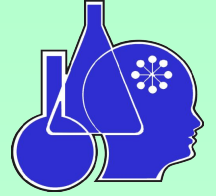


# LA County Science & Engineering Fair



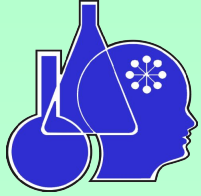
**In-person Fair**

**Sunday, 3/12/2023 and Monday, 3/13/2023 at the Shrine Expo Hall**

**Virtual Awards Ceremony:** *exact March date to be announced*



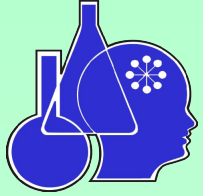
***Longest running Regional Science & Engineering Fair in the West***



# GOALS

- Opportunities to apply **creativity** **critical thinking** to solve problems the classroom.
- **Publicly recognize** achievements
- Opportunities for professional leaders to **network** with students & educators
- Promote **school-community cooperation** in developing scientific potential and skills

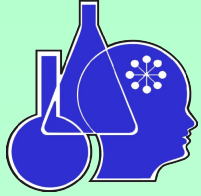




# Non-Discrimination Policy

- The Los Angeles County Science and Engineering Fair is an **equal opportunity** for all events, regardless of age, ancestry, color, disability (mental and physical), gender, gender identity, sexual orientation, medical condition, national origin, race and religious creed. *Judges & volunteers bear the responsibility to act as guardians and custodians of the students during their volunteering. Their familiarity with the students' special sensitivities is imperative to the overall Science Fair effort to achieve an **equal opportunity for all environment, free of discrimination.***





# Who Can Enter?

- Awards and scholarships in **36 categories** ranging from Biology to Engineering to Zoology
- Open to **Grade 6-12** students attending LA County **Public, Charter** or **Private** Schools or are **home-schooled**.
- Must compete in a **local school or district science fair** in order to qualify for regional competition **OR** be sponsored/mentored by a **research institution**

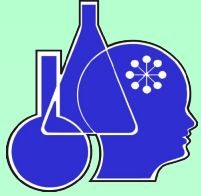




# Team Projects

- No more than **THREE** people per team
  - Why does this *need* to be a *team* project?
  - Every team member should have **a unique contribution** to the project and be able to justify their participation.

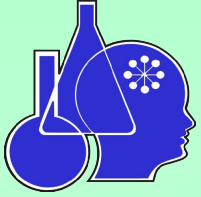




# Key Fair Regulations

- Projects **MUST** be **PRE-SCREENED** by the teacher!
- Projects involving **tissues/cell lines, microbes, human subjects, vertebrate animals, hazardous chemicals** must have **LACSEF** online [pre-approval](#)
- Adhere to all federal, state, and local **laws**
- Work of the entrant and **work of others** is clearly distinguished
- A clear, concise **3 - 4 min video** explaining the project has to be uploaded for the **Judges to see** before interviewing.





# Fair Categories

\*\*\* See [LACSEF Project Category details PPT](#) for more info

- **21 Junior Project categories**
- **15 Senior Project categories**



# SR Science Fair Categories

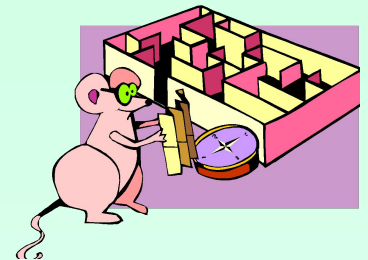
- Animal **Biology**
- Animal **Physiology**
- Behavioral/Social Sciences
- Biochemistry & Molecular Chemistry
- Chemistry
- Earth/Space Science
- Ecology
- Engineering **Applications**
- Engineering **Research**
- Environmental Management
- Mathematical/Computer Science
- Microbiology
- Pharmacology
- Physics
- Plant Biology & Physiology

