This handbook contains important information for students who have been selected from one of the 20 Regional Science & Engineering Fairs across the state to advance to the Georgia Science & Engineering Fair (GSEF) competition. GSEF will take place March 22-24, 2018 at the Classic Center in downtown Athens.

To qualify for GSEF, all projects must adhere to the Intel ISEF Rules & Guidelines for scientific research protocol. These guidelines outline the precautions that must be taken and the appropriate committee approvals that must be sought before beginning any scientific research.

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**Other Resources**

- GSEF webpage:
  - www.georgiacenter.uga.edu/gsef

- ISEF Rules & Guidelines (also apply to GSEF):
  - https://student.societyforscience.org/international-rules-pre-college-science-research

- ISEF/GSEF Required Forms Wizard:

Questions? Contact GSEF at gsef@georgiacenter.uga.edu
GSEF projects must be entered in one of the 20 categories below. **Category selection is final; no changes will be made after registration.** Many projects could easily fit into more than one GSEF category. Please review the categories below and the more in-depth descriptions listed in the Project Category document at [www.georgiacenter.uga.edu/gsef](http://www.georgiacenter.uga.edu/gsef) to select ONE that most accurately describes your project.

When selecting a category, consider the following: *Who will be the most qualified to judge my project? What area of expertise is the most important for the judge to have? (for example, a medical background or an engineering background?) What is the emphasis of my project? What characteristic of my project is the most innovative, unique or important? (For example, is it the application in medicine or the engineering of the machine? Is it inserting the proper gene or the method of computer mapping to demonstrate the results?)*

