

REGENERON

ISEF

A PROGRAM OF
SOCIETY FOR SCIENCE & THE PUBLIC

VIRTUAL | 2020

PROGRAMMING IS AVAILABLE THROUGH JUNE 5

PROGRAM GUIDE
VIRTUAL REGENERON ISEF 2020

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VIRTUAL REGENERON ISEF 2020 PROGRAMMING

Welcome to Virtual Regeneron ISEF 2020!

The Society for Science & the Public and Regeneron welcome you to enjoy Virtual Regeneron ISEF 2020 programming **through June 5**.

Finalist Exhibit Hall

Check out the amazing research done by the Regeneron ISEF 2020 finalists. Our 1,255 finalists from 55 countries, regions and territories and 44 states are presenting their work via approved abstracts of their research across 21 categories of science and engineering. Many have provided short video explanations and images.

The ISEF Commons

Home to dozens of colleges and universities, anyone can visit the ISEF Commons to learn more about what each school has to offer, in addition to connecting with admissions officials.

STEM Experiential Hall

Take a virtual stroll on Mars, walk through museum exhibits, play challenging STEM games and watch live streams of animals around the world. This Hall will feature 30 interactive and immersive experiences in a variety of disciplines that participants will be able to access over the internet.

Sponsor Booths

Learn more about the work of Regeneron, Akamai Foundation, Broadcom Foundation, Johnson & Johnson, Microsoft Azure Sphere, National Geographic Society, and other Virtual ISEF sponsors by visiting booths about their work, programs and philanthropy.

Society for Science & the Public

Learn more about the Society and all of our work, including our other exciting science research competitions, our journalism—*Science News* and *Science News for Students*, and programming aimed at expanding access to STEM education.

Volunteer Office

Visit the Volunteer Office to participate in the Virtual Volunteer Challenge, learn about the Society's affiliated fair network and meet the many volunteers that make ISEF possible each year.

Class of 2020!

A special message for our Seniors! Post on Twitter or Instagram using #SSPClassof2020 to honor your grad.

VIRTUAL REGENERON ISEF 2020 PROGRAMMING

All sessions will be available for on-demand viewing through June 5.

Opening Ceremony

- Welcome Remarks by **Maya Ajmera**, President and CEO, Society for Science & the Public and Publisher, *Science News*
- Interview with **George Yancopoulos**, Regeneron Co-Founder, President and Chief Scientific Officer, by **Joe Palca**, National Public Radio (NPR) Science Correspondent
- “Around the World” Dance Video of Regeneron ISEF 2020 Finalists

Excellence in Science and Technology Panel

- Moderated by **Joe Palca**, NPR Science Correspondent
- **Panelists:**
 - **Elizabeth Blackburn**, Professor Emerita, UCSF; Nobel Prize in Physiology or Medicine, 2009
 - **Martin Chalfie**, Professor, Biological Sciences, Columbia University; Nobel Prize in Chemistry, 2008
 - **Elissa Hallem**, Associate Professor, MIMG Department, University of California, Los Angeles; MacArthur Fellow, 2012
 - **Cato Laurencin**, University Professor, University of Connecticut; National Medal of Technology and Innovation in Medicine, 2014
 - **W.E. Moerner**, Harry S. Mosher Professor and Professor by Courtesy of Applied Physics, Stanford University; Nobel Prize in Chemistry, 2014

Women in STEM Panel

- Moderated by **Mary Sue Coleman**, President, Association of American Universities
- **Panelists:**
 - **Frances Arnold**, Linus Pauling Professor, California Institute of Technology; Nobel Prize in Chemistry, 2018
 - **Dianne Newman**, Binder/Amgen Professor of Biology and Geobiology, California Institute of Technology; MacArthur Fellow, 2016
 - **Monika Schleier-Smith**, Associate Professor of Physics, Stanford University, Hellman Fellow, 2015

