started another postdoc. We are pleased to have supported six of our 2018 Fellows to deepen their interdisciplinary pivots or to complete projects from their Fellowship year through the exceptional award of Additional Study Grants. Across the two cohorts, we have 34 Fellows from 20 different nations of origin. The Fellows completed their PhD studies at 22 institutions across six countries before commencing their postdoctoral placements at a total of 22 different institutions. You can learn more about the background, science, and ambitions of all our Fellows, and the next steps of our inaugural Fellows, later in this Annual Report.

Our nominating institutions, Reviewers and Selectors play a critical role in our community by helping us select among the best and brightest early-career scientists. The senior scientists who host our Fellows for their placements as Principal Investigators are valued members of the Schmidt Science Fellows community as well; they support and guide our Fellows throughout their Fellowship year. The Principal Investigators are also thought partners in the development of our ambition to build partnerships to advance interdisciplinary science.

Our Global Meetings rely on the support and engagement of our hosts, which include faculty and staff from some of the world's leading universities, forwarding-thinking companies, and cutting-edge laboratories. Their contributions enrich this key aspect of the Fellowship for our cohorts and is an essential part of what we feel makes the program unique.

Personally, I would like to thank and recognize the commitment and professionalism of our Schmidt Science Fellows program team. They have worked tirelessly to create a Selection process to identify Schmidt Science Fellows from institutions all over the world, to develop

and deliver all aspects of the program including placement, Global Meetings, mentoring, and fellowship support offerings, and to engage the broadest range of partners and stakeholders.

Strategic Plan

Our strategic plan provides a framework to guide our thinking as the program develops in the coming years and ensures that we can maintain our focus on the activities that deliver the most value to our Fellows and our vision of interdisciplinary science. The strategic plan is reflected in the structure of this Annual Report. Each of the major reporting sections aligns to a strategic objective of the plan:

Strategic Objective 1
Selecting the most promising interdisciplinary scientists, globally

Strategic Objective 2
Developing the next generation of science leaders

Strategic Objective 3
Creating a lifelong community of interdisciplinary scientists

Strategic objective 4
Solidifying excellence in infrastructure

Strategic Objective 5
Building partnerships to advance interdisciplinary science

Looking ahead

We will select and announce our third cohort in April 2020, taking our total community to more than 50 Fellows and alumni, known as Senior Fellows. These Fellows will have been selected by a Nomination and Selection process that is being continually improved upon to ensure we identify and select among the world's best early-career scientists with the potential to be interdisciplinary leaders. The coming year will also see the roll-out of the first activities for our Senior Fellows community, with lab visits, the first Senior Fellows Annual Forum, and a new digital engagement platform.

We look forward to the remaining Global Meetings with our 2019 Fellows and to welcoming the 2020 cohort into the Fellowship community. As we do so, we are working to strengthen our links with current meeting hosts and exploring options for further locations in other parts of the world.

While the world faces many evident challenges, we believe that science is best positioned to tackle them when scientists work across disciplinary and societal boundaries. At Schmidt Science Fellows, we aim to identify and develop the leaders that are needed to deliver on this potential. We will not be able to realize the full promise of interdisciplinary science alone and we are looking to partners across the science and innovation world to work alongside us. I hope you will join us! If you are interested in exploring a collaboration with Schmidt Science Fellows, please contact our team at: joinus@schmidtsciencefellows.org

Dr. Megan Wheeler
Executive Director

2018 Fellows

The 2018 Schmidt Science Fellows had the unique experience of being our inaugural cohort and helping to shape much of the first Fellowship year with the program team and sponsors. During the course of the Fellowship year they have reflected on what Schmidt Science Fellows has meant to them as they consider their next steps.

Find out more about our Fellows
- click their name to read their full profile

Dr. Karl Barber >

Postdoctoral institution and lab:
Elledge Lab, Brigham & Women's Hospital, Harvard Medical School
2019 destination:
Schmidt Science Fellows Additional Study Grant, followed by Jane Coffin Childs Fellowship at Harvard Medical School, commencing January 2020

> "Being a postdoc can be a very isolating experience, but one of the huge benefits of the Fellowship program is having a strong community of peers who are my allies across disparate disciplines."

Dr. Fahim Farzadfard >

Postdoctoral institution and lab:
Boyden Lab, MIT, and Church Lab, Harvard Medical School
2019 destination:
Postdoctoral position at MIT

Dr. Wes Fuhrman >

Postdoctoral institution and lab:
Paglione Group, University of Maryland College Park
2019 destination:
Senior Scientist at The Johns Hopkins Applied Physics Laboratory, Space Exploration Sector

Dr. Xiwen Gong >

Postdoctoral institution and lab:
Bao Group, Stanford University
2019 destination:
Schmidt Science Fellows Additional Study Grant at Stanford University

Dr. Yogesh Goyal >

Postdoctoral institution and lab:
Raj Lab, University of Pennsylvania
2019 destination:
Jane Coffin Childs Fellowship at the University of Pennsylvania

Dr. Peyton Greenside >

Postdoctoral institution and lab:
Brunskill Group, Stanford University
2019 destination:
Schmidt Science Fellows Additional Study Grant at Stanford University, followed by establishing a start-up company

Dr. Abbie Groff >

Postdoctoral institution and lab:
Page Lab, Whitehead Institute for Biomedical Research
2019 destination:
Schmidt Science Fellows Additional Study Grant at Whitehead Institute

> "I am extremely fortunate to have experienced the inaugural year of The Schmidt Science Fellows program, which has emphasized the importance of scientific communication, and the many different ways scientists can engage diverse audiences. This program has underscored for me how important it is to become and remain engaged with audiences outside of your immediate discipline, and how simple it can be to start at any stage of training. Realizing the power of cultivating this skillset has been tremendously energizing."

Dr. Hal Holmes >

Postdoctoral institution and lab:
Vlaisavljevich Lab, Virginia Tech
2019 destination:
Co-leader, Conservation X Labs Seattle, supported by the Gordon & Betty Moore Foundation

> "The Fellowship year exposed me to new ways of thinking. I learned a lot more about electronics and circuit design working with [my PI], and he introduced me to a lot of new connections. I also learned to think differently about risk and how to gauge the probability of success as we aim towards much bigger goals."

Dr. Jina Ko >

Postdoctoral institution and lab:
Weissleder Lab, Massachusetts General Hospital, Harvard Medical School, and Wyss Institute
2019 destination:
Schmidt Science Fellows Additional Study Grant at Massachusetts General Hospital

> "The Fellowship opened my eyes to the bigger picture. My placement year presented me with the opportunity to explore interests I did not know I had which have contributed towards my career path. I wanted to go deeper into molecular biology and so the lab I worked in surrounded me with chemists working on molecular chemistry. This helped me to realize I had an interest there, and I'm now working on a project with a chemistry focus. That experience would not be possible without my Fellowship."

Dr. Fred Richards >

Postdoctoral institution and lab:
Mitrovica Group, Harvard University
2019 destination:
Imperial College Research Fellow at Imperial College London

Dr. Mattia Serra >

Postdoctoral institution and lab:
The Applied Math Lab, Harvard University
2019 destination:
Swiss National Foundation Postdoc Mobility Fellowship at Harvard University

Dr. Adi Steif >

Postdoctoral institution and lab:
Marioni Group, Cancer Research UK Cambridge Institute, University of Cambridge
2019 destination:
Junior Research Fellowship at Trinity College, University of Cambridge

Dr. Ryan Truby >

Postdoctoral institution and lab:
Distributed Robotics Laboratory, MIT
2019 destination:
Schmidt Science Fellows Additional Study Grant, MIT

Dr. Jielai Zhang >

Postdoctoral institution and lab:
Nobel Group, University of Oxford
2019 destination:
OzGrav Postdoctoral Fellow at the ARC Centre for Gravitational Wave Discovery, Swinburne University of Technology, Australia

> "The Schmidt Science Fellows placement year makes taking risks and aiming for more ambitious scientific objectives easier. I received advice from my mentors and guidance from my family of Fellows."