<table>
<thead>
<tr>
<th>Life Science Categories</th>
<th>Earth, Energy &amp; Environment Categories</th>
<th>Physical Science Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANIMAL SCIENCES</strong></td>
<td><strong>EARTH &amp; ENVIRONMENTAL SCIENCES</strong></td>
<td><strong>CHEMISTRY</strong></td>
</tr>
<tr>
<td>Animal Behavior</td>
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<td>Cellular Studies</td>
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<td>Development</td>
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<td>Ecology</td>
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<td>Water Science</td>
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<td>Nutrition &amp; Growth</td>
<td><strong>ENVIRONMENTAL ENGINEERING</strong></td>
<td>Organic Chemistry</td>
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<td>Physiology</td>
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<td>Physical Chemistry</td>
</tr>
<tr>
<td><strong>BEHAVIORAL &amp; SOCIAL SCIENCES</strong></td>
<td>Land Reclamation</td>
<td><strong>MATERIALS SCIENCE</strong></td>
</tr>
<tr>
<td>Clinical &amp; Developmental Psychology</td>
<td>Pollution Control</td>
<td>Biomaterials</td>
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<td>Cognitive Psychology</td>
<td>Recycling &amp; Waste Management</td>
<td>Ceramic &amp; Glasses</td>
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<tr>
<td>Psychological Psychology</td>
<td>Water Resources Management</td>
<td>Composite Materials</td>
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<tr>
<td>Sociology &amp; Social Psychology</td>
<td><strong>ENERGY: CHEMICAL</strong></td>
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<td><strong>BIOCHEMISTRY</strong></td>
<td>Alternative Fuels</td>
<td>Electronic, Optical &amp; Magnetic Materials</td>
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<td>Analytical Biochemistry</td>
<td>Computational Energy Science</td>
<td><strong>PHYSICS &amp; ASTRONOMY</strong></td>
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<tr>
<td>General Biochemistry</td>
<td>Fossil Fuel Energy</td>
<td>Astronomy &amp; Cosmology</td>
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<tr>
<td>Medicinal Biochemistry</td>
<td>Fuel Cells &amp; Battery Development</td>
<td>Atomic, Molecular, &amp; Optical Physics</td>
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<tr>
<td>Structural Biochemistry</td>
<td>Microbial Fuel Cells</td>
<td>Biological Physics</td>
</tr>
<tr>
<td><strong>BIOMEDICAL &amp; HEALTH SCIENCES</strong></td>
<td>Solar Materials</td>
<td>Computational Physics &amp; Astrophysics</td>
</tr>
<tr>
<td>Disease Diagnosis</td>
<td><strong>ENERGY: PHYSICAL</strong></td>
<td>Condensed Matter &amp; Materials</td>
</tr>
<tr>
<td>Disease Treatment</td>
<td>Hydro Power</td>
<td>Instrumentation</td>
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<tr>
<td>Drug Development &amp; Testing</td>
<td>Nuclear Power</td>
<td>Magnetics, Electromagnetics &amp; Plasmas</td>
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<tr>
<td>Epidemiology</td>
<td>Solar</td>
<td>Mechanics</td>
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<tr>
<td>Nutrition</td>
<td>Sustainable Design</td>
<td>Nuclear &amp; Particle Physics</td>
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<tr>
<td>Physiology &amp; Pathology</td>
<td>Thermal Power</td>
<td>Optics, Lasers, Masers</td>
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<tr>
<td><strong>CELLULAR &amp; MOLECULAR BIOLOGY</strong></td>
<td>Wind</td>
<td>Quantum Computation</td>
</tr>
<tr>
<td>Cell Physiology</td>
<td><strong>Math, Computing &amp; Engineering Categories</strong></td>
<td>Theoretical Physics</td>
</tr>
<tr>
<td>Genetics</td>
<td><strong>COMPUTATIONAL BIOLOGY &amp; BIOINFORMATICS</strong></td>
<td>Mechanical Engineering</td>
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<tr>
<td>Immunology</td>
<td>Biomedical Engineering</td>
<td>Naval Systems</td>
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<tr>
<td>Molecular Biology</td>
<td>Computational Pharmacology</td>
<td><strong>MATHEMATICS</strong></td>
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<tr>
<td>Neurobiology</td>
<td>Computational Biomodeling</td>
<td>Algebra</td>
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<tr>
<td><strong>MICROBIOLOGY</strong></td>
<td>Computational Evolutionary Biology</td>
<td>Analysis</td>
</tr>
<tr>
<td>Antimicrobials &amp; Antibiotics</td>
<td><strong>EMBEDDED SYSTEMS</strong></td>
<td>Combinatorics, Graph Theory, Game Theory</td>
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<tr>
<td>Applied Microbiology</td>
<td>Circuits</td>
<td>Geometry &amp; Topology</td>
</tr>
<tr>
<td>Bacteriology</td>
<td>Internet of Things</td>
<td>Number Theory</td>
</tr>
<tr>
<td>Environmental Microbiology</td>
<td>Networking &amp; Data Communications</td>
<td>Probability &amp; Statistics</td>
</tr>
<tr>
<td>Microbial Genetics</td>
<td>Optics</td>
<td><strong>ROBOTICS &amp; INTELLIGENT MACHINES</strong></td>
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<tr>
<td>Virology</td>
<td>Sensors</td>
<td>Biomechanics</td>
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<tr>
<td><strong>PLANT SCIENCES</strong></td>
<td>Signal Processing</td>
<td>Cognitive Systems</td>
</tr>
<tr>
<td>Agronomy</td>
<td><strong>ENGINEERING MECHANICS</strong></td>
<td>Control Systems</td>
</tr>
<tr>
<td>Ecology</td>
<td>Aerospace &amp; Aeronautical Engineering</td>
<td>Machine Learning</td>
</tr>
<tr>
<td>Genetics/Breeding</td>
<td>Civil Engineering</td>
<td>Robot Kinematics</td>
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<tr>
<td>Growth &amp; Development</td>
<td>Computational Mechanics</td>
<td><strong>SYSTEMS SOFTWARE</strong></td>
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<tr>
<td>Pathology</td>
<td>Control Theory</td>
<td>Algorithms</td>
</tr>
<tr>
<td>Physiology</td>
<td>Ground Vehicle Systems</td>
<td>Cybersecurity</td>
</tr>
<tr>
<td>Systematics &amp; Evolution</td>
<td>Industrial Engineering-Processing</td>
<td>Databases</td>
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<td></td>
<td></td>
<td>Operating Systems</td>
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<td></td>
<td></td>
<td>Programming Languages</td>
</tr>
</tbody>
</table>
The following required forms and guidelines help students ensure that the research they are planning is safe, ethical, and approved by a parent, a teacher, and field experts. Students and mentors are strongly encouraged to use the Required Forms Wizard tool to help determine what forms are required for the project (https://apps2.societyforscience.org/wizard/index.asp).

To be eligible for GSEF, all projects MUST obtain proper approvals and follow the ISEF Rules & Guidelines. https://student.societyforscience.org/international-rules-pre-college-science-research

It is the responsibility of the student and the Adult Sponsor to evaluate the study to determine if the research will require forms and/or approval prior to experimentation, especially projects using human participants, vertebrate animals, or potentially hazardous biological agents. Students are encouraged to consult with the local SRC/IRB to ensure they have followed all rules and completed all required forms.

Research forms must be reviewed and signed by local and Regional SRCs/IRBs as appropriate. Failure to adhere to the ISEF Rules and Guidelines may result in disqualification at any stage of the GSEF competition, including revocation of awards and honors.

