# Orange County Science & Engineering Fair
# 2027 Rules and Guidelines

The following are the complete rules and guidelines for the Orange County Science and Engineering Fair (OCSEF). These regulations keep projects uniform for judging and ensure that they abide by the laws of the State of California, the State of California Education Code, and the rules of the Regeneron International Science and Engineering Fair (ISEF). The Board of Directors will enforce these rules to ensure all students have the opportunity to compete fairly.

**Table of Contents**:


Ethics Guidelines ..... 2
Eligibility & General Rules ..... 3
Project Rules & Guidelines ..... 4
Multi-Step Process ..... 6
Pre-Approval & Required Forms ..... 7
- Human Participants ..... 8
- Vertebrate Animals ..... 9
- Biological Hazards ..... 10
- Potentially Hazardous Chemicals, Materials, Devices ..... 11

Regulated Research ..... 11
Application Guidelines ..... 12
Project Registration Requirements ..... 14
Project Submission Requirements ..... 16
Project Display Requirements ..... 17


## PRE-APPROVAL NOTICE:

For projects that involve any of the following:

- Human Participants
- Vertebrate Animals
- Biological Hazards
- Potentially Hazardous Chemicals, Materials, Devices, Activities

Students **MUST** do the following BEFORE the start of any experiments:

- Complete Early Pre-Approval Registration
  - Begins September 1, 2026
  - Ends November 2, 2026
- Receive Pre-Approval from the Scientific Review Committee (SRC)

For additional details, go to the corresponding section(s) below and consult the Guides found at https://ocsef.org/resources.

## Ethics Guidelines

Student researchers, as well as adults, who have a role in projects are expected to maintain the highest ethical standards. These standards follow ISEF Rules and include, but are not limited to:

**Integrity** -- Honesty, objectivity, and avoidance of conflicts of interest are expected during every phase of the project. The project should reflect independent research done by the student(s) and presented in their own words with proper citation. The presentation of fraudulent data, evidence of plagiarism or the inappropriate use of AI are prohibited and grounds for the project failing to qualify.

**Legality** -- Compliance with all federal, state and local laws and regulations is essential. In addition, projects conducted outside the U.S. must also adhere to the laws of the country and jurisdiction in which the project was performed. All projects must be approved by a Scientific Review Committee (SRC), and when conducted at a Regulated Research Institution must also be approved by an Institutional Review Board (IRB), Institutional Animal Care and Use Committee (IACUC), and/or Institutional Biosafety Committee (IBC). It is recommended that students refer to CA and/or federal laws and regulations.

**Respect for Confidentiality and Intellectual Property** -- Confidential communications, as well as patents, copyrights, and other forms of intellectual property must be honored. Unpublished data, methods, or results may not be used without permission, and credit must be given for all contributions (including mentors) to the research.

**Stewardship of the Environment** -- It is the responsibility of the researcher and the adults involved to protect the environment from harm. Introduction or disposal of native, genetically altered, and/or invasive species, (e.g. insects, plants, invertebrates, vertebrates), pathogens, toxic chemicals or foreign substances into the environment is prohibited. It is recommended that students reference their local, state or national regulations and quarantine lists.

**Acknowledgment of Risks** -- All projects involve some amount of risk. Everyone is expected to recognize any actual or potential hazards, assess the risks, minimize the risks, and prepare for emergencies.

**Animal Care** -- Proper care and respect must be given to all animals. Alternatives to vertebrate animal research are strongly encouraged and must be explored before conducting a vertebrate animal project. The guiding principles for the use of animals in research includes the following “Four R’s:’ Replace, Reduce, Refine, Respect.

**Human Participant Protection** -- The highest priority is the health and well-being of the student researcher(s) and human participants.

**Potentially Hazardous Biological Agents (PHBAs)** -- It is the responsibility of the student and adults involved in the project to conduct and document a risk assessment, and to safely handle and dispose of organisms and materials according to prescribed methods for that situation.

Scientific fraud and misconduct are not condoned at any level of research or competition. This includes plagiarism, forgery, use or presentation of other researchers' work as one's own, and fabrication of data. A violation of this ethics statement may result in disqualification from participating in OCSEF and ISEF, and forfeiture of any awards, prizes, and acknowledgment received.

## Eligibility & General Rules

1. Students must be in the 6th-12th grade.
   - Junior Division – students in grades 6-8
   - Senior Division – students in grades 9-12

2. Students must attend a public, private, online, or home school AND either:
   a) live in Orange County, CA during the majority of the school year, or
   b) attend an Orange County, CA school AND live in a neighboring county (Los Angeles County, Riverside County, or San Diego County)
   - Students may only participate in one Regional Fair
   - Students in an enrichment or after school program must enter their project through the accredited school at which they are registered and attend daily.
   - Home-school students must be sponsored by a certificated school teacher, school administrator, or by application to the OCSEF Board (email request to info@ocsef.org), but NOT by a parent/guardian.
   - If a student's school and/or district has a local science fair, the student must participate in that local fair and qualify for OCSEF through that local fair.

