

# IJAS NEWSLETTER

October  
2025



## Interview with Dr. Periyannan

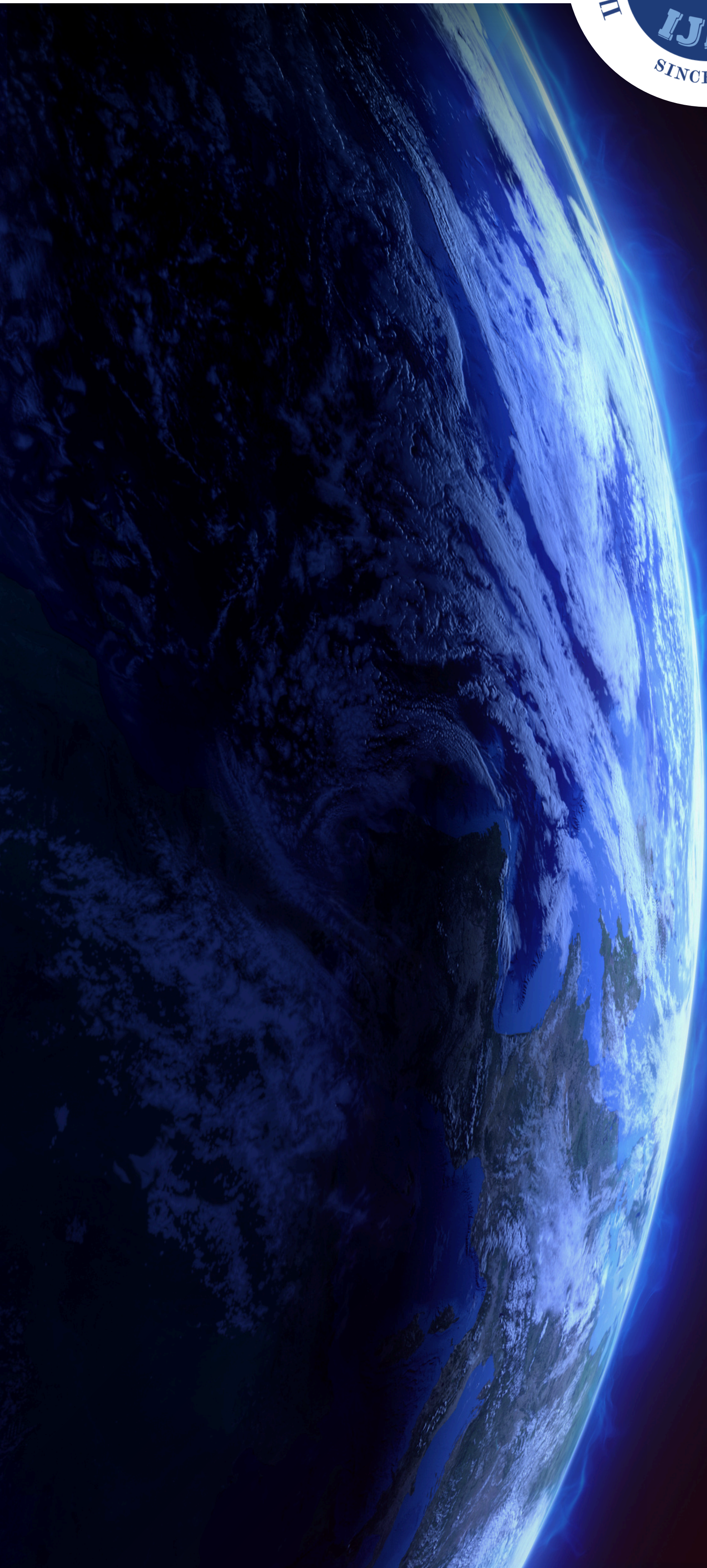
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## How to Qualify for ISEF and Thermofisher Awards

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# IJAS MISSION

The Illinois Junior Academy of Science exists for the benefit of students in the State of Illinois. The process students follow for IJAS gives them some insight into the problems and methods of thinking that are particular to the scientist. This process encourages these students to find information concerning new investigations and discoveries in science. It allows students a chance to use and gain an understanding of scientific equipment. Science fair gives reason for students with a special interest in science to go beyond the classroom curriculum and develop their own investigation(s). IJAS encourages students in their progress toward a career in science, technology, and engineering.

