



ACSEF 2021 HANDBOOK

IMPORTANT 2021 NEWS, ELIGIBILITY, DEADLINES AND RESOURCES

We suggest you print this handbook and bookmark the link.

During the upcoming months ACSEF will continue to support student researchers acknowledging that flexibility during this year will be essential.

ACSEF is affiliated with Broadcom Masters -national middle school competition, CSEF - CA state science fair competition, and ISEF - international science fair competition. The projects from ACSEF that are considered by the judges to be superior quality are eligible to advance to these competitions.

Questions send an email to the fair director Patti Carothers at directoracsef@gmail.com. You may also phone our voice mail **925-353-4414** leave a message following the instructions given in the outgoing message. Leaving a voicemail guarantees a call back.

Table of Contents

- Section 1** - New Items 1-8: ACSEF changes for 2021. **Pages 1-6**
- Section 2** - Roles of Adults and Students & General Eligibility Requirements. **Pages 6-9**
- Section 3** - Determining Your Group for Project Proposal Deadline **Pages 9-11**
- Section 4** - Application Paperwork Details. **Pages 11-17**
 - **Early Application paperwork. Pages 12-13**
 - **Regular Application paperwork. Pages 14-15**
 - **School Science Fair Winning REGULAR application paperwork Pages 15-17**
- Section 5** - Registration to attend the fair. **Pages 17-18**
- Section 6** - Project Resources. **Pages 18-20**
- Section 7**- School Science Fair Guidelines **Page 21**
- Section 8**- School and District Science Fair Quotas **Page 21**
- Section 9** - Title 1 School Support. **Pages 22-23**

Section 1

New Items 1-8: ACSEF for 2021

NEW ITEM #1

All Fair business and details will now appear in one location - on our registration website at Zfairs. <https://acsef.zfairs.com>

As of 7/26/2020 ACSEF will no longer be updating or renewing the url of our original website <http://acsef.org>. The site URL will not be renewed after November 2020.

NEW ITEM #2

We are using **Google Docs** for most of our information supplied through links located at the ACSEF Zfairs site.

Please be sure you are able to open Google Docs in pdf format. **One way to ensure you have access is to have a gmail account.**

Additionally to fill in interactive ACSEF forms you'll need Acrobat or Acrobat Reader.

NEW ITEM #3

ACSEF will be hosting topic specific video tutorials on our [Zfairs website](#).

Look for topical video & links to tutorial events on the Zfairs website beginning mid September

NEW ITEM #4

ACSEF will be using a virtual format for the 2021 fair.

How will it work?

Answer part 1: ACSEF will set aside a block of time like we do for an in-person event, and have the students waiting in their judging booth/room to have judges come to their judging booth/room.

- Just like in-person interviews, students wait for judges, when a judge arrives they can begin their session.

Round 1 judging determines category **1st-4th and special awards and projects that will move on to Round 2 Judging.**

Round 2 judging determines projects eligible for CSEF, Broadcom masters, and ISEF. Round 2 judging takes place ONE WEEK after Round 1.

For details click this link [Judging While Remote](#)

NEW ITEM #5

Eligibility requires ALL student projects (individual and team projects) to submit an online project proposal to a Google Form. No exceptions. This includes students assigned to do a research project by their teacher/school.

ACSEF's SRC/IRB is now required to determine the eligibility of **all** projects through submission of a project proposal before the project is provided with an application and registration link.

NEW ITEM #6

SAVE THE FAIR DATES

Saturday March 6, 2021

Round 1 Virtual Judging for Category and Special Awards Q/A interviews with 1-2 judges at a time for a time period of up to 15 minutes per each judge.

When necessary up to 2 judges may be assigned in each of your assigned time periods. For planning purposes you will be notified how many judges are assigned to your project.

Sunday March 7, 2021 6:00 pm

Post list of students selected by the judges for Round 2.

What if your project ID and name is not posted for Round 2?: Round 1 determined category 1st - 4th and Special Awards therefore check back on **Saturday March 20th, 2021 for the Virtual Public Day & Announcements of All Awards.**

Saturday March 13, 2021

Round 2 Virtual Judging for students being considered for State, National and International Awards Q/A Interviews by one or more groups of judges for a time period of up to 15-20 minutes per group of judges.

For planning purposes you will be notified how many groups of judges you will have.

Saturday March 20, 2021

Virtual Public Day & Announcement of Awards Winners:

A virtual public day will consist of the Student and display board photos, and a project abstract.

A virtual awards ceremony will consist of a brief video introduction by the Fair Director and Organizing Board Members.

This will be followed by the announcement of Category awards, Special Awards, National Broadcom Masters Nominees, California State Qualified and Alternate winners, and International Regeneron (ISEF) Grand Awards.

A link to all awards spreadsheets will be located on the ACSEF Zfairs site following the virtual awards ceremony.