2019 Fellows

The 2019 Schmidt Science Fellows represent 15 nations of origin, 18 nominating PhD institutions in six countries and scientific interests encompassing genetics, meteorology, digital design, physics, engineering, and more.

The 2019 cohort was announced by Eric and Wendy Schmidt at an event in New York City in April 2019. They join the inaugural Fellows as part of the growing Schmidt Science Fellows community.

"This new class of Fellows represent some of the best aspiring minds in science and technology today, and we look forward to helping them harness these gifts for the betterment of society."

Eric Schmidt

Dr. Ina Anreiter >

PhD Institution: University of Toronto
Postdoctoral institution and lab:
Simpson Lab, Ontario Institute for Cancer Research

Ina is a behavioral geneticist working to understand how genes and environmental factors combine to regulate the expression of genes that guide how individuals behave. As a Schmidt Science Fellow, she is pivoting into machine learning and aims to develop new methods for studying environmental influences on the regulation of gene expression.

Dr. Mercy Asiedu >

PhD Institution: Duke University
Postdoctoral institution and lab:
"Learning to cure" group, Computer Science and Artificial Intelligence (CSAIL), MIT

Mercy aims to use her biomedical engineering expertise to help address health inequalities. During her placement at MIT she hopes to better understand novel machine learning techniques, especially those in natural language processing and computer vision. Mercy aims to apply these to early diagnosis and outcome predictions of women's cancers.

Dr. James Briggs >

PhD Institution: Harvard University
Postdoctoral institution and lab:
Zhang Lab, The Broad Institute of MIT and Harvard

During his PhD, James built a map of the molecular changes that occur in cells during the early stages of embryogenesis. As a Schmidt Science Fellow, working with Dr Feng Zhang at the Broad Institute, he will build a tool to enable the systematic manipulation of many genes in each cell on his map to reveal how genetic circuits allow developing cells to make decisions to become different types.

Dr. Kasturi Chakraborty >

PhD Institution: University of Chicago
Postdoctoral institution and lab:
Becker Group, University of Chicago

As a Schmidt Science Fellow, Kasturi will integrate chemical tools she developed during her PhD for the study of immunological systems. She is interested in investigating microbe interactions in the gut, with the goal of understanding how changes in microbe populations can affect an individual's immune system.

Dr. Megan Engel >

PhD Institution: University of Oxford
Postdoctoral institution and lab:
Brenner Group, Harvard University

Megan's PhD explored biological self-assembly, the process by which proteins and nucleic acids can build themselves from one-dimensional strands of building blocks into functional three-dimensional shapes. As a Fellow, she aims to acquire knowledge of machine learning techniques. She wants to build predictive algorithms in order to map the natural self-assembly process with unprecedented accuracy.

Dr. Kaitlyn Gaynor >

PhD Institution: University of California, Berkeley
Postdoctoral institution and lab:
National Center for Ecological Analysis and Synthesis, University of California, Santa Barbara

Kaitlyn studies how animals interact with their environments and with each other, and how these interactions are being impacted upon by humans. As a Schmidt Science Fellow, she will pivot from field ecology research into data and computer science. She will identify computing tools and develop accessible, open-source workflows to develop novel analytical tools for the processing and synthesizing of a wide range of environmental data.

Dr. Mina Konakovic Lukovic >

PhD Institution: École polytechnique fédérale de Lausanne / Swiss Federal Institute of Technology Lausanne
Postdoctoral institution and lab:
Matusik Group, MIT

Mina's PhD involved work on the development of computational tools for the design and fabrication of complex, smart materials, with applications ranging from medical implants to architecture and space engineering. As a Schmidt Science Fellow, Mina will work at MIT to incorporate machine learning techniques into her digital fabrication work.

Dr. Jyotirmoy Mandal >

PhD Institution: Columbia University
Postdoctoral institution and lab:
Raman Lab, University of California, Los Angeles

During his PhD, Jyotirmoy created spectrally selective surfaces by structuring polymers and metals to selectively reflect, transmit, absorb or radiate light or heat depending on the wavelength. As a Schmidt Science Fellow, Jyoti will pivot from creating spectrally selective surfaces for energy applications to optics and photonics, aiming to create low-cost optical components.

Dr. Aleksandr Montelli >

PhD Institution: University of Cambridge
Postdoctoral institution and lab:
Kingslake Group, Columbia University

Aleksandr's PhD research focused on geophysical and geological investigations of high-latitude continental margins to reconstruct former ice-sheet behavior. As a Schmidt Science he will pivot into the computational and numerical modelling of ice sheets and ice masses to bridge the gap between the empirical and the numerical ice-sheet modelling communities.

Dr. Gladys Ngetich >

PhD Institution: University of Oxford
Postdoctoral institution and lab:
Space Enabled group, MIT

During her PhD, Gladys has been working on advanced cooling technologies for jet engines with the aim of developing more efficient, less environmentally damaging jet engines. As a Schmidt Science Fellow, Gladys will work on space-enabled technology designs that support sustainable development goals, aiming to improve public service and solve local problems.

Dr. Paul Ohno >

PhD Institution: Northwestern University
Postdoctoral institution and lab:
Martin Lab, Harvard University

Paul completed his PhD in Chemistry using laser spectroscopy to investigate the molecular structure of the boundary layer, or interface, that forms between two different substances. As a Schmidt Science Fellow, Paul will apply his expertise in lasers and spectroscopic techniques to develop and apply new ways of directly determining climate-relevant properties of the aerosol particles in the atmosphere.

Dr. Ahmad Omar >

PhD Institution: California Institute of Technology
Postdoctoral institution and lab:
Geissler Group, University of California, Berkeley

Ahmad's PhD research focused on using computational tools to develop a complete molecular description of the mechanical properties of hydrogels. As a Schmidt Science Fellow, Ahmad will pivot from soft matter engineering to explore the fields of nonequilibrium statistical physics and stochastic thermodynamics, leveraging these tools to gain a deeper understanding of the biophysical origins of diseases such as ALS, Alzheimer's, and Huntington's disease.

Dr. Asja Radja >

PhD Institution: University of Pennsylvania
Postdoctoral institution and lab:
Mahadevan Group, Harvard University

During her PhD, Asja worked on understanding the surface pattern formation mechanism of pollen grains using imaging, statistical mechanics, and computational techniques. As a Schmidt Science Fellow, Asja now aims to move into quantitative approaches to describe the growth and changes in the shapes that we see in living organisms.

Dr. Daniel Raudabaugh >

PhD Institution: University of Illinois, Urbana-Champaign
Postdoctoral institution and lab:
Gunsch Lab, Duke University

During his PhD, Daniel undertook several of the first in-depth analyses of how these submerged fungal communities are distributed between habitat as well as how they differ from each other. As a Schmidt Science Fellow, Daniel aims to develop his understanding of ecological toxicology to gain a better understanding of how pollutants impact aquatic ecosystems.

Dr. Kadi Liis Saar >

PhD Institution: University of Cambridge
Postdoctoral institution and lab:
Lee Group, University of Cambridge, in collaboration with the Knowles Lab, University of Cambridge

As part of her PhD training at the University of Cambridge, Kadi worked on devising new methods for probing protein folding and aggregation in the context of Alzheimer's and other neurodegenerative diseases. As a Schmidt Science Fellow, she is combining the micron-scale flow engineering approaches she developed during her PhD with state-of-the-art single-molecule detection tools.

Dr. Andreas Schlueter >

PhD Institution: Karlsruhe Institute of Technology
Postdoctoral institution and lab:
Ermon Lab, Stanford University

During his PhD, Andreas has worked with mathematicians to describe – at daily, weekly, and intraseasonal timescales – how different types of atmospheric waves create dry and wet periods, while demonstrating their potential for statistical rainfall forecasting. In his Schmidt Science Fellowship year, he will draw on this experience and expertise to develop a real-time crop-yield prediction model for Africa.