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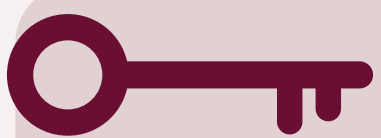
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2026  
IJAS  
State  
Science  
Exposition  
April 24-25



Theme of State Exposition:

Driven by Discovery :  
Research is Key



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# An Interview with Dr. Gopal Periyannan

Anda Wattanakit



Periyannan, G. (2025). [Photograph].

**D**r. Gopal Periyannan, a professor of chemistry and biochemistry at Eastern Illinois University kindly gave me an opportunity to talk with him last month about his role as a professor at Eastern Illinois University (EIU), as well as his research projects.

As an undergraduate student, Dr. Periyannan majored in chemistry. After receiving an honors degree from the University of Peradeniya, Sri Lanka, which extended for four years instead of a typical three year program, he decided to pursue a Ph.D at Miami University in Oxford, Ohio. He went on to receive his postdoctoral training at Medical College of Wisconsin in Milwaukee. Dr. Periyannan later joined Eastern Illinois University in 2006.

When asked about his decision to become a faculty member of

Eastern Illinois University, Dr. Periyannan said he was drawn to EIU because it is an active research university with students and faculty deeply engaged with what they work on. The administrators are also very supportive of the faculty and students to promote research and scholarly activities. Currently, Dr. Periyannan is overseeing two research projects. The first project involves bacteria called *Caulobacter crescentus* that have a metabolizing ability to break down toxic carbon compounds into nontoxic metabolic intermediates or other compounds that are metabolically or industrially important processes. This breaking down of toxic chemicals into benign chemicals by *C. crescentus* can be used to help clean up toxic industrial waste.

*“Stay curious.  
Stay motivated.”*

The second project studies Glutamate Carboxypeptidase II (GCPII), an enzyme that is found in humans and many organisms. Dr. Periyannan’s lab uses *C. elegans*, a tiny nematode, to investigate how tissue-specific GCPII functions, especially its interaction with the lipid environment of the plasma membrane. Dr. Periyannan’s advice for finding a research topic is to learn and form questions that have not been answered. Then, students can form a hypothesis.

For example, in the *C. crescentus* research, one may start by asking what makes it possible for *C. crescentus* to survive in the toxic environment that is fatal to other organisms. Similarly, in the GCP II project, Dr. Periyannan started to observe how researchers did not know much about its function which varied in different tissues. He decided to investigate the topic further by developing a hypothesis and designing experiments to prove it. “There is no shortage of questions. Doing research requires enthusiasm, perseverance, and motivation to go after those questions,” said Dr. Periyannan. Collaboration and patience are also important in doing research. “It is a shared project to which everyone can contribute bits and pieces. It is a process in progress. It is not built overnight. It is a long term effort,” said Dr. Periyannan. He added that sometimes things do not go as planned, but the unexpected situation opens another opportunity to more revision and further investigation. It involves repeating the experiment many times to make sure the data is correct.

Before ending the interview, I asked Dr. Periyannan for his advice to young scientists like our IJAS student participants. He said, “**Stay curious. Stay motivated.** If you have a passion for science, you need to reach out and explore your opportunity.”

*“There is no shortage of questions. Doing research requires enthusiasm, perseverance, and motivation to go after those questions”*

