Science Research Competitions

This document is not official and details about competitions frequently change from one year to the next. Please see the webpage for each competition for full, current details.

| Program Name: | Regeneron Science Talent Search (run by Society for Science & the Public) |
|---------------------------|--|
| URL: | https://www.societyforscience.org/regeneron-sts/ |
| Location: | Usually held in Washington, DC. |
| Dates: | Application opens in Fall. Applications are due in early November. |
| Students must be in their | r last year of secondary school in the US. Some US citizens attending school abroad are also |

eligible. Students must have completed a science research project independently (no team research is eligible). Research must fall within human and animal rules.

Entrants receive digital badges, t-shirts, laptop stickers, and a free subscription to *Science News* magazine. All entries can earn Research Report and Student Initiative digital badges. Three hundred semifinalists receive \$2,000 each and their schools receive \$2,000 per semifinalist.

| 1 st Place - \$250,000 | 5 th Place - \$90,000 | 9 th Place - \$50,000 |
|-----------------------------------|----------------------------------|--|
| 2 nd Place - \$175,000 | 6 th Place - \$80,000 | 10 th Place - \$40,000 |
| 3 rd Place - \$150,000 | 7 th Place - \$70,000 | 30 remaining finalists - \$25,000 each |
| 4 th Place - \$100,000 | 8 th Place - \$60,000 | |

Other Information:

Applications are sent directly to the Society – there are no regional fairs or other competitions needed to qualify. There are no quotas or limits to the number of winners per category or per geographic region. There is no cutoff got GPA or test scores. Read "<u>Rules and Entry Instructions</u>" for complete rules, guidelines, and application instructions.

STUDENT ENTRY

Entries in the Regeneron Science Talent Search are submitted online, with the exception of school transcripts, which may be mailed in hard copy or submitted online with the High School Report. Components of the application are managed as follows:

1. Responses to short answer and essay questions are entered directly into the online application webpages.

2. The Research Report, Institutional Review Board approval (for human participants), and International Animal Care and Use Committee approval (for non-human vertebrate animal exceptions) are uploaded by entrants as Word documents or PDFs.

3. Requests for Educator Recommendations, Project Recommendations, and High School Reports are sent via e-mail by the online recommendation system at the request of the entrant. Recommenders receive a unique PIN and are prompted to create a password to complete and submit forms online. Counselors may upload transcripts on the High School Report or applicants may mail a hard copy to SSP at the student's request.

New Mexico -> Enter on the national site.



| Program Name: | Regeneron International Science and Engineering (ISEF) |
|---------------|--|
| URL: | https://student.societyforscience.org/intel-isef |
| Location: | Los Angeles, CA |
| Dates: | May 2024 |

A student must be selected by an Intel ISEF-affiliated fair, and be in grades 9-12 (or equivalent) and not have reached age 20 on or before May 1 preceding the ISEF. Each student is only allowed to enter one project. That project may include no more than 12 months of continuous research and may not include research performed before January 2021. Team projects must have no more than three members. Teams competing at Intel ISEF must be composed of members who all meet Intel eligibility. Students may compete in only one ISEF affiliated fair, except when proceeding to a state/national fair affiliated with the ISEF from an affiliated regional fair.

- Prizes:
- The Gordon E. Moore Award
- This \$75,000 top award of the ISEF is provided to the top Best in Category project. The Moore Award recognizes the Best of the Best among the outstanding students from around the world who participate in the ISEF. The winning project is selected on the basis of outstanding and innovative research, as well as on the potential impact of the work
 — in the field and on the world at large.
- Young Scientist Awards*
- The Society will present \$50,000 awards to two Best in Category projects. These finalists will be selected for their commitment to innovation in tackling challenging scientific questions, using authentic research practices, and creating solutions to the problems of tomorrow.
- ISEF Best of Category Awards
- Best of Category Winners are provided a \$5,000 scholarship. Additionally, a \$1,000 grant will be given to their school and the ISEF-affiliated fair they represent.
- ISEF Grand Awards Grand Awards are presented in each of the 20 ISEF categories, as follows:
- 1st Award: \$3,000 cash award
- 2nd Award: \$1,500 cash award
- 3rd Award: \$1,000 cash award
- 4th Award: \$500 cash award
- *ISEF Special Awards* Each year, organizations representing a wide variety of scientific disciplines provide awards, scholarships, internship and other prizes to hundreds of student Finalists.
- *ISEF Experiential Awards* Each year, ISEF provides experiential awards to introduce students to settings in which they can explore their scientific interests while also experiencing a cultural exchange.
- Dudley R. Herschbach SIYSS Award
- European Union Contest for Young Scientists
- Intel Foundation Cultural and Scientific Visit to China
- London International Youth Science Forum/Philip V. Streich Memorial Award
- Intel Indo-U.S. Science and Technology Visit to India Award

