Science and Engineering Fair of Metro Detroit

September, 2025 69th Annual Science Fair Volume 23, Issue 1 Kathy Kitzmann & Tim Fino, Fair Co-Directors



The MISSION of the SEFMD is to create student excitement for STEM (Science, Technology, Engineering, and Mathematics), inspire interest in scientific subjects and research, develop respect for the scientific method, encourage personal growth, provide

recognition for student

research, and broaden

career opportunities

across Metropolitan

Detroit and the region.

What is the SEFMD?

The Science and Engineering Fair of Metropolitan Detroit (SEFMD), established in September 1956, is a nonprofit organization established to give students in southeastern Michigan an opportunity to develop and exhibit science fair projects.

What is a science fair project?

A project is an investigation of a topic requiring a student or team of students to:

- design an experiment,
- analyze observations, and
- arrive at some new conclusion.

A finished project should consist of:

- a logbook,
- a report, and
- a visual display of the student's work.

The Science Fair competition reinforces the scientific method in completing a The concepts of creating an project. hypothesis, initial developing prove/disprove experiment to the hypothesis, keeping a 'log book', and formulating conclusions form framework for years to come, whether a student chooses a technical field or not. Students learn to develop the art of presenting a concept and 'selling' or explaining that concept to professionals in the field. Furthermore, they can earn the recognition and awards that go with completing a project successfully.

If your school does not participate in the Science Fair, maybe you should consider adding it -- for the students!

WHO may enter the science fair?

- The SEFMD competition is open to all 3rd-12th grade students who live in or attend school in the counties of Lenawee, Livingston, Macomb, Monroe, Oakland, Washtenaw, and Wayne.
- Students may be from public, private, parochial, charter, or home schools.
- Competition is separated into three groups: Elementary Division (3rd-5th graders), Junior Division (6th-8th graders) and Senior Division (9th-12th graders).
- Students may enter as an individual or as part of a team (2-3 people; up to 10 people for Elementary).
- School Quota: For the 69th SEFMD, all schools may send up to 60 PROJECTS to the Science Fair. A school in the Junior Division may enter up to FOUR team projects, as part of its quota.
- A student may compete in a variety of categories, depending on their Division. The student should select his or her project category carefully. A complete description of the categories Is available on the science fair website. (Entry Form Info → Category Descriptions)

- Students enter the competition through the schools they attend. Each school completes the affiliation process on the home page of the science fair website and pays the school affiliation fee of \$75. The fee is discounted to \$25 if paid before 12/1 AND if the school commits to contributing volunteers to help during the week of the Fair.
- After a school is affiliated, students will also register online. Watch for links on the home page of the science fair website. See additional information in the next article on "how to enter the science fair"!
- The 2026 Fair will be an In-Person fair. All students will be asked to prepare a display board for the in-person judging and will have the option of uploading additional items, such as pictures, a pdf of the presentation, video, etc. . See "What's Due When" on the home page of the website for details.

Major Events Calendar

October/November -Mentoring Sessions via Zoom; Students may begin entering online

Dec 1, 2025 - SRC deadline; school affiliation deadline

Feb 20, 2026- All entries due ON LINE; any optional materials must also be submitted

Feb 23 - Teachers emailed notices

Mar 6 - Preliminary judging occurs of professional awards

Mar 17 (9AM-7PM) Project Set-up

Mar 18 (8AM-5PM)
In-person Judging

Mar 19-20 (9AM-7PM)
Public Viewing
"STEAM SLAM"
activities

Mar 19 (5PM-7PM)
Project Removal

Mar 20 (9AM-11AM) Project Removal

May, 2026
ISEF, Phoenix, AZ

HOW to enter and compete in the science fair

- (1) The student (or team) develops a research plan (planned experiment). Senior division students complete a Research Plan, Checklist for Adult Sponsor (1), Student Checklist (1A), and Approval Form (1B). These forms can be found on the website under the Forms/Documents heading.
- (2) The student (or team) completes additional required SRC (Scientific Review Committee) paperwork (if needed) by the deadline on the calendar.
- (3) The school affiliates on-line. The cost is \$75/school (discounted to \$25 if paid by 12/1 and if the school commits to providing volunteers during the week of the Fair).
- (4) The student (or team) completes the online entry/registration form by February 20, 2026. The cost is \$25/project, which is billed to the school. As part of the entry form the student must write an abstract, summarizing their project. See the website under General Info → How to write an abstract.
- (5) Students have the option of submitting additional online materials which may be

used by professional award judges. These items will also need to be submitted by February 20, 2026.