3. Schools and/or districts must be located in Orange County, CA and include at least one grade level from 6$^{th}$ to 12$^{th}$ grade, in order to be eligible to send projects to OCSEF.
   - Schools and/or districts that conduct a local science fair can only send projects that qualify through their local fair to OCSEF.
     - A school fair can send a maximum of 20 projects to OCSEF
     - A district fair can send a maximum of 150 projects to OCSEF
     - A school may exceed 20 projects if they are selected to enter OCSEF through their district fair.
   - If a school does not have a local science fair (school or district level), up to 20 projects per school may participate in the OCSEF with the approval of their teacher at that OC school.
     - If more than 20 projects register from the same school, a school coordinator must determine which 20 projects qualify for OCSEF.
   - A school may submit a written request for more than 20 projects for consideration by the OCSEF Board (email request to info@ocsef.org).
   - A district may submit a written request for more than 150 projects for consideration by the OCSEF Board (email request to info@ocsef.org).

4. Each student is only allowed to enter one project. That project as presented may include no more than 12 months of continuous research and may not include research performed before January 2026 for OCSEF 2027.

- Students may enter either an individual project or a team project (max 3 students per project).
- Projects entered by an individual must only include work done by that individual. If it's discovered that part of the project has been done by additional students, then the project will be disqualified.

5. Team Projects can have a maximum of 3 students but must only include students attending the same Orange County, CA school.

- All work on team projects must be acknowledged, and all team members must be present and prepared to participate in the judging process in order to be considered for category awards.
- Team projects will be placed in the same categories as individual projects. Judges will have higher expectations for the originality, scientific value, and completeness of team projects done by 2 or 3 students working together, in comparison with the work done by one student.

6. Teacher Approval - Students must have their teacher or administrator, from the school they attend, review & approve their project in the online registration system. This can NOT be done by an adult at an enrichment program, after school program, or college laboratory.

- The Teacher Approval process is part of the online application and required before students can complete their Project Registration.
- Students initiate a request in the Teacher Approval task for online approval from their teacher.

## Project Rules & Guidelines

1. Applications must present an experiment exemplifying the scientific method (Science), a project utilizing the engineering design process (Engineering/Computer Science), a project solving a math problem or proving a math theory/concept (Math), or a project using any combination of the above.

- Projects that are demonstrations, literature reviews, simulations, and/or information projects are not allowed.

2. All projects must be approved by the Scientific Review Committee (SRC) before being allowed to compete in OCSEF.

- **Pre-Approval by SRC is required BEFORE the project begins if it involves:**
  - Human participants
  - Vertebrate animals
  - Biological hazards
  - Potentially hazardous chemicals, materials, devices, or activities
- Pre-Approval projects must follow the Early Registration deadline.
- When Pre-Approval projects are conducted at a Regulated Research Institution or industrial setting, the project must also be approved by an additional regulatory board at that facility, such as:
  - Institutional Review Board (IRB) – human participation

- Institutional Animal Care and Use Committee (IACUC) – vertebrate animal research at research institute
- Institutional Biosafety Committee (IBC) – use of recombinant or synthetic DNA/RNA and other biohazards at a research facility
- Embryonic Stem Cell Research Oversight Committee (ESCRO) – embryonic stem cells

3. Project Category - Students are responsible for selecting an appropriate category in which to enter the project. **The chosen category should be the FOCUS of the project (not the tools you used). This will determine how the project is judged.**

- See the list of 2027 Project Categories
- OCSEF will not review category choices, so choose your category wisely. The category chosen will determine the expertise and focus of the judges reviewing your project.
- Projects using Artificial Intelligence (AI) or Machine Learning (ML) can belong in any category. The correct category is determined by what you studied, not which tools you used.

4. Continuation Projects:

- Any project based on or related to the student's prior research is considered a Continuation Project. This applies to any work done, even outside of a science fair.
- Student researchers must document that their additional research is a substantial expansion from prior work (e.g. testing a new variable or new line of investigation). Testing only an increased sample size is not acceptable.
- Projects will be judged only on experiments and data collection performed over 12 continuous months beginning no earlier than January 2026 for OCSEF 2027.
- All continuation projects are required to complete and upload Form 7 as part of Project Registration and Submission. Students must also upload the prior year's abstract or project summary.
- Project abstract, slide deck, and presentation must reflect only the current year's work.
- See the ISEF Continuation Rules regarding Continuation Projects

5. Multi-year longitudinal studies are permitted if the project involves testing variables in which time is a critical variable over consecutive years.

6. Artificial Intelligence may be used only as a tool to conduct the project. Its specific use must be cited including prompts (i.e. text-based inputs/commands). All components of the project registration, submission and presentation (e.g. research plan, abstract, slide deck, project display board, etc.) must be in the student's own words and can NOT be generated or modified by an AI application.