Tuesday March 23, 2021

MANDATORY ZOOM meeting of the following groups of student award winners and their parent/guardians:

Broadcom Masters Nominees: 5:00 pm - 5:30 pm An invitation will be sent from asst.director.acsef@gmail.com

State Qualified Nominees: 5:45 pm - 6:15 pm An invitation will be sent from asst.director.acsef@gmail.com

State Alternate Nominees: 6:30 pm - 6:45 pm An invitation will be sent from asst.director.acsef@gmail.com

ISEF Finalists: 7:00 pm - 7:30 pm An invitation will be sent from asst.director.acsef@gmail.com

*Award materials will be mailed to individual student home addresses. Planning for March 30, 2021 mailing date.

NEW ITEM #7

Project Proposal Submission Windows: As mentioned in New Item #5 - Regardless of the type of project you plan to do - ALL students working on a project alone and ALL project team captains must submit a project proposal to ACSEF's SRC/IRB via a Google Form for review. No exceptions! That means EACH project will submit a project proposal. This is required for ACSEF participation.

PROJECT PROPOSAL SUBMISSION WINDOWS

There are 2 project proposal submission window groups.

▲ **Early** and ◆ **Regular**. See Section 3 for details - Determining Your Group for Project Proposal and application paperwork Submission Windows & Links

▲ **EARLY Group Google Form Project Proposal Submission Window**

August 26 - November 1, 2020

Early Online Project Proposal submission window is **ONLY for those student projects responding YES one or more of the eight (8) statements located in Section 3 pgs. 9-11**

***See Section 3 in the handbook to determine if you are in the EARLY group or not. This is where you will also obtain the link to the Early Project Proposal Google Form.**

There is a **2 step SRC/IRB pre-approval process for the Early group** that must occur before you can begin the actual collection of research/experiment data.

Step 1 Complete the Early Project Proposal Google Form and **wait for an email** from SRC/IRB. The **Google Form Link** for these types of project submissions **OPENS August 26, 2020 - CLOSSES November 1, 2020. The Link is provided in Section 3 pages**

SRC/IRB will either approve and provide links to the application paperwork or will make suggestions to improve the proposed project and require a revised proposal to be submitted.

If revisions are requested a one time revised proposal resubmission to the Early Project Proposal Google Form must occur well by the November 1, 2020 deadline.

Step 2 Complete the required application paperwork from the links sent by SRC/IRB in the proposal is accepted email by the Early application paperwork Deadline discussed in New Item #8. **ALL Early Group application paperwork** must be reviewed/signed by SRC/IRB before experimentation can begin. No exceptions.

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◆ **REGULAR Group Google Form Project Proposal Submission Window**
November 20, 2020 - January 15, 2021

Regular Online Project Proposal submission window for **ALL** projects types that do **NOT** require ACSEF SRC/IRB pre-experimental approval

*See Section 2 in the handbook to determine your group & link to the Regular Project Proposal Google Form.

The **Google Form Link** for these types of project submissions **OPENS November 20, 2020 - CLOSSES January 15, 2021.**

NEW ITEM #8

Application paperwork FORMS SUBMISSION DEADLINES

There are 2 application paperwork submission windows.
 Early and Regular.

▲ **EARLY Application Paperwork Deadline**

November 15, 2020

Early application paperwork: The project proposal acceptance email from SRC/IRB will contain links to the application forms specific to each type of project.

Students should complete the application paperwork in a timely manner and email to the SRC/IRB for review **WELL BEFORE THE DEADLINE!**

****The earlier your application paperwork is received and approved by SRC/IRB = the earlier you can start the experiment. *reminder do not start the experiment without SRC/IRB application paperwork approval - failure to follow this rule will deny the project for competition at ACSEF.***

Email a scanned single pdf file of the completed, signed and dated application paperwork to src.irb.acsef@gmail.com (make a copy for yourself).

SRC/IRB will review the application paperwork for errors and missing information (signatures, dates, required content etc.)

Once you received email confirmation that your application paperwork is perfect.... Then you may start the experiment/research.

Before you can be approved to register as a participant, ACSEF will also require you to print a copy of the approved application paperwork and mail or drop it off to the SRC/IRB:

Mail the APPROVED application paperwork or drop off application paperwork into the ACSEF bin on the front porch at this address no later than the deadline

November 15, 2020.

Robin Groch, ACSEF

10 Claypool Ct.

Danville, CA 94526

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◆ **REGULAR Application Paperwork Deadline**

January 30, 2021

Regular application paperwork: Students will receive an emailed acceptance of the Google Form project proposal from src.irb.acsef@gmail.com containing links to the regular application paperwork forms.

It is advised students set to work on the paperwork promptly and submit well in advance of the January 30th deadline in case there are errors in the paperwork that require revisions before SRC/IRB can sign off on the project.