New Mexico -> https://www.nmt.edu/stem/sciencefair/



| Program Name: | 34th Annual Supercomputing Challenge |
|---------------|--|
| URL: | https://supercomputingchallenge.org |
| Location: | TBD |
| Date: | Expo is in April |
| Eligibility: | Elementary, Middles School, and High School students (public, private, homeschool) |
| Prizes: | |
| Seniors who h | ave participated in the Challenge in the past are eligible to apply for scholarships |

Seniors who have participated in the Challenge in the past are eligible to apply for scholarships. Prizes awarded vary year-to-year based on donations.

Other information:

See the Dates Page for the dates of the events for the 32nd Annual Supercomputing Challenge.

Registration: Sept 1 - 20. The first 50 teams get a welcome box for registering on time. Proposals due: December 1st Virtual Kickoff: September/October Interim Reports due: February 1st. February Evaluations: Saturdays in January - February time from. Final Reports due First Wednesday in April Expo and Awards: In April

See the Kickoff webpage for information about what will take place during the October 9th Kickoff and to access links to the class material, pictures, and more.

To learn more about the Supercomputing Challenge, read the Invitation to Participate.

Teachers, post the flyer to solicit students or edit the Word version of the flyer and add your contact information.

Teachers, student can get credit for participating in the Supercomputing Challenge.

New Mexico -> https://supercomputingchallenge.org



Program Name: Broadcom MASTERS (middle school, run by Society for Science & the Public) <u>https://student.societyforscience.org/broadcom-masters</u>

Location: TBD

Usually-Application opens February 1st. Applications are usually due during the first week of June.

Competition Week: TBD - Usually in October

Students in grades 6 to 8 who have been nominated through an SSP Affiliated fair are eligible. These science & engineering fairs are provided the opportunity to nominate their top 10% of 6th, 7th and 8th grade students for this national competition. Nominees will then need to complete an online application by the application deadline to compete at the national level.

- Top 300 Projects: Receive an award ribbon, a *Science News* family subscription, a Broadcom MASTERS backpack and decal, and a leather-bound Invention Journal, courtesy of The Lemelson Foundation.
- Top 300 Teachers: Receive a Broadcom MASTERS tote bag, a one-year digital subscription to Science News magazine, and the special edition booklet of Invention and Innovation articles from Science News for Students, courtesy of The Lemelson Foundation.
- Finalist: All finalists receive \$500, an all-expenses paid trip to Washington, DC for themselves and a parent or guardian and the opportunity to win more awards including:
- o **\$25,000 Samueli Foundation Prize** in honor of overall STEM excellence The Rising Star Award, which includes a trip to attend Intel ISEF and represent the U.S. at Broadcom MASTERS International
- o **\$10,000 Robert Wood Johnson Foundation Award** for Health Advancement
- o \$10,000 Marconi/Samueli Award for Innovation
- o **\$10,000 Lemelson Award for Invention**, sponsored by the Lemelson Foundation
- o **1st place STEM awards** awarded in Science, Technology, Engineering, and Math categories, which include a \$3,500 stipend for a summer camp of the winner's choice and an iPad
- o **2nd place STEM awards** awarded in Science, Technology, Engineering, and Math categories, which include a \$2,500 stipend for a summer camp of the winner's choice and an iPad
- o **The Rising Star Award**, which includes a trip to attend Intel ISEF and represent the U.S. at Broadcom MASTERS International

Other Information:

Broadcom MASTERS[®] (Math, Applied Science, Technology and Engineering for Rising Stars), is the premier international middle school science and engineering fair competition. A program of the <u>Society for Science & the</u> <u>Public</u> sponsored by the Broadcom Foundation, Broadcom MASTERS participants reap the benefits of project-based learning, collaboration with teachers, mentors and professional scientists and engineers.