Dr. Rebecca Sherbo >

PhD Institution: University of British Columbia
Postdoctoral institution and lab:
Nocera Lab, Harvard University

During her PhD, Rebecca worked to perform hydrogenation reactions, common in food, petrochemical and pharmaceutical industries, with electricity and water rather than with pressurized hydrogen gas. As a Fellow she will pivot to explore methods of converting CO2 to biofuels and other chemicals using biological systems such as microbes, harnessing the advantages to using living systems over synthetic pathways for energy storage and CO2 conversion.

Dr. Grisha Spektor >

PhD Institution: Technion – Israel Institute of Technology
Postdoctoral institution and lab:
Papp Group, National Institute of Standards and Technology

During his PhD, Grisha investigated the interactions between surface-confined light and matter. As a Fellow, he aims to work with micro-frequency. with micro-frequency combs towards the goal of shrinking the most precise instruments science has developed thus far to chip-scale devices. In exploring the limits of these devices, he hopes to work towards producing extremely precise time-keeping devices and miniature sensors.

Dr. Saki Takahashi >

PhD Institution: Princeton University
Postdoctoral institution and lab:
Greenhouse Lab, Experimental & Population-based Pathogen Investigation Center, University of California, San Francisco

Saki's PhD focused on the geographical risk of measles in Africa and the transmission patterns of hand, foot, and mouth disease in Asia. As a Schmidt Science Fellow, Saki will combine big data computing with molecular techniques to explore complex infectious disease dynamics for diseases such as malaria.

Dr. Wiriya Thongsomboon >

PhD Institution: Stanford University
Postdoctoral institution and lab:
Aristilde Lab, Northwestern University

Wiriya studied bacterial biofilms during her PhD, furthering our understanding of these communities of bacteria that are relevant to many common infections. As a Schmidt Science Fellow, she will now explore her interest in beneficial microbes, hoping to effectively utilize them for sustainable agriculture and investigate microbial abilities to degrade plastic and to tackle the global crisis in plastic waste.

Scientific Highlights from the Schmidt Science Fellows Community – 2018-2019

The following are just a few highlights of the scientific outcomes published by 2018 and 2019 Schmidt Science Fellows during the past year.

High-precision technique stores cellular "memory" in DNA

2018 Fellow Dr. Fahim Farzadfard published, together with colleagues at MIT, research demonstrating a technique to store complex "memories" in the DNA of living cells, including human cells. The work, published in *Molecular Cell* in August 2019, can be used to record the intensity, duration, sequence, and timing of many events in the life of a cell, such as exposures to certain chemicals. This memory-storage capacity can act as the foundation of complex circuits in which one event, or series of events, triggers another event, such as the production of a fluorescent protein.

Reference: Farzadfard, F., Gharaei, N., Single-Nucleotide-Resolution Computing and Memory in Living Cells, *Molecular Cell*, 2019 75, 4, 769-780, doi: 10.1016/j.molcel.2019.07.011

Discovery of 'Lazarus' superconductivity in uranium ditelluride

2018 Fellow Dr. Wes Fuhrman was part of an international team, alongside Principal Investigators Johnpierre Paglione and Nicholas Butch at University of Maryland College Park, that published a paper in *Nature Physics* in October 2019 that describes the discovery of a rare phenomenon called re-entrant or "Lazarus" superconductivity in the material uranium ditelluride. This will raise interest in uranium ditelluride as a potential material for use in quantum computers.

Reference: Ran, S., Liu, I., Eo, Y.S. *et al*. Extreme magnetic field-boosted superconductivity. *Nat. Phys*. 15, 1250–1254 (2019) doi:10.1038/s41567-019-0670-x

RNA-sequencing as a tool for evaluating human embryo competence

2018 Fellow Dr. Abbie Groff was the first author on a paper in *Genome Research*, published in September 2019, that detailed a new technique using RNA-sequencing of embryos as a tool to understand developmental competence. This work may one day help to improve IVF treatment. The paper demonstrates proof-of-principle advancement for assessing embryo competence by combining information about previously established metrics, such as morphological quality or karyotype status, with full transcriptome sequencing from paired embryo biopsies and the remaining embryo.

Reference: Groff, A., Resetkova, N., *et al* RNA-seq as a tool for evaluating human embryo competence. *Genome Res.* 2019. 29: 1705-1718

Porous polymer coatings to control light and heat in buildings

2019 Fellow Dr. Jyotimoy Mandal was the lead author on a paper based on his PhD research in the journal *Joule* from Cell Press. The work, published in October 2019, demonstrates optical switching of porous polymer coatings (PPCs) to modulate heat and light. It is hoped that PPCs, which are inexpensive and scalable, will be used to control light and temperatures in buildings.

Reference: Mandal, J., Mingxin, J., *et al* Porous Polymers with Switchable Optical Transmittance for Optical and Thermal Regulation. *Joule*. 2019 3, 12: 3088-3099, doi: 10.1016/j.joule.2019.09.016

Global Selection

Schmidt Science Fellows utilizes a rigorous and extensive Nomination and Selection process to identify and select an annual intake of Fellows. We strive to achieve a diverse, international pool of applicants through our Nomination process. The bar for selection as a Fellow is set high – we want candidates who have demonstrated they are already exceptional scientists during their graduate study and who posess the character and ambition to be world-class interdisciplinary scientist-leaders who will take on the great challenges of our time.

2018 Fellows with Eric Schmidt and Wendy Schmidt

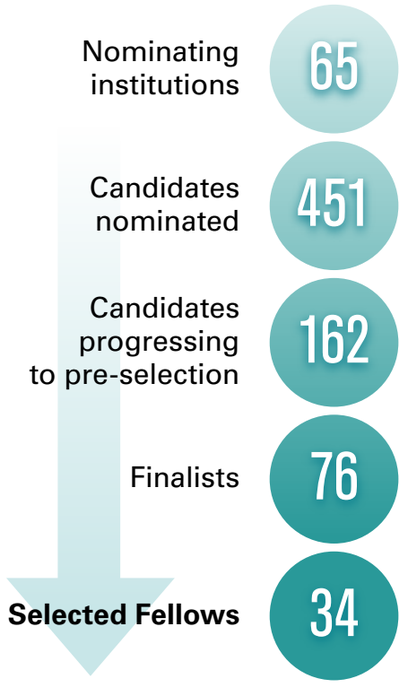
2019 Fellows with Eric Schmidt and Wendy Schmidt

2018 and 2019 Cohort Selection

During 2018 and 2019 we selected two cohorts of Fellows. We announced our inaugural class of 14 Fellows in April 2018. They joined the program from 12 nominating universities in four countries and began their Fellowship year in July 2018. The 2019 cohort were selected and announced 12 months later. Numbering 20 Fellows in total, the second group represents 18 different PhD institutions in six countries.

Both the 2018 and 2019 cohorts were announced by Eric and Wendy Schmidt at Selection events in New York City.

Our Nomination and Selection process across both the 2018 and 2019 cohorts



Nomination and Selection Process

We are grateful to the significant number of partner organizations and individuals that play crucial roles in casting a global net for candidates and providing indispensable expertise in reviewing, interviewing, and selecting Fellows. We partner with institutions in North and South America, Europe, Africa, Asia, and Australia. A total of 45 Reviewers and Selectors participated in our 2018 process, growing to 70 for 2019.

Developing our processes

The announcement of the 2018 cohort represented the culmination of months of work by the project team from Rhodes Trust and Schmidt Futures that established the early program operations. During 2017, the team designed and implemented the Selection process and secured support from leading science, technology, and engineering institutions and renowned scientists around the globe. The result was a robust and challenging process that enabled the identification of an exceptional first group of Fellows.

We strengthened the Selection process for the 2019 cohort, adjusting deadlines, and introducing a program observer to the wrap-up sessions at Pre-Selection to assist Selector-pairs in applying the selection criteria consistently across multiple meetings.

The Nomination and Selection process for the 2020 cohort has been developed further as we commit to deploying an optimized admissions system. With learnings from the first two years, we have advanced deadlines to increase the resilience of the process and the Selection criteria have been simplified and clarified to help nominating institutions, applicants, Reviewers, and Selectors better understand the qualities we seek in Fellows. We have revised our selection rubric for the 2020 process to further focus Selectors on these qualities.