It is up to the student to ensure that completed application paperwork is scanned and emailed in a single PDF file to src.irb.acsef@gmail.com for review by the January 30th deadline.

*** **School Science Fair Exception: Regular Application Paperwork - Deadline February 20, 2021**

This does not apply to those winning students who previously submitted Early* Application Paperwork.

School Science Fairs **Blue Winning Projects ONLY:**

- The School Science Fair Coordinator or school Admin must notify ACSEF no later than **November 1, 2020** of the schools intent to hold a science fair.
- The School Science Fairs must be held by **February 10, 2021**
- The School Science Fair Coordinator or school Admin. must supply ACSEF with both EARLY & REGULAR winners information by **February 12, 2021** as per the email instructions the school Science Fair Coordinator or school Admin will receive from ACSEF upon notification their school is holding a science fair.
- The School Science Fair Coordinator or school Admin will scan each winning **Regular Application**, save it in a single PDF file and email it to the SRC/IRB no later than **February 20, 2021**.
- ACSEF will not accept the emailed files directly from school regular group winning students - they must come from the school contact only.

End of Section 1

Section 2

ROLES OF ADULTS and STUDENTS & GENERAL RULES & ELIGIBILITY REQUIREMENTS

Roles of students and adults: Use the link below to access the tutorial describing the roles of adults (parents/guardians, teachers, administrators, SRC, IRB) and students relative to the research project safety and approval. [Roles and Responsibilities of Students and Adults](#)

General Eligibility: ACSEF follows the [2021 International Science Fair Rules](#). ACSEF rule modifications are indicated in **red** below. Additionally, ACSEF follows the [Science Fair Regulations for Ethical Standards](#)

A) Student researchers, as well as adults who have a role in their projects, are expected to maintain the highest ethical standards. These include but are not limited to integrity, legality, respect for confidentiality and intellectual property, stewardship of the environment, animal care, human participant protection, documentation of risks for any and all project research components.

Scientific fraud and misconduct are not condoned at any level of research or competition. This includes plagiarism, forgery, use or presentation of other researcher's work as one's own and fabrication of data. Fraudulent projects will fail to qualify for competition.

ACSEF reserves the right to revoke recognition of a project subsequently found to have involved unethical standards or is fraudulent.

B) Students **younger than 20 years old** who **attend school or are homeschooled in Alameda County** in **grades 6–12** are **eligible** to attend ACSEF providing they meet all appropriate eligibility criteria.

EXCEPTION 1: ACSEF has a prearranged agreement with the Santa Clara County Science Fair Director/President to accept human participant testing project proposals for pre-experimental approval because SCCSF no longer accepts this type of project.

C) Projects can be entered as an individual or team of 2 or 3 students provided they have **not competed with this same project** in any other regional, county, state, country or international fair (such as Santa Clara, GGSF, Contra Costa, CSEF, etc.) in any previous or current year . * ask the ACSEF fair director if you are unsure of the project's eligibility by emailing directoracsef@gmail.com

Students may submit one (1) project only into one judging category. A student who is on a team may not submit a team and also an individual project as well.

D) Team entries—A team of two or three students attending the same or different schools within Alameda County may enter one team project. All team members must be in the same grade level division - no mixed middle + high school teams are allowed.

All team projects will be judged for scientific merit using the same criteria regardless of the number of individuals preparing the project.

Maximum allowable team members is 3.

Any change in the team configuration must be discussed by email with the fair director directoracsef@gmail.com.

Exception 2: Combined mixed county teams of 2 or 3 students may compete at ACSEF providing prior emailed permission from each of the involved county science fair directors and providing one member of the team attends school in Alameda County - example one student from Contra Costa County, Santa Clara etc. + a student from Alameda County.

All mixed county teams may only compete at one regional or county ISEF affiliated fair of one of its members, and not at multiple regional/county science fairs of any additional members.

ACSEF notifies fair directors of mixed county teams when the team project proposal has been submitted for eligibility to ensure there is no double dipping so to speak.

ACSEF assumes financial responsibility for any out of AC county student travel expenses to ISEF if the team is selected as an ISEF finalist. The out of county student(s) will for purposes of publication be considered only as representing ACSEF and not their home fair at the next level competition.

E) ALL projects must initially be submitted through the ACSEF project proposal system to determine eligibility. NO EXCEPTIONS!

The project proposal will be reviewed and critiqued by the ACSEF SRC/IRB team to determine originality and safety..

The project proposal is NOT the same as the application paperwork!

F) ALL projects must meet or exceed the [Minimum Quality Standards](#). Project proposals failing to adhere to this will automatically be denied.

G) ALL projects must **NOT** be on the [Projects to Avoid](#) list or fall into the projects to avoid criteria. Project proposals failing to adhere to this will automatically be denied.

H) Students who attend school in Alameda County, and who complete their projects at a Registered Research Institution -RRI (college, online college or professional lab) in another locale are eligible to submit a project proposal.