New Mexico -> Enter on the national site.



| Program Name: | m Name: Junior Science and Humanities Symposium (JSHS) | |
|---------------|---|--|
| URL: | http://www.jshs.org/ | |
| Location: | Regional, with a National Symposium. | |
| Dates: | Regional Dates Vary; National Symposium: Late April / early May | |
| | | |

All students in grades 9-12, enrolled in public, private, or home schools within the area served by the JSHS regional symposium are eligible. Investigations reporting on experimental, field, observational, or applied research are eligible. Students attending school in the United States, Canada and Germany

Prizes:

Students who participate in regional and national symposia receive public recognition and certificates and \$500 is awarded to one teacher at each of the 48 regionals, honoring their contribution.

For the regional finalists...

- An expense-paid trip to the National JSHS, awarded to five finalists at each regional symposium. The National brings together over 360 participants for educational and scientific exchange.
- A total \$4,500 in undergraduate, tuition scholarships, awarded at \$2000, \$1500, and \$1000 to each of three regional symposium finalists
- An invitation to present their original research investigation at the National JSHS, awarded to the 1st and 2nd place finalists at each regional symposium. The 3rd, 4th, and 5th place regional finalists will present their research in the poster competition to compete for cash awards.

For the <u>national finalists</u>...

- A total of \$192,000 in undergraduate tuition scholarships is presented to the top three finalists in the National Symposium research paper oral competition in each of the subject categories.
- Each of the 1st Place finalists receives \$12,000
- Each of the 2nd Place finalists receives \$8,000
- Each of the 3rd Place finalists receives \$4,000
- A cash award in the amount of \$350 will be presented to the top finalists in the National Symposium research poster competition in each of the subject categories.

Other Information:

Interested students and their teachers are encouraged to <u>contact the JSHS regional symposium director</u> in their area to obtain application guidelines and materials and be prepared to:

- 1. Submit a written report (e.g. abstract and/or paper) of the original research investigation for review by a regional panel of judges;
- 2. Submit a "Statement on Outside Assistance," reporting on the student's independent contributions to the research problem, and reporting that proper procedures and protocols were followed in the conduct of research involving vertebrate animals or human subjects;
- 3. Deliver a concise oral presentation to the symposium; complete registration and/or application materials;
- 4. Comply with regional and national rules and policies that apply to the preparation of the written reports and the oral presentations.
- 5. While review or library research is a part of the research process, these investigations alone are not appropriate.

New Mexico -> https://stemed.unm.edu/JSHS



https://www.reapnm.org/

| Program Name: | Google Science Fair |
|---------------|--|
| URL: | https://www.googlesciencefair.com/en/ |
| Location: | Online, International. |
| Date: | Was not held in 2019-2020 school year. TBD for this school year. |
| Prizes: | |

179 prizes and awards including:

- Grand Prize Winner: One Finalist from the Finalist Awards will be determined as the Grand Prize Winner and receives a \$50,000 in scholarship funding.
- The National Geographic Explorer Award*: The National Geographic Award for Natural Sciences and Environment will award one winner from the Natural Sciences Category.
- The LEGO Builder Award*: The LEGO Education Award for Engineering Innovation will award one winner from the Physical Design & Engineering Category.
- Scientific American Innovator Award*: The Scientific American Innovator Award will award one winner from the Pure Sciences Category.
- The Virgin Galactic Pioneer Award*: The Virgin Galactic Award for Space will award one winner from the Space & Physics Category.
- The Inspiring Educator Award recognizes an educator who has inspired students to participate in the Science Fair Competition.

Other Information:

All students must have an internet connection and a Google Account to participate. Projects must be in English, German, Italian, Spanish, or French. The final submission must include a summary, "About Me" page, research question/proposal, research steps, methods/testing and redesign, results, conclusion/report, and bibliography, references, and acknowledgements. Entries are judged on eight core criteria, which include the student's presentation, question, hypothesis, research, experiment, data, observations, and conclusion.

*\$15,000 scholarship and an experiential component

New Mexico -> Enter on the national site.



Program Name: BioGENEius Challenge

URL: <u>http://www.biotechinstitute.org/go.cfm?do=Page.View&pid=89</u>

Local and "<u>At-large</u>" for those geographically outside the boundaries of the locally-based regions (California Bay Area, California So Cal Area, Colorado, Delaware, Georgia, Illinois, Iowa, Kansas, Maryland, New Mexico, North Carolina, Pennsylvania, and Virginia). Students qualify for the National Challenge when nominated by their region, and can then qualify for the International BioGENEius challenges.

Dates: Regional Dates Vary; National and International competitions are in June.

Students attending school in the United States, Canada and Germany may apply. Students must be enrolled in biology or science-related courses (Grade 9 to 12) in any public or private school and home schools.