Our Selection criteria >

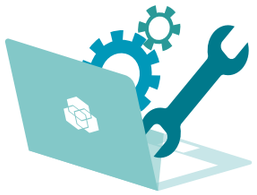
Scientific Curiosity

Extraordinary Achievement

Global Ambition for Social Good

Character and Spirit of Collaboration

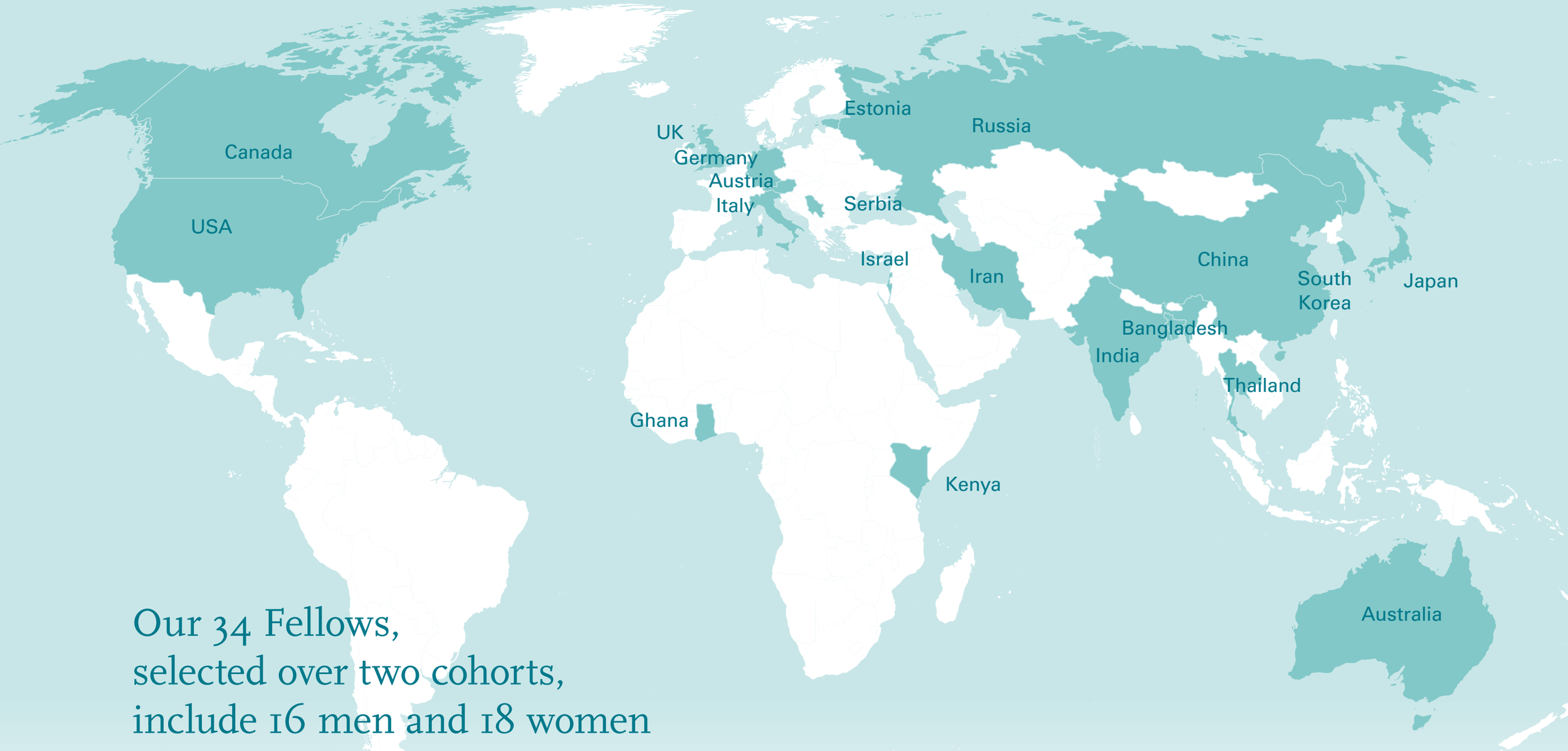
Alignment with the Program



Innovative Spirit

Our Fellows

The 34 Fellows in the first two cohorts are 18 women and 16 men, representing 20 nations of origin. 31 nominating institutions in nine countries have been represented at the Final Selection stage over the two years to date. Institutions in six different countries have seen their nominated candidates progress to selection as Fellows. We are committed to broadening the international footprint of our Fellowship as we want to select the best interdisciplinary early-career scientists wherever they are in the world. We believe ensuring our Fellows have the broadest range of backgrounds enhances the Fellowship experience for all and improves the potential for our Fellows to engage with and tackle global challenges. To further increase the global intake of Fellows in future cohorts we will be expanding our outreach to nominating institutions around the world and will continuously review our selection processes to ensure every eligible nominated applicant has a fair chance of progression.



Our 34 Fellows,
selected over two cohorts,
include 16 men and 18 women
who come from
20 different nations of origin.

Tackling Women's Health Challenges with Artificial Intelligence

Dr. Mercy Asiedu grew up in Ghana before completing her PhD at Duke University, North Carolina. Her research curiosities are driven by understanding how health inequalities exist, and how she can use her expertise in biomedical engineering to address them through advances and innovations in technology. She is currently pursuing her Schmidt Science Fellows placement at MIT.

Mercy spoke to us about her motivations and her experience as a 2019 Fellow.

What made you want to apply to Schmidt Science Fellows?

What attracted me most to the program was being able to spend a year doing research and learning in a field different from my own. During my PhD, I really wanted to learn more about artificial intelligence (AI) and machine learning to make my findings more applicable. I wanted to learn more about how novel deep learning techniques could be applied to medical images, such as ultrasound, MRI or pathology slides.

However, my background was not in computer science, so it would have been difficult to find a competitive lab to explore this area. Being funded and backed by Schmidt Science Fellows enabled me to get into a computer science lab at MIT doing just this.

How did your PhD lead to your Fellowship?

My PhD was in biomedical engineering and global health where I developed a device for low-cost cervical cancer screening: it's like a miniature high-magnification camera that can be used by a woman for self-testing. We tested this device, called a Calloscope, at Duke Medical Centre and in hospitals in Ghana, receiving positive feedback.

My PhD used computer algorithms to classify the pictures for diagnosis. But I was working on basic and traditional types of machine learning where you lose quite a lot of clinically useful data, so I wanted to learn more about how AI approaches could best analyse the image data and improve diagnosis.

> "I wouldn't be able to do the same interdisciplinary collaborations without Schmidt Science Fellows' support."

What can you do now that you couldn't without your Fellowship?

I wouldn't be able to do the same interdisciplinary collaborations without Schmidt Science Fellows' support. For instance, at Massachusetts General Hospital, they have a huge database of mammogram images, and we're combining pathology and historical medical records to predict the people most at risk. Then, at the Dana Faber Institute, a new project is using slides of patient pathology and investigating the family history of disease to predict risk factors.

I'm learning so many new skills such as machine learning how to code in Titan, using Linux systems, and working with Big Data that I wouldn't have had the chance to do otherwise. I'm also learning how to communicate science so it can be understood by people from different disciplines.

How have you found the Global Meetings?

The Global Meetings have allowed us to hear from successful scientists who have taken non-traditional paths in their academic careers, such as switching disciplines, and have been successful, not in spite of their paths, but because of their paths. My main takeaway was that having multiple lenses to view scientific research allows one to make connections that might not necessarily be obvious to others who have remained in the same area of academic research.

The meetings are also a fantastic opportunity for building relationships with my cohort and with previous Fellows.

How do you see your future developing?

I want to be an entrepreneur and to form a medical device company to focus on developing countries, particularly in sub-Saharan Africa. I want to use machine learning to help us bridge the global health gap and really bring Africans to the conversation.