### Forms required for EVERY project:
- **GSEF Participation Agreement**: Provided by your Regional Fair Director. Required for every student.
- **Official GSEF Abstract Form**: Official GSEF version is preferred, but 2018 ISEF Abstract Form (20 or 22 category) also accepted.
- **1 Checklist for Adult Sponsor**: The Adult Sponsor ensures that experimentation is within local, state, and Federal laws and Intel ISEF rules and that forms are completed by other adults (e.g. Qualified Scientist) as required.
- **1A Student Checklist Research Plan/Project Summary**: See pg. 2 of PDF for Research Plan/Project Summary instructions. The Research Plan is your first step. If changes are made during your research, they can be added to the original Research Plan as an addendum, recognizing that some changes may require returning to the SRC/IRB for appropriate review and approvals. If no additional approvals are required, the addendum serves as a Project Summary to explain the research that was conducted. If no changes are made from the original Research Plan, no Project Summary is required.
- **1B Approval Form**: One form per student. Signed and dated before experimentation begins and right after SRC has reviewed Forms 1, 1A, and any special forms. If project requires pre-approval, SRC signs either 2a or 2b before experimentation. Regional Fair SRC signs section 3 prior to that fair.

### Additional forms required for specific types of research:  
(Use Required Forms Wizard)
- **1C Regulated Research Setting**: Required if you conducted research at a college/university, medical facility, industrial setting, or other lab or research setting other than home, school or field.
- **2 Qualified Scientist**: Required if your research involves human participants, vertebrate animals, potentially hazardous biological agents, or DEA-controlled substances.
- **3 Risk Assessment**: Required if your research involves hazardous chemicals, activities or devices, or DEA-controlled substances.
- **4 Human Participants and Informed Consent Form**: Required if your research involves human participants. Informed Consent Forms must be signed by research participants (see sample). IRB APPROVAL REQUIRED BEFORE EXPERIMENTATION!
- **5A/5B Vertebrate Animals**: Required if your research involves vertebrate animals. 5A is for research conducted at home, school, or field; 5B is for research conducted at a regulated research institution. SRC/IACUC/IBC APPROVAL REQUIRED BEFORE EXPERIMENTATION!
- **6A Potentially Hazardous Biological Agents**: Required if your research involves microorganisms, rDNA, fresh/frozen tissue (including primary cell lines, human and other primate established cell lines and tissue cultures), blood, blood products, or body fluids. SRC/IACUC/IBC APPROVAL REQUIRED BEFORE EXPERIMENTATION!
- **6B Human/Animal Tissue**: Required in addition to 6A if your research involves fresh/frozen tissue (including primary cell lines, human and other primate established cell lines and tissue cultures), blood, blood products, or body fluids.
- **7 Continuation/Research Progression**: Required if your project continues or expands upon a previous year’s work. Also must include Abstract and Research Plan for each previous year.
Judging Criteria

Teachers and students in Georgia should consider the following judging criteria when planning science projects and school-level fairs. These guidelines are based on the Intel ISEF criteria. ISEF and GSEF offer a second set of criteria that may be applied to projects in engineering, mathematics and computer science, where appropriate. The judging process places special emphasis on the student’s ability to discuss the project effectively during the oral interview, as well as the project’s demonstration of originality, creativity, imagination, discovery, and inventiveness.

Displays should serve two functions: 1) to present the research clearly when the student is not present, and 2) to guide the personal interview toward an in-depth discussion. Judges may examine the student notebook (three-ring binder), which should include at least ISEF Forms 1, 1A and 1B, the Research Plan, any additional forms/permissions required by the specific research being conducted, and optional items such as a research paper.

Note: The points system indicated below applies to Senior Division judging only, although overall criteria may serve as a guide for Junior Division projects as well.

