CASEF FALL TEACHER MEETING 2023-24

TEACHER HANDBOOK WWW.CASEF.ORG
UNDER "WHAT WE HAVE" – RESOURCES

SLIDESHOW WILL BE POSTED UNDER RESOURCES ON WEBSITE

March 4 – 7, 2024

The 2023 fair will be an **in-person** event in the Penn State Harrisburg CUB (gymnasium)

Monday: 4 – 7 pm Certification

Young Scholars Judging

Tuesday: 10:00 – 11:30 Sr. Judging

12:00 – 1:30 Jr. Judging

9:00 – 3:00 Special Award Judging

Thursday: 6:30 Awards *Penn State Harrisburg Kulkarni Theater*

CASEF YOUNG SCHOLARS
Grades 5 & 6

www.casefys.stemwizard.com

YOUNG SCHOLARS CALENDAR

January 10	Registration
January 16	Fees due
March 4	4 - 7pm Set up and Judging.
March 7	6:30 Award Ceremony

Rules

Interview Questions

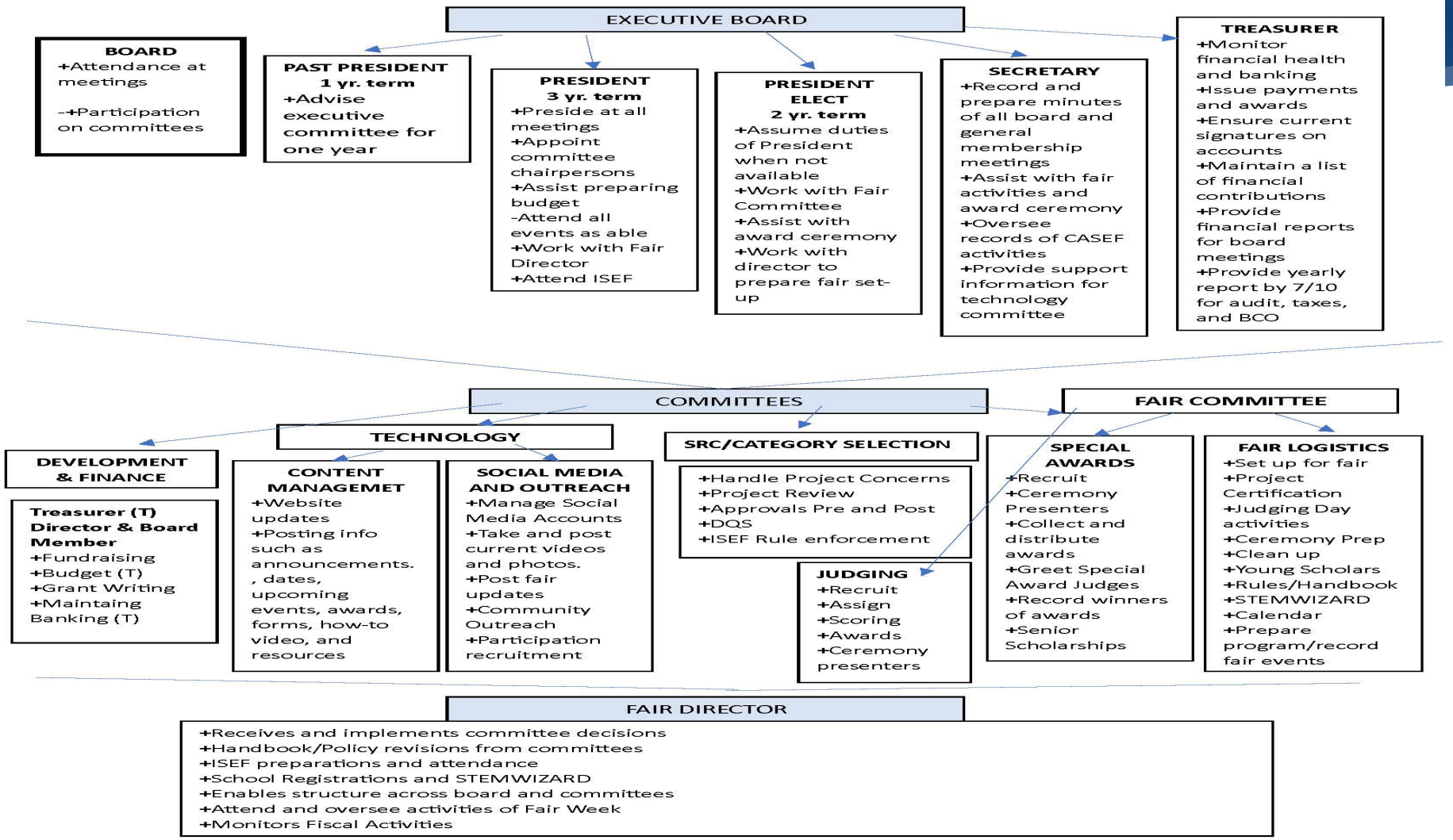
Rubric

www.casef.org

PLEASE SHARE WITH YOUR ELEMENTARY STAFF AND SEE THE WEBSITE FOR DETAILS

Constitution and By-Laws Changes

It is the recommendation of the Board of Directors to approve changes to organizational structure



CAPITAL AREA SCIENCE & ENGINEERING FAIR

Thermo Fisher Scientific Junior Innovators Challenge

Formerly BroadcomMASTERS

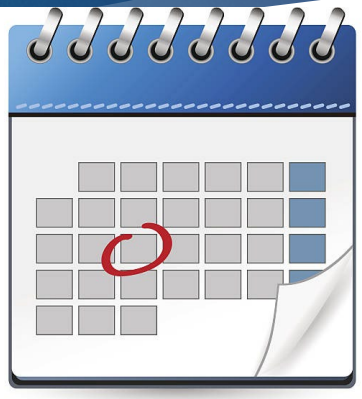
1800+ applicants, 300 semifinalists, 30 finalists

CASEF Semifinalists

KAZI, ARMAN (GRADE 8)
Hershey, Pennsylvania Hershey Middle School
Creating Brain Computer Interface for Neuromuscular Disease Patients To Communicate

PAUL, AINESH (GRADE 8)
Hershey, Pennsylvania Hershey Middle School
Exploring the Relationship Between Early Life Experience and Aggression

CALENDAR



November 21 Deadline for SRC Prior Approval Requests*
* Humans more than minimal risk, vertebrates, or microbiology
December 9 All prior approval corrections/omissions due.