I) Homeschooled students who attend home school **located in Alameda County** are eligible to submit a project proposal, even if they participate in online classes from other locales.

JI) Students may participate in only one project. If a student is a member of a team and also has his/her own individual project to enter - they must decide upon being a member of the team or removing themselves from the team to participate as an individual only.

K). Individual entries—A student may enter one (1) project only as an individual.

L) Students (team or individual) may present work for their project in ONE category. ([2021 Categories](#)). The project work must include no more than 12 months of continuous research ahead of the start date of ACSEF (3/6/2020-3/6/2021). (*see [Definition of continuation project](#) at this link).

Questions send an email to the fair director at directoracsef@gmail.com. You may also phone our voice mail **925-353-4414** leave a message following the instructions given in the outgoing message. Leaving a voicemail guarantees a call back.

End of Section 2

Section 3

Determining Project Proposal and application paperwork Submission Windows

How to determine your project proposal submission and application paperwork submission group (Early or Regular)

Individuals and Teams must read each statement below and respond Yes or No.

**** 1.** My/our project will be mentored through online or physical means by an adult with an advanced degree (MS, PhD) working at a college or professional lab.

**** 2.** My/our project will be a continuation of a previous year's research. Link to explanation of what constitutes a continuation project: Additional Rules for Continuation projects:

https://docs.google.com/document/d/14jNIsuVGGYW_h4PiS9hXS1FHMxYFsdJUAToDpTIGOjg/edit?usp=sharing

**** 3.** My/our project will use humans in a virtual manner for taking surveys or performing mental or physical tests or tasks or will be used to test my/our engineered device, prototype, app etc.. Link to Human subject rules:

<https://student.societyforscience.org/human-participants> **ACSEF has the right to have more stringent rules than ISEF therefore at ACSEF:**

Human Subjects may not be asked to ingest foods of any type or any stimulant inducing food, drinks, inhalants or any type of medications without proper medical supervision and/or may not be given a grade boost, money or other monetary valued rewards including gifts gift cards, food or drink items for their participation. Project proposal and application paperwork must clearly indicate this requirement.

**** 4.** My/our project will use human or vertebrate animal bodily fluids or tissues. Link to Potentially Hazardous Biological Agent rules:

<https://student.societyforscience.org/potentially-hazardous-biological-agents>

**** 5.** My/our project will use vertebrate animals in a manner that manipulates their behavior, habitat, or nutrition. **ACSEF has the right to have more stringent rules than ISEF therefore at ACSEF:**

If you plan to use vertebrate animals in the manner described then the project must be monitored by a veterinarian (procedure, materials, weight loss and general health during experiment) or be performed at a college or professional lab (Regulated Research Institute - RRI) under the supervision of a qualified scientist/lab mentor. Link to

Vertebrate Animal rules: <https://student.societyforscience.org/vertebrate-animals>

****6.** My/our project will result in euthanasia of vertebrate animals for the purpose of obtaining tissue or results. **ACSEF has the right to have more stringent rules than ISEF therefore at ACSEF if you plan to use vertebrate animals in the manner described then the project must be performed at a college or professional lab (Regulated Research Institute - RRI) under the supervision of a qualified scientist/lab mentor. No exceptions!**

Link to Vertebrate Animal rules:

<https://student.societyforscience.org/vertebrate-animals>

**** 7.** My/our project will use microbes (bacteria, fungi, etc.) in culturing (growing) microbes on agar or other solids or in liquid etc.) experiments.

→If do not have a high school, college or professional lab in which to culture microbes AND will not be mentored by person trained and certificated in microbiology in which to culture microbes other than Baker's or Brewer's yeast then we require that you:

- a) *Select to work on culturing **Baker's or Brewer's yeast**. These are allowed to be cultured at home BUT they may not be cultured then used in any recombinant DNA or RNA studies.*
- b) *Select to work on a non vertebrate organism possibly terrestrial invertebrates such as slime molds, yogurt, nematodes, insects or freshwater and marine life including planarians, crustaceans, molluscs, and many others for your research study*
- c) *Select to use computer modeling*
- d) *Select to use open source microbial research databases.*

Link to Potentially Hazardous Biological Agent Rules * **Pay attention to the rules & those listing microbes that are exempt from SRC pre- experimental approval.**

<https://student.societyforscience.org/potentially-hazardous-biological-agents>

****8.** My/our project will use **at least one** of the following:

- a) recombinant DNA (rDNA)
- b) culturing or engineering of clinically significant multi drug resistant organisms (MDROs)

- c) culturing of human or animal waste
- d) genome editing studies that include alteration of germ line cells, insertion of gene drives, or use of rapid trait development systems (RTDS).

Note: When at this link: Scroll to look for *Additional Rules for Projects Involving Recombinant DNA (rDNA) Technologies*.

