Regeneron ISEF Symposia Schedule

May 11-14, 2026

Phoenix, AZ

Symposia sessions are an opportunity to share information with students, parents, teachers and fair directors, and do not imply endorsement by Society for Science. No fees have been paid.

Monday, May 11

9:00 AM to 9:45 AM **Room: 106C**

Innovating for a Sustainable Future: Cutting-Edge Research at Arizona State University

Dr. Treavor Boyer; Dr. Datu Buyung Agusdinata – Arizona State University

Join Arizona State University to explore how interdisciplinary research is driving real-world sustainability solutions. Faculty and students from the Walton College of Global Futures and the Ira A. Fulton Schools of Engineering will showcase groundbreaking projects in renewable energy, water management, climate resilience, sustainable materials, and smart infrastructure. This interactive workshop will highlight how ASU is leveraging innovation, technology, and cross-disciplinary collaboration to address some of the world's most pressing environmental challenges. Attendees will gain insights into cutting-edge research, learn how sustainability challenges are being tackled from multiple perspectives, and discover opportunities for collaboration and inspiration in STEM fields.

Type: Panel Discussion **Audience: Fair Directors, Teachers, Students**

9:00 AM to 9:30 AM **Room: 106B**

Navigating Regeneron ISEF - Helpful Tips for a Successful ISEF Week

Ingrid Weigand – Austin Science Education Foundation

Many first-time fair Directors are overwhelmed when they arrive at ISEF; few have received all the information they need to successfully navigate the week.

We will discuss the week day-by-day with important reminders from checking for SRC infractions on Monday night to making arrangements to feed students on Wednesday morning and at noon, attending key symposia (judging, SRC, rules changes) and panels; getting from the Grand Ceremony to the airport on tight schedules (project breakdown, luggage storage, etc.).

Type: Presentation **Audience: Fair Directors**

9:00 AM to 9:30 AM **Room: 106A**

Day in the Life at a Semiconductor Company

Nathan Mascarenhas – Nikon Precision Inc.

Nathan Mascarenhas shares his journey from graduating from Arizona State University in 2019 to becoming a Project Owner within the semiconductor industry. He explains photolithography - the critical process of printing nanometer scale circuits onto semiconductor chips using light. After working as a field service engineer and later as a shift lead, Nathan transitioned into managing technical projects and innovation initiatives. His work includes implementing agile methodologies and near field communication technology within manufacturing fabs. He concludes by offering advice for students, emphasizing the importance of differentiating oneself and making a strong impression during interviews.

Type: Presentation **Audience: Students**

10:00 AM to 10:45 AM **Room: 120D**

Judging at Regeneron ISEF

ISEF Judging Advisory Committee

Learn about Grand Awards Judging at Regeneron ISEF! We will talk about all aspects of your judging experience: the schedule for judging day, the Judging Criteria, the types of judges at ISEF, and the people and resources available to support you. Bring your questions!

Type: Presentation **Audience: Fair Directors, Teachers, Students**

11:00 AM to 11:45 AM **Room: 106B**

Inside the Breakthrough: What It Takes to Push the Bounds of Science Again and Again

Smita Pillai; Lori Morton, PhD; Najla Husseini; - Regeneron

What does it actually take to make a scientific breakthrough, not in theory, but inside one of the world's leading biotech companies? In this session, Regeneron scientists and leaders will pull back the curtain on how they think, question, and collaborate to turn bold ideas into transformative medicine. Join an unfiltered conversation about what it takes to build a place where breakthrough science doesn't happen by chance, but by design and then put that thinking immediately into action with a hands-on exercise. You'll leave with a sharper lens for approaching your own work, one used by scientists at the frontier of human health.

Type: Hands-on Workshop **Audience: Students**

11:00 AM to 11:45 AM **Room: 106C**

Thermo Fisher Scientific Junior Innovators Challenge: Society for Science's National Middle School STEM Research Competition

Raeva Ramadorai; Alex Grace – Society for Science

Thermo Fisher Scientific Junior Innovators Challenge (JIC), a program of Society for Science, is the premier STEM research competition for 6th, 7th, and 8th grade students in the US. This competition provides an outlet for middle school students to share their outstanding research projects at the national level. Affiliated science fairs around the nation nominate the top 10% of students to enter the Thermo Fisher JIC. This session will provide a general overview of the program and will feature a Q&A panel with former finalists, who will share their experience with research at the middle school level and their advice for students entering the program. Fair directors, student observers, teachers and parents/guardians of middle school students are invited to attend this session.