January 10 FINAL Deadline for ALL student project entries into STEMWIZARD
January 16 School Registration and fees due AND Inventory Forms due with rankings.
FINAL deadline for sponsor to review of STEMWIZARD entries
January 20 Category Selection Committee
January 23 emails re: omissions/corrections and failure to qualify.
January 25 11:59pm ePOSTMARK DEADLINE for corrections/omissions **NO EXTENSIONS OR EXCEPTIONS**
February 10 Project numbers assigned by this date.
February 13 Extra project registration fees due
February 26 11:59pm Release to Judges Milestone complete with active video link.
February 28 Projects released to the judges.

Fair Week – March 4-7

Monday – Student certification 4-7pm - Young Scholar (grades 5 & 6) judging **WE NEED HELP THIS EVENING**
Students must bring hard copies of the Exhibitor Entry Form (with abstract) and PSU/Insurance Waiver *www.CASEF.org*
Tuesday – Judging with interviews SR 10:00 – 11:30, JR 12:00 - 1:30 *NO STUDENTS CAN BE DROPPED OFF OR WAIT FOR RIDE UNCHAPERONED*
Tuesday by 6 pm grand champion call-back notifications
Wednesday- 9 to 12:30 Grand Champion Judging by appointment
Wednesday and Thursday open to public 8 am – 6pm
Thursday 6:30pm Award Ceremony - Remove displays **PRIOR** to ceremony or between 8 and 10 am Friday

Fair Week – March 4-7

- Monday – set up 4-7pm ***We need help certifying and judging Young Scholars!***
- Tuesday – 10:00am to 11:30 Judging Senior Interviews
- 12:00 – 1:30, Judging Junior Interviews

NO LUNCH AVAILABLE ON CAMPUS

- Tuesday by 6pm – grand champion call-back notifications
- Wednesday – Grand Champion Judging by appointment 9 – 12:30
- Wednesday- Thursday Open to public 12 – 6pm
- Thursday – Open to the public 8am – 6pm
- Award Ceremonies 6:30