7. In-Person Fair - Students must attend the in-person 2027 Fair to be judged.

- Students unable to attend the project setup day must designate a teacher, parent, or other student team member to set-up the project display and receive Display & Safety approval.
- All students for a team project must attend together and participate in the interview with the judges.
- Only students being interviewed will be allowed in the judging area (Exhibit Hall).

    - Students will receive a badge at check-in, which must always be worn at the Fair.
- Students are allowed to refer to their project display board and lab notebook during interviews with the judges.
- Students may show a short video demonstration of their prototype during their interviews with the judges.
- Refer to the Project Display Guide for the complete project display rules.

## Multi-Step Process

Students must complete the following steps to participate in OCSEF judging:

**Step 1 – Project Registration**

Use the Pre-Approval Flowchart and review not only the OCSEF Rules below but any corresponding Guides to determine if your project needs pre-approval BEFORE starting your project.

- **Begins September 1, 2026**
- Use the Online OCSEF Application to register your project.
- Don't wait until the deadline to register your project. Register early for shorter SRC review times.

Pre-Approval Projects:

- **Ends November 2, 2026** (11:59pm PST)
- All Pre-Approval projects require one or more Required Forms.
- Students must receive SRC Approval BEFORE starting their project.
- SRC review can take 2-3 weeks for projects registered at the early deadline.

Regular Projects:

- **Ends February 1, 2027** (11:59pm PST)
- The February registration deadline is only for projects that do NOT need pre-approval.
- SRC review can take at least a week for projects registered at the regular deadline. You will have limited time to make any corrections requested by SRC.

**Step 2 - SRC Review**

Once registration is completed, your application will automatically be reviewed by our Scientific Review Committee (SRC). Approval is required by SRC before your project can move to Project Submission.

- SRC reviews all projects at Registration to determine if the project can be done safely as described and if all required documentation has been provided.
- Pre-Approval projects require SRC Approval BEFORE students start their project.
- Only projects with SRC Approval will move to the Project Submission step.
- Be sure to check your email often! Students will receive emails from noreply@mail.smapply.net (check spam folder) with either approval or a request for additional information about the project.
- Students are responsible for responding to any SRC requests within 72 hrs.

- Students with a school/district Fair (or more than 20 projects from your school): If your project is registered and approved by SRC, your project must still qualify for OCSEF through your school/district fair (or be chosen by your school), in order to be eligible to participate at OCSEF for judging.
- Please contact the Scientific Review Committee at src@ocsef.org for any additional questions but be sure to review all Forms, Rules and Guides first.

**Step 3 – Project Submission**

This includes an abstract and slide deck along with a Continuation or Regulated Research form (if required).

- **Ends February 22, 2027** (11:59pm PST) – **for ALL projects** (no exceptions)
- You can complete Project Submission as soon as you complete your project.
- Don't wait until the deadline to submit your project. Final project review can take a few days for projects submitted at the deadline. You will have limited time to make any corrections requested by OCSEF.

**Step 4 - Project Review**

Once Project Submission is completed, your application will automatically be reviewed again. The OCSEF Team will be checking to make sure your project is eligible, all submitted items are compliant with the rules, and no additional documents are needed. Final approval by OCSEF is required before your project is allowed to participate in Judging at the Fair.

- Be sure to check your email often! Students will receive emails from noreply@mail.smapply.net (check spam folder) with either approval or a request for changes to submitted items.
- Students are responsible for responding to any OCSEF requests within 72 hrs.
- Projects must receive Final Project Approval from OCSEF by March 1, 2027.

**Step 5 - In-Person Fair:**

The 2027 in-person Fair will be a multi-day event in March of 2027. Students must create a project display (poster board plus lab notebook) for the Fair. Projects will be judged for Category Awards (and some Special Awards) through student interviews with judges at the in-person Fair. Students will be provided with a schedule before the Fair, and all students with judged projects will be invited to the awards ceremony.

- **Friday –** Project display setup and Display & Safety check
- **Saturday –** Judging
- **Sunday –** Awards Ceremony

## Pre-Approval & Required Forms

If a project involves any of the following:

- Human Participants
- Vertebrate Animals
- Biological Hazards
- Potentially Hazardous Chemicals, Materials, Device, Activities

- Use the Pre-Approval Flowchart, OCSEF rules below, and corresponding Guide(s) to determine if your project requires Pre-Approval and Required Form(s) BEFORE starting your project.

Then, students MUST complete the following BEFORE starting any experiment:

- Complete the corresponding Required Form(s)
- Complete the Early Pre-Approval Registration process
- Receive Pre-Approval from OCSEF's Scientific Review Committee (SRC)

Below are additional details for each project type and the corresponding Required Forms.

- Links to each Required Form can be found:
  - on our OCSEF Website under Resources
  - within the Online OCSEF Application
- All OCSEF projects follow ISEF Rules.