<table>
<thead>
<tr>
<th>Most Projects</th>
<th>Engineering Projects (may be applied to some projects in mathematics and computer science)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Research Question (10 pts)</td>
<td>I. Research Problem (10 pts)</td>
</tr>
<tr>
<td>• clear and focused purpose</td>
<td>• description of a practical need or problem to be solved</td>
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<tr>
<td>• identifies contribution to field of study</td>
<td>• definition of criteria for proposed solution</td>
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<tr>
<td>• testable using scientific methods</td>
<td>• explanation of constraints</td>
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<tr>
<td>II. Design and Methodology (15 pts)</td>
<td>II. Design &amp; Methodology (15 pts)</td>
</tr>
<tr>
<td>• well-designed plan and data collection methods</td>
<td>• exploration of alternatives to answer need or problem</td>
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<tr>
<td>• variables and controls defined, appropriate and complete</td>
<td>• identification of a solution</td>
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<tr>
<td>• appropriate application of mathematical and statistical methods</td>
<td>• development of a prototype/model</td>
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<tr>
<td>• sufficient data collected to support interpretation and conclusions</td>
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<tr>
<td>III. Execution: Data Collection, Analysis &amp; Interpretation (20 pts)</td>
<td>III. Execution: Construction &amp; Testing (20 pts)</td>
</tr>
<tr>
<td>• systematic data collection and analysis</td>
<td>• prototype demonstrates intended design</td>
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<td>• reproducibility of results</td>
<td>• prototype has been tested in multiple conditions/trials</td>
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<tr>
<td>• appropriate application of mathematical and statistical methods</td>
<td>• prototype demonstrates engineering skill and</td>
</tr>
<tr>
<td>• sufficient data collected to support interpretation and conclusions</td>
<td>• completeness</td>
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<tr>
<td>IV. Creativity (20 pts)</td>
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<tr>
<td>• project demonstrates significant creativity/originality/inventiveness in one or more of the above criteria</td>
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<tr>
<td>V. Presentation (35 pts)</td>
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<tr>
<td>Poster (10 pts)</td>
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<tr>
<td>• logical organization of material</td>
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<td>• clarity of graphics and legends</td>
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<td>• supporting documentation well selected and displayed</td>
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<tr>
<td>Interview (25 pts)</td>
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<tr>
<td>• clear, concise, thoughtful responses to questions</td>
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<tr>
<td>• understanding of basic science relevant to project</td>
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<tr>
<td>• understanding of interpretation and limitations of results and conclusions</td>
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<tr>
<td>• degree of independence in conducting project</td>
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<tr>
<td>• recognition of potential impact in science, society and/or economics</td>
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<tr>
<td>• quality of ideas for further research</td>
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<tr>
<td>• for team projects, contributions to and understanding of project by all members</td>
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</tbody>
</table>
The following is a summary of common display and safety issues. For any situation not addressed here, refer to the Intel ISEF Display & Safety Regulations (https://student.societyforscience.org/intel-isef-display-and-safety-regulations).

**Maximum Size of Project**
- **Depth** (front to back) 30 inches
- **Width** (side to side) 48 inches
- **Height** (tabletop to top) 72 inches

GSEF projects must be exhibited on the tabletop. No floor exhibits. No part of a GSEF exhibit may be placed on the floor or under the table. All project materials, supports, equipment, and demonstrations must be contained on the tabletop. Displays do not have to be trifold boards; pull-ups and pop-ups are allowed if within allowed dimensions.

**Official Abstract**
The complete, unaltered 8.5x11 Official GSEF Abstract Form (preferred) or the complete, unaltered 8.5x11 Official 2017 ISEF Abstract Form are the only abstracts that may be exhibited. It must be displayed vertically, preferably by taping it to hang from the front edge of the table. It is acceptable, but not preferred, to incorporate the form on the display board or to stand it in a document frame (no glass). Abstract Forms do not need to be stamped or embossed. You may not have a section titled “Abstract” on your board unless the section contains only an Official Abstract Form (not just the paragraph from the form).

**Other Forms to Tape to Table**
If your research required the following forms, they must be taped to the front of your table/displayed vertically:
- Form (1C) Regulated Research Institutional/Industrial Setting
- Form (7) Continuation Project

**Binder & Required Forms**
Arrange photocopies (not originals - keep those at home in a safe place!) of all other required forms in numeric order in a three-ring binder placed on the table. Required forms include, but are not limited to:
- Form (1): Checklist for Adult Sponsor
- Form (1A): Student Checklist
- Research Plan/Project Summary
- Form (1B): Approval Form
- Forms (1C) through (7) as required for your project

Optional items such as research paper may also be included.

**Log Book & Other Items on Tabletop**
Although ISEF regulations no longer require a bound logbook, judges like to see this item and it is highly recommended. Your logbook should be on your table.

Other items on tabletop may include a photo album of the work, previous logbooks for Continuation projects, and items that are necessary to demonstrate the science if the board and binder are not sufficient, provided these items do not violate any other Display & Safety Regulations.

**Continuations**
A project that is a continuation of a previous year’s work must be about the student’s new work for this year, with minimal reference to the previous research. The project title or subtitle may mention which year the project is; e.g., “Year 2.” Longitudinal studies may present only conclusionary data from prior years. Continuation projects must have Form (7) taped to front of table.

**Human Subject Consent Form 4**
When human participants are involved in a project, their signed consents should be obtained but not displayed, as they are confidential. Place a note in your binder stating where these forms are being kept.