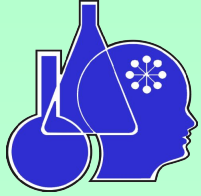




# JR Science Fair Categories

- Animal Biology
- Animal Physiology
- Behavioral Social Science - **Human**
- Behavioral Social Science - **Non-Human**
- Biochemistry & Molecular Chemistry
- Chemistry - **Applied**
- Chemistry - **General**
- Earth/Space Science
- Ecology
- Engineering **Applications**
- Engineering **Research**
- Environmental Management
- Materials Science
- Mathematical/Computer Sci
- Microbiology
- Pharmacology
- Physics-**Aerodynamics & Hydrodynamics**
- Physics - **Electricity & Magnetism**
- Physics - **General**
- Plant Biology & Physiology
- Product Science





# ONLINE Registration

- Most LA County Middle Schools and High schools receive a notice for entry to the LA County SEF in **August, 2022** **CHECK the website**
- **ONLINE Registration** for the Site Science Fair Coordinator and School or Sponsoring Institution opens **Aug 22, 2022** to **January 23, 2023**.
- **LACSEF Fee & Waiver form** for submission



***Being Updated: Detailed directions and links can be found at:  
<https://lascifair.org/how-to-enter/school-enrollment-2/>***



# Site Coordinators

- To be a **school's Site Coordinator**, you must be an *adult designated the administration*. When you enroll your school online, you will have to **include your position** at your school.
- SC responsibilities, how to register schools/students and a **detailed PDF presentation** is available on **Google Slides** and the **LACSEF Padlet**:



# The Pre-approval Process

- Before beginning, please **MAKE SURE TO CLICK ON** and carefully read the new **Pre-Approval General Info** <https://www.lascifair.org/pre-approval/pre-approval-general-info>

and the **sub-pages** on regulations for projects involving:

- *tissue/cell lines*
  - *human subjects*
  - *live vertebrate animals*
  - *hazardous materials and/or*
  - *Microbes*
- **View [PPT presentation](#)** on the Pre-Approval process
  - **FAQs** *specifically targeted problem areas for approval*



# When in Doubt, Pre-approve!

- There is **nothing worse** than having a student try to register their project and find out that it needed pre-approval **AND IT'S REJECTED.**



- The Pre-approval process *ends* before Student Registration *begins*. **There are no exceptions.**
- Make sure that you and the students have carefully read all the pages on ALL 5 categories of pre-approval.
  - If it involves human subjects (a student cannot perform experiments/surveys on themselves), it needs pre-approval....period.
  - Hazardous materials can be iffy - be careful!
- Alternatives can be experiments on plants or invertebrates or simple engineering.
- **WHEN IN DOUBT, SUBMIT A PRE-APPROVAL!!**



# Monitoring Your Dashboard

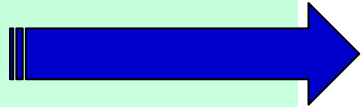
- Once students have submitted a project for pre-approval, Site Coordinators and teachers **need to keep track of the status of student submissions.**
  - You can see what has been **submitted**,
  - what is **awaiting verification** from supervisors,
  - what has been **denied** and **pending resubmission**,
  - and what has been **denied a second time**.
- You need to go into the student submissions to **see what needs to be fixed** so you can advise the student.
- *This helps prevent projects from being denied by LACSEF because students not fix their proposals.*



# Research Plan for Submission

- **Objective/Problem/Hypothesis** (*include evidence of search for alternative to vertebrate animals*)
- **Materials:** (*detailed*)
- **Bibliographic References** (*a minimum of 3 references, not exclusively Internet*):
- **Procedure/Research Techniques**
  - Provide a **clear and detailed description**/outline of proposed procedure, *including equipment to be used, safety measures, and disposal of hazardous chemicals.*
- **Risk Assessment:** detail any possible risks
- 2-3 more pages of information, ***digitally verified by return email from Supervising Adults***

# Example: Certification Online Template (both Jr/Sr)



Enter online  
registration  
webpage here  
<https://app.lascifair.org>

## HAZARDOUS MATERIALS RESEARCH PLAN

To be completed by the Student Researcher in collaboration with Designated Supervisor/Qualified Scientist:

