

aspen institute

ENGAGING YOUTH TO HARNESS SCIENCE TO MAKE THEIR COMMUNITIES
HEALTHIER, STRONGER, AND MORE RESILIENT

www.ourfutureisscience.org

PROGRAM PROSPECTUS

July 2025

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OFIS Mentees & Mentors





ABOUT OFIS

Many of society's most pressing matters are scientific: infectious diseases, health and well-being, agricultural sustainability, and water security, among others. Youth around the world have been at the forefront of these issues by bringing to light the connection between urgent global matters and the experiences of local communities.

In response to this extraordinary cultural inflection point, the **Aspen Institute Science & Society Program** launched a nonprofit initiative called **Our Future Is Science (OFIS)**. Through exploration of the scientific endeavor, OFIS inspires the next generation of science leaders and ignites a movement to integrate near-peer mentorship with informal STEM education by engaging youth in science to make locally driven impacts on their communities.

Our mission is to equip rising generations to address societal challenges through innovative, science-based solutions. OFIS inspires the next generation of STEM leaders and empowers socially conscious youth to become innovators and advocates, advancing science and creating positive change in the 21st century. OFIS has three primary goals:

- Spark curiosity and passion for applying scientific principles to improve local communities;
- Accelerate students' engagement in STEM education and careers by connecting them with scientist-mentors; and
- Equip students with the tools, knowledge, and confidence to become leaders in their communities and beyond.

Founding, past, and current supporters





















594K+

TOTAL APPLICANTS,
IMPRESSIONS, ENGAGEMENTS,
EMAILS, ATTENDEE
INTERACTIONS, WEBSITE
VISITS & VIEWS, POST LIKES
AND REACH SINCE 2021





OUR TEAM



Aaron Mertz is a biophysicist and educator and has been recognized internationally for his laboratory research and advocacy for underrepresented groups in science. He joined the Aspen Institute in 2019 as founding Director of the Science & Society Program and founded OFIS in 2021.



Jylana Sheats is an applied behavior scientist and has leveraged her education, training, and experience to lead, shape, and innovate across public, private and non-profit sectors. Her individual and collaborative efforts have focused on understanding and designing solutions to address factors that impact health behaviors and health outcomes.



Hassan Farah is an OFIS alumnus mentor and the Science & Community Postdoc for the Aspen Institute. While completing a B.S. and Ph.D. in Biomedical Sciences, Hassan has developed and directed leadership training and peer mentorship programs. He has also organized large-scale demonstrations and negotiations as a student activist.



Ehony Tyler has 20 years of experience in public education and is the founder and Executive Director of Liberated Success Inc., a youth career development nonprofit. Ebony is passionate about youth career development and parenting, which led her to create two podcasts, Career Exploration Saturday and The New Normal in Parenting.



Sejal Goud is a senior at Princeton University, where she is pursuing studies in public policy and international affairs. She is committed to leveraging her backgrounds in advocacy and journalism to promote the link between civic engagement and science communication, as well as to support underrepresented youth in the sciences.



Caroline Gelb is a science producer, program manager, and educator who loves to share her excitement about the promises science can bring to future generations.



Dorianis Peréz completed her Ph.D. in Computational Science from Florida State University. She is an Adjunct Professor in the Department of Mathematics and Physical Sciences at Northern New Mexico College. She has been involved with OFIS as a Mentor, Ambassador, Lead Ambassador, and now OFIS staff member.



Breana Turner is a fourth-year Ph.D. candidate in the Translational Biology, Medicine, and Health program at Virginia Tech, where she also earned a Master of Public Health degree. She has been involved with OFIS as a Mentor and is now an OFIS staff member.



ADVISORY GROUP

To ensure that the program stays true to its mission, the OFIS Advisory Group offers expertise, experience, and counsel.



Jayshree Seth, Ph.D.Chief Science Advocate and Corporate Scientist at 3M



Mandë Holford, Ph.D.
Associate Professor in
Chemistry at CUNY
Hunter College and The
CUNY Graduate Center



Gabriel Reyes, M.S.Founder and CEO of FLi Sci and Ph.D. student at Stanford University



Omar Gowayed, Ph.D. NYU Chemical Engineering Graduate and NYC March for Science Leader



Jay Flores
Global STEM
ambassador and
founder of
Invent the Change

Advisory Group Alumni



Dao-Yi ChowCo-founder of the fashion brand Public School
2021–2023



Dietram Scheufele, Ph.D.Vilas Distinguished Achievement Professor of Life Sciences
Communication, University of Wisconsin-Madison
2021–2023



Augusta Uwamanzu-Nna
Harvard graduate, UCSF medical
student, high school Science
Talent Search Finalist
2021–2022



Adnaan Wasey Emmy Award-winning producer and writer. **2021–2023**



OUR STORY

Our Future Is Science (OFIS) was conceptualized in response to tremendous societal forces: 1) youth activism around the world on behalf of issues rooted in science, such as climate change and water management, and 2) calls for equity across fields, especially in science and public health, based on vast disparities in outcomes from the COVID pandemic.