**Allowable Handouts**
The only handout allowed is an UNALTERED photocopy of the complete 8.5x11 Official Abstract Form. You are permitted (but not required) to bring up to 20 unaltered photocopies of your Official Abstract form to GSEF to distribute to judges. GSEF will not make these copies for you. You may not distribute any other items or forms of information.
DISPLAY & SAFETY REGULATIONS, CONTINUED

Displayed Graphs, Images, & Photos

Credits: You must cite the source of every photo, graph, table, chart or other images, including those made by the student and those taken from the internet, journals and books. The citation must state who created the graph/chart/table, who took the photograph, or where a photo or image came from. For example: “All photographs by Jon Kim,” or “Image from www.wherever.com.”

Put the info right by the item, or, if all graphs/images were taken or created by the exhibitor or are from the same source, one clearly visible credit line or on a “tent” on the table is sufficient.

Content: Photos or images on board must not be deemed insensitive, offensive or inappropriate (e.g., no surgery, necrosis or dissection) by any member of the SRC, the Display & Safety Committee or GSEF staff. The decision made by any one of these groups is final.

Photograph Release

Photos/videos of people other than the finalist are not allowed unless a signed photograph release is available at the project. If the person is under 18, parent or guardian signature is required. Sample text: “I consent to the use of this visual image involving my participation/my child’s participation in this research.” Keep these releases in your binder.

Note: There is no specific official form for this purpose.

Mentor’s Work/Acknowledgements

The mentor’s name and institution must not appear anywhere on the display but can be mentioned at the end of the optional research paper in the binder. A mentor’s research is not a part of the student research project and must not be included in the display. Very minimal reference to work done by a mentor or others may be included only as background to clarify what the student’s own research did and didn’t cover and must clearly indicate that it was not part of the student’s work.

Replacement of Disqualified Items

If any GSEF representative requests that an object or item be removed from a display and that item is returned to the exhibit without specific permission from the GSEF Director, the project may be disqualified.

Audio-Visual or Multi-Media

At GSEF, electronic displays, e.g., PowerPoints or videos, for non-computer science projects are discouraged unless they are necessary to demonstrate the science. Judges are not required to view them. Displays must be under 30 seconds, with 15 seconds preferred. GSEF will discourage but ultimately is not responsible for equipment theft.

SAFETY REGULATIONS

Electricity at Project

If you want electricity at your table, you must submit the Electricity Request Form and fee with your registration. Electricity will be approved only for projects that require it to demonstrate the research (e.g., some computer science and engineering projects). If electricity is approved, an outlet will be provided within nine feet of the exhibit. The exhibitor must bring an approved extension cord.

Lighting

Lighting will not be approved for decorative purposes but may be approved if necessary to demonstrate the science. The electricity fee ($100) must be submitted with registration. Bulb and fixture must not pose risk of injury if touched. Cool LED light is preferred. Incandescent, halogen and other warm light sources must be caged, encased, or otherwise protected so that 1) it is not possible to burn any person or item with any part of the apparatus, bulb, fixture, or casing, and 2) no glass can escape if the bulb is accidentally broken.

Lasers

Lasers may be used only when they follow the Official ISEF Rules and Regulations. Display & Safety Inspectors may revoke the privilege and require lasers to be removed if any careless or indiscriminate use is observed. Offenses may result in revoking the right to participate.

Stability

All parts of the exhibit must be stable. Particular care must be taken with tall or heavy displays to ensure that they cannot tip over onto participants, judges, or guests.

Other Safety Policies

GSEF staff and/or the Display & Safety Committee reserve the right to remove any item or entire project at their discretion for safety reasons or to protect the integrity of the GSEF and its rules and regulations.

Laptops/Tablets

If you are bringing a laptop or other valuable electronic device, consider investing in a security device such as a locking cable system to secure your item at the exhibit. GSEF will take measures to discourage to theft/damage to exhibits or parts of exhibits, including electronics, but is ultimately not responsible should theft or damage occur.
# Display & Safety Regulations, Continued