Project must have a biotechnology application. Individual students only, may submit one project for this competition. Research presented must be NEW research. Only a 12-month project that occurred within the last 18 months before this year's International BioGENEius Challenge is allowed.

Prizes:

- Local and At-Large BioGENEius Challenge winners will receive a trip to compete in the U.S. National BioGENEius Challenge and an invitation to attend the BIO International Convention.
- U.S. National BioGENEius Challenge winners will get to advance to the International BioGENEius Challenge to compete for top prizes in Global Healthcare, Global Sustainability and Global Environment BioGENEius Challenges.
- Winners of the Global Challenges are awarded cash prizes at the prestigious BIO International Convention.

Other Information:

The BioGENEius Challenges provide high school students the opportunity to compete and be recognized for outstanding research in biotechnology. Students have the opportunity to apply and compete for top honors in the Global Healthcare Challenge (Medical Biotechnology), the Global Sustainability Challenge (Agricultural Biotechnology) or the Global Environment Challenge (Industrial/Environmental Biotechnology).

New Mexico -> michael@maasbiolab.com



| Program Name: | FFA AgriScience Fair | |
|---------------|--|--|
| URL: | https://www.ffa.org/agrisciencefair | |
| | https://ffa.app.box.com/s/cf4o9vs85ieer7z5xqcin17raji0tvgp/file/289991234870 | |

Regional and National.

Dates:

Regional dates vary, National applications due July 1st.

Participants must be in 7th -12th grade, and a current dues-paying FFA member. They must conduct a scientific research project pertaining to the agriculture and food science industries, and present their findings to a panel of judges with a display and a report.

Prizes:

Each participant is given a gold, silver or bronze rating and receives a pin. Cash awards are contingent upon available funds.

Other Information:

Students selected as one of the top 12 in their respective category and division are invited to attend and compete at the National FFA Convention & Expo. While there, students put up a display showcasing their project and interview with a panel of judges. After all students have been interviewed, written report scores are then combined with convention interview scores to calculate the overall ranking of projects within each category and division. Each participant is ranked gold, silver or bronze and receives a pin.

Students can compete in the national AgriScience fair in one of six categories: Animal Systems; Environmental Services/Natural Resource Systems; Food Products and Processing Systems; Plant Systems; Power, Structural and Technical Systems; Social Science.

To qualify for the national AgriScience fair, students must:

- Be in grades 7-12
- Conduct a scientific research project pertaining to the agriculture and food science industries and present their findings to a panel of judges with a display and a report.
- Be selected as the state winner at their state AgriScience fair.
- Be declared by the state FFA association by June 1 through FFA.org.
- Be certified by the chapter advisor by July 10 through FFA.org.
- Submit their full written report and application to the National FFA Organization postmarked by July 10.
- Be selected as one of the top 12in their respective category and division.

New Mexico -> enter through school's FFA Chapter



| Program Name: | eCYBERMISSION |
|------------------------|---|
| URL: | https://www.ecybermission.com/ |
| Regional and National, | online. |
| Dates: | Application opens in early August. Application closes early March. National Judging |
| | and Educational Event held mid-June. |

Students must be enrolled in either 6th, 7th, 8th or 9th grade at a U.S.-based public or private school, a Department of Defense Education Activity (DoDEA) school abroad or a U.S.-based home school. All students must be a U.S. Citizen or a Lawful Permanent Resident in order to participate in the competition. Students compete in Teams of three or four students overseen by a team advisor. Team Advisors must be a teacher, coach, counselor, or leader in a youth organization and at least 21 years of age. Team Advisors must have access to an active email account. A parent may serve as a Team Advisor as long as the parent is known at the student's school/organization and has education or youth leadership experience while also meeting the other eligibility requirements of a Team Advisor. All students and Team Advisors who wish to participate must register and have a complete team prior to the close of registration. A Team Advisor may register more than one team. All registered teams must be complete and registered by the close of registration in December **Awards:**

National Awards:

- First-Place National Winners \$5,000 U.S. Series EE Savings Bonds at maturity per student.
- Regional Awards:
- All regional finalists \$1,000 U.S. Series EE Savings Bonds (at maturity) per student.
- First-Place Regional Winners Additional \$2,000 U.S. Series EE Savings Bonds at maturity per student and an all-expenses paid trip to the Washington DC Metropolitan Area to compete for the First-Place National Award.
- State Awards:
- First-Place State Winners \$1,000 U.S. Series EE Savings Bonds at maturity per student.
- Second-Place State Winners \$500 U.S. Series EE Savings Bonds at maturity per student.
- Honorable Mention Awards Award certificate.

