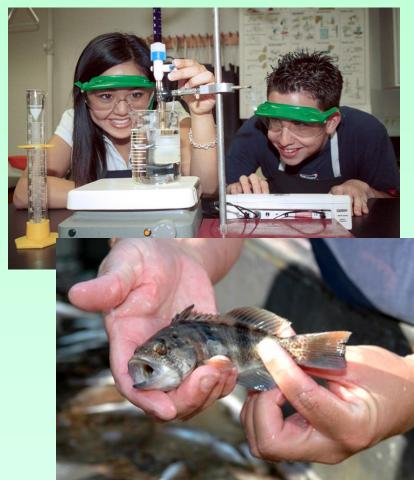


# Project Pre-Approval Certification

For projects involving tissues/cell lines, human subjects, live vertebrate animals, hazardous materials or microbes







# **Fair Regulations**

- If a project involves tissues/cell lines, human subjects, vertebrate animals, hazardous chemicals or microbes, proper paperwork must be submitted ONLINE and pre-approved by the LA County Science & Engineering Fair *BEFORE* beginning the research itself.
- Research design must be based on scientific methodology or engineering principles.



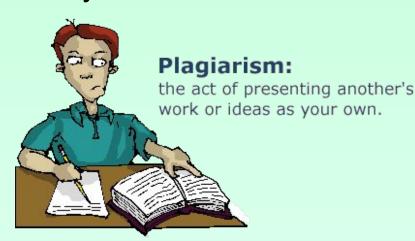
# **Reminder: PLAGIARISM**

### Plagiarized projects will fail to qualify for competition in affiliated Science Fairs. Students plagiarized if:

- Someone else wrote it first
- They copied it from somewhere
- They cannot explain what they submitted
- You cannot understand what they submitted
- They do not know the words that they used

### Plagiarism

- Is NOT ethical
- Is LYING
- Is ILLEGAL
- Is against the RULES



Link to check for Plagiarism

## **# Pre-approvals per School**

- A maximum of **30 projects per school c**an be submitted. *Submit projects you know meet our guidelines.*
- When whittling down <u>many</u> pre-approval projects, consider the *quality and caliber of the student(s)* / project topic/ <u>uniqueness</u> of experiment.
- If a team is requesting pre-approval, only 1 student (the team captain) should submit the information. If all team members submit the same forms, that counts as 2 or 3 projects out of the 30 you are allowed.

# **School Registration FIRST**

 Every LA County Middle School and High school receives a <u>notice</u> for entry to the LA County Science Fair in early Aug.



1. Site Science Fair Coordinator and and online school registration opens Aug 14, 2023 to January 22, 2024.

Every document will be posted and downloadable at <u>http://www.lascifair.org</u>

### **The SRC Committee**

 The LA County Science Review Committee (SRC) is responsible for pre-approval of targeted student projects.



- A minimum of 3 persons will
   pre-screen each Research Plan including:
  - A Biomedical Scientist (Ph.D., M.D., etc.)
  - A Science Teacher/Advisor that is not sponsoring a project at the LACSEF.
  - A Science Fair Committee member that is not involved as a Teacher/Advisor or Animal Care Supervisor

### **Supervisor Qualifications**

- Section I of our Rules and Regulations details the <u>qualifications of</u> <u>Supervisors</u>. The SRC must check to make sure that all adults are qualified to fulfill the role(s) in which the students have listed them. (Adults involved will receive auto-emails, to confirm they are supervising this project: they need to respond)
  - The **Teacher/Advisor** is the student's **science teacher or lab researcher** in which the student is working.
  - The Biomedical Scientist should have a professional degree (doctorate or Master's with related experience) in the area of science that pertains to the student's project.
  - The Designated Adult Supervisor directly oversees the student's experiment. It can be the teacher or the parent.
  - The Animal Care Supervisor must be familiar with proper care and handling of animals involved in research. This can be the *Biomedical Scientist, Adult Supervisor, or animal care professional or Site Coordinator.*









### The SRC Committee also looks for:

 Compliance with LACSEF guidelines, state and federal laws and the California Education Code governing human subject, tissue/cell line, live vertebrate animal, hazardous materials and microbe research.







### **Continuation Projects**

- If a project is a continuation of a previous LACSEF project, the Research Plan must document how this year's project is new and must contain at least 2/3 new information.
- Repeating previous experimentation or increasing sample size is unacceptable.



Displays must reflect the current year's work.