## The Following Items Are **Not Allowed** At Projects

### Not Allowed Per Safety Regulations:

- **Living or dead organisms**, including fungi, animals, plants, and microorganisms
- **Taxidermy specimens, parts, pelts**
- **Preserved vertebrate or invertebrate animals** or animal parts, including cells
- Human or animal **food** of any kind
- Human or animal **parts or body fluids** (including bones, urine, bloodstains)
- **Plant materials** including potpourri, grain, birdseed, spices, leaves, flowers, logs, branches, etc. Plastic or other inorganic replicas or photographs should be used instead. (Exception: manufactured construction materials used in building the project or display)
- **Soil, sand, rock, minerals, or waste** samples, even if fully encased in acrylic
- **All chemicals**, including water.
- **All liquids, gels, powders, and creams**, such as shampoo, sunscreen, salt, soap, agar, etc.
- **Dry ice** or other sublimating solids
- **Hazardous substances or devices**, including poisons, drugs, firearms, weapons, martial arts weapons, ammunition, etc.
- **Sharp items**, including syringes, needles, pipettes, nails, knives
- **Flames or highly flammable materials**
- **Glass** or glass objects unless deemed by the Display & Safety Committee to be an integral and necessary part of the project (e.g., glass that is an integral part of a computer screen)
- **Hammering, pinching, or pounding devices** that are not fully immobilized, pulleys or hinges with pinch points, etc.
- **Batteries** with open-top cells
- Any apparatus or item deemed unsafe by any member of the SRC, the Display & Safety Committee, judges, or the GSEF staff (e.g., vacuum tubes or dangerous ray-generating devices, pressurized or empty tanks that previously contained combustibles, etc.)

### Not Allowed Per Display Regulations:

- Any items that are **acknowledgments, self-promotions, or external endorsements** (such as naming the research institution or mentor, or patent pending statements).
- **Awards**, medals, flags, logos (including school and university logos).
- **Give-away items** such as flyers, pens, postcards, CDs, business cards, etc. Exception: Exhibitors may give out up to 20 unaltered copies of the Official Abstract Form.
- **Postal addresses, URLs** (other than those used solely to cite the sources of photos), **email addresses, social media handles, QR codes, phone/fax numbers** of any exhibitor or his/her school or research institution.
- **Active Internet** or email connections.
- For Continuation projects, no prior years’ written material or visual depictions on the display board. However, previous years’ logbooks and binders may be on the table if desired and if clearly marked, e.g. “Year 1.”

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**No changes, modifications, or additions to projects may be made after approval by the Display and Safety Committee.**

Exhibitors who do not adhere to this regulation will fail to qualify for competition.
GSEF Attendance Policy

General Attendance Policy
Please do not register for this event unless you can commit fully. All exhibitors are expected to attend the entire event, including morning and afternoon judging sessions on Friday and the Saturday Attended Public Viewing and Awards Ceremony. Thursday evening early setup is optional.

No exceptions will be granted for conflicts with other events or activities, including academic or athletic competitions, social events such as weddings and proms, family or group travel commitments, or cultural events such as art shows, concerts, or performances. Students and their families must decide together which events will take priority. We realize that these other events are important to you and that some of you will have to make hard decisions about which event you want to attend. Notify us immediately if you have been selected for GSEF but you decide not to participate.

Exceptions may be granted only for serious medical situations, such as scheduled chemotherapy or dialysis, and for certain religious prohibitions, such as observant Jews who cannot travel on the Sabbath. Notify us early.

Judging
Judging outside of the officially scheduled periods is prohibited. Morning and afternoon judging involve different judge teams and are for different purposes and awards.

Team Attendance
If the exhibit is a team project, all members must register and pay the registration fee. Teams may be represented at GSEF by one or more members; however, individual judges have the freedom not to consider a team if they haven’t had the opportunity to meet and interview all members. If the project advances to ISEF, all members must attend the international competition.

Awards Ceremony Attendance
Any student who misses the Awards Ceremony will be ineligible for the major and special awards, including scholarships, internships, ISEF Trips, Grand Awards, the Pinnacle Award, and large monetary awards. This is out of respect for the award sponsors, who often wish to present the awards in person and to have publicity photos taken with the winners they interviewed on Friday. The absent student may still be eligible for “honors” and some unsponsored awards, provided the substitute policy (below) is followed.

Substitute Policy
No substitutes are permitted during judging.

A student who cannot attend the entire Awards Ceremony may designate another student exhibitor to come to the stage at the time the absent student’s name is called and to accept unsponsored awards on the absent student’s behalf. The substitute’s photo will be taken with the award, and if the photo is published, it will bear the name of the winner. Parents and teachers may not collect awards on behalf of students. GSEF does not record the names of substitutes, nor is GSEF responsible for the substitute’s handling of the award after acceptance. If the absent student wins a monetary award, the substitute must get the tax paperwork to the winner to sign and return to GSEF within ten days. Awards unclaimed at the ceremony will be forfeited.