Type: Presentation **Audience: Fair Directors, Teachers, Students**

11:00 AM to 11:45 AM **Room: 106A**

Innovation Mashup: Combining Invention & Research to Engage and Empower Students

Laurel Bingman – Society for Science

In this workshop, educators will experience the power of Invention Education for sparking innovative thinking and explore the ways that invention & research combine and connect. We will start with a hands-on invention activity that can be used in the classroom, and then we will utilize lessons learned from this activity to guide our discussion of effective approaches for integrating invention & research with students. We will end with worktime for educators to brainstorm ways to apply these innovative strategies to their own research programs.

Type: Hands-on Workshop **Audience: Teachers**

12:00 PM TO 12:45 PM **Room: 106A**

Regeneron Science Talent Search: The Next Step for Rising 12th Grade Students

Allie Stifel; Elaine Edwards – Society for Science

Seeking all U.S. based 12th grade students to apply to Regeneron ISEF's sister competition! The Regeneron Science Talent Search, a sister competition to Regeneron ISEF, has identified future leaders in STEM for 85 years. Learn about the competition requirements, application tips, and the more than $3 million awarded to high school seniors, and their schools each year--including the top prize of $250,000! Then, during the second half of the session, meet some of the top 40 finalists from this year's competition, learn about their experiences and ask them your questions in a panel interview

Type: Presentation **Audience: Fair Directors, Teachers, Students**

12:00 PM to 12:45 PM **Room: 101ABC**

Harnessing the Art of Presenting: How to Successfully Develop and Practice Science Research Presentations

William Furiosi – Oviedo High School, USFL23

The ISEF judging rubric weighs the presentation as 35% of the overall score. Subsequently, the more effectively presented research will win more. This session aims to illustrate how students, teachers, and fair directors can better understand and harness the art of presenting to find better success in research competitions. The session will focus on the presentation triangle: (1) poster, (2) oral presentation, and (3) judging. Each facet will be thoroughly discussed regarding best practices for effective delivery, and each of the three will have ample examples of how to practice the art of presenting. For example, participants will be walked through how to evaluate a genuine poster draft with authentic feedback, how to maximize presentation opportunities in a classroom setting, and how to leverage alumni networks for increasing judging experiences. Attendees will come away with example feedback, skills, and activities to improve their presentations and that of their delegations.

Type: Presentation **Audience: Fair Directors, Teachers, Students**

12:00 PM to 12:45 PM **Room: 106B**

Society STEM Outreach Programs & Expanding Access to STEM Research

Anna Pawlow; Raina van Duym; Emily Freeland; Jessica Buono – Society for Science

This session will provide an overview of the Society for Science's national STEM Outreach Programs, including Science News Learning, Research Teachers Conferences, STEM Action and Research Grants, and the Advocate Program, as well as recent regional cohort initiatives. Attendees will discuss and explore how these educator professional development models can be adapted and applied in their own regions to strengthen knowledge and resource sharing and expand access to student research and affiliated fair competitions. Come prepared to participate and share your strategies and ideas.

Type: Hands-on Workshop **Audience: Fair Directors, Teachers**

1:00 PM to 1:30 PM **Room: 106A**

Discovering Futures in Marine Technology and Water Research at Northwestern Michigan College

Merrick Adams - Northwestern Michigan College

Many students are interested in marine sciences and underwater technology, but few know how to turn that passion into a job. I would love to share with attendees how NMC's GLWSI can lead students to extremely interesting, fulfilling, and dynamic careers both on- and off-shore. The Great Lakes as a natural and cultural resource have never been under more pressure, and most people have no idea what sort of issues lie beneath the surface. I plan on presenting an introduction into several of these key issues, such as ecosystem collapse, water contamination, and infrastructure failure. In our region there are many organizations trying to solve these problems, but it's all-hands-on-deck. This will be followed by an examination of how our students study these topics and translate their experience into a dream job, and how students and teachers can get involved in the future.