# IJAS Student Participant Spotlight:

## Traian Matsumoto

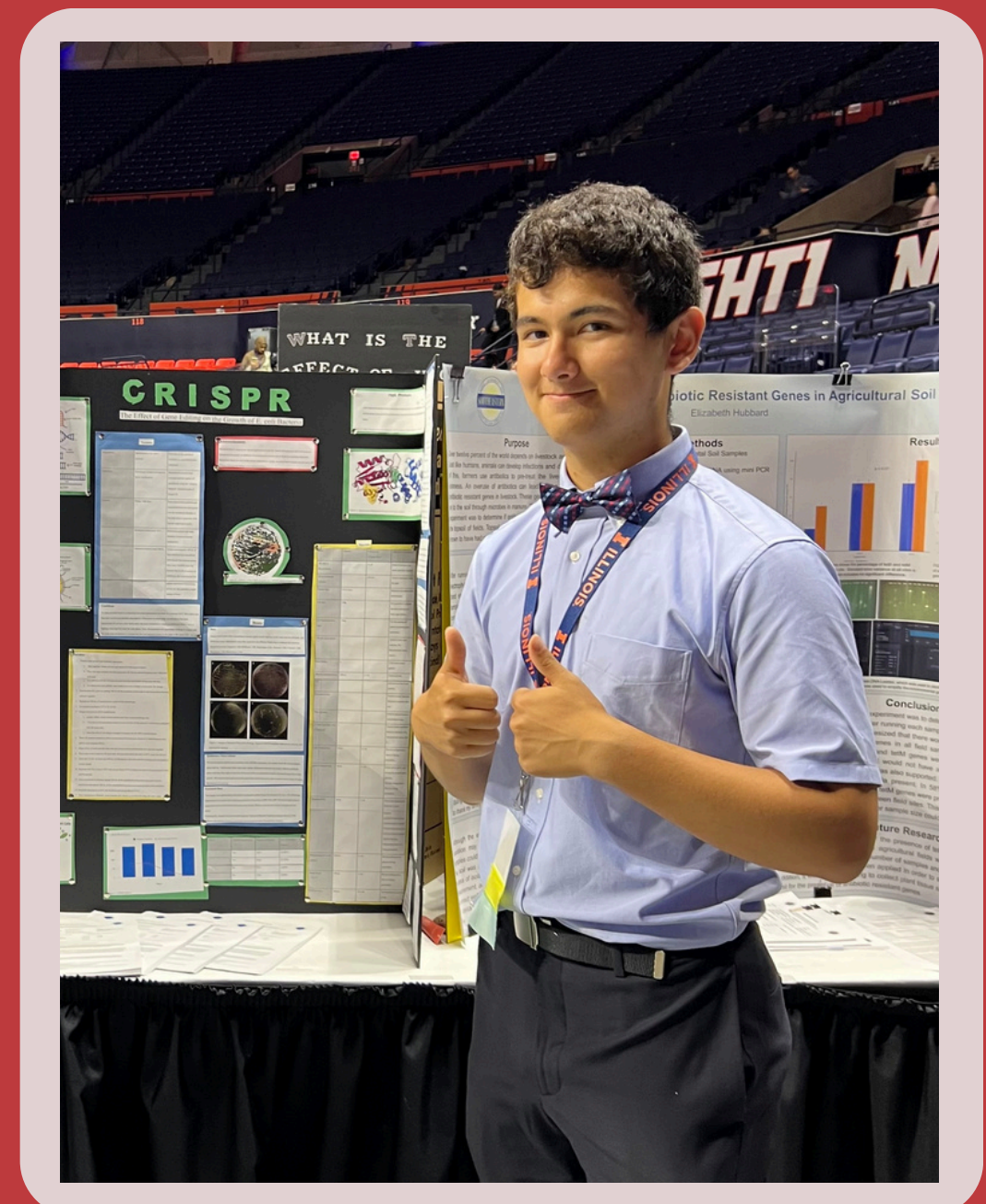
Annette Kang

For this issue of the IJAS Newsletter, we had the opportunity to interview one of our IJAS student participants, Traian Matsumoto. Traian is a Senior at Richwoods High School in Region 1. He joined IJAS in the Fall of 2024 and was a first-time participant in IJAS this past Spring in 2025. We welcome him into our community! When asked about his experiences with STEM, he said that he likes robotics and biology. Before joining IJAS, he had mostly only participated in smaller competitions, such as Olympiad-type competitions, but not anything experimental. IJAS gave Traian an opportunity to be innovative with his science research.

Traian's research project for IJAS this year is in the category of Microbiology. His idea is to find the effects of various antibiotics, such as plant-based tinctures and household items, and test their effectiveness against two types of bacteria: *E. coli* and *Pseudomonas fluorescens*. The reason why he chose this topic is because antibiotic resistance is becoming a more serious problem every year, so he wanted to observe some natural methods to fight bacteria.

When asked what he thought about the IJAS State Exposition, Traian said, "It was really cool because I got to meet a bunch of people who were interested in the same topics. I got lucky because the person next to me was really talented, and she did a lot of research. I was inspired by her. I just really like the environment and the atmosphere of the exposition."

Through IJAS, Traian had the opportunity to talk with other students about science research, and learn from them as well. One thing that Traian is looking forward to accomplishing through IJAS this year is improving his research skills, since he is planning to do a lot of undergraduate and graduate research in the future. Traian wants to build skills for topics such as microbiology and molecular biology, and would like to familiarize himself with utilizing and maintaining all of the equipment during his



Baumgardner, J. (2025, May 2). [Photograph].

experimentations. He says that last year he was doing a lot of things for the first time, but being involved in IJAS provided him with experience, helped him improve, and gave him more confidence in doing a science experiment. As Traian was a first time participant, we thought it would be interesting to hear what advice he has for newcomers and other first-time student participants. He says, "It's really school dependent, and how much support you have for your projects in your school. For me, I was able to get a lot of support from my teacher, and my teacher was able to help me out on a lot of things. But I think it's really important to focus on something you want to do, because if you want to do a really good project, you're gonna have to spend a lot of time on it. And you don't really want to be spending that much time on something you're not really passionate about." We thank Traian for his insights and hope he will continue to learn and enjoy his research through IJAS. We also wish him luck on his next project!