The Future of Bioscience

- **Tina Hesman Saey**, Molecular Biology Senior Writer, *Science News*
- **Interview with:**
 - **Leroy “Lee” Hood**, Senior Vice President and Chief Science Officer, Providence St. Joseph Health, Chief Strategy Officer, Co-founder and Professor, ISB
 - **Huda Zoghbi**, Professor, Baylor College of Medicine; Howard Hughes Medical Institute (HHMI)

VIRTUAL REGENERON ISEF 2020 PROGRAMMING

Lessons in Leadership During Times of Uncertainty

- An interview with **Craig R. Barrett**, Retired CEO/Chair, Intel Corporation and **Maya Ajmera**, President and CEO, Society for Science & the Public and Publisher, *Science News*

Fighting COVID-19 with Science | Sponsored by Regeneron

- A Panel of Regeneron scientists discusses their work on COVID-19. The Panel will be moderated by **Nancy Shute**, Editor in Chief, *Science News*.
- **Panelists:**
 - **Christos Kyratsous**, Ph.D., Vice President of Research, Infectious Diseases and Viral Vector Technologies
 - **Leah Lipsich**, Ph.D., Vice President of Strategic Program Direction, Global Development
 - **Serge Monpoeho**, Ph.D., Senior Director, Quality Control and Chief Virologist

The Role of CRISPR and COVID-19

- An interview with **Feng Zhang**, Investigator, HHMI, Core Institute Member, Broad Institute, James and Patricia Poitras Professor in Neuroscience at McGovern Institute for Brain Research, MIT, by **Tina Hesman Saey**, Molecular Biology Senior Writer, *Science News*

Technology and Its Role During the Pandemic

- **Kumar Garg**, Senior Director and Head of Partnerships, Schmidt Futures
- **Interview with:**
 - **Catherine Havasi**, Researcher and Entrepreneur in Artificial Intelligence (AI)
 - **Galen Hunt**, Distinguished Engineer & Managing Director, Microsoft Azure Sphere
 - **Tom Leighton**, Co-Founder and CEO, Akamai Technologies
 - **Henry Samueli**, Co-Founder and Chairman, Broadcom, Inc.
 - **Divya Nag**, Apple Health

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How COVID-19 Is Spotighting the Role of Science in Society | Sponsored by Johnson & Johnson

- The COVID-19 pandemic has put science front and center for the public. People want to understand the science behind coronavirus and the possible solutions, and scientists are replacing pop stars as household names. At the same time, the unprecedented nature of coronavirus has demonstrated that scientists, doctors and policy makers do not have immediate solutions, and segments of the population continue to distrust and challenge the information and guidance coming from scientists and policy makers.
- In this environment, transparent and engaging science communication is more important than ever. One example of how the public can be engaged effectively and get a “backstage” look at R&D is Johnson & Johnson’s new series “The Road to a Vaccine.”
- Join this discussion with a scientist, a policy maker and a communicator about ways to make science more transparent and inclusive.
 - **Seema Kumar**, Vice President, Communication, Johnson & Johnson
 - **Dr. Margaret Hamburg**, Foreign Secretary of the National Academy of Medicine
 - **Rinke Bos**, Ph.D., principal scientist, Janssen Pharmaceutical Companies of Johnson & Johnson
 - **Anvita Gupta**, CEO, AINovo Biotech Inc
 - Introduction: **Jacqueline Maestri**, Vice President, Engineering & Property Services, Johnson & Johnson

How the Science of Social Distancing Began with a Science Fair Project

- **Michele Glidden**, Chief Program Officer, Society for Science & the Public interviews **Lara Glass**, Student Program Fellow, The Memorial Church, Harvard University, First-Year Proctor, Harvard College, ISEF ‘06

Technology Is a Force for Good

- **Katy Knight**, Executive Director and **David M. Siegel**, Chairman of the Siegel Family Endowment, discuss how their foundation supports organizations working at the intersection of learning, workforce and infrastructure