<https://student.societyforscience.org/potentially-hazardous-biological-agents>

If you responded **YES** to one or more of the statements your project proposal and application submission group is designated as

▲ **EARLY.**

Your project proposal and application paperwork requires ACSEF's SRC/IRB pre-experimental approval before you can start the research.

▲ **EARLY PROJECT PROPOSAL GOOGLE FORM LINK:**

<https://forms.gle/tpU9snDKVLzYGiun8> Link goes live August 26, 2020 and closes November 1, 2020

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If you responded **NO** to **ALL** of the statements your project proposal and application submission group is designated as

◆ **REGULAR.**

◆ **REGULAR PROJECT PROPOSAL GOOGLE FORM LINK:**

<https://forms.gle/ZqHH23AkRk5RxpTf9> Link goes live November 20, 2020 and closes January 15, 2021

Questions send an email to the fair director at directoracsef@gmail.com. You may also phone our voice mail **925-353-4414** leave a message following the instructions given in the outgoing message.. Leaving a voicemail guarantees a call back.

 End of Section 3

Section 4

Application paperwork details

Application paperwork links will be emailed by the SRC/IRB to students upon final approval of their project proposal.

You may jump to the pages matching your application deadline group:

▲ **EARLY** application paperwork emailed Application Deadline November 15, 2020. Pages 12-13

◆ **REGULAR** Application emailed Paperwork Deadline January 30, 2021 Pages 14-15

*** **School Science Fair Regular winner** Application emailed Paperwork Deadline February 20, 2021. Pages 15-17

▲ **EARLY application paperwork deadline November 15, 2020**

Early group - (Only students answering YES to one or more of the 8 statements in Section 3)

As previously stated in Section 2 - The project proposal acceptance email from SRC/IRB will contain links to the application forms and research plan form specific to each type of project.

Subsequently students should **immediately set to work completing the application** paperwork if they plan to meet the deadline.

There is no grace period beyond the deadline for incomplete paperwork.

Follow the instructions carefully the first time. If errors or safety issues are found it will either delay or if beyond the deadline deny your project .

★Go to <https://acsef.zfairs.com> to find links to several tutorials. One of these is filling out each of the forms.

HINT: Additionally ACSEF suggests students open each link to the forms provided by the SRC/IRB to become acquainted with the content you will need to type onto the form.

If necessary print and do a practice run on the forms so they are accurate.

****Early Group: The earlier your application paperwork is received and approved by SRC/IRB = the earlier you can start the experiment. ***WARNING reminder** do not start the experiment without SRC/IRB application paperwork approval - failure to follow this rule will deny the project for competition at ACSEF.***

Filling out the forms:

General Instructions:

1. To type and sign directly onto the various required forms while online you must have access to **Adobe Reader, Adobe Pro or Adobe DC.**
Each item of the application paperwork is a fillable pdf (fillable = you can type into the forms and sign/date the form - Parents and Teachers also can type into the form to sign/date).
2. Open each link provided. Complete one form at a time.
3. *If you are on a TEAM the captain must ensure each team member completes Form 1B and Student Agreement and emails it to you. Failure to do this will delay your approval.

4. When each form is complete - save it onto your computer by naming it by the form title. For example: Form 1 Checklist for Adult Sponsor". **WARNING** the online form will NOT automatically save.
5. Then go on to the next forms when you have time to do so in the order they are listed in the email from SRC/IRB, remembering to save each as it is completed.
6. Print each form to send to ACSEF. (and make a copy for yourself too).
7. Scan ALL the forms into a single pdf file. *SRC will not open individual attached documents **nor** jpeg, gifs, tiffs or png photos of forms or any additional paperwork.

If you DON'T have access to a printer that scans or a scanner, [skip to this link for what you can do.](#)

All documents must be in ONE pdf file attached to an email to SRC/IRB.

8. ***If you are on a team only the team captain sends the email - however the team captain MUST copy each team member, yourself and parent/guardian.**
9. In the Subject line type:**First and Last name of the student submitting the paperwork.**
10. Email the application pdf file to yourself, your parent/guardian, your team members if applicable and to src.irb.acsef@gmail.com .

11. NOW you wait. Real humans must now read over everything for correctness, clarity, and safety.

If there are errors on the application paperwork SRC/IRB will **reply to all** from the original email and request the errors be fixed. There is no grace period beyond the original deadline of **November 15, 2020**

- a. The students will need to **remove the error pages and insert the fixed pages into the application packet.**
- b. The student will need to **RESCAN the ENTIRE corrected application packet** and RESEND a single pdf file with
SUBJECT LINE: REVISED APPLICATION FOR (insert First and Last name to src.irb.acsef@gmail.com) by: **November 15, 2020**

The **[Congratulations Your Paperwork is Approved](#)** email will come from the Fair Director directoracsef@gmail.com

The email will contain two important items:

1. **EARLY** group projects will receive a reminder to **MAIL** or drop off a paper copy of the approved paperwork (see details below for mailing or dropping off).