**Objective(s):**

**Complete before going  
online to submit proposal**

**Problem:** (in the form of a question)

**Hypothesis:** (if applicable): (IF I do this... THEN this will happen...)

### **Procedure/Experimental Techniques:**

**Hazardous Materials List:** Identify the hazardous chemicals, activities or devices that will be used, in detail.

**Hazardous Materials Source:** Describe the source for your materials. (Full detail is required.)

**Student Procedures:** Describe the procedures to be performed by the student.

**Supervisor Procedures:** Describe the procedures to be performed by supervising scientist/adult supervisor.

### **Risks and Safety Precautions:**

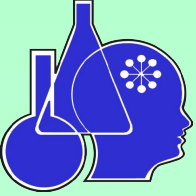
**Risks:** Identify and assess the risks involved (for activities, devices or chemicals).

**Safety Precautions:** Describe the safety precautions to be taken during procedures (*be specific for each hazard involved*).

**Safety Information Sources:** List the source(s) of safety information.

**Disposal Methods:** Describe the disposal method(s) to be used for hazardous materials.





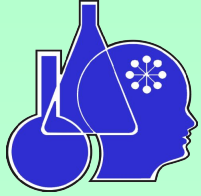
# Senior Division Forms are same as Intel ISEF forms

Have to be  
brought to  
*the fair,*  
with  
signatures



## ISEF Forms

Use these forms to document adherence to the International Rules



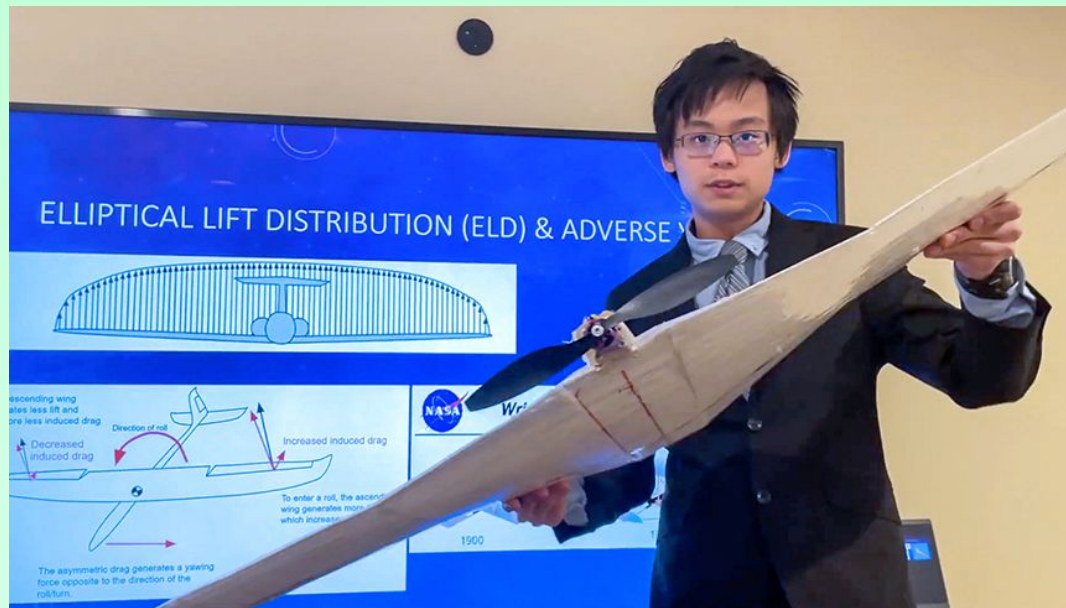
# Student Online Registration

- Once a student completes his/her SRC-approved research, they may **REGISTER** the project for the LACSEF competition. **(links not live yet)**
- **Student online registration Dec 19, 2022** at:  
<https://www.lascifair.org/student-project-registration/>
- **Student & Project Registration closes Feb 6, 2023**
- Site Science Fair Coordinators must submit **online student verification information** and ***ADHERE TO ALL DEADLINES.***