*"I just really like the environment and the atmosphere of the exposition."*

~ Traian

# IJAS

is

a...



**Regeneron**

**ISEF-**

**affiliated**

**Fair!**

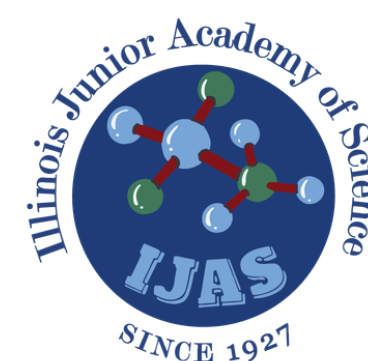
# How to Qualify for ISEF and Thermo Fisher Science Competitions

## REGENERON ISEF

- Must be in 9th-12<sup>th</sup> grade.
- Must compete in a Regeneron ISEF affiliated science fair (i.e.: IJAS) and win the right to attend Regeneron ISEF.
- For a complete set of rules and guidelines, please review the [International Rules for Precollege Science Research](#).



## Thermo Fisher Scientific Junior Innovators Challenge (JIC):



- Must compete in a Society affiliated science & engineering fair.
- Be nominated to the top 10% of 6th, 7th and 8th grade participants for this national competition through their judging procedures.
- Nominees then need to complete an online application for a chance to compete at the national level.

*ISEF FAQ*. (2025, July 31). Society for Science. <https://www.societyforscience.org/isef/faq/>  
*Eligibility and Important Information*. (2024, August 23). Society for Science. <https://www.societyforscience.org/jic/eligibility-and-important-information/>

# IJAS Poster Guidelines

Samarth Donapati

- Every source of information used in your project must be properly cited. This includes books, websites, articles, and any data collected from secondary sources.
  - Include a bibliography on your poster and reference materials.
- Citation style (APA) Be sure to follow the correct format.
- Projects that involve hazardous chemicals, biological materials, or any risky procedures must follow specific safety guidelines. Ensure you have appropriate safety equipment (gloves, goggles, etc.) and permissions through the safety sheet submission
- Posters should clearly present your hypothesis, methodology, results, and conclusion.
- Avoid overly dense text. Use bullet points, graphs, and visual aids to convey your information effectively.
- Cite everything on your poster: Make sure you attribute images, graphs, and data properly.
- Your poster must fit within the designated space, 36 x 48 inches.
- The abstract must be on display with your poster (often placed at the top or near the project title).
- Keep track of deadlines for registration, preliminary paperwork, and any review or safety approval.
- Be Prepared! Judges will ask questions about your project, so be ready to explain your methods, findings, and why you chose your research topic.
- Be sure to practice a 2-3 minute explanation of your project that highlights the main points. Answer questions confidently and clearly.
  - Before the fair, practice explaining your project to friends or family so that you're ready for the interview portion with judge.
- Be prepared to answer any questions related to your research. Know your data, your results, and the implications of your findings.