- (6) Students and teachers are notified if projects are accepted for competition.
- (7) Students complete experimentation work and prepare their reports and project displays. Follow the Display and Safety Guidelines found on the website, under the Forms/Documents heading.
- (8) Students bring their project displays to Huntington Place on Tuesday, March 17. All online presentations and display boards must be approved by the Display and Safety Committee.
- (9) Projects will be judged in person on Judging Day, Wednesday, March 18. The top Senior Division projects will be interviewed by the judges and students must be present. (Junior teams may also have interviews.)
- (10) Judging results are usually posted by midnight of judging day on the website.

Do You Need Additional Forms? Animals? Humans?

Projects that use vertebrate animals, human subjects, human or animal tissue, recombinant DNA, pathogenic agents or are continuation projects require additional forms. These forms may be obtained from the web site under the Forms/Documents heading.

All of these forms must be completed <u>before</u> beginning your project. In addition, the student **must enter online** before submitting the forms.

Senior Division students (grades 9-12) must submit these forms online by Dec. 1 in order

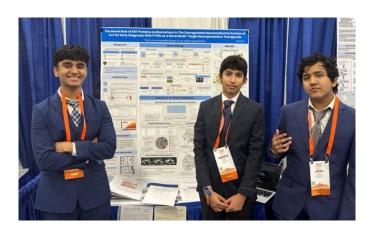
to receive **pre-approval** from the Science Fair's SRC. Projects involving human subjects must first be approved by the school's IRB, followed by the fair SRC.

Junior Division students (Grades 6-8) should submit these completed forms online by February 20. SRC pre-approval is not needed. School IRB approval is required for work with human subjects.

Elementary Division students (Grades 3-5) should not plan to carry out projects that use vertebrates, humans, tissues, DNA, and pathogenic agents.

MSEF & ISEF Grand Award winners -

Aryav Das, Samarth Dunakhe, & Arnav Sharma



TOP AWARDS

Elementary and Junior Divisions Grand Award (top 6 students and top team) - medal, certificate 1st-3rd place (~20%) - certificate Blue (outstanding) ~20%, certificates Green/Red - all other participants

Senior Division

Grand Award (top 6 students and top team) - medal, certificate; participate in state science fair; may be sent to International science fair; scholarships; may compete for Weizmann award

1st-3rd place (~20%) - certificate, may be invited to participate in state science fair

Various special awards are given at the Fair by technical societies, professional associations and institutions, governmental agencies, and businesses. These are in addition to the category awards given by the Fair itself.

At the 2025 SEFMD, the value of all awards given including scholarships, was close to \$100,000. The particular awards are varied: plaques, books, certificates, company dinners and recognitions, cash awards and savings bonds. A four-week trip is awarded to attend the Weizmann Institute in Israel.

MSEF/ISEF

The 32nd Annual Michigan Science and The Engineering Fair (MSEF) will be held on April 11, 2026 at Lawrence Technological University. All Senior Division 1st place winners and some State Fair. Students from other parts of the state may also participate in the state fair. State fair participants will be competing for state fair awards.

International Science Engineering Fair (ISEF) will be held in May, 2026, in Phoenix, AZ, and will be an in-person fair. Up to six individual Division Projects and one team project selected 2nd place and 3rd place winners will be selected at the Metro Detroit will be invited to participate in the Fair to compete at the ISEF. Over \$2 million in awards and scholarships will be presented.

Senior Grand Award Winners for 2025

The following students were Grand Award winners at the 2025 SEFMD and were able to participate in the inperson ISEF. (See the back page for ISEF results). We congratulate them for their success at the SEFMD!

Mara Hammoud and Lara Hammoud (grade 11), Detroit Country Day School, Cellular and Molecular Biology

Haodong (Ryan) Wei (grade 11). Cranbrook Kingswood Upper School, Robotics and Intelligent Machines

Joshveer Greewal (grade 12), Northville High School, Mathematics

Dean Jordan (grade 10), International Academy - West, Systems Software

Divya Nema (grade 10), Novi Senior High School, Earth and Environmental Sciences

Sunny Rong (grade 11), Greenhills

School, Energy: Sustainable Materials and Design

Ahyoung Song (grade 10), International Academy - East, Computational Biology and Bioinformatics

The following students were Grand Award winners at the 2025 MSEF, held at Lawrence Tech University, and also participated in the ISEF.