Type: Presentation **Audience: Teachers, Students**

1:00 PM to 1:45 PM **Room: 106C**

Protecting People Through Science: How Science Shapes PFAS Policy at NRDC

Anna Reade - Natural Resources Defense Council

This presentation will explore how science can be used to inform and strengthen environmental policy, using PFAS (forever chemicals) as a case study. The session will highlight the role of scientists at NRDC and how scientific research, data analysis, and publicly available tools help translate complex environmental health science into impactful policy solutions. Drawing from real world examples, the presentation will discuss how PFAS research supports decision making, communication, and advocacy at the federal and state levels. Students will gain insight into how evidence-based science moves beyond the lab to protect public health and the environment, as well as the diverse career pathways that exist at the intersection of science, policy, and environmental justice.

Type: Presentation **Audience: Fair Directors, Teachers, Students**

1:00 PM to 1:45 PM **Room: 106B**

Beyond the Spectrum: How Youth-Led Innovation is Rewiring Inclusive Design

Maya Hammoud; Lara Hammoud - Perception Foundation

Every day, we look children in the eye and tell them they do not belong - not through words, but with a system that treats neurological and mental health support as a luxury rather than a human right. For decades, the "expert" design industry has built sensory environments costing $50,000 or more, expensive spaces designed without the input of the very communities they are meant to serve, effectively excluding the people who need them most. Since age seven, we've been dismantling this barrier. The Perception Foundation combines neuroscience, stakeholder interviews, and youth-led innovation to create low-cost, inclusive environments. This session reveals a blueprint for designing a world where belonging is a right, not a privilege.

Type: Hands-on Workshop **Audience: Students**

2:00 PM to 3:30 PM **Room: 120D**

Science Unscripted: An "Ask Me Anything" session with Regeneron co-Founder George D. Yancopoulos, M.D., Ph.D.

George Yancopoulos – MD, PhD, Board Co-Chairman, President and Chief Scientific Officer

Join George Yancopoulos, co-Chairman, President, and Chief Scientific Officer of Regeneron, for an engaging, unscripted conversation. From his early beginnings to his career-defining moments, George will offer personal insights into the journey behind Regeneron and share a few fun and lesser-known facts along the way.

Type: Presentation **Audience: Fair Directors, Teachers, Students**

3:30 PM to 4:15 PM **Room: 106C**

Building a STEM Portfolio to showcase your STEM Curiosity

Nicolas Lee – Caltech; Jeremy Weprich – MIT Admissions

This session will focus on how students can best take their STEM projects, works, contributions, etc. and present them in a clear and concise way so that colleges and universities can get a deeper look into their STEM passion and curiosity. This session will be a presentation on examples and share tips and tricks on how students can be putting their best foot forward when submitting a STEM Portfolio to a US College or University. Examples will include research projects, posters, videos, pictures, etc. The session is designed to go for 30-35 min with 10-15 min of Q&A at the end.

Type: Presentation **Audience: Fair Directors, Teachers, Students**

3:30 PM to 4:15 PM **Room: 101ABC**

Understanding Creativity and Impact at ISEF

Christopher RoDee – ISEF Judging Advisory Committee; Mark Oleksak – STEM Pioneers

This presentation will address the basic elements of STEM creativity and provide examples showing these elements. The presenters will discuss how Finalists can identify and explain their project's creativity to grand awards and special awards judges using the ISEF Judging Criteria. Techniques for sustaining and enhancing creativity will also be presented.

The presentation will also address the importance of identifying and communicating a project's impact or potential impact in the judge interviews. Students will be encouraged to explain why the project matters and to keep their impact statement grounded in the actual results obtained.

The presentation will conclude with a Q&A session hosted by the presenters.

Type: Presentation **Audience: Students**

Tuesday, May 12

9:00 AM to 9:45 AM **Room: 101ABC**

The OSIRIS-REx and OSIRIS-APEX missions

Dathon Golish - University of Arizona

The OSIRIS-REx mission traveled to asteroid Bennu to examine its surface up close, study its composition, and collect physical samples to bring back to Earth. After a two-year cruise home, the spacecraft delivered its sample capsule, but the mission wasn't over. Renamed OSIRIS-APEX, it set course for a new target: asteroid Apophis. On April 13th, 2029, Apophis will pass within 36,000 kilometers of Earth, closer than some satellites! APEX will be there to observe Apophis and how the close approach to Earth changed it.