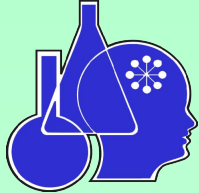


# Student Online Registration

A **3 - 4 min video** about your project, 2-3 key **logbook** pages and a PDF version of your **research report** must be **uploaded** to the LACSEF student registration site for the judges:



**Detailed instructions for submission** will be on the project registration site in January, 2023



Have students fill out all pages of the “Scratch Sheet” and review the answers before entering online.

Los Angeles County Science Fair  
SCRATCH SHEET- STUDENT ONLINE REGISTRATION

Student- Use this Scratch Sheet to prepare, in advance, all required information for online project registration. Use this Scratch Sheet as a step-by-step guide when registering online.

Registering is a 2 part process:

- 1<sup>st</sup>, you will enter YOUR information and then receive a password by email.
- 2<sup>nd</sup>, you will use that password to log in to the system and enter your PROJECT information.

If you do not complete the 2<sup>nd</sup> part, your registration for the Los Angeles County Science and Engineering Fair will be incomplete and your project will not be a part of the Fair.

Part 1- Registering Your Information

To register, go to [www.app.lascifair.org](http://www.app.lascifair.org)

1. Move cursor/mouse to “Click here to register a new account”—CLICK
2. Select “Student” from the pull-down menu; click CONTINUE

**REGISTER- STUDENT PROFILE INFORMATION:** This section must be completed by a student submitting an “Individual Project” entry and ALL MEMBERS of a “Team Project.” *ALL MEMBERS OF THE TEAM MUST COME FROM THE SAME SCHOOL.* A Site Coordinator must oversee the work his or her students do- this is not possible if a student attends another school.

3. **School-** Select your school from the pull-down menu

*(Be very careful and select the correct school name; check with your School Site Science Fair Coordinator as to the correct school name that is registered in the Science Fair database).*

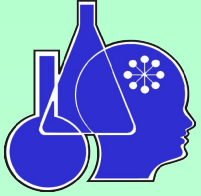
4. **Grade-** Type your grade level using the correct number (6, 7, 8, 9, 10, 11 or 12)  
Select your grade level \_\_\_\_\_

5. **First Name-** (Use appropriate upper and lower case letters when typing)

6. **Last Name-** (Use appropriate upper and lower case letters when typing)

7. **Address-** Type your complete HOME ADDRESS; include Apt. #, if appropriate

8. **City-** (Use appropriate upper and lower case letters when typing)



# Notification

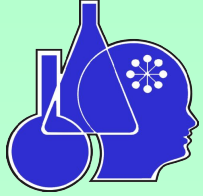
- Site Science Fair Coordinators will be notified of **approval/rejection** of submitted Student Research Plans.
  - **Periodically check the website Dashboard** and follow-up with your students to ensure all verifications and revisions are completed.



# Monitoring Your Dashboard

- Once students have submitted a project for pre-approval, Site Coordinators and teachers **need to keep track of the status of student submissions.**
  - You can see what has been **submitted**,
  - what is **awaiting verification** from supervisors,
  - what has been **denied** and **pending resubmission**,
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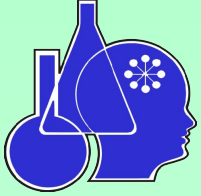




# Fair Dates and Location

- The LACSEF will take place on **Sunday, March 12th** and **Monday, March 13th, 2023** at the **Shrine Expo Hall** across from USC.
  - Attached to their large parking lot or use the **LA Metro “Expo” line** off the Jefferson/USC exit
- Virtual Awards Ceremony in March 2023. Date TBA





# Interviews and Judging

Details on In-person Judging to be finalized by Jan, 2023

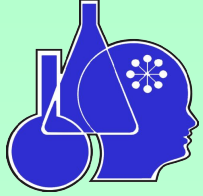


## Procedure

- Inside: filter paper, 12 mg of powder, & 1 more filter paper
- 20 trials per solution: 10 with the cups cleaned; 10 with the cups uncleaned



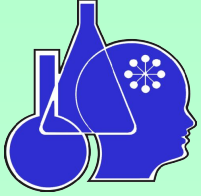




# Judging

- **Clothing:** Neat, preferably business style— it shows your respect for the judges.