Innovation and Entrepreneurship Panel

- Moderated by **Maya Ajmera**, President and CEO, Society for Science & the Public and Publisher, *Science News*
- **Panelists:**
 - **Paige Brown**, Co-founder & CEO, WindBorne Systems
 - **David Holz**, Co-founder & CTO, Leap Motion
 - **Ramji Srinivasan**, Former Co-founder & CEO, Counsyl

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From Education to Exploration: Careers that Change the World | Sponsored by National Geographic

- A Panel of National Geographic Explorers discusses how their passion for science has led them to careers in environmental science. The Panel will be led by **Andrew Brennen**, a National Geographic Education Fellow.
 - **Asha De Vos**, World-renowned pioneer of blue whale research
 - **Vanessa Bezy**, Marine biologist whose mission is to protect sea turtles

Internet Evangelism — A One-on-One Interview with Vint Cerf

- An interview with **Vint Cerf**, Google Vice President and Chief Internet Evangelist, by **Adam Bly**, Founder & CEO of System; Former VP of Data at Spotify

The Great Physics Questions that Remain Unanswered

- An interview with **Brian Greene**, Professor of Physics and Mathematics, Columbia University; Co-founder, World Science Festival, by **Emily Conover**, Physics Writer, *Science News*

Making Smart Bets on Entrepreneurs

- Moderated by **Anna-Katrina Shedletsky**, Founder and CEO, Instrumental; Angel Investor
- **Panelists:**
 - **Hayley Bay Barna**, Partner, First Round Capital
 - **Sheel Tyle**, Founder & CEO, Amplo
 - **Gideon Yu**, Co-Owner and Former President, San Francisco 49ers; Former CFO, Facebook and YouTube

College Admissions

- Moderated by **Allie Stifel**, Director of Regeneron Science Talent Search, Society for Science & the Public
- **Panelists:**
 - **Chris Peterson**, Senior Assistant Director of Admissions, MIT
 - **Brenna Heintz**, Senior Assistant Dean of Admissions, Swarthmore College
 - **Ingrid Schvarczopf**, Associate Director, Engineering Student Recruitment & Retention Office, University of Toronto
 - **Taylor Pondy**, Admissions Officer, University of California San Diego

VIRTUAL REGENERON ISEF 2020 PROGRAMMING

SCIENCE EDUCATION SERIES

Fundraising for Science Fairs & Research Programs

- Moderated by **Caitlin Sullivan**, Director of Outreach & Equity, Society for Science & the Public
 - **Bruce Makous**, Chief Advancement Officer, Society for Science & the Public
 - **Liz Baker-Bowman**, Southern Arizona Science & Engineering Fair (SARSEF)
 - **Freda Vine**, Ed W. Clark High School, Las Vegas, NV

International Rules and Guidelines for Student Research 2021

- **Michele Glidden**, Chief Program Officer, Society for Science & the Public, discusses international rules and guidelines for student research with **Members of the ISEF Scientific Review Committee**.

Research at Home: Life Sciences Edition

- Moderated by **Anna Rhymes**, *Science News* in High Schools Program Manager, Society for Science & the Public
 - **Bill Wallace**, Ph.D., Georgetown Day School, Washington, DC
 - **Tina Gibson**, Ph.D., The Mississippi School for Math and Science, Columbus, MS

Behind the Curtain of Uncertainty: A Statistics Crash Course

- Moderated by **Caitlin Sullivan**, Director of Outreach & Equity, Society for Science & the Public
 - **Paul Strode**, Ph.D., Fairview High School, Boulder, CO

Research at Home: Big Data and Engineering Edition

- Moderated by **Anna Rhymes**, *Science News* in High Schools Program Manager, Society for Science & the Public
 - **David V. Black**, New Haven School, Spanish Fork, UT
 - **Vincent Joralemon**, Frank McCourt High School, New York, NY
 - Special Guest: **Michael Carapezza**, Program Coordinator, HK Maker Lab & NY Bioforce

Protecting Your Intellectual Property: Patents, Trademarks, Copyrights and Trade Secrets