Type: Presentation **Audience: Teachers, Students**

9:00 AM to 9:45 AM **Room: 106C**

Beyond ISEF: Pathways for Continued Engagement in Science

Dr. Janelle Simmons - Sigma Xi, The Scientific Research Honor Society

Discover how Sigma Xi connects high school students and educators to a global community dedicated to supporting scientific discovery. This interactive session will highlight opportunities to engage with Sigma Xi through mentorship, recognition programs, and student-centered initiatives. Participants will learn how Sigma Xi supports students and teachers through accessible programs and resources, whether or not they are members. Attendees will gain insight into how to connect with a network of scientists, participate in meaningful experiences, and remain engaged beyond competitions like Regeneron ISEF. The session will conclude with clear, actionable steps for getting involved and making the most of Sigma Xiâ€™s programs and community.

Type: Presentation **Audience: Teachers, Students**

9:00 AM to 9:45 AM **Room: 106A**

Teaching Research and STEM Literacy with Science News Learning

Raina Van Duym – Society for Science; Karisa Boyer – Joplin High School

In this session, participants will hear from a research teacher about how she uses Science News Learning articles and lesson plans in her classroom to inspire student research and teach core curricular concepts. Participants will learn how to incorporate journalism articles that cover the latest research findings across STEM subject areas into their curriculum to increase students STEM literacy skills, get them excited about doing research and teach core concepts with fun, engaging applications.

Type: Presentation **Audience: Fair Directors, Teachers**

2:00 PM to 2:45 PM **Room: 101ABC**

College Application Process

Mike Rick and Jeremy Weprich – MIT Admissions; Nic Lee – Caltech Admissions

Join admission representatives from MIT and Caltech to learn about the college application process and ask questions!

Type: Panel Presentation **Audience: Teachers, Students**

2:00 PM to 2:30 PM **Room: 106C**

From Curiosity to Innovation: Empowering Future Scientific Leaders in Emerging Technologies

Dr. Salman Alfihed - KACST

This presentation explores how students can transform simple ideas into real scientific impact in fields such as AI, semiconductors, and advanced sensors by moving through a clear journey from curiosity to structured research, where they learn to define meaningful problems, build essential skills, and develop independent projects step by step. It includes real examples of students who took ownership of their work and achieved outcomes such as research publications, functional prototypes, and in some cases patentable innovations. Drawing on the Regeneron ISEF experience, it highlights what drives strong student research, including clear scientific thinking, rigorous methodology, and effective communication, while emphasizing that ISEF is not a final destination but an important milestone in a longer research path that continues toward deeper exploration and real-world contribution. It also demonstrates how the right mix of mentorship, guidance, and opportunity can accelerate student growth and unlock their ability to create meaningful, high impact innovations.

Type: Presentation **Audience: Fair Directors, Teachers, Students**

2:00 PM to 2:30 PM **Room: 106A**

Incorporating Research into After-School and Saturday Research Programs and CTE, Elective, and Innovative Courses

Tim Sears - The University of Texas Rio Grande Valley, USTX04

The presenter will share practical ideas from 23 years of collaborative experience starting, expanding, and continuing support for 6th-12th grade student STEM research during and outside of the school day. The session focuses on ideas and models for successful after-school and Saturday student research programs at schools that maximize student mentorship and funding. Important considerations for in-school options to begin or enhance STEM research into CTE, elective, and innovative courses will also be discussed. Frequently overlooked course options, local partnerships, and diverse funding sources will be shared through a presentation and booklet that participants can use to either start or expand research programs or course offerings at their school or district.

Type: Presentation **Audience: Teachers**

3:00 PM to 3:45 PM **Room: 106C**

Why the UK? Unlocking World-Class International Education Opportunities

Marianna Asatryan - EIT Oxford

Thinking about studying in the UK? This interactive session will explore why the UK is one of the world's leading destinations for higher education. It is hosted by the Ellison Scholars program, who offer full-ride scholarships to the University of Oxford.

Over the course of the session, they will break down what makes UK Universities so special, compare course structures with the US system, and highlight the benefits of a UK degree. You will gain practical guidance on choosing the right university for you, navigating applications, and finding funding opportunities. They will also discuss student life, career opportunities, and how a UK education can open doors globally. Whether you are just exploring the UK and its opportunities or are ready to apply, this session should give you the insight and confidence to take your next step.