**Human Participants:**

All projects involving human participants must follow all OCSEF Rules, State and Federal Regulations, and the International Science & Engineering Fair Rules (ISEF Human Participant Rules). **Consult the OCSEF Human Participants Guide for additional details & guidelines for students**. These projects include:

- humans completing a task/activity or being tested
- survey/questionnaire (online or in-person)
- observing and interacting with humans
- humans (other than yourself) testing and/or using a device
- human dataset with identifiable private information

Students need to complete the following Required Forms and upload them at project registration.

- Form 4 (Human Participants) – signatures obtained at student researcher's school
  - medical/mental health professional (school nurse or counselor)
  - educator (not your own teacher)
  - school administrator (principal or vice principal)
- Form 3 (Risk Assessment) – acknowledge risks for participants
- Informed Consent Form (use OCSEF template)
- Research Plan (use OCSEF template)
- Additional Documents – for any survey, test, video, audio, or activity participants interacting with
- Form 2B (Qualified Scientist) – if the SRC determines that your project needs a Qualified Scientist

Additional guidelines include, but are not limited to:

- Please refer to the ISEF Human Studies Risk Assessment Guide (**HERE**) when designing your research project to ensure the rights and welfare of your human participants are protected.
- Please refer to the ISEF Online Survey Consent Procedures (**HERE**) if using an online survey or questionnaire as part of your project.

- All human participant studies, including any type of survey, involving minors (students under 18 years of age) must receive assent from the student participant and written parental permission from a legal guardian.
- Students themselves are prohibited from independently diagnosing disease, providing medical advice, administering medication, and/or performing medical procedures. These projects must be supervised by a qualified medical professional. Diagnostic apps published on public websites or app stores must have prior FDA approval.
- A student may observe and collect data for analysis of medical procedures, medication/treatment efficacy, and diagnosis of illness, only under the direct supervision of a licensed health care provider/professional. This Healthcare provider/professional must be named in the research plan/ protocol approved by the SRC.

**Vertebrate Animals:**

All projects involving vertebrate animals (mammals, fish, birds, reptiles, or amphibians) plus cephalopods (which are potential sentient animals) must follow all OCSEF Rules, California Education Code, and the International Science & Engineering Fair Rules (ISEF Vertebrate Animal Rules). This includes testing or observing animals in nature or a controlled setting. **Consult the OCSEF Vertebrate Animals Guide for additional details & guidelines for students**.

**State of California Education Code Title 2, Division 2, Part 28, Chapter 4, Article 5, 51540.**

In the public elementary and high schools or in public elementary and high school sponsored activities and classes held elsewhere than on school premises, live vertebrate animals shall not, as part of a scientific experiment or any purpose whatever:

a) Be experimentally medicated or drugged in a manner to cause painful reactions or induce painful or lethal pathological conditions,
b) Be injured through any other treatments, including, but not limited to, anesthetization or electric shock.

Live animals on the premises of a public elementary or high school shall be housed and cared for in a humane and safe manner.

Students need to complete only one of the following Required Forms and upload it at project registration.

- Form 5A (Animals at home/school/field) – upload at Registration
- Form 5B (Animals at Regulated Research) – upload at Submission

Additional guidelines include, but are not limited to:

- The project must be planned and carried out under the direct supervision of a veterinarian, designated supervisor, or qualified scientist as required by the OCSEF Scientific Review Committee.
- The maximum permissible weight loss or growth retardation (compared to controls) of any animal is 15%, because significant weight loss is one sign of stress. Student researchers are expected to regularly monitor the health of their animals and record their weights.

- Projects that are purely observational studies of wild animals (not pets) in their natural environment are exempt from Pre-Approval and the Required Form if ALL of the following apply:
    - There is no interaction with the animals being observed
    - There is no manipulation of the animal environment in any way
    - The study meets all federal and state agriculture, fish, game and wildlife laws and regulations, and
    - The student provides enough details in their application for the SRC Team to determine whether the project is purely observational

**Biological Hazards:**

All projects that involve potentially hazardous biological agents must follow all OCSEF Rules, State and Federal Regulations, and the International Science & Engineering Fair Rules (ISEF Biological Hazards Rules). **Consult the OCSEF Biological Hazards Guide for additional details & guidelines for students**. These biological agents include:

- Bacteria, viruses, yeast, fungi, mold, viroids, rickettsia, cyanobacteria, or parasites
- Meat or non-commercial eggs
- Fresh or frozen tissue
- Primary cell cultures, human & animal cell lines, and tissue cultures
- Blood, blood products and body fluids
- Samples from a human or animal body (teeth, bone, saliva, hair, swabs, etc.)
- Samples collected from the environment (water or soil)
- Recombinant DNA

Students need to complete the following Required Form(s) and upload them at project registration.