Other Information:

eCYBERMISSION is a web-based Science, Technology, Engineering and Mathematics competition for 6th, 7th, 8th and 9th grade teams. Teams propose solutions to real problems in their community and compete for State, Regional and National Awards.

Teams select one of seven "Mission Challenges" to address through the submittal of their "Mission Folder" (research project). Mission Challenges include: Alternative Sources of Energy, Environment, Food, Health & Fitness, Forces & Motion, National Security and Safety, Robotics, and Technology.

New Mexico -> enter through main site.



| Program Name: | National American Indian Science & Engineering Fair (NAISEF) |
|-----------------------|---|
| URL: | https://fairs.aises.org/naivsef |
| In-person and Virtual | |
| Dates: | Online Registration, November - February. In-person & virtual Fair held in late March/early April |
| | |

American Indian, Alaska Native, and Native Hawaiian (AI/AN/NH) students in 5th to 12th grade can participate in one of two divisions.

Junior Division: grades 5-8

Senior Division: grades 9-12

- 5th to 12th grade students, who have not reached age 20 on or before May 1 •
- MUST be AISES members ٠
- Projects may be submitted by individual students or teams of up to three students •
- At least one team member must be AI/AN/NH •
- Project must cover research done over a maximum, continuous 12-month period between January and May •

Each participant (whether an individual or team) must have one adult sponsor (either a parent, teacher, or mentor) • Awards:

AISES awards cash prizes to the winners of each division. Additionally, the Grand Award winner for the Senior Division receives a chance to participate in the International Science & Engineering Fair (ISEF). Travel and registration are paid by AISES.

Other Information:

All students who register for NAISEF must follow ISEF International Rules & Guidelines regulations and will submit ISEF forms. Registrations are considered complete when all forms and documents have been completed and uploaded.

New Mexico -> enter through regional program.

Note: students cannot enter their projects in BOTH a NAISEF and a region ISEF-affiliated research competition.



| Program Name: | New Mexico Junior Academy of Science |
|---------------------|---|
| URL: | https://www.nmas.org/junior-academy-of-science.html |
| Location: | In-person at regional and state levels |
| Dates: | Online Registration, November - February. In-person & held between February & April |
| Program Description | |

Program Description

The New Mexico Junior Academy of Science (NMJAS) promotes student research, participation in science fairs, and an annual written and oral technical paper competition. Science education has focused primarily on the background and tools necessary to do scientific research, but there is little emphasis on writing about and orally presenting the results of research. The NMJAS paper competition was instituted as a means of aiding and encouraging young scientists in the written and oral communication of the results of their research. The NMJAS encourages students to participate in this competition, through which they have unique opportunities to learn a crucial part of scientific work: communicating their work to others.

Prizes: First and second place winners in each division at their Regional Fairs are awarded \$150 and \$100, respectively and are eligible to compete at the State Competition. First, second, and third place awards at the State Competition are \$250, \$150 and \$100.



| Program Name: | New Mexico Governor's STEM Challenge |
|---|--------------------------------------|
| URL: | https://newmexicostem.org/ |
| Location: | Showcase at UNM in Albuquerque |
| Dates: | January 20, 2024 |
| Deadline to RSVP is October 27th. Must be registered for the Challenge to RSVP. | |

Program Description:

2023 CHALLENGE QUESTION

Now that we live in a post-pandemic world, how can we improve overall mental, physical, or relational health and wellness in our homes, schools, and communities through the use of science, technology, engineering and math (STEM)?

Challenge Question Overview

The New Mexico Department of Workforce Solutions, the New Mexico Public Education Department, and New Mexico State University, encourage all NM high school students who are enrolled in STEM courses to address the 2nd Annual Governor's STEM Challenge Question through innovation, application, and strategic initiative.

Students and high schools who take on the Challenge will construct a project model demonstrating the application of the question and how it relates to real-world problems/solutions. High School STEM class curricula will be illustrated through case study methodology and co-curricular learning tools.

Teams will consist of a maximum of 10 students and 2 teacher mentors who will submit a solution proposal in addition to presenting at the Virtual Statewide STEM Showcase on December 3rd.

Projects will be judged by Participating NM industry employers on the basis of: Quality Degree to which answers demonstrate necessary skills associated with NM STEM organizations.

Award winning teams \$5,000 (\$500/student)