Learn more about Mercy Asiedu and her science at:
schmidtsciencefellows.org/fellow/mercy-nyamewaa-asiedu/

Fellow Training and Development

Developing our Fellows and enabling them to gain the skills, experience, and networks to support their growth as interdisciplinary science leaders is at the heart of the Schmidt Science Fellows program. Through an interdisciplinary postdoctoral placement, our Global Meeting Series, and an individualized mentoring program, we deliver a curriculum aimed at achieving the learning outcomes we believe are necessary for our Fellows to achieve their potential as leaders.

Learning outcomes

Our learning outcomes underpin the delivery of all training and development for our Fellows. The main strands are:

- Leadership and management – including ethics, problem-solving, resilience, and communication.
- Engaging society – including critical evaluation, understanding the policy landscape, and how to address societal challenges.
- Community development – including shared values, establishing peer support networks, networking, and advocacy for interdisciplinarity.

Postdoctoral placement

All Schmidt Science Fellows undertake a 11-14 month postdoctoral placement at a world-leading laboratory as part of their Fellowship. This placement enables Fellows to pivot into a new discipline, gaining skills and different perspectives.

Across the 2018 and 2019 cohorts, Fellows have undertaken placements at:

Brigham and Women's Hospital Boston, Massachusetts, USA
The Broad Institute Cambridge, Massachusetts, USA
University of California, Berkeley Berkeley, California, USA
UCLA Los Angeles, California, USA
University of California, Santa Barbara Santa Barbara, California, USA
University of California, San Francisco San Francisco, California, USA
University of Cambridge Cambridge, UK
University of Chicago Chicago, Illinois, USA
Columbia University Palisades, New York, USA
Duke University Durham, North Carolina, USA
Harvard University Cambridge, Massachusetts, USA
University of Maryland College Park College Park, Maryland, USA
Massachusetts General Hospital Boston, Massachusetts, USA
MIT Cambridge, Massachusetts, USA
National Institute of Standards and Technology Boulder, Colorado, USA
Northwestern University Chicago, Illinois, USA
Ontario Cancer Research Institute Toronto, Canada
University of Oxford Oxford, UK
University of Pennsylvania Philadelphia, USA
Stanford University Stanford, California, USA
Virginia Tech Blacksburg, Virginia, USA
The Whitehead Institute Cambridge, Massachusetts, USA

Placements are decided by Fellows following selection and in consultation with Academic Council mentors. Fellows can undertake their placement at any lab anywhere in the world, subject to fundamental criteria and alignment with the program's goals. For the 2019 cohort, we introduced a new placement process whereby they were required to consider at least three potential host labs, anywhere in the world, to ensure they maximized the opportunity afforded by the Fellowship. For the 2020 cohort, the process of identifying potential labs has been integrated into

the application process to encourage applicants to think broadly, and globally, about their placements early-on in the process. Discussions with Academic Council mentors and a final lab decision occurs after Selection.

We launched the Additional Study Grant (ASG) scheme in early 2019 to provide a mechanism to fund Fellows who have a strong scientific case for continuing their placement project beyond their initial year. The ASG scheme aims to help Fellows, in exceptional circumstances, to complete research where further time would allow them to solidify research outcomes from their field or would enable them to establish credibility and expertise in their new field.

We provided ASG funding, ranging from 4-12 months duration, to six Fellows from the 2018 cohort.

Global Meetings Series

We convened our Fellows at four Global Meetings during 2018-19, including our first-ever meeting with the inaugural cohort in July 2018 and the first meeting to feature an overlap of two cohorts of Fellows in July 2019. We held Global Meetings in the United Kingdom; in Cambridge, Massachusetts; and the Bay Area of Northern California.

> "A lot of times you don't zoom out on science, you just think about your specific problem, so [at the Global Meetings] I've had the chance to think more broadly."
> Rebecca Sherbo, 2019 Fellow

The Global Meetings introduce Fellows to new research ideas, techniques, and questions. These provide exposure to a wide range of cutting-edge science, leading thinkers and institutions, and delivers training in science communications, grant writing, research team management, leadership, and the facilitation of interdisciplinary research. Further, the Global Meeting Series provides the training and opportunities to build the professional networks that Fellows require to become interdisciplinary science leaders and to have the greatest possible benefit to the world.

Global Meetings Series 2018-19

United Kingdom 2018

Speakers 43

Hosts and partners Blavatnik School of Government, Imperial College London, John Radcliffe Hospital, Rhodes Trust, University of Cambridge, University of Oxford

Cambridge, Massachusetts 2018

Speakers 41

Hosts and partners Alda Center for the Communication of Science, Harvard University, MIT, ScienceCounts, The Broad Institute

Northern California 2019

Speakers 39

Hosts and partners CZ BioHub, Innovation Endeavors, Khosla Ventures, Kleiner Perkins, Lawrence Berkeley National Laboratory, SLAC, Stanford University, University of California Berkeley

United Kingdom 2019

Speakers 54

Hosts and partners Blavatnik School of Government, DeepMind, Imperial College London, Oxford Internet Institute, Rhodes Trust, University of Cambridge, University of Oxford

Topics covered during the first year of Global Meetings included:

Leadership, ethics, managing diverse cross-disciplinary teams, teaching, problem-solving, communications skills - verbal, visual, and written, resilience and perseverance, budgeting, funding, intellectual property, exposure to cutting edge science and innovative research tools across multiple disciplines, engagement with interdisciplinary science organizations, policy, addressing societal challenges, community building, and networking.

Our 2019 Fellows complete their Fellowship year with Global Meetings in Cambridge, Massachusetts and Northern California, before a return to Oxford in summer 2020.

Looking ahead, we intend to increase the international footprint of the Global Meetings, to grow the number of hosts and partners that we work with, and to help expose our Fellows to science, concepts, and systems from other parts of the world. We anticipate Global Meetings outside of the US and UK beginning in 2021 and we will also explore other US locations, in addition to continuing to work with existing hosts and partners.

Mentoring

Each Schmidt Science Fellow is allocated a mentor from our Academic Council to provide scientific and career advice during and after their Fellowship year.

The 2018 cohort received mentoring exclusively from the Chair of the Academic Council, Professor Sir Keith Burnett CBE FRS. Sir Keith held 168 mentoring calls with the Fellows during 2018-19, plus provided additional advice and guidance between scheduled sessions.

Schmidt Science Fellows appointed Professor John Boothroyd, Associate Vice Provost for Graduate Education and Postdoctoral Affairs and the Burt and Marion Avery Professor in the Department of Microbiology and Immunology at Stanford University, as a member of the Academic Council in July 2019. John has assumed mentoring responsibilities for a group of the 2019 Fellows.

2018-19 – The view from the Chair of the Academic Council

Our program is committed to the individual mentoring of Fellows as scientists who are making a courageous and sometimes challenging pivot in their careers. Their ambitions relate to many of the great problems we face as individuals and as a society. I feel privileged to be the first Chair of the Academic Council and to have a central role in supporting our Fellows as they take significant steps in their careers and lives.

Regular mentoring runs throughout the Fellowship. During the inaugural year of the Fellowship, I mentored all 14 of our Fellows, holding regular videoconference calls with each, supplemented by the opportunity to speak face-to-face during Global Meetings. Feedback from the Fellows has told us just how important this has been to their development. I also valued the opportunity to be part of visits to many Fellows in their labs where we could speak with their Principal Investigators.

Mentoring calls and meetings are confidential and have an open agenda, but they typically include discussions about how to approach scientific questions and career planning, as well as the very human factors in a successful scientific life such as managing interpersonal relationships, negotiation, and balancing life and work pressures.

Beyond mentoring, the Academic Council also reflects the academic development and support of the Schmidt Science Fellows as a cohort and considers how the Fellowship can best achieve its academic aims in all its work.

Looking ahead, we plan to develop the Academic Council membership to reflect the needs and scientific interests of our Fellows as well as to strengthen diversity amongst the mentors. I am delighted that, even as a new cohort of Schmidt Science Fellows begins its journey, I am maintaining regular contact with our inaugural Fellows as they enter the next stages of their careers, continuing to learn together and sharing our insights for good.

I look forward to staying in contact with them and offering my support to future cohorts of Schmidt Science Fellows who have so much to offer to science and the world.