- Form 6A (Biological Agents) – for all biological agents
- Form 6B (Human/Animal Tissue) – additional form for tissues, cell lines, and body fluids

Additional guidelines include, but are not limited to:

- **Culturing organisms in the home environment is prohibited.** All cultures must be incubated in a properly equipped laboratory and disposed of properly under qualified supervision.
- Students must carefully plan and follow safe procedures.
- Appropriate safety precautions, including personal protective equipment (eye goggles, aprons, gloves, etc.) must be followed when hazards exist. Students should also have appropriate adult supervision.
- Projects involving multidrug resistant organisms and Recombinant DNA (rDNA) technologies must be conducted in a Regulated Research Institution and approved by their Biosafety Committee.
    - Genome editing studies, that include alteration of germline cells, must be completed in a BSL-2 (Biosafety level 2) laboratory, and approved by the Institutional Biosafety Committee.
- Students may not perform bioengineering for the following purposes:
    - Insertion of antibiotic-resistant traits
    - Designing or selecting multiple drug-resistant organisms.

- Students may not be involved in the direct acquisition of recombinant DNA, tissue, organs, or other body parts (including blood and meat) from humans or vertebrate animals; they must be acquired by qualified adults or from a commercial or medical source.
    - This does not apply to meat from the grocery store.

**Potentially Hazardous Chemicals, Materials, Devices, & Activities:**

All projects that involve potentially hazardous chemicals, materials, devices, and activities must follow all OCSEF Rules, State and Federal Regulations, and the International Science & Engineering Fair Rules (ISEF Chemicals-Devices Rules). **Consult the OCSEF Chemicals-Materials-Devices Guide for additional details & guidelines for students**. These hazards include, but are not limited to:

- 3D printing, soldering, saw/drill, oven/stove, generator, circuits, motor, electricity
- lasers, batteries, pH testing, UV light, magnets, charcoal, open flames, ionizing radiation
- Solvents, ferrofluid, gases, biofuel, rocket fuel, acids, bases, household cleaning agents, chemicals
- Prescription drugs, tobacco, explosives, combustion, pyrophoric chemicals
- Samples collected from the environment (water or soil)

Students need to complete the following Required Form and upload it at project registration.

- Form 3 (Risk Assessment)

Additional guidelines include, but are not limited to:

- Potential hazards include anything that involves a level of risk above and beyond that encountered in the student's everyday life or whose operation requires a moderate to high level of expertise to ensure safety.
- Students must carefully evaluate the safety risks and follow the appropriate safety precautions, under the guidance of an adult or qualified scientist.
- Appropriate safety precautions, including personal protective equipment (eye goggles, aprons, gloves, etc.) must be followed when hazards exist. Students should also have appropriate adult supervision.
- Review the Safety Data Sheet for any chemicals or substances prior to use.
- The use of chemicals in the home environment is prohibited with a NFPA rating of 3 or 4 and/or a GHS safety rating of 1, 2, or 3.

## Regulated Research

Students who perform projects in whole or part at a regulated research institute or industrial setting (college, university, company, hospital, etc.) must follow all OCSEF Rules and the International Science & Engineering Fair Rules (ISEF Rules). **Consult the OCSEF Regulated Research Guide for additional details & guidelines**.

Students must upload the following documents as part of Project Registration.

- Student Work Approval – students need to provide documentation of approval to work in this lab from the institution/company/facility (not a letter from the supervising adult or principal investigator).

- Oversight Approval Document(s) – students need to provide any Approval documents from the appropriate institutional oversight committee or safety officer, if applicable.
    - Oversight committees include the IRB, IACUC, IBC, ESCRO, or EH&S.
    - Letters from the Principal Investigator of the laboratory attesting to appropriate approvals will NOT be accepted.

Students need to complete the following Required Form and upload it as part of Project Submission.

- Form 2C (Regulated Research)

Additional guidelines include, but are not limited to:

- **OCSEF rules might be more restrictive than those followed by the research facility.**
    - Example: student researchers are prohibited from performing vertebrate animal euthanasia.
- Studies that culture clinically significant multi drug-resistant organisms (e.g. MRSA, VISA/VRSA, VRE, CRE, ESBLs, or fungi with known resistance to antifungal agents) require Institutional Biosafety Committee (IBC) approval, BSL-2 (Biosafety Level 2) containment and must have written justification for usage and be conducted in a Regulated Research setting.
- Projects involving Recombinant DNA (rDNA) technologies and Genome editing studies that include alteration of germline cells must be completed in a BSL-2 laboratory and approved by the Institutional Biosafety Committee.

## Application Guidelines

Be sure to follow these guidelines and tips for completing your application correctly and to avoid any delays in project approval. OCSEF uses an Online Application for Project Registration and Project Submission, along with our own Certification Forms and Slide Deck templates. **Consult the 2027 OCSEF Application Guide for additional details and guidelines for students**.

1. Project Registration Deadlines:

- **Online registration begins September 1, 2026**
- Pre-Approval Projects:
    - **Ends November 2, 2026** (11:59pm PST)
    - Use the Pre-Approval Flowchart to help determine if your project needs Pre-Approval BEFORE you start your project.
    - Complete the corresponding Required Form(s).
- Regular Projects:
    - No pre-approval required
    - **Ends February 1, 2027** (11:59pm PST)
- No exceptions to the deadlines. Do not wait until the last moment to complete the online application for project registration, which takes significant time to complete along with teacher approval.