# Upcoming Events

## October

### Intro to IJAS Webinar

October 9, 2025 - 4 pm

<https://us02web.zoom.us/j/84077035460?pwd=R8yVL1lutEpY8tebebejaBaXezNTK4.1>

Meeting ID: 840 7703 5460 – Passcode: 134020

### October IJAS Student Board Meeting

October 12, 2025 - 7 pm

### Intro to IJAS Webinar

October 14, 2025 - 4 pm

<https://us02web.zoom.us/j/84077035460?pwd=R8yVL1lutEpY8tebebejaBaXezNTK4.1>

Meeting ID: 840 7703 5460 – Passcode: 134020

### October IJAS Board Meeting

October 18, 2025 - 9 am

## November

### November IJAS Student Board Meeting

November 9, 2025 - 7 pm

### November IJAS Board Meeting

November 23, 2025 - 7pm



October 12<sup>th</sup>

6pm

November 9<sup>th</sup>

6 pm

December 7<sup>th</sup>

6 pm

January 11<sup>th</sup>

6 pm

## CONTACT LIST

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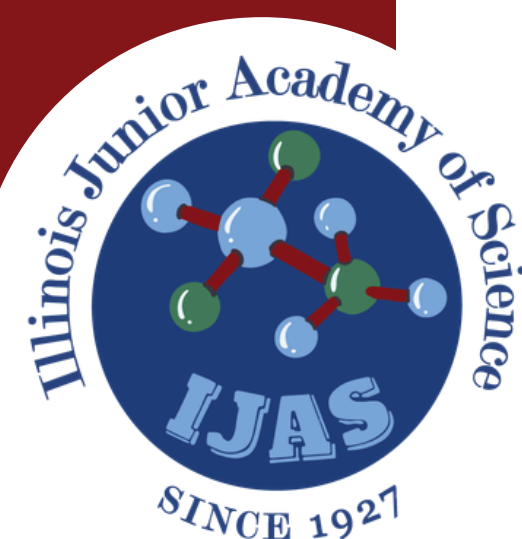
IJAS President-Elect

Brian Lewandowski

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# Regeneron Science Talent Search

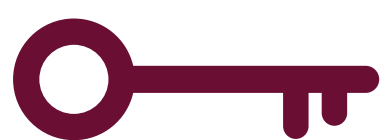
Caleb Gao



IJAS invites everyone to sign up for the 2026 Regeneron Science Talent Search. Every year, 2,500 students throughout the U.S. compete in this competition by submitting original research in various scientific fields. The competition takes place in Washington D.C. in March for the top 40 finalists. Competitors can win 250,000 dollars for first prize, meet other brilliant students, and gain practice in scientific research. This is a great opportunity for anyone interested in pursuing scientific research. Application deadline is November 6th, 2025 at 7pm CT. We look forward to seeing our IJAS students represent Illinois at the national stage! For more information, please go to [societyforscience.org](https://societyforscience.org).

## 2025-2026 IJAS Membership

IJAS school, club, and individual membership registration is now open for the 2025-2026 competition season. Please join or renew today.



[IJAS Registration Link](#)

## 2026 Regional Fairs

<https://ijas.org/Regional-Science-Expositions>

### Region 1

March 14

Western Illinois University

### Region 2

March 7 (*paper*)

March 14 (*poster*)

### Region 3

March 13<sup>th</sup> (*paper*)

March 14<sup>th</sup> (*poster*)

### Region 4 - TBD

### Region 5 - TBD

### Region 6 - TBD

### Region 7

March 30

Ramsey Junior High

### Region 8

TBD

Southern Illinois University

### Region 9

March 7 (*paper*)

March 14 (*poster*)

### Region 10

March 14

Lincoln Land Community College

### Region 11

March 7

### Region 12

March 21

Southwestern Illinois College

# How To Become An IJAS Donor

Contact Emily Dawson for further info or to discuss your donation, or make your direct donation online.



Have a love for science research of one of the 20 categories in IJAS?

Go to the IJAS website: [ijas.org](http://ijas.org)

Click on “Donors & Sponsorship”.

Click on “Donation Link” to make a direct online donation to IJAS. All gifts are tax-deductible.

Look through donor levels and follow the instructions below them to donate.

Thank you for your support!

# IJAS 24-25 Partners

## Platinum



UNIVERSITY OF  
**ILLINOIS**  
URBANA-CHAMPAIGN



**BRADLEY**  
University

**SIU**

CARBONDALE



## Gold



**Ameren**  
ILLINOIS



**EXPERIENCE**  
**CHAMPAIGN**  
**URBANA**

# Silver



Jay and Jeremy Hoffmann Memorial Fund



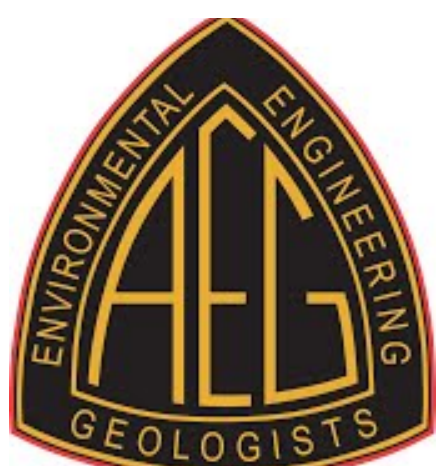
# Bronze

Kevin Keehn

Lokesh Family

Ali Uslu

Jann Hawkins



# EPIC



## Special Award



## Friends of IJAS

Bev Friend

Jonathan Langton

Jay Hoffman



museum of  
**science+industry**  
chicago