Keith Burnett

Professor Sir Keith Burnett FRS CBE
Chair of the Academic Council

Fusing Materials with Robotics – and Developing a Leader

Professor Daniela Rus is Director of CSAIL – the Computer Science and Artificial Intelligence Lab at MIT. She was Principal Investigator to 2018 Fellow, Dr. Ryan Truby during his Fellowship year and subsequent Additional Study Grant. Ryan combined his background in materials science with the robotics expertise at CSAIL to forge a path in soft, sensing robotics.

Daniela spoke to us about her perspective as a Principal Investigator to a Schmidt Science Fellow.

How has your experience been as a Principal Investigator in the Schmidt Science Fellows community?

It's been fantastic. I have to say that my Schmidt Science Fellow Dr. Ryan Truby is exceptional. I have loved the opportunity to connect together the fields of materials science with robotics and machine learning, which was the chance we had with this program. We can now do things that we never would have been able to do in the field of materials science alone, or the field of robotics alone.

We were able to advance an exciting and special problem at the intersection of these three disciplines. Until Ryan joined our team there were no sensors attached to soft robots. Then Ryan invented a new type of material, we call it 'Kirigami' sensor skin, that is like a paper-thin sensor attached to soft robotic systems. It creates sensorized systems that can move, sense and get feedback from the world like an elephant trunk or the legs of an octopus. But these systems have so much flexibility that they are very hard to control, and so we were able to couple machine learning into the system that enabled us to develop new models and controllers. And it's not just for soft robots, it could be applicable to any type of robot.

> "If we are going to advance the fields between disciplines, then programs like Schmidt Science Fellows are invaluable... I believe that the future belongs to working at the intersection between disciplines."

How did you and your research group benefit from hosting a Fellow?

Ryan is an extraordinary member of my group. He's outstanding as a human being and as a scientist. He's so positive and inspiring in how he approaches challenges, and how he doesn't get scared to try a new method or look into a new discipline.

Ryan has worked with various postdocs and students in my group and has written papers with all these different people. For each collaboration there was mutual betterment, each person learned from the others and really understood the meaning how the whole is better than the sum of the parts.

How do you feel Ryan benefited from being a Fellow in your group?

I think he has strengthened his background in robotics and machine learning and grown as a scholar, technical leader and a group leader. I love how the Schmidt Science Fellowship has given him the skills – it's not just about the technology – it's all about developing the people and their leadership, and he certainly learned the lessons in a maximal way.

What do you think about the Schmidt Science Fellows model for advancing interdisciplinary training?

It's very important to the advancement of science because I believe that the future belongs to working at the intersection between disciplines. Creating the tools and using the instruments from different disciplines allows us to move the needle of what we know about the world much more than if we just work within our individual disciplinary boundaries.

If we are going to advance the fields between disciplines, then programs like Schmidt Science Fellows are invaluable. I was very impressed when I saw the detailed vision of the Schmidt Science Fellows program and now I would like to put my name in the hat for future fellowships because I know you spend so much quality time with your fellows and you help them grow scientifically and personally.

Learn more about Ryan Truby and his science at:
schmidtsciencefellows.org/fellow/ryan-truby/

Building a Lifelong Community of Interdisciplinary Scientists

Once selected as a Schmidt Science Fellow, our Fellows become members of a supportive and inspirational community of interdisciplinary leaders that lasts a lifetime. Support and development opportunities from the program and the network of Fellows will continue to be available beyond the completion of the Fellowship year and through a Fellow's career.

The vision for a lifelong community

Through the development of a lifelong Schmidt Science Fellows community, we aim to amplify our Fellows' impact to be greater than they would be on their own. Our Fellows will be provided with opportunities, support, and ongoing connections to ensure their continued development and success as interdisciplinary science leaders.

Fellows will engage in mutual peer-support and ongoing, career-stage-relevant professional development, to deliver a greater positive impact on the world through further access to international networks, and to advance the program's vision for interdisciplinary science.

The inaugural cohort became our first alumni, called Senior Fellows, at the completion of their fourth Global Meeting in Oxford in July 2019. The Fellows marked the transition with a traditional Oxford boating, or punting, trip on the Cherwell River, followed by lunch and a presentation with the program team.

Senior Fellows program

We launched our Senior Fellows program with the inaugural cohort during the meeting in Oxford. As this rolls out during 2019-20 it will lay the foundation for the growth of the Senior Fellows community. The initial program will include:

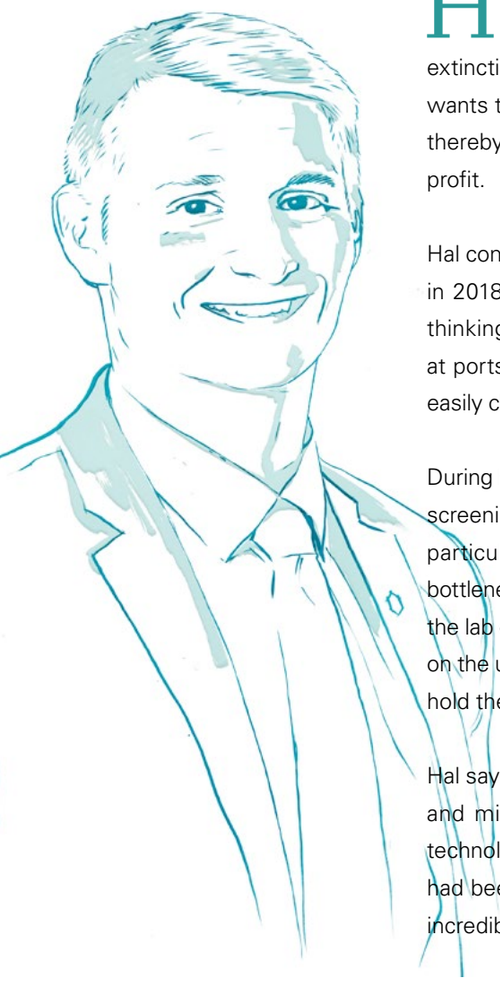
- Dedicated communications channels.
- Opportunities to engage with current Fellows and future cohorts.
- Senior Fellows online platform.
- Multiple opportunities to reconnect with other Fellows and the program each year, in different locations and different scales, including an annual Senior Fellows Forum.
- Regular newsletters and updates from across the Schmidt Science Fellows community.
- Opportunities to contribute to the program over time, as Reviewers, Selectors, speakers, and peer mentors.

Staying connected

The development of the Schmidt Science Fellows lifelong community also includes our commitment to maintaining links with, and opportunities for further engagement for, our Principal Investigators and Reviewers and Selectors. During 2018-19, the program visited many of the Principal Investigators hosting the inaugural Fellows to discuss our ambitions and plans, and to listen to their feedback. Principal Investigators, Reviewers, and Selectors are an integral part of our community as advocates for interdisciplinary science and supporters of our mission for advancing scientific discovery. They are invited to join Fellows and other guests at Global Meeting events and the annual announcement of new Fellows.

Harnessing Cancer Fighting Technology to Combat Illegal Trade in Endangered Species

During his PhD, Dr. Hal Holmes developed a DNA 'barcode' reader to help identify the origin of naturally-derived products being traded around the world. While the device showed promise, he found extracting samples for DNA analysis for some products challenging. As a 2018 Fellow, Hal pivoted to spend a year at Virginia Tech exploring how techniques being tested for cancer therapeutics could help him to quickly extract DNA samples.



Hal Holmes, a 2018 Fellow, has dedicated himself to advancing and deploying science to halt at least one of the drivers of species extinction – the huge and growing illicit trade in endangered species. He wants to perfect technology that would choke off demand for this trade, thereby reducing the incentive to destroy valuable and rare habitats for profit.

Hal completed his PhD in bioengineering at the University of Washington in 2018, working on a project to develop a DNA 'barcode' reader. The thinking behind the development of the device was to provide agents at ports, border posts, and truck checkpoints with a way of quickly and easily checking the provenance of natural products through DNA analysis.