2. DO NOT create duplicate applications. Team Projects: Only create and register one application per project. You will add all partner information to one application, then partners must be invited as Collaborators to the application.

3. Only use a PERSONAL STUDENT email address (**NO SCHOOL email addresses**) when creating your account and in your project application. We will not be able to contact you if you use a school email address.

- Students should use a separate email address from their parent/guardian.
- Sign up for a free Gmail account if you have no other alternative.

4. Students will receive email notifications from noreply@mail.smapply.net (check spam folder).

- Students must add their parent and other students & parents for team projects as Collaborators to the application.
- Collaborators will also receive all email notifications.

5. The status of your application is shown on the My Applications Dashboard.

- **Application in Progress** = not registered/submitted for review, need to click green "Submit" button
- **Under SRC Review** = submitted and being reviewed
- **Project Approved** = approved for judging

6. You can work on your project application over multiple sessions by saving your progress. After each on-line session with your application, click on "Save & Continue Editing."

7. **All required tasks must be completed before you are able to complete the registration of your project application**. For each task, complete all sections, review to make sure no edits are needed, then select "Mark as Complete". You will see the status of each task in the Task List (on the left-hand side of your application page). The status of completion for each task is represented by a circle symbol.

- **Task not started** = circle with "no color" inside
- **Task started but incomplete** = circle half-filled with a green color
- **Task complete** = circle completely filled with a solid green color plus a white checkmark
- Note: Clicking "Mark as Complete" for a task does not mean your project is registered.

8. Some tasks (teacher approval and student/parent signatures) will not appear until the student information, project information, and required forms tasks are marked as complete.

- Team Projects - Additional Signatures for additional students & parents will appear

9. Check the "Task List" Column frequently since some of the tasks require signatures from your teacher, parent, and team project students & parents. You may need to follow up with them to make sure they complete their part of the application. Once teachers and parents complete their tasks, you will need to finalize your registration by clicking the green "Submit" button.

- Students will need to "Mark as Complete" the Teacher Online Approval task, AFTER their teacher completes the online form.

10. Once ALL tasks are completed, **be sure to click the green "Submit" button to finalize your Project Registration**. If you do not click submit, then your project application will NOT be registered and will not move to the Scientific Review Committee (SRC) for review and approval.

- Project applications CAN NOT be edited once finalized. Review your answers carefully before selecting "Submit".

11. For questions on the Project Registration tasks or if you are having technical difficulties, contact OCSEF at info@ocsef.org. Please read the instructions carefully before contacting OCSEF.

12. You will receive a confirmation email from noreply@mail.smapply.net once your project registration has been finalized. All applications will then undergo review by the OCSEF Scientific Review Committee (SRC) to check for compliance with the OCSEF rules, safety concerns, and inclusion of any necessary Required Forms. After SRC Review, you will get an email stating one of the following:

- Your application is approved and will move to the Project Submission stage
- Your application needs additional information before being approved
- Your application has been declined

13. If the SRC Team requires additional information, the email notification from noreply@mail.smapply.net will include the information needed and how to update your application. Check your email and spam folder often.

- **Students are responsible for making ALL requested changes to their application within 72 hours and resubmitting it for additional SRC Review.**
- **Projects requiring SRC Pre-Approval can NOT start until approved by SRC.**
- After the Regular Registration Deadline, you will no longer be able to update/resubmit your application.
- Only projects with SRC Approval will be eligible for Project Submission.

## Project Registration Requirements

All projects must be registered by the appropriate deadline as the first step in being eligible for OCSEF. The following items must be completed as part of the Registration process. **Students are expected to review and follow all OCSEF rules and guidelines.**

NOTE: The Teacher Approval and Signature tasks will appear once the student information, project information and required form tasks have been completed.

1. Student Information - please provide all required information about the student(s). If a team project is selected, additional fields will appear to enter information for each student. Be sure to provide current and complete email addresses, phone numbers, and residential addresses for communication and mailing purposes.

2. Project Information - be sure to provide detailed information for each question about your project, as this is what the SRC Team uses to determine if your project is approved. Your application will be sent back to you for revisions if the information is incomplete, which could result in your project approval being delayed.

**High School Projects** – all high school students are required to upload Form 1B, which serves as the Approval Form for projects selected for the California and International fairs.

**Research Plan -** A research plan is the key to a successful project. It is a framework to plan a project - to pose the question being asked or the problem being solved and the steps that will be taken to reach the goal. It is a clear and detailed accounting of the methodology or procedures intended. It is an opportunity to conduct a risk assessment that will in turn support decisions about the environment in which to conduct the project, the supervision necessary and if there are pre-approvals required before you begin experimentation. A research plan does not need to have all of the answers; but it should be a clear roadmap for the student researcher to share the intended steps and to review and receive feedback before beginning.