The co-founders of OFIS authored an essay in LeapsMag (now <u>Upworthy Science</u>) and the Aspen Institute blog, "<u>Democratize the White Coat by</u> <u>Honoring Black, Indigenous, and People of Color in</u> <u>Science</u>," introducing the ethos and societal dynamics inspiring this endeavor.

In 2021, an outstanding team of education, science, and media specialists launched this national initiative.



The initiative was named a **2023 Falling Walls Engage Finalist** and **2024 Winner** among 200+ and 100+
applications, respectively, from 50+ countries,, steps
toward becoming Falling Walls Science Breakthrough
of the Year in Science Engagement. In November 2024,
we presented the initiative before a global audience in
Berlin, Germany, at the Falling Walls Science Summit.



ACCOMPLISHMENTS & FUTURE GOALS

2022

OFIS conceptualized by the nonprofit Aspen Institute Science & Society Program in collaboration with the citizen-centered-design firm Coda Societies

Received seed funding from Genentech and Manitou Fund

Published essay "Democratize the White Coat" introducing ethos and societal dynamics that inspired OFIS

Expanded size of mentorship program

National educational media campaign ignites science-based solutions to societal issues

Partnering with cross-sector organizations to expand reach and activate youth engagement

Community Talk Series creates public, virtual platform for scientists and activists to share experiences with youth

Science Engagement Projects enacted by first cohort of Mentees

Received additional support from Columbia University's NSF Science and Technology Center for climate, LEAP

Hired full-time team members and expert consultants

Designed unique curriculum

2019-2020

about science and community

2021

Disseminated call for applications for mentorship program

Onboarded first cohort of 50 students selected from 260+ applicants

Received additional funding from Rita Allen Foundation, 3M, and Lyda Hill Philanthropies

2023 & Beyond

Amplified 2022 successes including curriculum design, programming, and fundraising

Expanded size of mentorship program

Launched Ambassador Program for OFIS alumni

Enacting recurring media campaigns on the pulse of current events

Creating alumni activities for past participants to advise new students

Ultimately working to establish a long-lasting educational program that sets the standard for youth mentorship in science and community

Falling Walls Science Engagement Winner in 2024 (global Science Summit presentation, application entry video, press release)

Falling Walls International Science Summit



2024 Winner for Science Engagement Breakthrough of the Year at the Falling Walls Science Summit in Berlin, Germany, with focus on climate adaptation.

Previously, in 2023, we were named a **Finalist** in the same competition.





How we have worked with Partners



3M

- 3M Corporate Scientist and Chief Science Advocate is a star member of our Advisory Group
- 3M senior administrator was a participant in the Science & Society Program's roundtable and forthcoming report on public trust in science
- We hosted a tour for our participants of the 3M Innovation Center to discover how breakthroughs in materials are benefiting communities
- Designated 3 participants in 2024–2025 cohort as 3M Scholars from Minnesota and created curated programming for them



Learning the Earth with Artificial Intelligence and Physics – Columbia University's NSF Science and Technology Center

- Hosted 2 Community Talks with Columbia experts about climate data science
- Co-designed a climate and data science module in the OFIS curriculum
- OFIS Directors delivered keynote address about student engagement at LEAP Annual Meeting
- OFIS Director participated in bidirectional feedback session at LEAP workshop with community partners
- OFIS Ambassadors participated in a bidirectional feedback session with LEAP researchers



How we have worked with Partners



Burroughs Wellcome Fund

- Hosted 1 Community Talk about genomics and epigenetics with Burroughs Wellcome Fund Associate Communications and Special Projects Officer, who previously led research activities in the Human Genome Project
- Designated 3 participants in 2023–2024 cohort as Burroughs Wellcome Scholars from North Carolina created curated programming for them—and another 3 students will receive this designation for the 2025-2026 cohort.