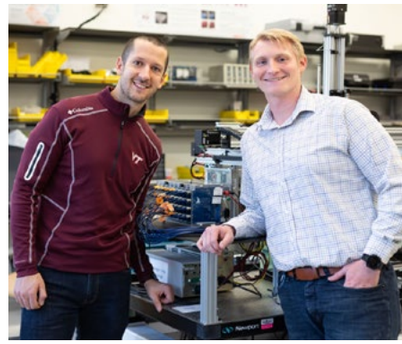
During his PhD, Hal and his colleagues made strong progress on the DNA screening tool itself, but it became clear to him that obtaining samples, particularly from challenging products such as timber, was a crucial bottleneck. With support from Schmidt Science Fellows, he spent a year in the lab of Dr. Eli Vlaisavljevich at Virginia Tech. The lab is primarily focused on the use of ultrasound to create collapsing bubble clouds (cavitation) that hold the promise of a non-invasive way to treat cancer tumors.

Hal says: "My work up until the Fellowship was focused on microfluidics and microfabrication and Eli's work is focused on ultrasound based technology which is a completely different world of disciplines to what I had been exposed to, and so I learned a new skill set that I found to be incredibly valuable for conservation."

> "We are now moving much faster on my project by taking an interdisciplinary mind-set and that is directly linked to the lessons I learned in my Fellowship. This has had a direct impact on how I structured my team and my thinking."

He spent his placement year developing the engineering and the protocols that would allow the ultrasound technology to be deployed as a means of DNA extraction, alongside the 'reader' device.

Eli welcomed Hal into his lab and recognized the mutual benefit in having a different skill set in the team: "Having Hal in the lab has been an excellent experience. We are both extremely interested in pursuing new technologies to solve large global problems in medicine, conservation, and other areas, and we share an understanding of the interdisciplinary and team science approach that is required to reach those goals. Hal brought a completely new set of expertise to my lab, along with an entirely new research direction for us to pursue together."



Hal is now serving as Chief Engineer of Conservation X Labs, the non-profit dedicated to driving technology and innovation to combat the extinction crisis. He is co-leading a lab that he helped to establish in Seattle. Supported by the Gordon and Betty Moore Foundation as one of the 2018 Moore Inventor Fellows with a $825,000 grant, he is perfecting his DNA screening tool to produce a marketable device.

"We are now moving much faster on my project by taking an interdisciplinary mind-set, and that is directly linked to the lessons I learned in my Fellowship. This has had a direct impact on how I structured my team and my thinking."

Learn more about Hal Holmes and his science at:
schmidtsciencefellows.org/fellow/hal-holmes/

Strong Foundations

Schmidt Science Fellows is focused on the success of our Fellows and ensuring they are equipped to become future interdisciplinary science leaders. This is only possible with strong strategy, policy and operational foundations on which our more visible activities can rest.

Policy development

As Schmidt Science Fellows has grown in scale, with more Fellows, a Senior Fellows community, increased numbers of Reviewers and Selectors, and greater diversity in science and placement locations, we have strengthened our policy provision to ensure we can transparently and equitably meet everyone's needs.

During the past year, we have developed and implemented a new privacy policy, working closely with the Rhodes Trust, to ensure that we manage the information of our applicants, Fellows, and stakeholders appropriately. For the 2019 cohort selection process, we instigated a new code of conduct and unconscious bias guidance for Selectors across all three stages of the process.

The 2019 cohort has been the first to benefit from a best-in-class Family Leave policy. This policy was designed to ensure that our Fellows have the support they need to achieve their goals of becoming future science leaders even when they need to take some time away from the lab to care for others. Our Family Leave policy provides highly flexible leave options for any Fellow caring for dependents following birth, adoption, serious illness, or other circumstances, and supplementary stipend payments, to ensure they can pick up their science and program engagement as seamlessly as possible upon return to the laboratory.

Program team

Our program team has grown since the announcement of the first cohort of Fellows. Our first team members were Dr. Megan Wheeler, Executive Director, and Matt Goode, Director of External Affairs and Fellowship Engagement, in May 2018. They were joined by Dr. Simon Vaughan, as Director of Admissions in October 2018 and Christine Norton in the role of Executive Assistant to the Executive Director in March 2019. We have benefitted from the expertise of Diana Skurka, Manager, Program Implementation at Schmidt Futures for her role in events management for Schmidt Science Fellows.

The team has developed further to reflect evolving priorities and learnings from the first year. Following an extensive international search in summer 2019, Dr. Janell Catlin was appointed as Director of Global Meetings, joining in October 2019. Anu Mayer also began her role as External Affairs and Admissions Officer the same month.

Professor Sir Keith Burnett formally began in his role as Chair of the Academic Council in November 2018. He is supported by Ruth Arnold as Executive Assistant to the Chair of the Academic Council. Professor John Boothroyd was the first additional member of the Academic Council, joining in July 2019, and we plan to expand the Council further to reflect the diverse interests and needs of our growing Fellowship community.

Working with the Rhodes Trust

Schmidt Science Fellows continues to be grateful to the Rhodes Trust, as one of our two main partners, for hosting our headquarters office in Oxford, UK and for providing much of our core operational infrastructure.

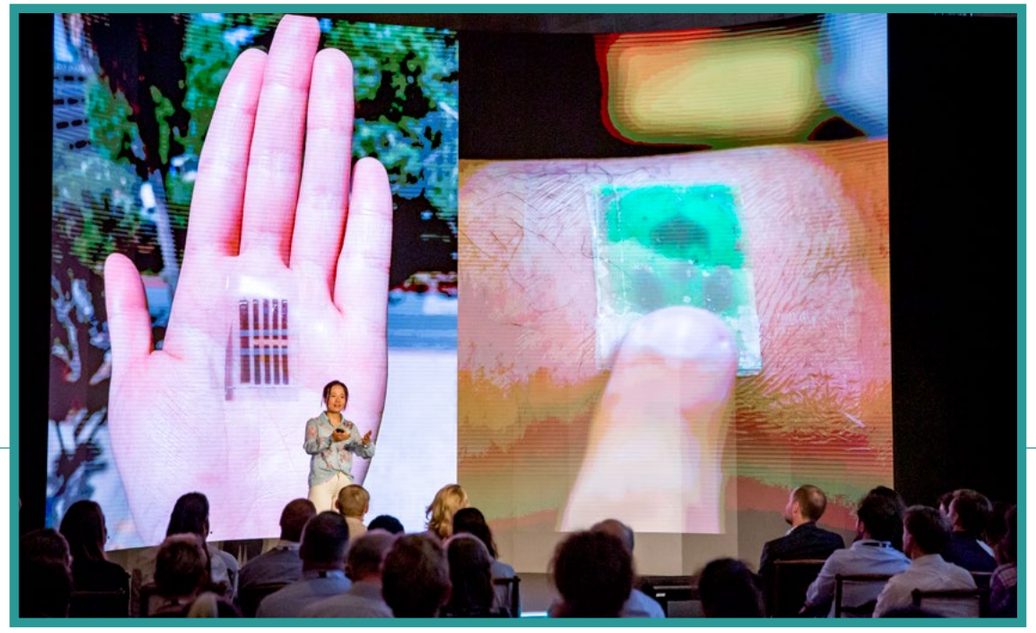
During 2018-19, we worked closely with Rhodes Trust colleagues as an integral part of two major infrastructure projects: digital transformation and the planned physical redevelopment of Rhodes House. Both projects will ultimately provide world-class support for Schmidt Science Fellows in strengthening our relationship management systems, providing an online portal for Fellow engagement, and providing future office and convening space for our staff and Fellows to connect in person.

Advancing Interdisciplinary Science

Our Fellows are at the heart of everything we do – but for them to succeed and to have the greatest positive impact on the world, we believe we need to work with partners to advance interdisciplinary science throughout the global research system.