Remove displays PRIOR to ceremony or Friday morning between 8 – 10 am

IRB – Institutional Review Board

PURPOSE: APPROVE PROJECTS THAT POSE MINIMAL RISK
SEE PAGE 23-24 OF HANDBOOK

MEMBERS: NON-SPONSORING TEACHER, ADMINISTRATOR, AND MEDICAL OR MENTAL HEALTH PROFESSIONAL

DETERMINATION: REVIEW FORM 3 TO DETERMINE MITIGATION OF RISK
HUMAN PARTICIPANTS FORM 4 & HUMAN CONSENT FORM

APPROVAL: SIGNATURES NEEDED ON FORMS 1B, 2A , 3 AND START DATE IS AFTER APPROVAL

PROJECTS THAT INVOLVE VERTEBRATE ANIMALS, MICROBIOLOGY, OR HUMANS WITH MORE THAN MINIMAL RISK NEED TO BE APPROVED BY SRC

NO RESEARCH CAN BEGIN UNTIL PROJECT IS APPROVED

NEW CATEGORY **MARI**

- **Math, Research, Informatics**
- **MARI Math, Research-based, and Informatics (tech applications)** -research projects that are not based on traditional experimentation or engineering design. Mathematic projects, data driven research, and applications of existing technology, software, and mathematical models.
- Sources need to be cited – preferably in-text citations as well
- A significant conclusion must be drawn from the compilation of research, not just a report of available research.

- **CERT** *(formerly TEEM)* **Computer, Engineering, Robotics, and Technology** computer hardware, robotics, software, and engineering (design, build and test)

- **RUBRIC AVAILABLE www.CASEF.org**

2024 CHANGES SUMMARY

REMINDERS:

- Schools should form and IRB* for approval of projects that do not need SRC approval. Projects needing SRC approval submit to CASEF SRC for before **NOVEMBER 21st.** **Please email the director with the student's name, grade, school and project title to notify SRC that the project is awaiting approval.**

- **Form 3: Risk Assessment – MUST BE DONE FOR ALL PROJECTS. Answers CANNOT be "n/a." The answer can be "minimal risk"** but there **MUST** be some potential risk identified AND a way to mitigate that risk. *i.e. Paper survey : Risk – uncomfortable with topic, Mitigation – does not complete survey*

NEW:

- **MICROBIOLOGY PROJECTS - Students in grades 7-12 may enter Microbiology project IF they use exempt organisms in a BSL-2 Lab.* OR** if the project is done in a Registered Research Institution (RRI) with all the completed forms and letters so that it can be approved and accepted at Category Selection. **NO culturing unless in BSL-2 lab. Disposal plan required.**

  ***NEW ISEF BSL-2** Rule Lab must complete checklist and SRC tour must verify conditions.

- PSU Media Release and CASEF Release - PSU Form must be turned in at Set-up. CASEF – agree on STEMWIZARD – make parents/guardians aware

- STEMWIZARD opens for 2023 October 18th. Teacher/Sponsor must register before students can enter. *Entries that are currently in may need to be re-submitted.*

- EITC Letters of Support – Public Schools, DUE in November. *Sample letter on website, must be on school letterhead from Administration.*

- **Category Updates: NEW: MARI** (Math, Research, Informatics) **CHANGE: CERT,** formerly TEEM (Computers, Engineering, Robotics, Technology)

- Judging Day Seniors 10 -11:30 and Juniors 12 – 1:30 NO LUNCH ON CAMPUS PSU will offer tours and demonstrations during the judging sessions. We will need a participation count.

- Fee can be paid by credit card with 4% processing fee. It can be paid on website, or a Square invoice can be requested. Invoice on website.

2024 STEMWIZARD https://casef.stemwizard.com/

Teachers need to re-register for 2024 – make sure your students use your registered name and same school name.

Some student milestones have slight changes. Please have students read carefully. ALL have published due dates.
NOTE: The Penn State Release Form and Participation Agreement can be found on website www.casef.org and is a condition of participation. Must be turned in in hard copy at set-up. They must agree in STEMWIZARD **and** bring a hard copy to registration.
NO SIGNED FORM – NO ADMITTANCE!

Project Summaries without working links to a video will not be eligible for first place or special awards.

Judges will need to re-register. If you are judging, please register as a judge also.