Carson Family
Charitable Trust

Carson Family Charitable Trust

 Designated 5 participants annually for 4 years starting 2023–2024 as Carson Scholars from New York City and another 5 students will receive this designation for the 2025-2026 cohort.



Wellpoint Tennessee

Will designate 4 participants in 2025–2026 cohort as
 Wellpoint Scholars from Tennessee and will create curated programming for them



Amgen Foundation

 Created a <u>channel on Amgen's LabXchange platform</u> with our mentor lab tour recordings and other media

FOUR PRINCIPAL PILLARS OF OFIS



Mentorship Program

This annual, national, virtual <u>Program</u> connects high-schoolers with STEM graduate students to explore science-and-community intersections through our continually evolving curriculum composed of:

- OFIS elibrary;
- Module-based learning on topics such as AI, climate science, genomics and epigenetics, and big data; and
- Professional development workshops (e.g., science communication, storytelling, LinkedIn profile development).

Weekly Mentorship Team meetings help facilitate this academic year-long journey of near-peer mentorship, scientific learning, community engagement, and career exploration. Mentees and mentors receive honoraria for their active participation in OFIS to honor that their time and commitment to the program.

Educational Campaigns for the Public

OFIS's <u>Educational Campaigns</u> on social media ask youth to share their visions, in the form of short videos submitted via social media, for how science could be used to solve an issue in their community. Submissions are adjudicated based on innovation, creativity, and feasibility with awards given to the top entrants.

Ambassador Program

The OFIS <u>Ambassador Program</u> consists of outstanding alumni mentors and mentees who work together on a range of topics in which they connect science with local communities and develop new Science Engagement Projects. OFIS ambassadors also give back to our network of mentors and mentees by attending feedback sessions for Science Engagement Projects, hosting workshops, and collaborating with external partners as representatives of OFIS.

Champions Program

The <u>Champions Program</u> is designed for qualified applicants to the Mentorship Program but whom we could not admit due to administrative capacity (e.g., staffing and financial constraints). These Champions receive special invitations to OFIS activities such as our Community Talks and a selection of workshops for professional development including public speaking and scientific storytelling. Champions are also encouraged to participate in our educational campaigns on social media.

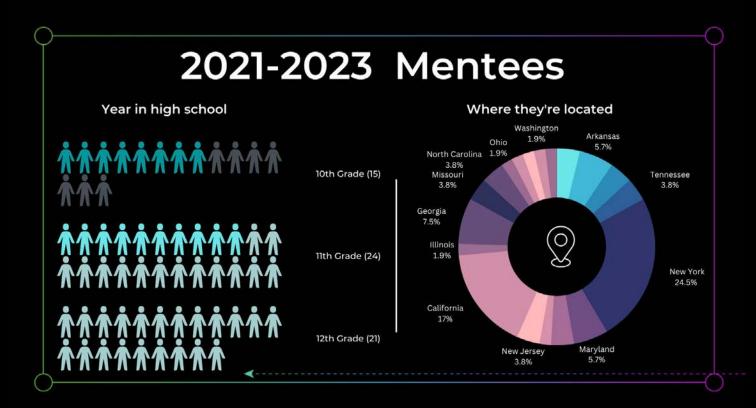
MENTORSHIP PROGRAM OVERVIEW SCIENCE



Mentees and Mentors	To date, 700+ youth and young adults from across the U.S. have applied to Our Future is Science. We have accepted: • 2021–2022 Cohort 1 - 50 students • 2022–2023 Cohort 2 - 60 students • 2023–2024 Cohort 3 - 90 students • 2024–2025 Cohort 4 - 75 students
Mentorship Teams	Mentorship teams (3 mentors and 2–3 mentees) meet weekly from October to June annually.
Community Talk Series	To complement our curriculum, we have hosted monthly community talks and workshops with leading professionals whose work is at the intersection of STEM and community. Speakers hailed from 3M, Columbia University, Procter & Gamble, LinkedIn, the University of Maryland School of Dentistry, University of California - San Francisco, Gilead, and other entities.
Science Engagement Projects	Students work to identify a problem in their community and apply the scientific process, coupled with learnings from the OFIS eLibrary and insights from the OFIS Community Talk speakers, to design a Science Engagement Project, with topics including: • Impacts of Poor-quality Housing in the NYC (South Bronx) on Low-Income Families • Cancer Clusters Coldwater Creek (North St. Louis) • "Redlining" in Tacoma, Washington • African Americans and the Criminal Justice System in Nashville, Tennessee • Black Maternal and Child Health Pregnancy in Oakland, California • Microplastics in Jacksonville, Florida



