



Workshop #6 - Post-STEM Fair Activities

Presented by the GSDSEF SLB Outreach Committee



A decorative network diagram in the top-left corner, consisting of a complex web of interconnected nodes and lines. The nodes are represented by small circles, some of which are larger and have concentric rings, suggesting different levels of connectivity or importance. The lines are thin and gray, creating a mesh-like structure.

SLB Introductions!

A decorative network diagram in the bottom-right corner, similar to the one in the top-left. It features a cluster of nodes connected by lines, with some nodes being larger and more prominent than others, all rendered in a light gray color.

Agenda

Why continue your research?

How to go further: Taking your research to the next level

Mentoring time: ask our SLB members on their experiences in research beyond the fair!

Sustainability in Research

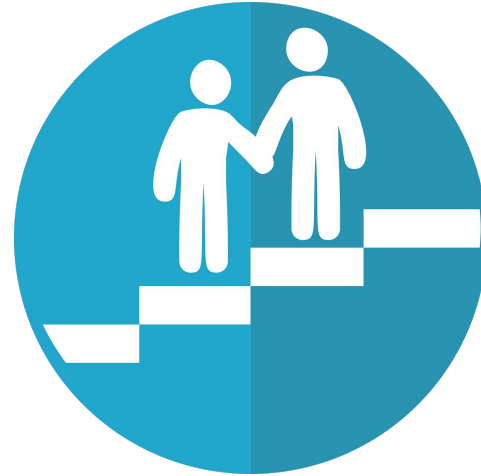
◎ Benefits of pre-collegiate research:

- Research skills
- Experience
- Connections
- College Applications
- Fun!!!



Continuing to Participate in Research

- ◎ Additional conferences/competitions
- ◎ Filing Patents or publishing in HS journals
- ◎ Continuation projects
- ◎ Research programs
- ◎ Getting a research mentor
- ◎ Taking a class
- ◎ Science clubs and societies



Competitions - Middle School

- ◎ 3M Young Scientist Challenge

3M

Young Scientist Lab

in partnership with: **Discovery**
EDUCATION™



- ◎ Broadcom MASTERS*



*must qualify through GSDSEF or CSEF

Competitions - High School

- ◎ JSHS(Junior Science and Humanities Symposium)
<https://www.jshs.org/>
- ◎ Google Science Fair (only happens some years)



- ◎ IYRS (International Youth Research Summit)
<https://www.helyx.science/iyr-s-ii>
- ◎ IYRS International



Competitions - High School

◎ BioGenius*



◎ ISEF (International Science and Engineering Fair)*



*must qualify through GSDSEF or CSEF

Competitions - Field Specific

- Stockholm Junior Water Prize



- Clean Tech Competition



Publications (engineering or science)

- ◎ **What:** condensing your research report and publishing in a journal
- ◎ **Why:** publications are the work of professional scientists!
- ◎ **How:** we recommend high school level publications
 - Journal of Youths in Science (JOURNYS)
 - National High School Journal of Science (NHSJS)
 - Canadian Science Fair Journal (CSFJ)
 - Be sure to read manuscript directions before submitting!

The logo for JOURNYS, featuring the word "JOURNYS" in a bold, teal, sans-serif font. The letter "O" is stylized with a horizontal bar through its center.

JOURNYS

The logo for the National High School Journal of Science (NHSJS), featuring the acronym "NHSJS" in a large, bold, black, serif font. Below it, the full name "The National High School Journal of Science" is written in a smaller, black, sans-serif font.

NHSJS
The National High School
Journal of Science

Patents (engineering)

What: a way to protect your IP and unique innovations

Why: so others don't steal your ideas -- useful if planning to continue research or create company based on your idea

How: Adapt the things you have already written for GSDSEF for patent

- Two phases of patent - provisional and non-provisional
- Types of patent - design vs utility -- most likely want a utility patent on your engineering project
- Likely want to consult a patent attorney for the non-provisional

[Resource on patent filing from USPTO](#)

Continuation Projects

- What did you test this year?
- Are there any new variables that you think could be interesting?
 - Are there other methods that you haven't considered?
- Is there a variable that you controlled previously (this could become your new independent var.)?



Research Programs/Internships



MIT RSI



salk[®]

**EDUCATION
OUTREACH**
Hands-on Science Education



Heithoff-Brody Scholars Program (Salk)



Stonybrook's Simmons Summer Research Program

COSMOS



COSMOS



Stony Brook **University**

Simons Summer Research Program

Research Mentors & how to get one

- ◎ What: a scientist in your field who's willing to teach you
- ◎ Why: their expertise will be invaluable to guiding you
- ◎ How:
 - Cold Emailing
 - Through personal connections
 - Participating in research programs and following up



Cold Emailing

- What to include in a cold email:
 - How you found out about their research/what about their research interests you (be specific!)
 - What you have done in relation to their research (your science fair project)
 - Possibly attach your resume



Higher Education

- ◎ Advanced college courses for your field
- ◎ Highly useful in research!
- ◎ Mentors & teachers can point you towards niche, online classes for your research



Societies: Clearwater Innovation

- ◎ If you have an environmental/water related project, contact emilytianshi2014@gmail.com or kyletianshi@gmail.com to schedule an interview with Clearwater Innovation
- ◎
- ◎ If you're interested in environmental advocacy, contact us to join the organization



CLEARWATER INNOVATION
GARAGE LAB RESEARCH BY KIDS

Societies: Helyx Initiative

Interested in bioinformatics research?

Check out The Helyx Initiative: helyx.science

Free bioinformatics workshops + seminars, as well as leadership opportunities

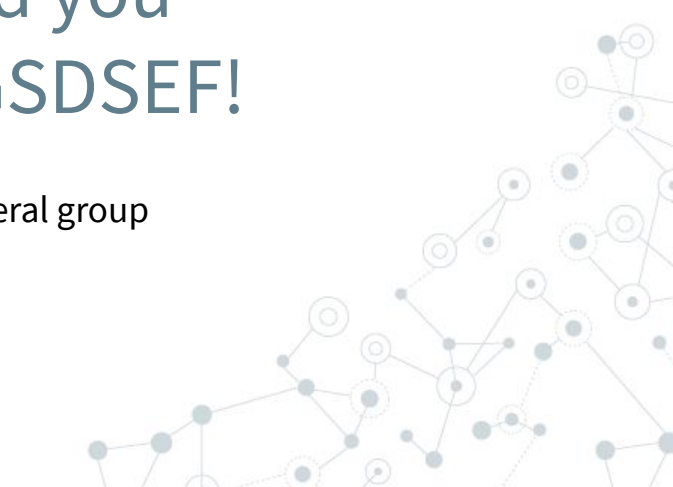


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Thank you!

We hope this was useful and you enjoyed competing in the GSDSEF!

Chat Q&A - we will now answer chat questions for the general group

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