# **The Pre-approval Process**

- Site Coordinators must have previously registered their school.
- If the school is not registered, email <u>pre-approval@lascifair.org</u> with the school's name as it will appear in the program and the SC's <u>unique</u> email address.
- The system will email a password within 48 hours. Use this password to log into our online registration system and fill in all Site Coordinator and School information.

Name	Smallville Middle School
Address	15 Main Street
City	Smallville
State	CA
Zip Code	90811
Phone	213-000-001
District	Gotham USD
Grade Levels	<ul> <li>6</li> <li>7</li> <li>8</li> <li>9</li> <li>10</li> <li>11</li> <li>12</li> </ul>
	Update

School Information

Mak

## **The Pre-approval Process**

 Before beginning the pre-approval process with students, please MAKE SURE TO CAREFULLY READ the "Research Rules and Regulations" page and sub-pages on regulations

for projects involving:

- <u>tissue/cell lines</u>
- <u>human subjects</u>
- live vertebrate animals
- hazardous materials and/or
- microbes



### LOS ANGELES COUNTY & ENGINEERING F

Join us for the 74th Annual LA County & Engineering Fair in person, March 10at the Shrine Expo Hall, Los Angel

Virtual Awards Ceremony on YouTube Sunday, March 24, 2024

HOME COMPETITION INFO PRE-APPROVAL RESOURCES IN THE NEWSL BE A VOLUNT ABOUT US

### **Project Rules & Regulations**

2023 LACSEF Rules & Regulations (view/print PDF)

Links to Safety Resources and Information

Flinn Safety Information/Tips: https://www.flinnsci.com/teacherresources/safety/

DEA Controlled Substances: https://www.dea.gov/druginfo/ds.shtml

EPA TRI (Toxic Release Inventory) Chemicals: https://www.epa.gov/toxicsrelease-inventory-tri-program/tri-listed-chemicals

Biosafety in Microbiological and Biomedical Laboratories (BMBL)- Downloadable Version:

http://www.cdc.gov/biosafety/publications/bmbl5/bmbl.pdf

SDS Search: http://www.flinnsci.com/msds-search.aspx

California Science Safety Handbook - Downloadable Version: http://www.cde.ca.gov/pd/ca/sc/documents/scisafebook2014.pdf

Flinn Lab Safety Course: https://www.flinnsci.com/teacherresources/misc-pages/professional-development/laboratory-safetycourse/

OSHA Laboratory Safety Guidance booklet:

https://www.osha.gov/sites/default/files/publications/OSHA3404laborat ory-safety-guidance.pdf

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

Enter online registration webpage here

https://app.la scifair.org/ Print out & complete all pages for teacher's review and OK before going online to submit proposal



1107 Fair Oaks Ave. # 94, South Pasadena, CA 91030

www.lascifair.org

### **Research Plan for Experiments with Hazardous Materials**

### **GUIDELINES FOR HAZARDOUS MATERIALS AND SAFETY PRECAUTIONS**

Students planning research must complete and obtain LACSEF Scientific Review Committee (SRC) approval of the Certification of Hazardous Chemicals, Activities or Devices before starting experiments.

Following are examples of precautions that must be taken to prevent injury to persons or the environment. No list could possibly foresee all possible hazards, so teachers, parents and students must carefully plan and follow safe procedures specific to each study. The methods and materials section of the project description must contain explicit and detailed statements as to how and where experiments will be conducted.

- Approved eye-protective devices should be used by all persons performing science activities involving hazards to the eyes. All persons in close proximity must be similarly equipped. Laboratory aprons and rubber or plastic gloves should be available and should be worn whenever hazards exist that could damage clothing, injure someone or irritate skin.
- 2. Eyes and skin must not be exposed to ultraviolet light experimentally or accidentally as part of a project.
- 3. The use of <u>especially hazardous chemicals</u> should be avoided and substitutes used. If the use of certain hazardous chemicals such as gel preparations of acrylamide, a neurotoxin, or ethidium bromide (a mutagen) cannot be avoided, extra precautions must be exercised and the supervisor must perform any procedures involving exposure to these hazards. Consult materials <u>safety data sheets</u> (SDS) prior to use of any hazardous chemicals. Student use or handling of ethidium bromide or gels stained with ethidium bromide is prohibited. If a necessary part of the experiment, they must be handled only by qualified lab personnel trained in the standards for their use. Care must be taken that the student does not come into contact with them.
- 4. The use of <u>controlled substances</u> (drugs, chemicals, anesthetics, narcotics, etc. which are regulated by the comprehensive <u>Drug Abuse Prevention and Control Act of 1970</u>) must be in accordance with existing local, state and federal laws. See your pharmacist or write the department of health for information about these laws. The use of many such substances is prohibited by the LACSEF.
- 5. Prohibited Research
  - A student may not directly handle <u>Liquid Nitrogen</u>: a trained adult may handle it for the student.
  - State law <u>Education Code</u> also prohibits students from possessing, using, or distributing Alcohol and Tobacco, prescription drugs and other controlled substances, firearms and explosives –including airsoft guns, paintball guns,