Arnav Sharma, Aryav Das, and Samarth Dunakhe (grade 10), International Academy - East, Park Tudor School (Indiana), Arizona Prep High School (Arizona), Computational Biology and **Bioinformatics**

Nathan Ma and Samer Rahman (grade 11), Detroit Country Day School, **Embedded Systems**

CONGRATULATIONS to all of these students!!

Judging - 3 Phases

1-Entry Form

- is received on time
- is completed correctly
- is a project-not a book report
- complies with SRC/IRB preapprovals (if necessary

2-Judging - Preliminary Round & Prof. Awards

- Online for all divisions

3-Judging - Final **Rounds**

- Interviews (Sr)
- Possible Interviews (top Jr. Teams) - TBD
- Stand alone (Jr/Elem)
- Selection of ISEF Finalists (Sr)
- Selection of Jr **Grand Awards**

Scoring/Judging

10%-Research Question 15%-Design/Methodology 20%-Execution 20%-Creativity 35%-Presentation 10%-Board 25%-Interview

SEFMD VALUES -S.E.A.R.C.H.

S cientific method **E** mpowering **Experience** A ccess for A ll R ecognition C reativity and C onfidence H ighest Integrity and Ethical **Behavior**



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GRAND AWARD - Winning SCHOOLS (2022-2025)

A.L. Holmes Elementary/M.S. (2025) Allen Park High School (2022) Baker MS (2024) Bates Academy MS (2024) Boulan Park MS (2022, 2025) Canton High School (2024) Clague Middle School (2022) Clippert Academy M.S. (2022, 2024) Cranbrook Kingswood Upper (2022-2025) Dakota High School (2023) Davis Aerospace Technical H.S. (2022-2023) Dearborn Center for Math, Science, and Technology (2022) Detroit Country Day Upper School (2022-DPSCD Virtual School (2022) Foreign Language Immersion & Cultural School (2025)

Greenhills School (2024-2025) Huda School and Montessori (2023) Huron High School (2022-2024) Indus Center for Academic Excellence (2025)International Academy (2022-2023, 2025) Larson Middle School (2022-2025) Northville High School (2025) Novi Senior High School (2023, 2025) Oakland Christian M.S. (2025) Pasteur Middle School (2023) Pleasantview Elementary (2025) Plymouth Scholars M.S. (2022) Roeper Elementary School (2023, 2024) Star International Academy (2024) St. Patrick Elementary (2023) Tawheed Center School (2023) Troy High School (2022-2024)

INTERNATIONAL SCIENCE FAIR RESULTS

Gompers Elementary/M.S. (2024)



The Regeneron International Science and Engineering Fair (ISEF) was held in May, 2025, in Columbus, OH, and the senior grand award winners from SEFMD and MSEF (whose names are given on the previous page) participated in ISEF. The awards received at the ISEF were as follows.

Arnav Sharma, Aryav Das, & Samarth Dunakhe, 1st place (\$6000) category award in Computational Biology and Bioinformatics. Arnav, Aryav, and Samarth were the first three-person team from three different states to compete at both the MSEF and the ISEF!

Nathan Ma & Samer Rahman, 4^{th} place (\$600) category award in Embedded Systems.

Maya & Lara Hammoud, 3rd place (\$1200) category award in Cellular and Molecular Biology; \$1000 first place award from TUBITAK (the Scientific and Technological Research Institute of Turkiye).

Haodong (Ryan) Wei, 4th place (\$600) category award in Robotics and Intelligent Machines and the 2nd place (\$600) from the Patent and Trademark Office Society.

(The photo above includes the three students from the SW Michigan Science Fair in Kalamazoo: Suraj Dixit, Claire Tong, and Aanya Goel).

GRAND AWARD Winners - Elementary/Middle School

Gabrielle Clark, Candice Kassab, Adrianna Malone-Perkins, Mila Nguyen, Aaditya Singh, Varun Swamy and Brielle Turner were the students who won Grand Awards in the Elementary and Middle School Divisions at the 2025 SEFMD. Congratulations to all of these students! See you at the 2026 Fair!