2. The director will supply you with a Registration Guidebook. This will walk you through the official online registration for ACSEF that secures your spot at the fair.

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◆ REGULAR Application Paperwork Deadline January 30, 2021

EXCEPTION: Schools holding Science Fairs see Exception below

As previously stated in Section 2 - The project proposal acceptance email from SRC/IRB will contain links to the application forms and research plan form specific to each type of project.

Subsequently students should immediately set to work completing the application paperwork if they plan to meet the deadline for their group.

There is no grace period beyond the deadline for incomplete paperwork.

So follow the instructions carefully the first time. If errors or safety issues are found it will either delay or if beyond the deadline deny your project .

★Go to <https://acsef.zfairs.com> to find links to several tutorials. One of these is filling out each of the forms.

HINT: Additionally ACSEF suggests students open each link to the forms provided by the SRC/IRB to become acquainted with the content you will need to type onto the form.

If necessary print and do a practice run on the forms so they are accurate..

Filling out the forms:

General Instructions:

1. To type and sign directly onto the various required forms while online you must have access to **Adobe Reader, Adobe Pro or Adobe DC.**
Each item of the application paperwork is a fillable pdf (fillable = you can type into the forms and sign/date the form - Parents and Teachers also can type into the form to sign/date).
2. Open each link provided. Complete one form at a time.
3. *If you are on a TEAM the captain must ensure each team member completes Form 1B and Student Agreement and emails it to you. Failure to do this will delay your approval.
4. When each form is complete - save it onto your computer by naming it by the form title. For example: Form 1 Checklist for Adult Sponsor". **WARNING** the online form will NOT automatically save.

5. Then go on to the next forms when you have time to do so in the order they are listed in the email from SRC/IRB, remembering to save each as it is completed.
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The director will supply you with a Registration Guidebook. This will walk you through the official online registration for ACSEF that secures your spot at the fair.

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*****School Science Fair Exception: Regular Group Application Paperwork Only
Deadline February 20, 2021**

This DOES NOT apply to winning students identified as Early Group*

*****School Science Fairs Regular Winning Projects:**

As previously stated in Section 2 - The project proposal acceptance email from SRC/IRB will contain links to the application forms and research plan form specific to each type of project.

Subsequently students should immediately set to work completing the application paperwork if they plan to meet the deadline for their group.

There is no grace period beyond the deadline for incomplete paperwork.

So follow the instructions carefully the first time.

If errors or safety issues are found it will either delay or if beyond the deadline deny your project .

★Go to <https://acsef.zfairs.com> to find a tutorial on filling out each of the forms.

HINT: Additionally ACSEF suggests students open each link provided by the SRC/IRB to become acquainted with the content you will need to type onto the form.

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4. When each form is complete - save it onto your computer by naming it by the form title. For example: Form 1 Checklist for Adult Sponsor". **WARNING** the online form will NOT automatically save.
5. hen go on to the next forms when you have time to do so in the order they are listed in the email from SRC/IRB, remembering to save each as it is completed.
6. Print each form. (and make a copy for yourself too).
7. Scan each printed form and email to your teacher.
8. The teacher will review the forms to ensure they are complete and filled out correctly. *Teachers ensure that you have a Form 1B and Student Agreement from each of the students if they are on a team.

9. The teacher will scan each of the forms into a single pdf file per project. *SRC will not open individual attached documents **nor** jpeg, gifs, tiffs or png photos of forms or any additional paperwork.

If you DON'T have access to a printer that scans or a scanner, [skip to this link for what you can do.](#)

All documents must be in ONE pdf file attached to an email to SRC/IRB. The teacher will email each winning project forms to src.irb.acsef@gmail.com for review well before the deadline of **February 20, 2021**

If SRC/IRB determines there are errors they will alert the teacher via email requesting the errors be fixed by:

- a. **removing the error pages and insert the fixed pages into the application packet.**
- b. **RESCAN the ENTIRE corrected application packet.**
- c. **RESEND a single pdf file with the**
SUBJECT LINE: **REVISED APPLICATION FOR** (insert First and Last name) to student team members if applicable, parent/guardian and src.irb.acsef@gmail.com by: **February 20, 2021**

The [Congratulations Your Paperwork is Approved](#) email will come from the Fair Director directoracsef@gmail.com

The director will supply the teacher and each winning student with a Registration Guidebook. This will walk the students and their parents through the official online registration for ACSEF that secures their spot at the fair.

End of Section 4

SECTION 5

REGISTER YOUR PROJECT TO COMPETE AT ACSEF.

This year there will NOT be a registration fee. We will however **suggest a donation** of any amount over \$10 which enables ACSEF to **meet our IRS nonprofit public charity requirement that 1/3 of our funding** is derived from the public at large

ACSEF participation is open only to those students that have successfully submitted a project proposal and application by their respective deadlines.