Additional requirements, if applicable:

- Continuation Projects
    - Upload Form 7 plus the previous project's abstract/project summary
- Regulated Research
    - Upload Student Work Approval – facility documentation of approval to work in this lab from the institution/company (not a letter from the supervising adult or principal investigator).
    - Oversight Approval – documentation from the appropriate institutional oversight committee or safety officer, if applicable.

3. Required Forms - if your project includes any of the following, you will need to complete & sign the corresponding Form(s) as part of your project registration application. Consult the corresponding section above and Guide(s) for additional details, guidelines, and form links.

- Pre-Approval Projects:
    - Human participants
    - Vertebrate animals
    - Biological Hazards
    - Potentially hazardous Chemicals, Materials, Device, Activities
- If conducted at a regulated research institute or industrial setting, student must also upload
    - Approval document(s) from the appropriate institutional regulatory board (IRB, IACUC, IBC, ESCRO, EH&S) or safety officer.

4. Teacher Approval - the teacher at the school they attend and listed on the application must review the project application and provide their approval. This process is done through the online application system. Students invite their teacher to review their application and sign the Teacher Approval form online.

5. Student & Parent Signatures - separate signature tasks will appear for each student and parent to provide their acknowledgement of the rules and their individual signatures.

6. Collaborators - students must use this feature to invite their parent and other students & parents (for a team project) so that:

- their parent receives all email communications
- other students & parents (for a team project) receive all email communications
- other students on a team project can help complete the application
- other students & parents (for a team project) can provide their signatures

## Project Submission Requirements

Once the project is approved by the SRC and completed, the following project components must be uploaded to the application to complete Project Submission prior to the deadline. These items will be viewed by judges prior to in-person judging interviews. Be sure to follow additional guidelines for each component below.

**Abstract:**

Students must write an Abstract (maximum of 200 words) after finishing their project. This must be written in their own words. It is recommended that the Abstract include the following:

- purpose of the experiment or design
- key materials and equipment
- procedures/methodology or design process
- most important/significant results
- conclusions and research applications

**Slide Deck:**

Students must create and submit a Slide Deck about their project using one of the digital templates. The use of a standard presentation format assures equity in judging.

- Maximum of 12 slides and maximum file size of 10 MB
- Save your file as a pdf before uploading to your Project Submission application
- Follow and comply with all criteria and formatting clearly outlined on the first slide of the template. Be sure to delete the first slide with the formatting instructions before submitting.
- The slide deck must be in the student's own words/design and can NOT be generated by an AI application.
- Students may NOT include links to any websites or additional project information.
- Slides 1-11 must cite sources for all graphics, photos, and resources, but do NOT include URLs.
- Slide 12 can include URLs for online resources cited (following APA Citation guidelines).
    - **Students must verify all citations to ensure they are correct.**
- Use the template that matches your project type.
    - Science Slide Deck template
    - Engineering/Computer Science Slide Deck template

    - Math Slide Deck template
- Projects may not display procedures detrimental to the health and well-being of vertebrate animals or humans. The OCSEF Board of Directors reserves the right to deny any display of photographs/visual images/charts/tables and/or graphs of such, as determined by the OCSEF Scientific Review Committee

**Continuation Projects:**

Any project based on or related to prior research by the student must provide documentation so that it is clear how the current project differs from previous work. See the OCSEF Rules above or the ISEF Rules for additional details. Students need to do the following as part of their Project Submission:

- Complete and upload Form 7 (Continuation Project)
- Upload previous year's abstract/project summary

**Regulated Research Projects:**

Students must indicate whether or not they conducted any part of their research at a regulated research institute or industrial setting (college, university, company, hospital, etc.), including in both the US and other countries. Students need to do the following as part of their Project Submission:

- Upload Form 2C (Regulated Research)
    - Completed & signed by the principal investigator or head of laboratory, AFTER the project is done.
- Upload Form 5B (Animals at Regulated Research) - if involves vertebrate animals or cephalopods
    - Completed & signed by the principal investigator or head of laboratory, AFTER the project is done.

## Project Display Requirements

Students must create a project display (poster board plus lab notebook) for in-person judging at the Fair. All projects will undergo inspection by Display & Safety (D&S) after setup. Only projects that receive approval will be eligible for judging. **Review these guidelines and consult the Project Display Guide for additional details**.

Each project must follow these guidelines:

- Total project display space = 3.2ft wide x 2.5ft deep x 5ft high (38in x 30in x 60in)
- The entire project display must be on the table and fit within the project space dimensions
- Students must be present at their display during their entire assigned judging period

**Project Board:**

Students must create a Project Board that describes their project (like the Slide Deck). See the Prohibited Display Items section below for additional guidelines.

- The poster board can be tri-fold or flat in style, but must fit within the allowed project space when on display.
- The poster board must be stable and free-standing (able to stand on its own without falling over).