Sponsors will need to be monitoring student entries, especially under the "Submission for Judges Review" Milestone. These WILL NOT BE EDITED BY CASEF. ***We have built TWO EXTRA days into the calendar for teachers to check entries before category selection. Projects WILLL be disqualified for not meeting the registration requirement. There are new screencasts on the website to walk you through each form.***

Both category awards and special awards will view the projects via STEMWIZARD. The projects will be made available to the judges the week prior to the fair. Student will not be able to make corrections or modifications after the deadline**. This includes the link to the video presentation.**

2024 DISQULIFICATION BY CATEGORY SELECTION COMMITTEE

The category review committee volunteers spend many hours reviewing the projects. Again, this year, the committee has provided extra time for sponsors to review the project entries prior to category selection meeting. This review process is to verify the entries are complete, the forms are signed, and the required information is included in the entry. ***We can use help in January to review the projects.***

DISQUALIFICATION CRITERIA

1. Incomplete Research Plan with 5 resources and/or failure to include copies of any surveys used in the project.
2. Incomplete or unsigned forms
3. Failure to complete all of the STEMWIZARD milestones.
4. Form 4 with missing information and/or signatures.
5. Form 3 – Risk Assessment form submitted with “none” or “n/a” answers.
6. Experimentation that does not fall within the submitted start and end dates.
7. Omitting SRC approval for Human, Vertebrate, or Potentially Hazardous Biological Materials, including ALL microbiology projects.
8. Any project that cultures microorganisms, mold, fungi, or other non-exempt organisms in a BSL-1, classroom, or home, or non-approved environment.
9. Failure to use an RRI or APPROVED BSL-2 laboratory when required.
10. Failure to comply with SRC requested changes.
11. Failure to meet deadlines.
12. Omission of registration forms and/or payment
13. Requests for exemption from CASEF or SRC rules and guidelines
14. Academic fraud, lack of integrity in research, or plagiarism
15. Failure to set up and be certified.
16. Survey projects without the required statistical analysis
17. Display boards that do not follow the outlined requirements on the Exhibitor Information Form.
18. Circumstances deemed unacceptable by the CASEF board of directors.

PROJECT NUMBER IS NOTIFICATION OF ACCEPTANCE – If you do not receive a project number on the notification the project has not been accepted.

Please do not activate a deactivated project or use a number that might be in a deactivate account in STEMWIZARD.

PROJECT VIDEO SUMBISSION

YOUTUBE UNLISTED VIDEO or other parent/teacher approved media

Each project will be required to submit a video presentation. The video will be an introduction of the project for the judges. Teams must have all team members participate in the video. The first 5 seconds of the video needs to be just the display board. The project needs to be introduced by project number and title. NO STUDENT NAMES OR SCHOOLS (this includes uniforms – business casual attire is recommended.) Student faces are NOT required.

The Display Board MUST BE THE BACKGROUND FOR VIDEO and should contain the same information that is submitted in the PDF documents in STEMWIZARD.

The video can be no longer than FIVE (5) minutes and should tell the story of the project: problem, method, results, analysis, and conclusion. The video must be student/school/sponsor produced. Professionally produced videos will be disqualified. Encourage the students to speak candidly and confidently about their project. A memorized or read speech does not make a good presentation. The judges should be able to follow along with the provided PDF submissions.

CASEF will determine if the video may replace an interview

VERIFY LINK IS WORKING

INSTRUCTIONS/HOW TO www.CASEF.org

RESOURCES

CSATS HTTPS://WWW.CSATS.PSU.EDU

PA STATE LIBRARY MAKER SPACE
HTTPS://WWW.STATELIBRARY.PA.GOV/GENERALPUBLIC/STATE-LIBRARY-MAKERSPACE/PAGES/DEFAULT.ASPX

PA SOCIETY FOR BIOMEDICAL RESEARCH
HTTPS://PSBR.ORG

GETTYSBURG COLLEGE ADVANCING SCIENCE
HTTPS://WWW.GETTYSBURG.EDU/OFFICES/ADVANCING-SCIENCE

ENVIORMENTORS
HTTPS://ENVIRONMENTORS.PSU.EDU

DNCR
HTTPS:// WWW.DCNR.PA.GOV/EDUCATION/PAGES/DEFAULT.ASPX

CHESAPEAKE BAY FOUNDATION
HTTPS://WWW.CBF.ORG/HOW-WE-SAVE-THE-BAY/WITH-SCHOOLS