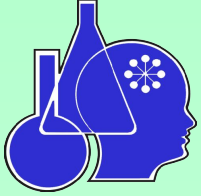




# Your Interview

- **Rehearse Your Presentation**
  - You will more composed if you are prepared.
- **Do your BEST!**
  - Be calm, confident and professional.
  - Know what you are talking about and you will do fine!!!





# First Impressions

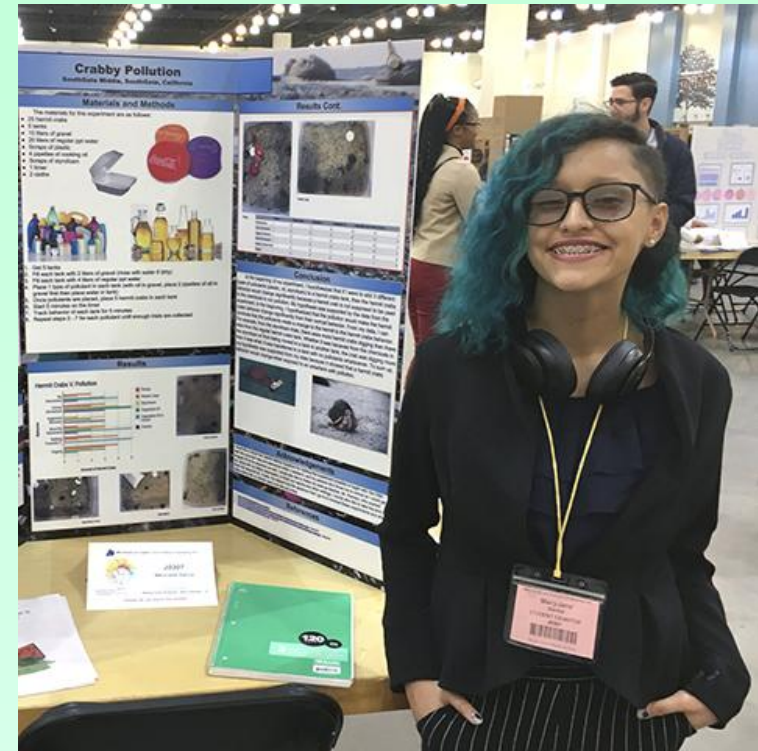
- **Introduce** yourself to each judge but in a pandemic, **DO NOT shake hands**: nod to them and smile.
- **Courtesy**: If able, **stand** when judges come to your exhibit and remain standing until they leave.

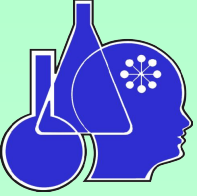




# What Judges Expect from Students

- **Enthusiasm!** An interview can be fun!
- **Pride** in your projects and accomplishments
- Give **as much information** as possible, ***BUT...***
  - ***Be able to explain your projects clearly and concisely***
- To be able answer **appropriate to level and age**

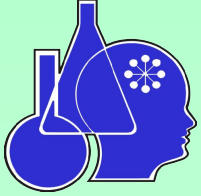




# The Judges Will Want To Know:

- **How** was your project topic selected?
- Did you **receive help** and if so, how much?
- What has been **previously known** about the project's general subject area?
- What would the you do if there were additional time to spend on the project?
- **What have you learned** through the investigation?
- If this project was continued, what would be **next step(s)**?