Exhibit Removal
Exhibits may not be removed until after the Awards Ceremony. Some awards are distributed by placing them on exhibits while the Awards Ceremony is being conducted. If an exhibit is removed early, honors ribbons and certain other awards will be forfeited.
## GSEF *Tentative* Schedule of Events

LOCATION: THE CLASSIC CENTER AT 300 N. THOMAS STREET, ATHENS, GA 30601

### THURSDAY / MARCH 22

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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| 5:30 pm – 8:30 pm | Early Exhibit setup - *Classic Center Exhibit Hall*  
Family & friends welcome! |

### FRIDAY / MARCH 23

<table>
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| 7:30 am – 9:30 am | Exhibit setup - *Classic Center Exhibit Hall*  
Students, parents, chaperones, and guests must exit Exhibit Hall by 9:30 am. |
| 9:30 am – 11:45 am | FREE TIME! Exhibitors free for an early lunch, hotel check-in, shopping, etc. |
| 9:30 am – 5:30 pm | Parents/teachers/chaperones free to explore Athens and UGA.  
Parents/teachers/chaperones, please do not be inside the Classic Center building between 9:30 am and 9:30 pm today. A hospitality room with free coffee and Wi-Fi is available across the street in the Magnolia Room of the Hilton Garden Inn. *Please designate a place outside of the Classic Center to meet your student(s) after 5:30 pm.* |
| 10:00 am – 11:45 am | Judges’ Safety and Compliance Inspection of Exhibits  
Only Judges and GSEF staff are permitted in the Exhibit Hall. Your complete exhibit must be displayed. Electrical items that can be operated in an unattended mode should be turned on. |
| 11:45 am – 3:00 pm | Exhibitors at Projects for Round 1 Interviews  
All Exhibitors must be at their exhibits. Students should be prepared to answer and ask questions, and to discuss their projects with the judges. Exhibitors & Judges only. |
| 3:00 pm - 3:30 pm | Student Break - *students, remember to bring money for snacks!*  
No visitors (parents/teachers/chaperones) are permitted in the building during the break. |
| 3:30 pm - 5:30 pm | Exhibitors at Projects for Interviews  
All Exhibitors must be at their exhibits. Exhibitors & Judges only. |
| 5:30 pm | FREE TIME! Exhibitors and their parents/teachers/chaperones are free to enjoy dinner and explore Athens. No GSEF participants/guests will be permitted in any part of the building at any time this evening. |

### SATURDAY / MARCH 24

<table>
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<th>Time</th>
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<td>9:00 am – 3:00 pm</td>
<td>Exhibit Floor Open to the General Public</td>
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| 1:00 pm – 3:00 pm | All Exhibitors at Projects (Mandatory)  
All students must be at their projects to answer questions. Families and friends welcome. |
| 3:30 pm | All Exhibitors Line Up in Exhibit Hall  
GSEF staff will be present to give instructions. All Exhibitors must be present. |
| 4:00 pm – 6:00 pm | Awards Ceremony – *Classic Center Theatre*  
Must be present or awards will be forfeited. Exhibits may not be removed until the conclusion the ceremony.  
Guests (parents, teachers, chaperones) must have a ticket to enter the Awards Ceremony. Limit one guest ticket per student. Tickets may be claimed at the GSEF Help Desk Saturday morning between 10 am and 3 pm. Livestream of Awards Ceremony will be available for viewing on electronic devices or in a viewing room on site. |
| 6:00 pm – 8:00 pm | Project Teardown  
Exhibits must be removed between 6 and 8 pm. Exhibits left after 8 pm will be removed by the clean-up crew. |
| 6:30 pm – 7:00 pm | ISEF Winners’ Meeting – *Classic Center Theatre Stage, Backstage*  
For all ISEF 2018 Delegates (both Regional and GSEF) - come backstage for important info about ISEF |
Frequently Asked Questions

Most other questions are answered on the GSEF website (www.georgiacenter.uga.edu/gsef) or by reading the ISEF Rules (https://student.societyforscience.org/international-rules-pre-college-science-research).

If I am selected for GSEF, do I have to attend the entire event?
- You must attend the entire judging period on Friday and the afternoon public viewing and Awards Ceremony on Saturday. Thursday set-up is optional.
- No exceptions are made for schedule conflicts. This includes scholarly or athletic competitions, social events such as weddings and proms, travel plans, performances, concerts, etc. We realize that these other events are important to you and that some of you will have to make hard decisions about which event you want to attend. Notify us promptly if you have been selected for GSEF but decide not to participate.
- Exceptions may be granted for serious medical situations, such as chemotherapy or dialysis, and for certain religious prohibitions, such as observant Jews who cannot travel on the Sabbath. Notify us early.
- Teams may be represented by one or more members; however, individual judges have the freedom not to consider a team if they have not had the opportunity to meet and interview all members.