Each project must be officially registered to compete at ACSEF 2021.

Registration creates a **project dashboard** in our online system. It is through your dashboard project ID that ACSEF will assign your judges.

Soon after you receive the **email confirming your paperwork application is completed** the Fair Director will send an email containing a link to the 2021 **Registration Guide**.

The **Registration Guide** contains the detailed step by step instructions for successfully registering and a **coded link** that will allow you to register.

The **Registration Guide** also contains a list of items you'll need to upload to your project dashboard some of which the judges will be using during judging.

The email will come from directoracsef@gmail.com

End of Section 5

SECTION 6 PROJECT RESOURCES

Teachers - If you are wondering HOW you can accomplish your NGSS requirements and have students do a science fair project research - Check this out! Having your student perform research projects to enter into ACSEF takes care of your NGSS requirements! Really! [Teachers see how science fair can accomplish your NGSS requirements](#)

If you are a student (or teacher) wondering how to get started on a project or help your students with projects that could be entered into ACSEF here are some helpful hints and links to projects done by other students that possibly can give you some ideas of related research (note:do not repeat another person's exact project! That is a form of plagiarism!).

Resources from IDEA to FAIR

1. Powerpoint presentation: [2021 Why do a science or engineering project?](#)
2. If Teachers or students are [TOTALLY new to science fair start here](#).
3. Prepare yourself to think like a scientist by learning about minimum quality standards for science and engineering projects. [Minimum Quality Standards](#).
4. Coming up with an idea - 1st check our list of projects to be avoided [Projects to Avoid](#)
5. Use the links below to help stimulate ideas that are not on this list
 - a) Link to some of the [ACSEF 2018 and 2020 high school and middle school project abstracts](#).
 - b) Link to [Broadcom Masters top 30 Middle School Projects in USA 2019](#). But remember, repeating a project exactly as it is shown without changing

something such as materials or methods is a form of plagiarism! Use these for ideas only and EXPAND upon what was learned.

c) Who wants to do an engineering project? What is an engineering project? How does it differ from a science project? Here is an engineering project Must See Link! [Everything you need to know about engineering projects](#) and how to do them!

d) Check the difference between a science project and an engineering project regarding the research plan (Procedure and materials) formatting for each. [Science Project Research Plan](#) vs. [Engineering Project Research Plan](#)

e) [Science Buddies](#) has **EVERYTHING** you'd ever want to know about getting started on a science fair project! **BUT DO NOT REPEAT THE PROJECTS!!** We will not accept them!! Use their list of projects as an idea launching point - check their "make it your own" suggestions and come up with some of your own changes.

f) **Links to previously winning projects** that made it to the California Science and Engineering Fair might spark an idea "I wonder if I changed this a bit (make a change to materials or methods) what would happen?"

**Select a highlighted year and then browse the projects from previous [California Science and Engineering Fair](#)

**This is a link to the [Canada virtual science fair](#) - What we like about this site is that you can see the entire work of the student. Select the award level and category you want to view.

**For those of you who want to GO REALLY BIG this is the link to the [International Science & Engineering Fair winning project abstracts since 2014](#)

1. [Complete Display and safety guidelines. Summarized Display and Safety Guidelines.](#) [Photo Gallery of Sample Display Boards](#) including ISEF finalists
2. **ACSEF Judging Categories (are the categories the same this year?)**
3. **Teachers** - Contact us! The Director, Operations Director and Judging Advisor are former high school and middle school teachers and collectively have over 70 years of science fair research experience guiding students from idea to fair!

We've been down this road before you and would love to help you become the guide to the next generation of scientists and engineers and in doing so accomplish your NGSS requirements! directoracsef@gmail.com

FAQ (Frequently Asked Questions):

- How many projects qualify from ACSEF to go to the International Science and Engineering Fair ISEF? ANSWER: In 2021 we will qualify **6 projects** based upon the outcome of Round 2 judging

- How many projects qualify from ACSEF to go to the California Science and Engineering Fair CSSF? ANSWER: In 2021 *at the time of publishing the Handbook we have not been provided our CSSF quota. We will update when that is determined. We do know that both middle and high school projects will be selected based upon the outcome of Round 2 judging.
- How many projects qualify from ACSEF to be nominated to the national Broadcom Masters middle school competition? ANSWER: The top **10% of the middle school projects** will be nominated. based upon the outcome of Round 1 and Round 2 Judging
- How many 1st place category awards are selected? ANSWER: It varies according to the outcome of Round 1 judging scores. **We do allow multiple 1st, 2nd 3rd and 4th place in EACH** middle and high school category as per the judging scores from Round 1
- *note starting in 2021 there will be no Honorable Mention awards.

Tips for writing a great abstract!