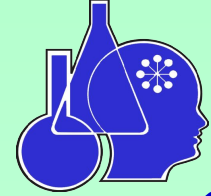


# Judging Tips

- **Courtesy:** the judges will tell you when they are ready for you to begin. During your presentation, they may wish to see 3D Models or equipment you used.
- **Be Positive**
  - Be calm, confident and professional.
  - You've done the *very best* you could!



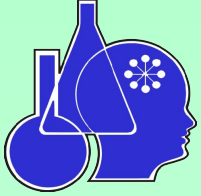
Download "[Interview Tips & Tools](#)" doc on Padlet



# Exhibit Hall Open to the Public

## Student projects can be viewed after judging



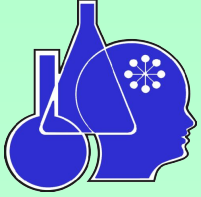


# Project Removal

- **Take down projects promptly** when judging and/or Open House are finished.
- Students/Site Coordinators will be notified when take-down will begin.
- **All projects must** be removed by **10:00 pm**
- **No storage space:** uncollected projects go in the **trash**



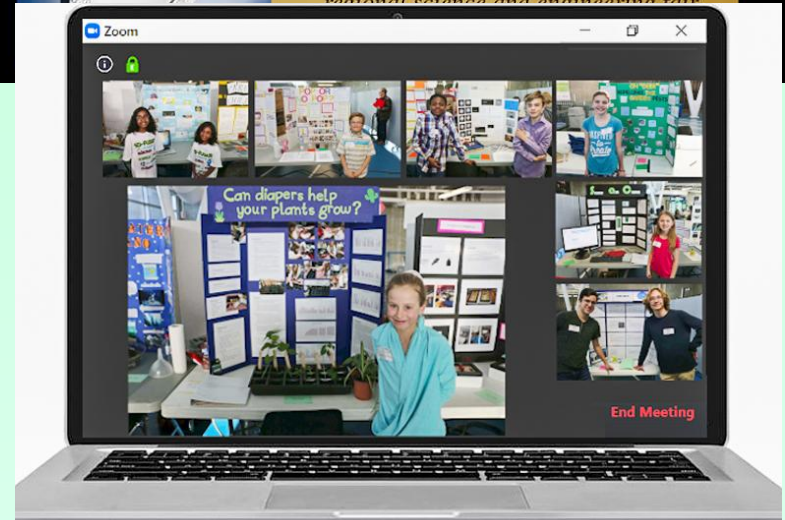


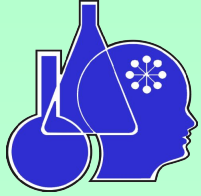


# Awards Ceremony

2023 **Virtual Ceremony** will be after the fair, in March

***Check the website and Padlet frequently!***



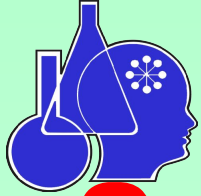


# Awards (Virtual 2023)

**ALL students should plan to be present!**

- Students compete for **first, second, third place** and **honorable mention medals**
- **Special awards** and scholarships provided by the business community.
- **First, second** and some **third place** winners **MAY** qualify to compete in the ***California State Science Fair***.
- Decision of the judges is **FINAL**

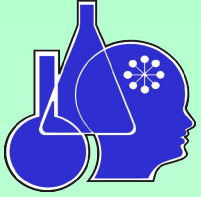




# International Science & Engineering Fair

- Top 2-7 student projects in the **Senior Division** may be selected *for* **international** competition!





# 2021 Awards Ceremony

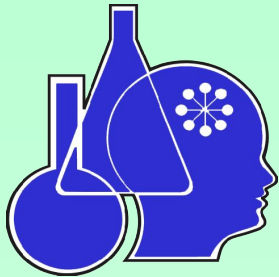
2023 Virtual Ceremony will be Saturday, March 18



***Designed & Photographed by  
Anne F. Maben***

**[afmaben@gmail.com](mailto:afmaben@gmail.com)**

*Science Consultant, UCLA Science Project  
Workshop Coordinator, LACSEF*



***for the  
Los Angeles County Science &  
Engineering Fair***

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