What can get me “kicked out” of GSEF?
- Presenting someone else’s work as your own.
- Refusing to follow instructions of GSEF staff or judges.
- Violation of GSEF Display & Safety Regulations

Why haven’t I received my GSEF registration confirmation email?
- We may not have processed your registration yet. It can take several weeks for your registration to make it from your Regional Fair to GSEF and into our database.
- It may have gone to your ‘Junk Mail’ folder.
- The email address on your GSEF Registration Form may have been missing, illegible, or incorrect. In this case, it is your responsibility to contact us (gsef@georgiacenter.uga.edu).

How do I know what forms I need?
- Everyone needs Forms 1, 1A, 1B, and a Research Plan. Most projects should have a Risk Assessment Form 3.
- You may need additional forms. Use the Forms Wizard (https://apps2.societyforscience.org/wizard/index.asp) to determine this. If your project will involve interaction with other people, animals, bacteria, or tissues, you will very likely need more forms.

What do you mean I “used an old form” or “followed the old rules”?
- You must use the current year’s (2018) forms and know this year’s schedule and rules. They can be found on the GSEF website (www.georgiacenter.uga.edu/gsef). We update frequently, especially as the fair date approaches. Always get your forms and instructions from here or from the ISEF website (https://student.societyforscience.org/intel-isef-forms) – don’t rely on previous years’ information!

Are GSEF rules the same as ISEF rules?
- Mostly. Here are a few of the exceptions. Refer to the website for more:
  - GSEF prefers to receive photocopies of your forms with your Registration Packet. You must also have your own set of photocopies in a binder at your exhibit.
  - GSEF requires every exhibitor to submit a signed GSEF Participation Agreement, provided by your Regional Fair Director.
  - GSEF exhibits must fit on top of a table 48”w x 30”d and have a maximum height of 72 inches. ISEF allows exhibits that stand on the floor or use additional space under the table, but NO floor space may be used at GSEF.

Is every Best in Category award given out every year?
- No. Some categories may not have a Best in Category award in any given year. Awards are given only if the judges feel that there are exhibits of sufficient quality in the category.

In which category should I exhibit to have the best chance of being selected to attend the Intel ISEF?
- ISEF delegates are selected without regard to category.

How many Georgia projects advance to the Intel ISEF?
- In 2017, four projects and two observers advanced from GSEF, and 26 students advanced from ISEF-affiliated regional fairs.
**What kinds of projects usually win top awards?**
- Projects that discover something that we did not already know – especially if that information is useful in some way.
- Projects based on solid and sufficient data that is processed accurately and presented clearly.
- Many top winners in Senior Division have the guidance of a research professional in their field.

**Team or individual project – how do I choose?**
- Know the policies of your local and regional fairs. Each school and region decides independently whether to allow teams. Teams of more than three students are prohibited at both GSEF and ISEF.
- Some projects require expertise in more than one area; in these cases, a partner or team approach may be useful.
- Some special awards may be restricted to only individual projects. Most scholarships, internships, and large cash prizes are limited to individual projects.

**What are the most common paperwork errors?**
- Failure to do the forms that must be done *before* starting on your research project.
- Missing signatures or missing forms.

**What are the most common research errors?**
- Insufficient data due to small sample size or too few replications/repetitions.
- Having a conclusion that does not directly derive from your data. Or collecting the wrong type of data - data that can’t support or disprove your stated hypothesis/purpose.

**What are the most common GSEF display errors?**
- Forgetting to display credits for every photo, chart, and graph, even your own.
- Including an *unofficial* abstract on the board. Only the unaltered 8.5x11 official abstract form may be displayed.

**What are the expectations for different ages?**
- Grades 6-10 are learning experimentation and correlation. They may: 1) take some action on one group and compare the results to a control group, or 2) observe how something influences or correlates with something else. Examples: Does [my idea] decrease the pollution in this stream? Is this protein always present when X happens?
- Grades 11-12 should be able to analyze their data to show its significance. They should consider how their research can potentially benefit society or the environment. Some projects may be moving toward inventing something new and useful, making a new discovery, or pushing the boundaries of current knowledge.

**My friend was interviewed three times and I was interviewed eight times. Why?**
- Some of the people talking with you may not have been judges. Members of the press and GSEF staff members often stop to talk with exhibitors, even though they do not “score” the project.
- Judges who have completed all their assigned interviews like to chat with students whose projects interest them but whom they are not assigned to judge. This is one of the perks of being a judge.
- Your topic may fit with a particular Special Award that happens to have sent lots of judges.
- You might just have a totally fascinating project.