- Writing the abstract is a key part of your research project.
- If you want to write a great abstract follow these guidelines:
- When your project is completed (data is analyzed and conclusion is made) write an abstract following this format with samples, also Link for help in writing an Abstract with samples,.

NOTE: The ACSEF judges will have access to this link if they choose to prepare questions designed to bring out the best in you and your project during their virtual Q/A timed with you.

Link to Writing your abstract with samples:

<https://docs.google.com/document/d/1NJ3TOJoQ-fCxTKU6kzLthpZMQOddyL2IbAqppCt7VAw/edit?usp=sharing>

Here are tsome [2020 ACSEF Abstracts](#) to review

Tips for creating a great display board

ACSEF will require a **quality** display board. If your school did not require a display for the selection process now you must make one. Use our guidelines:

- [Use these guidelines](#) & guidelines [with photo samples & annotations](#) [Photo Gallery of Sample Display Boards](#) including ISEF finalists

Questions send an email to the fair director at directoracsef@gmail.com. You may also phone our voice mail **925-353-4414** leave a message following the instructions given in the outgoing message. Leaving a voicemail guarantees a call back.

___ End of Section 6 ___

SECTION 7 SCHOOL SCIENCE FAIR GUIDELINES

School Science Fair Coordinator, Admin or designated staff member please:

- Ensure that all selected projects must meet [Minimum Quality Standards](#) and must NOT be on the [Projects to Avoid](#) list or fall into the projects to avoid criteria.
- ACSEF recommended judging criteria required selection of judges are located at the indicated links: [Selection of Judges & Judging Tips & Hints](#) and [Judging Criteria](#).
- The School Science Fair Coordinator or school Admin must notify ACSEF no later than **November 1, 2020** of the schools intent to hold a science fair.

Provide the **name of the school**

Provide the **date the selection will be made**. Note must be no later than 11:59 pm February 10 2021. Email: directoracsef@gmail.com

ACSEF will provide via return email the school admin or other staff member with:

- The link to the Winner Google Form.
- A list of information we need about each student and his/her winning
Note: for team projects ACSEF will need the information per each student on the team.
- The School Science Fairs must be held by **February 10, 2021**
- The School Science Fair Coordinator or school Admin. must supply ACSEF with project and personal **early and regular winners** information by **February 12, 2021** as per the email instructions the school Science Fair Coordinator or school Admin will receive from ACSEF upon notification their school is holding a science fair.
- The School Science Fair Coordinator or school Admin will scan each Regular Application, save it in a single PDF file and email it to the SRC/IRB no later than **February 20, 2021**. ACSEF will not accept the emailed files directly from winning students - they must come from the school contact only.

Questions send an email to the fair director at directoracsef@gmail.com. You may also phone our voice mail **925-353-4414** leave a message following the instructions given in the outgoing message. Leaving a voicemail guarantees a call back.

_____ **End of Section 7** _____

Section 8

SCHOOL PROJECT QUOTAS

- **Schools that are NEW to ACSEF** participation and holding a science fair or using an administrative selection committee will be given a participant quota of **8 winning projects**.

New Schools may select a mix of individual and team over all grade levels.

New Schools may alternately decide to select 1-2 best projects per grade level up to 8 total winning projects per grade level up to 4 total projects if grade level awards are provided.

- **School District Science Fair Quota:** Top 15% of all projects or some percentage between 1%-5% top projects per grade level if grade level awards are provided.
- **Schools that have PREVIOUSLY participated at ACSEF:** Please provide the top 15% of your projects.

_____ **End of Section 8** _____

Section 9

Title 1 School Support

1. Online registration fees are waived for students attending Title 1 schools,. Or for students who are on free or reduced lunch providing a school administrator sends an email which contains the following information. *note the email must be sent from the school administrators school email address to ACSEF director directoracsef@gmail.com
 Contents of email
 - a) Name of person submitting Title1 verification information
 - b) Name of school
 - c) CDS code
 - d) Physical address of the school
 - e) Mailing address of school if different from above
2. E-mentor guidance for teachers who involve students in science or engineering projects. Contact the fair director for teacher e-mentoring. directoracsef@gmail.com
3. **School Science Fair 101 workshops** will resume when school programs return to normal.

~~Science Fair 101 workshop for your school or school district (contact fair director Patti Garothers for available dates directoracsef@gmail.com).~~ 4. ~~NEW PROGRAM for Title 1 Schools.~~

~~Shadow Program Year 1 and Year 2 —*note this new 2020 fair program is limited to a first come first served eligibility until special funding runs out.~~

4. **Shadow Programs year 1 & 2** will resume when school programs return to normal and ACSEF is no longer virtual.

[Shadow Program Year 1 & 2.](#)

Questions send an email to the fair director at directoracsef@gmail.com. You may also phone our voice mail **925-353-4414** leave a message following the instructions given in the outgoing message. Leaving a voicemail guarantees a call back.