- Go to <u>https://app.lascifair.org/</u> and click on "Register a New Account"
- Select "Student" and then select "Pre-approval."
- Enter all the information as requested. Students need to make sure to CAPITALIZE the first letter in their First and Last name and provide an email that is checked regularly.
- The system will send a password to the email address they provide.



- Once a student receives their password, they need to GO BACK to <u>https://app.lascifair.org/</u> and enter their email address and password.
- After they log in, click on "Project Pre-Approval"
- Students select the form(s) their teacher has instructed them to fill out AND been reviewed by the teacher.

There may have more than one form that needs to be filled out - fill out one at a time.



- Fill in the <u>name</u> and <u>email address</u> of all required certification references.
- Each person listed will **get an email** (at the email address you provided) asking them to verify their role in the project.



- If the researcher types an incorrect email, then there will be <u>no verification</u> and the project <u>will not</u> be approved.
- References need to be contacted to check their email and verify or approval of the project will be delayed.

# Working with Human Subjects

- A Human Subject Consent Form is attached at the end of all 5 pre-approval forms, to be completed online for ANY project involving humans!
- This form will provide information to your research subjects and parent/guardians about your project and will provide written "informed consent" and/or parental permission.

### Human Consent Form

For your project, a Human Consent Form needs to be developed in consultation with your Site Science Fair Coordinator, Designated Supervisor, or Qualified Scientist. This form will provide information to your research subject (or parent/guardian) about your project and will document written informed consent, and/or parental permission. For project approval, we need to approve the main sections of the form here.

- Every participant and parent/guardian needs to receive this form and sign his or her consent at the bottom, both before starting the research project.
- You MUST identify that minors require written parental/guardian consent in order to participate.

### LIST THE INFORMATION FOR YOUR PROPOSED FORM IN EACH BOX, FOR APPROVAL

### Purpose of the Project

· Identify the goal of the project and why conducting the project is important.

If you participate, you will be asked to ('You' refers to your subjects, not yourself)

 Explain in detail exactly what your participants will be doing.

### Time required for participation

 Identify the participant's total time commitment, how many trials will be done and how much time there will be between trials.

### Your participation in this study is voluntary

You need to inform participants that their participation in this study is completely voluntary and that there will be NO negative consequences if they choose not to participate. You need to inform participants that if they decide to participate, that they may stop participating at any time and may decide not to answer any specific question.

Risks to you ('You' refers to your subjects, not yourself)

 Explain what MIGHT happen, both psychologically and/or physically to the participant and how you will reduce the risk to keep your participants safe.

Benefits to you ('You' refers to your subjects, not yourself)

Describe what the participant gets for participating. Financial compensation is not allowed. Think REAL benefits - there is always something.

Confidentiality of your name and any photos will be maintained by ('You' refers to your subjects, not yourself)

STATE EXACTLY HOW CONFIDENTIALITY WILL BE MAINTAINED. (Example: use #'s
or letters to refer to subjects in reports or display - only the researcher will know real
names; no recognizable photos on board. etc.)

If you have any questions about this study, feel free to contact Name of Adult Supervisor, Site Science Fair Coordinator, or Parent

Phone number of Adult Supervisor, Site Science Fair Coordinator, or Parent

Email address of Adult Supervisor, Site Science Fair Coordinator, or Parent

### **Certification References**

Please provide the email addresses for the people who will be serving the following roles in your experiment. An email will be sent to each address with a link for the person to certify your project. You can see what <u>qualifications</u> each person needs on our website.

# **Working with Human Subjects**

- PRINT the Human Consent Form section (last 2 pages of the template.) Every participant and their parent/guardian will need to receive of this form and sign their consent at the bottom before starting a project involving human subjects.
- This <u>same information</u> needs to be <u>entered</u>
   ONLINE at the LACSEF pre-approval webpage.