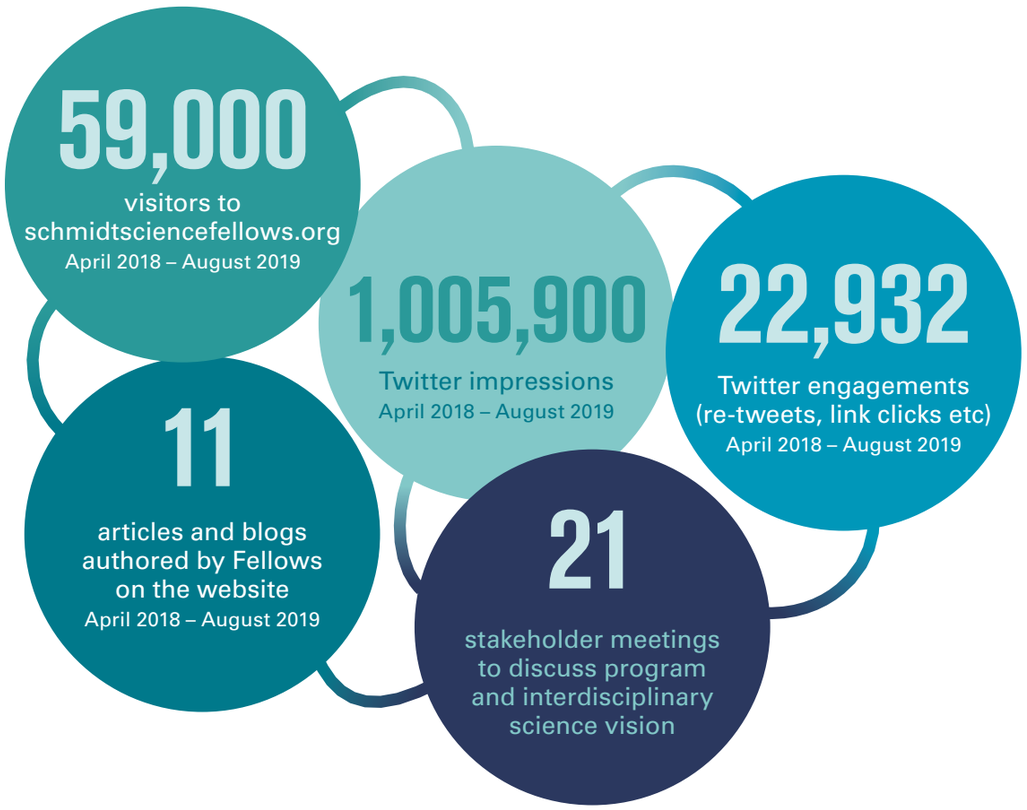
This priority is an emerging and long-term commitment by the program, but our early work includes:

- An external communications strategy to highlight the promise and early success of the interdisciplinary research of the Schmidt Science Fellows, including the 'inSPIREd' event and associated digital content in July 2019.
- Engagement with international stakeholders with active interests in science or leadership training and the future of interdisciplinary science, including the Royal Society, National Academies of Science, Engineering and Medicine, National Science Foundation, National Institutes of Health, Wellcome Trust, UK Research and Innovation, the American Association for the Advancement of Science, and American Geophysical Union, among many others.
- Working with professional development delivery partners at our Global Meetings to develop bespoke interdisciplinary science training that could be rolled out in the future to broader audiences.
- Sharing of best practices and collaborative engagement initiatives with programs working towards similar aims to Schmidt Science Fellows, including the new Stanford Science Fellows and The Azrieli Fellowship.
- Participation in sector-wide training and fellowship forums.
- Identification of opportunities for supporters of interdisciplinary science to deepen ties with the program, for example inviting former host Principal Investigators to join our pool of Reviewers and Selectors.



Communications and engagement

Our communications and external engagement activity in 2018-19 has helped to broaden the reach of the program, develop the profiles of the Fellows, and lay the groundwork for our planned push to advance the case for interdisciplinary science.



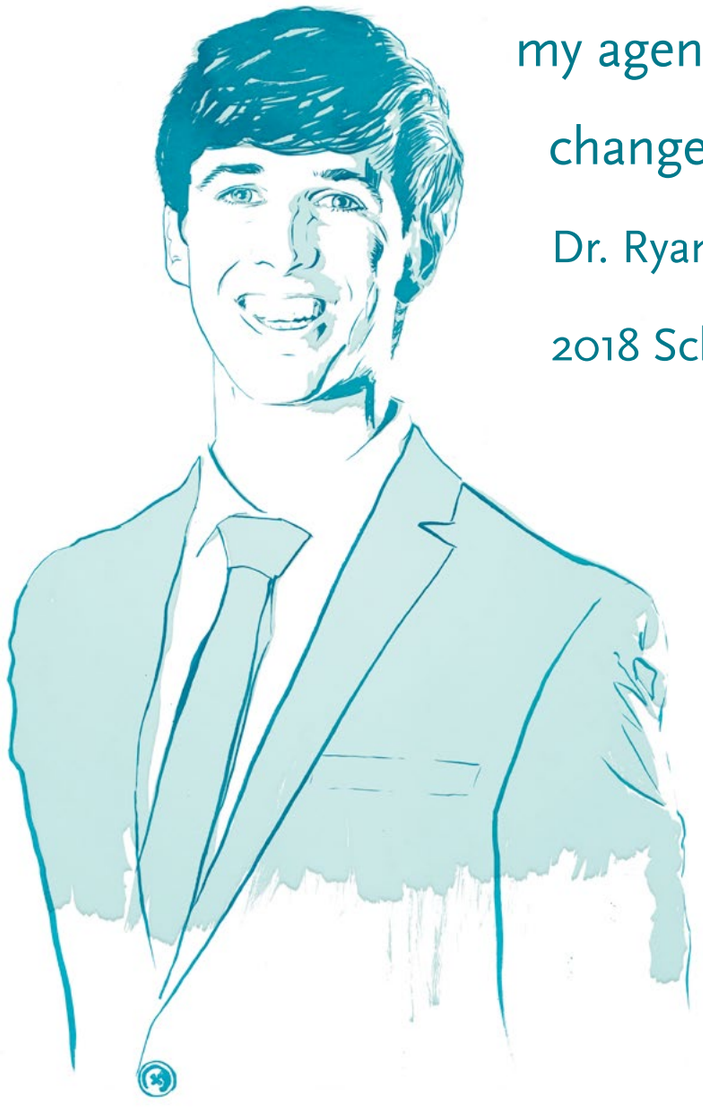
Future plans

As the Schmidt Science Fellows program develops, we anticipate evolving our work towards our strategic objective of advancing interdisciplinary science. This will include deeper stakeholder engagement, research efforts to better understand the interdisciplinary science and policy landscape, consultation with our partners and Fellows, and using our convening abilities to promote dialogue and action and break down barriers to successful interdisciplinary science.

“This Fellowship has given me the tools, the community, and the confidence I need to lead through my science and own my agency to meaningfully change the world.”

Dr. Ryan Truby,

2018 Schmidt Science Fellow



Our partners

Schmidt Science Fellows was launched in 2017 by Eric and Wendy Schmidt and is a program of Schmidt Futures, delivered in partnership with the Rhodes Trust. The program has an initial commitment of at least $25 million for the first three years, and is the beginning of a broader $100 million effort by Eric and Wendy Schmidt to promote scientific leadership and interdisciplinary research over the next decade and beyond.

Schmidt Futures

Schmidt Futures is a philanthropic initiative, founded by Eric and Wendy Schmidt, that finds exceptional people and helps them do more for others together. It knits talent into networks, bets on the most promising ideas through diverse forms of competition and support, and equips people to scale through partners and modern tools.

www.schmidtfutures.com

The Rhodes Trust

The Rhodes Trust is the home of the world’s preeminent graduate fellowship, the Rhodes Scholarship, based at the University of Oxford since 1903. In its second century, they are expanding the Rhodes Scholarships globally and broadening their impact through partnerships that develop exceptional leaders across different life stages and areas of focus.

www.rhodeshouse.ox.ac.uk

For more information about Schmidt Science Fellows and our Nomination and Selection process, please visit: www.schmidtsciencefellows.org

To learn more about the background, motivations, and work of some of our Fellows, please visit: www.schmidtsciencefellows.org/news/we-are-schmidt-science-fellows/

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