- Moderated by **Caitlin Sullivan**, Director of Outreach & Equity, Society for Science & the Public
 - **Jorge Valdes**, Ph.D., Education Program Advisor, United States Patent & Trademark Office
 - **Juan Valentin**, Education Program Advisor, United States Patent & Trademark Office

Inspiring Changemakers: A Model for Young Leaders to Protect our Planet

- Moderated by **Alison Szopinski**, Senior Director of Youth Initiatives, National Geographic Society
 - **Kavita Gupta**, National Geographic Educator of the Year and Teacher Fellow
 - **Charu Gulati**, National Geographic Certified Educator and Mentor

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Inventing Tomorrow Q&A

- Moderated by **Karen Shelley**, Director of Strategic Partnerships
 - **Laura Nix**, Director of *Inventing Tomorrow*
 - **Jared Goodwin**, finalist featured in the film
 - **Nuha Anfaresi**, finalist featured in the film

Communicating Your Science and Doing It Well

- **Bethany Brookshire**, Ph.D., *Science News for Students*
- **Sarah Zielinski**, Managing Editor, *Science News for Students*

Apoyando Estudiantes en Investigaciones de STEM: Una Discusión con Maestras con Experiencia

- Moderated by **Milena Acosta**, Community Engagement Manager, Natural History Museum of Los Angeles County
 - **Luz S. Carillo**, MD, Northwest Early College High School, El Paso, TX
 - **Celia Castellanos**, Foshay Learning Center, Los Angeles, CA
 - **Yajaira Torres - De Jesus**, Ph.D., Colegio Rosa-Bell, Guaynabo, Puerto Rico

Supporting Rural and Native Students in Research

- Moderated by **Caitlin Sullivan**, Director of Outreach & Equity, Society for Science & the Public
 - **Cheyenne Branscum**, Oklahoma Geo Team Coach, Shawnee, OK
 - **Debbie Morgan**, South Sevier High School, Monroe, UT

Supporting Underrepresented Students in STEM Research

- Moderated by **Caitlin Sullivan**, Director of Outreach & Equity, Society for Science & the Public
 - **Priscilla Lumberras**, Granbury High School, Granbury, TX
 - **Keri Meador**, Central High School, Louisville, KY

Teaching Research for Students

- Moderated by **Anna Rhymes**, *Science News* in High Schools Program Manager, Society for Science & the Public
 - **Jennifer C. Claudio**, Oak Grove High School, San Jose, CA
 - **Amy Hammett**, Maize High School, Maize, KS
 - **Katy Gazda**, Red Mountain High School, Mesa, AZ

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SOCIETY FOR SCIENCE & THE PUBLIC PROGRAMS

Regeneron Science Talent Search: A Competition for 12th Graders

- **Allie Stifel**, Director of the Science Talent Search, Society for Science & the Public, discusses the application process for the competition. Together with the 2019 finalists, Allie discusses the impact of the program.

Science News in High Schools Program Overview

- **Anna Rhymes**, *Science News* in High Schools Program Manager and **Raina van Duym**, *Science News* in High Schools Associate Specialist, both from the Society for Science & the Public, discuss the program and its benefits to teachers and students.

Broadcom MASTERS Overview: National Middle School Competition

- **Raeva Ramadorai**, Broadcom MASTERS Program Manager, shares details about the Broadcom MASTERS program and application process.

The Regeneron International Science and Engineering Fair encourages students to tackle challenging scientific questions and develop the skills needed to solve the problems of tomorrow.

SOCIETY FOR SCIENCE & THE PUBLIC

The Society for Science & the Public is a champion for science, dedicated to expanding scientific literacy, effective STEM education and scientific research. Founded in 1921, we are a nonprofit 501(c)(3) membership organization focused on promoting the understanding and appreciation of science and the vital role it plays in human advancement. Through its acclaimed science research competitions, including the Regeneron Science Talent Search, the Regeneron International Science and Engineering Fair and the Broadcom MASTERS, and its award-winning magazine, *Science News* and digital media properties, *Science News for Students*, the Society is committed to inform, educate and inspire.

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