MENTEE DEMOGRAPHICS



MENTOR UNIVERSITIES



GRADUATE CENTER



Cold

MEHARRY

















































































MENTOR GRADUATE SUBJECTS OF STUDY

- Ecology and Evolutionary Biology
- Biomedical Engineering
- Industrial Hygiene and Environmental Sciences Translational Biosciences
- Psychology
- Indigenous Health
- Nursing
- Immunology
- Geography
- Engineering and Public Policy
- Biomedical Science
- Environmental Engineering
- Pharmacology & Toxicology
- Public Administration- Health Disparities
- Neuroscience
- Medicine

- Sociology & Human Services
- Epidemiology
- Biology/Molecular biology
- Applied Mathematics
- Public Health and Implementation Science
- Civil Engineering
- Clinical Psychology
- Molecular & Cellular Biology
- Geology
- Vascular Biology
- Cancer Biology
- Mechanical Engineering
- Environmental Science Hydrology

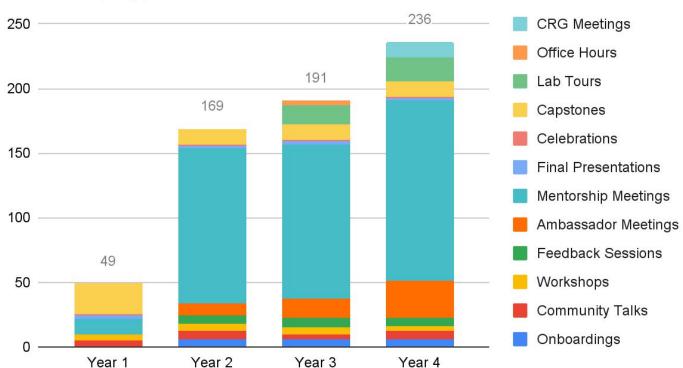




SCIENCE Learning Experiences

645 educational events and meetings hosted over 4 years









Bringing the Scientific Process to Life

Mentor Lab Tour Highlights https://youtu.be/046niCIFSAc



MENTORSHIP CURRICULUM

The OFIS team of educational and scientific experts designed a nimble, bespoke, evidence-based curriculum to help shape tangible trajectories toward careers that will make communities and society better through science.

Participatory design and feedback processes in each module enable mentees and mentors to participate in their own learning, promote co-learning and co-teaching, and ensure that student needs are met with the ability to adapt in real time. Accompanying program components that bring the curriculum to life include:

- Weekly deep dives with reflections on relevance to students' lived experiences;
- Curated eLibrary to support exploration of science-community issues; and
- Monthly Community Talk Series featuring outside experts in STEM fields.

Curriculum Topics (2021–2024)

- ENVIRONMENTAL ADAPTATION
- BIG DATA & INNOVATION
- HEALTH & HEALTHCARE

- ENGINEERING & ARTIFICIAL INTELLIGENCE
- ASTROPHYSICS & SPACE EXPLORATION
- GENOMICS & EPIGENETICS



STUDENT SCIENCE ENGAGEMENT PROJECTS

A culminating, mentee-led, community-based Science Engagement Project enables students to demonstrate learning and highlight their unique place as future scientifically minded leaders.

Mentees will explore a community issue of interest or relevant to their personal experiences. Through an in-depth review of the literature and informational interviews (with scientists, activists, and other stakeholders), and discussion with their Mentorship Team, mentees will:

- Define the problem to be solved;
- Connect it to a global U.N. Sustainable Development Goal and/or Healthy People 2030;
- Design a science-based solution—applying learnings from the OFIS curriculum;
- Create a communication/dissemination plan tailored to what is accessible and preferred by their audience/community; and
- Present or implement their solution (prototype or actual).

OUTCOMES: Through this process, mentees will have increased awareness of issues impacting their community while simultaneously developing science-based solutions. Invaluable skills they will gain include:

- Evidence review and information synthesis;
- Problem identification;
- Research question development and other elements of the scientific process;
- Collaboration skills;
- Presentation skills; and
- Science communication competencies to support engaging with multi-sector audiences.



EXAMPLE COMMUNITY & PUBLIC EVENTS

OFIS also features monthly <u>Community Talks</u> and <u>Professional Development Workshops</u> with those in science or science-adjacent careers to share their career trajectories and how their work intersects with local communities.