Research Participant Signature:	Date Reviewed & Signed:(mm/dd/yy)
Research Participant Printed Name:	
Minor Assent	
Parental/Guardian Permission (if applicabl	·
, , , ,	ave read and understand the information above and
, , , ,	ave read and understand the information above and ate or permission for my child to participate.
, , , ,	
I freely give my consent/assent to participa	ate or permission for my child to participate.

https://lascifair.org/pre-approval/pre-approval-general-info/

### **Sr Division Human Consent Forms**

In addition, **Senior Division** students need to complete the fillable **ISEF Human Consent** form found here. All participant forms have to be *brought to the fair*, with signatures.

### **Human Informed Consent Form**

Instructions to the Student Researcher(s): An informed consent/assent/permission form should be developed in consultation with the Adult Sponsor, Designated Supervisor or Qualified Scientist.

This form is used to provide information to the research participant (or parent/guardian) and to document written informed consent, minor assent, and/or parental permission.

- When written documentation is required, the researcher keeps the original, signed form.
- Students may use this sample form or may copy ALL elements of it into a new document.

If the form is serving to document parental permission, a copy of any survey or questionnaire must be attached.

Student Researcher(s):	
Title of Project	

I am asking for your voluntary participation in my science fair project. Please read the following information about the project. If you would like to participate, please sign in the appropriate area below.

Purpose of the project:		
If you participate, you will be asked t	0:	
Time required for participation:		
Potential Risks of Study:		
Benefits:		
How confidentiality will be maintaine	:d:	
If you have any questions about this	study, feel free to contact:	
Adult Sponsor/QS/DS:	Phone/email:	

### **Voluntary Participation:**

Participation in this study is completely voluntary. If you decide not to participate there will not be negative consequences. Please be aware that if you decide to participate, you may stop participating at any time and you may decide not to answer any specific question.

By signing this form I am attesting that I have read and understand the information above and I freely give my consent/ assent to participate or permission for my child to participate.

Adult Informed Consent or Minor Assent	Date Reviewed & Signed: (mm/dd/yy)
Research Participant Printed Name:	Signature:
Parental/Guardian Permission (if applicable)	Date Reviewed & Signed: (mm/dd/yy)
Parent/Guardian Printed Name:	Signature:
Page 40 Intern	ational Rules, Guidelines for Science and Engineering Fairs 2023-2024. societyforscience.org/ISEE

 When students are finished submitting all information, the statements and agree to it, then click on "save."

I certify that the experimental procedures used in this science fair follow the rules and regulations of the LACSEF. I also certify that the procedures followed will ensure that neither the procedures nor the materials used constitute any known danger and that all microorganisms, pathogenic or non-pathogenic, will be handled and disposed of as if pathogenic.

I understand that this form must be approved and signed by all parties BEFORE the project can begin, and I will comply with this regulation.

I agree to this statement:

- They will then be <u>directed back</u> to the "Forms" screen.
- If there is another form they need to fill out, they should click on it and follow the same directions as above.

# **Monitoring the Dashboard**

- Once students have submitted a project for pre-approval, Site Coordinators and teachers should be keeping track of the status of student submissions.
  - Teachers 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**.
- Teachers can go into the student submissions to see what needs to be fixed so they can advise the student.
- This prevents projects that are denied by LACSEF because students did not fix their proposals.



### **Projects needing NO Pre-approval!**

### Check out "Project Categories" PPT for more ideas

### **Projects involving:**

- plants, unless the species is toxic
- <u>observing</u> animal behavior in the wild, with no manipulation
- invertebrates (shellfish, insects, worms, jellies, etc.)
- plankton studies (ALL animals must be treated humanely!)
- ecological sampling, simply observing species diversity and numbers, with no human manipulation
- low-risk engineering, with no hazardous components
- lab kits for rockets with contained propellants or uses air pumps.



### **Projects needing NO Pre-approval!**

Check out "Project Categories" PPT for more ideas

### **Projects involving:**

- dry ice; common lab equipment: calorimeters, bunsen burners, hot plates, scales, saws, drills, hammers (with supervision)
- plant tissue, cut hair samples, vertebrate tissue samples from businesses, food stores, restaurants or science supply companies
- most mathematical, computer coding/simulations
- geology (non-hazardous/non-toxic soils)
- astronomy, theoretical physics

## 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!!





### **Developed by**

Alamelu Arunachalam, VP, SRC Chair, LACSEF **Anne Maben**, Exec. Board member, LACSEF **Eric Hartung**, President, LACSEF Jennifer Moses, Past President, LACSEF **Emily Hoffman**, South Pasadena MS Dr. Kiersten Darrow, Former Chair, SRC, LACSEF Margery Weitkamp Retired SRC, LACSEF

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