Type: Presentation **Audience: Teachers, Students**

3:00 PM to 3:45 PM **Room: 106B**

Writing about your STEM Passion for your College Application

Nicolas Lee - Caltech

This session will focus on how high school students can write about their passion for STEM in their college applications. This will be a workshop style presentation where students will help to identify their core STEM values and get tips on how to describe and write about these in a college application. We will also share examples from Caltech's supplemental essays and answer questions from students and teachers on how to best approach the topic. This is open to all High School students attending ISEF. This workshop is designed to go for 25 - 30 min with 10-15 min of Q&A.

Type: Presentation **Audience: Teachers, Students**

3:00 PM to 3:45 PM **Room: 106A**

Scaling Science Fair Operations: Best Practices and Peer Exchange for Modern Fairs

Traven Watase - MySciFair

Science fairs are becoming increasingly complex, with growing demands around registration, judging coordination, compliance (IRB/SRC), and communication. Many fairs still rely on fragmented systems and manual processes, leading to inefficiencies and inconsistent experiences for students and organizers. This interactive workshop combines structured best practices with guided peer discussion to explore how fairs can operate more efficiently. The session will begin with real-world approaches used to streamline registration, manage judge assignments, support compliance workflows, and improve communication. Participants will then engage in small-group discussions to share challenges, identify common bottlenecks, and exchange solutions. The session will conclude with a synthesis of key patterns and actionable strategies. Attendees will leave with practical frameworks and peer-informed insights they can immediately apply to improve their own fair operations.

Type: Hands-on Workshop **Audience: Fair Directors, Teachers**

4:00 PM to 4:45 PM **Room: 101ABC**

How (Not) to Train a Neural Network

Kody Stremick - Jane Street

"How (Not) to Train a Neural Network" is a Jane Street talk. During his presentation, Kody will share how machine learning in an applied setting often goes quite differently than in the classroom or a purely research environment. Inspired by a variety of real-life examples from finance and beyond, he'll discuss some ways LLMs and other deep learning models can go off the rails in surprising ways.

Type: Presentation **Audience: Students**

Wednesday, May 13

10:00 AM to 10:45 AM **Room: 101ABC**

SRC Rules Review by Regeneron ISEF Scientific Review Committee

Regeneron ISEF Scientific Review Committee

Meet with members of the Regeneron ISEF Scientific Review Committee to discuss edits to the 2027 rules book, the most common rules violations, and SRC paperwork management. Come with questions!

Type: Panel Discussion **Audience: Fair Directors, Teachers, Students**

11:00 AM to 12:30 PM **Room: 106A**

Powering the Next Generation of U.S. Chipmakers: Classroom Experiences That Build Tomorrow's Semiconductor Workforce

Jasen Ritter; Brendan Murphy - Project Lead the Way on behalf of Intel Foundation

This hands-on session showcases how the Intel Foundation and Project Lead The Way (PLTW) are expanding access to semiconductor science, advanced manufacturing, and AI enabled engineering learning experiences across the U.S. education system.

The session demonstrates components of PLTW's Advanced Manufacturing high school course. Educators will operate equipment, run digital simulations, and see firsthand how PLTW and Intel are preparing students for technician roles, clean room processes, automation, Industry 4.0 environments, and AI assisted engineering workflows.

By the end of the session, participants will:

- Understand how the Intel Foundation partnership expands national access to future ready, semiconductor-aligned STEM programs
- Gain a practical understanding of PLTW's semiconductor and advanced manufacturing learning pathway
- Experience hands-on demonstrations of robotics, motion control, AI tools, and digital fabrication workflows
- Learn how educators and districts can bring these experiences to their students

Type: Panel Discussion **Audience: Fair Directors, Teachers**

1:00 PM to 1:45 PM **Room: 106C**

Voices From the Classroom: Alabama Teachers Share Strategies for Science Fair Success

Dr. Jessica Gilpin; Wayne Howse; Dr. Virginia Vilardi; Dreama White - Auburn University

Our panel of Alabama teachers will share their real-world experiences building and sustaining successful science fair programs. Panelists will discuss their backgrounds, how they became involved in science fairs, and what motivates them to continue mentoring young researchers. Topics include: Top coaching tips, common challenges and how to overcome them, garnering support from STEM champions, and developing strategies for making SEF a valued part of their school culture. Attendees will have the opportunity to ask questions to a current Society for Science Advocate and 2 veteran SEF teachers to gain practical insights for implementation in their own classrooms and programs.