Eleanor Fleming, DDS, PhD, MPH

Assistant Dean, DEI University of Maryland School of Dentistry

Joshua Omonuk

Ugandan Climate Activist RiseUp Movement

Daisa Taylor

Inventor Founder, CEO VariegateHealth

Shanell McGoy, Ph.D., MPH

Director, Corporate & Social Responsibility Gilead Sciences

Maria Flores, MA

Founder Brenner Insights

Brittney N. Doyle

Founder WISE Health SF

Michelle Woodard

Senior Manager 3M Office & Innovation Center

Adrian Land, Ph.D.

Senior Regulatory Affairs Manager Procter & Gamble

Kramer Wimberly, MSDT

Master Scuba Diver Diving with a Purpose

Danielle Ignace, Ph.D.

Assistant Professor University of British Columbia

Courtney Cogburn, Ph.D.

Professor, Columbia University Co-director, Justice Equity & Tech Lab

Pierre Gentine. Ph.D.

Professor, Columbia University Director, LEAP Center

Kristopher Green

Relationship Manager LinkedIN

Malik & Miles

MIT Doctoral Students TikTok Twins

Daphne O. Martschenko, Ph.D.

Assistant Professor Stanford University Center for Biomedical Ethics

Mandeep (Muno) Sekhon

Associate Communications and Special Projects Officer Burroughs Wellcome Fund

Marcus D. Walter

News Anchor & Meteorologist WTVO/WQRF Science Communicator & Storyteller

Ashley M. Taylor, Ph.D.

Senior Scientist, Products Research Procter & Gamble

Mutale Nkonde

Founder & CEO Al for the People

Chris Hemphill

Senior Director, Commercial Intelligence Woebot Health



MENTEE/MENTOR IMPACTS

53%

Reported that they did not know how to explain science-community linkages before participating in the program

97%

Reported that *after* participating in the program, they **knew how to explain** science-community linkages



MENTEE/MENTOR IMPACTS

92%

Mentees rated the mentorship program as "good" or "very good"

91%

Mentees described their experience as "good" or "very good"



MENTEE & MENTOR TESTIMONIALS

"OFIS definitely made me want to be more involved in the intersection between science and community in the future, and I hope that I can continue this throughout my professional development."

— OFIS Mentee, 11th Grade

"Through OFIS, I have developed a newfound interest in data science. This was something I could not do without my Science Engagement Project."

— OFIS Mentee, 10th Grade

"Our Future Is Science is the love language between community and science. It captures the nuances in STEM."

— OFIS Mentee, 12th grade

"OFIS supported me, and in my opinion, helped me get into college, as well as the combined BA/MD program. I seriously do not think I would be where I am if it weren't for my experience with OFIS."

— OFIS Ambassador

"If I didn't have programs like this to make me dive deeper, then I wouldn't know about opportunities."

— OFIS Mentee, 11th grade

"I was not sure about attending college due to financial difficulties, but after listening to my mentor's story, I decided to continue on with this path. My mentors encouraged me to join programs so I could build up my experience and display it to colleges and future jobs."

— OFIS Mentee, 12th grade

"I was able to land an internship for this summer, and I credit my experiences with OFIS for helping me. During the interview, I was able to talk about OFIS, which helped me stand out from other candidates."

— OFIS Mentor, Graduate Student



NATIONAL EDUCATIONAL CAMPAIGN

www.ourfutureisscience.org/campaign



Campaign Welcome by

Dr. Marcia McNutt

President, National Academies of Sciences https://voutu.be/R3SDEo-EaFw



NATIONAL EDUCATIONAL CAMPAIGN











@ourfutureisscience

Social media can serve as a platform for activism and a powerful channel of positive messaging and learning about science as a concrete path toward change. Partnering schools, youth-serving organizations, scientists, and influencers are using Instagram and TikTok to create opportunities for young people across the U.S. to share their visions for "how science could be used to solve problems in their communities."

Disseminating insights from the campaign will ensure that the voices of young people across the U.S. are heard widely.



Dr. Nina Vasan shares the...



Kira shares how science c...



Saad Amer shares the im...



Otana shares how #ophth...



How do you think #scienc...



What does a scientist me.



Our future is #sustainable...



Omar shares ho





NATIONAL EDUCATIONAL CAMPAIGN: WINNER HIGHLIGHTS



Water Contamination Innovation by Samara (North Carolina)



Micro-plastic Innovations by Olha (New Jersey)



Climate Innovation by Simone (Arizona)



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