    - Any mechanism that supports the poster is considered part of the project display & must conform to the maximum dimensions stated above.
- No changes, modifications, or additions to projects are allowed after approval by Display/Safety.
- The poster board should include all aspects of the project:
    - Title, Abstract, and Question/Hypothesis or Engineering Goal
    - Materials and Procedures or Design Process
    - Data/Results, Data Analysis, Conclusions, Future Work
    - Image Citations
- Photograph, Visual, Image, Graph, Chart, Data Table Requirements
    - All images, graphs, charts, etc. must be cited for their source.
    - Projects may not display photographs of procedures detrimental to the health and well-being of vertebrate animals.
    - Photographs of surgical procedures may not be exhibited.
    - Displays may not contain photographs or personally identifying information of human participants.
    - Display items that are distracting (sounds, lights, odors, etc.) are prohibited.
    - Photographs or images of people other than the student researcher(s) need to have a signed photo/video release form from those individuals in a notebook.
    - No logos or references to awards from other Fairs allowed.

**Additional Display Items:**

- Display & Safety Approval Form (received on-site at the Fair) – must be on display after D&S Approval
- Lab Notebook – bring on check-in day for approval and display for judging
- Models or Prototypes – bring on check-in day for approval and display for judging
- Videos, Images, or Demos – must be displayed on laptops or phones on check-in day for approval
    - No AC electrical power will be provided for project displays.
    - Computers - fully charge and bring battery backup.
    - Download Videos - no guaranteed Wi-Fi during judging
- All project display materials must fit within the allowable dimensions stated above.
- Students must obtain an Approval Sticker for any item they want to take home overnight between check-in and judging.
    - Only items with Approval Stickers will be allowed in the Exhibit Hall for judging
- Only Class 1, 2, or 3R lasers are allowed (must be labeled by manufacturer) as part of your project display. Handheld lasers are NOT permitted in the Exhibit Hall.

**Lab Notebook:**

Students must have a Lab Notebook on display at the Fair. This serves as a log that documents what you did, how you did it, and why so someone else can repeat what you did.

- Can be handwritten notebook or digital printouts in a binder.
- Pages should be dated & signed and easy to read by the judges.
- Must include, but not limited to:

- Materials and Procedures
- Raw Data and Graphs, Charts, Tables
- Observations – quantitative and qualitative
- Calculations
- Designs or Diagrams – for prototypes
- Sample computer code written by student

**Models & Prototypes:**

- Students that have a device or equipment as part of their project may display it at the Fair, as long as it fits on the table within the project space dimensions.
- Demonstrations will not be allowed for safety reasons. Students are advised to have a video available to show the function of their prototype.

**Prohibited Display Items:**

- Information on display or items that are acknowledgements, self-promotions or external endorsements
- Awards from previous fairs
- Personal address or contact information
- Glitter or anything that can cause a mess on the floor
- Handouts for distribution to judges
- Living organisms - including all animals, plants, and microscopic life forms
- Culture plates
- Taxidermy specimens or parts
- Preserved vertebrate or invertebrate animal parts or specimens
- Human or animal food
- Human/animal parts or body fluids (for example, teeth, hair, blood, urine)
- Plant materials (living, dead, or preserved)
- Any liquid or chemicals, even in a closed or sealed container (including water or mercury within a thermometer)
- Soil, sand, rock, cement and/or waste samples
- Hazardous substances or devices
    - Poisons or drugs
    - Firearms, weapons, ammunition, reloading devices
    - Grease/oil and sublimating solids such as dry ice
- Items that may have come in contact with hazardous materials or chemicals. Filters (including microbial) may not be displayed unless the Display and Safety Committee can reasonably determine that the device was cleaned or never used
- Sharp items (for example, syringes, needles, pipettes, knives)
- Glass or glass objects
- Flames and highly flammable materials (including heating elements)
- Batteries with open-top cells or wet cells or battery packs over 100 watt-hour capacity

- Drones or any flight-capable apparatus (unless the propulsion power source removed)
- 3D printers (unless power source is removed)
- Granules or powders
- Inadequately insulated apparatus capable of producing dangerous temperatures
- Any apparatus with belts, pulleys, chains, or moving parts with tension or pinch points that are not appropriately shielded

**IMPORTANT – Loss or Damage:**

Valuable equipment, such as computers, may be part of the display only if the *student participant* accepts full responsibility.

- It is advised that valuable materials (e.g. computers, research notebook) be on display only during the actual judging period.
    - Students can obtain Approval Stickers during Display & Safety Check for any equipment and/or laptops, so they can be taken home overnight
    - Only items with Approval Stickers will be allowed in the Exhibit Hall for judging
- Although precautionary security service will be provided, the Orange County Science & Engineering Fair assumes no responsibility for loss or damage to any project or project part.
- Students must exercise care in protecting equipment.
- It is advisable to have an extra copy of notebooks and all printed materials.