Type: Panel Discussion **Audience: Fair Directors, Teachers**

1:00 PM to 1:45 PM **Room: 101ABC**

ISEF Educator Guide

ISEF SRC; Michele Glidden; Nora Kelly; Dr. Jenna DeLuca

Come join the ISEF SRC and Society Staff to discuss the ISEF Educator Guide that was published in October 2025. This guide walks educators through our rules and forms and provides additional context to our rules. We'll walk through the guide and open up a conversation for questions and revisions.

Type: Panel Discussion **Audience: Fair Directors, Teachers**

2:00 PM to 2:45 PM **Room: 101ABC**

Regeneron ISEF Display & Safety Rules

Regeneron ISEF Display & Safety Committee

Come join the Display & Safety Committee to discuss infractions encountered this year as well as changes to the rules and guidelines for 2027. Bring your questions for the committee to answer.

Type: Panel Discussion **Audience: Fair Directors, Teachers**

3:00 PM to 3:45 PM **Room: 106A**

Judging with Intention: Training, Best Practices, and a Simulated Judging Experience

Dr. Karen Dane; Dr. Jessica Gilpin; Megan Fitzgerald; Olivia Ray - Auburn University

Effective judging can make or break a science fair experience for students and judges. In this session, we will share the Alabama Science and Engineering Fair's data driven approach to judge training and walk through the protocols we use to create a smooth, consistent fair day. Participants will take part in a mini simulated judging session to experience our process firsthand. We will also invite attendees to discuss and exchange their own favorite judging practices.

Type: Hands-on Workshop **Audience: Fair Directors, Teachers**

3:00 PM to 3:30 PM **Room: 106C**

Thermo Fisher Scientific Junior Innovators Challenge: Rules and Paperwork Deep Dive

Raeva Ramadorai - Society for Science

In this session, we will go over eligibility requirements, common rules issues, and guidance for paperwork within the application. We will also introduce a new, optional middle school project approval form for the 2027 cycle, with the opportunity to answer questions and provide feedback. This session is recommended for fair directors and educators, though students are welcome.

Type: Presentation **Audience: Fair Directors, Teachers**

3:00 PM to 3:45 PM **Room: 106B**

Grow your fair size and quality with 5 practical practices

Jill Ott - Science Coach

This highly interactive, workshop-style session is designed for educators, fair directors, and science leaders seeking proven strategies to increase both fair participation and the quality of student research projects. Participants will engage with five evidence-based, immediately actionable practices that strengthen recruitment, improve project rigor, and support sustainable program growth. The lead presenter successfully expanded a rural regional fair from 50 students to 3,300 in ten years and has spent the past eight years helping other regional fairs achieve measurable growth. Attendees will leave with freely shared handouts, practical tools, and clear implementation steps that can be adapted to their own contexts. Rather than relying on a secret formula this session presents a replicable system of small, strategic changes that, when implemented over time, have helped fairs triple participation within three years.

Type: Hands-on Workshop **Audience: Fair Directors, Teachers**

Thursday, May 15

9:00 AM to 9:45 AM **Room: 106C**

Building High-Performance Science Fair Systems: Practical Strategies for Student Preparation, Fair Management, and International Success

Mark Oleksak; Eng. Anas Alhunaihan; Dr. Daniyal Ghazzawi; Ms. Sara Alajlan - Mawhiba

A panel discussion with individuals that have over 20 years' experience in organizing and implementing science and engineering fairs. The goal is to provide advice to the audience that will serve as takeaways for their fairs. This will highlight what can be done even if a fair does not have significant resources.

The relevance points for this panel discussion are:

* Directly relevant to fair directors and educators
* Focuses on systems and execution
* Provides best practice experience with no promotions
* Highly transferable across countries and regions

Key audience takeaways:

*How to structure a national fair pipeline using IT and social media
*How to attract and train judges, advisors and mentors
* How to prepare students for local and international competitions
* How to scale participation and quality simultaneously
* How to build continuity year-to-year

Type: Panel Discussion **Audience: Fair Directors, Teachers, Students**