72ND GEORGIA SCIENCE & ENGINEERING FAIR

JUDGE VOLUNTEER FORM

This form can also be completed online at bit.ly/gsef2020judgevolunteer

The Georgia Science & Engineering Fair is Georgia's premier forum for students to showcase their original research, compete for awards, and interact with top scientists from around the state. Every year GSEF depends on the help of about 300 volunteer judges to interview students about their research and select award winners. We hope you will join our team!

WHEN: **Friday, March 27, 2020** **WHERE:** The Classic Center, 300 N Thomas St, Athens **APPLY BY:** **February 1** *But we hope to receive forms as EARLY as possible so we can forecast category assignments and recruit more judges as needed.*

1. First Name: _____ Last Name: _____

2. Institution/Company: _____

   Major/Department: _____

   Area(s) of Expertise: _____

3. Residence City/State: _____ 4. Cell #: _____ 5. Other phone: _____
   Cell #'s needed to send mobile judging assignments or locate you during judging

6. Primary email: _____

7. Backup email: _____

8. I have judged at previous GSEFs: ☐ **10+ years** ☐ **4-10 years** ☐ **1-3 years** ☐ **I'm new at this**

9. Education: ☐ **Doctorate** ☐ **Doctoral student** ☐ **MA/MS** ☐ **MA/MS student** ☐ **Bachelor's** ☐ **Undergrad student** ☐ **Other**

10. Additional details about your judge qualifications (pg. 2), if applicable:
    e.g., previous positions, research experience, etc.

11. Select the **Division(s)/Tier(s)** for which you are best qualified and interested in judging. See pg. 2 for judge qualifications/details.
    - ☐ **Junior Division** (grades 6-8)
    - ☐ **Senior Division** (grades 9-12) - **Tier I** (Category Judge)
    - ☐ **Senior Division** (grades 9-12) - **Tier II** (Category Chair)
    - ☐ **Senior Division** (grades 9-12) - **Tier III** (Grand Awards)

    AND, in addition to my regular (Junior/Senior Division) judging duties, I am also willing to serve as a:
    - ☐ **Junior Division Category Leader**
    - ☐ **Special Award Judge** (in the event an organization that has sponsored a special award cannot provide their own judges to determine their winners)

12. Rank three (3) or more **Categories** that you can judge by marking them 1, 2, 3, etc. We will try to assign you to one of your choices depending on project distribution. Junior Division judges may be assigned to an overall area (e.g., Life Sciences). See pg. 3 for category descriptions.

    *Note: Categories marked **HIGH NEED!** are areas where our judge numbers tend to be relatively low. If you have the expertise, please help us prioritize these categories so that we can ensure an even distribution of judges across all projects. And please encourage colleagues in these areas to volunteer!*

LIFE SCIENCES:	MEDICINE & HEALTH:	MATH, COMPUTING & ENGINEERING:	EARTH, ENERGY & ENVIRONMENT:	PHYSICAL SCIENCES:
____ **Animal Sciences**	____ **Behavioral & Social Science**	____ **Embedded Systems**	____ **Earth & Environmental Science**	____ **Chemistry**
____ **Biochemistry**	____ **Biomedical & Health Science**	____ **Engineering Mechanics** HIGH NEED!	____ **Environmental Engineering** HIGH NEED!	____ **Materials Science** HIGH NEED!
____ **Cellular & Molecular Biology**	____ **Biomedical Engineering**	____ **Mathematics**	____ **Energy: Chemical** HIGH NEED!	____ **Physics & Astronomy** HIGH NEED!
____ **Microbiology**	____ **Computational Biology & Bioinformatics**	____ **Robotics & Intelligent Machines**	____ **Energy: Physical** HIGH NEED!	
____ **Plant Sciences**	____ **Translational Medical Science**	____ **Systems Software**		

13. List the names of any **students in grades 6-12** who might advance to GSEF and whom you have mentored, taught, or are related to: Attach add'l if necessary

Please submit ASAP / by February 1 to:

GSEF@georgiacenter.uga.edu (**SAVE** PDF before attaching)

Fax: 706-542-6596 (no cover necessary)

Georgia Science & Engineering Fair
1197 S. Lumpkin St., Ste 198 • Athens, GA 30602

*Volunteer judges for the Georgia Science & Engineering Fair will be expected to adhere to the **Judge Code of Ethics** (pg. 2).*

JUDGE VOLUNTEER DETAILS

Judge Qualifications

Senior Division Tier I, II, III Judges (Grades 9-12)

a. doctorate or other terminal degree (PhD, MD, DDS, DVM, etc.); or
b. substantial research experience in a PhD program in a scientific discipline; or
c. bachelor's or master's degree and a minimum of six years of professional experience in a relevant discipline

Junior Division Judges (Grades 6-8)

a. any of the Senior Division Tier Judge qualifications listed at left; or
b. research experience in a relevant professional or industrial setting; or
c. graduate standing in a discipline related to one of the project categories or in a relevant education program; or
d. significant progress toward, or completion of, an undergraduate degree in a scientific discipline (additional info may be requested)

What will my experience be like? *Small schedule adjustments may be made closer to event*

Senior Division Tier I: 9:00 AM – 4:00 PM **Needed: 175**

Tier I judges range from first-timers to those with over twenty years of judging experience. They judge Senior Division, grades 9-12, during Round 1. After checking in, you will have training and orientation, during which you will receive a text message or email link to the GSEF judging web app (no app download required). The app will provide a list of specific assigned projects for you to judge, usually all in one category. You will be introduced to the Tier II judge to whom you will report. You will have 90 minutes to preview your assigned category while the students are away and to make notes for your interviews. While previewing your projects, you will also be alert for Special Award candidates. After your lunch (provided), the students arrive for Round 1. Interview a student and score the project in the judging app. When you have interviewed all your students, meet with your Tier II to discuss your top projects. Your Tier II judge will dismiss you once they have everything they need from you. Please keep your cell phone on until at least 6:00 PM, in case we need to clarify anything.

Senior Division Tier II: 9:00 AM – 6:00 PM **Needed: 15-20**

Tier II judges have judged at least 3 years. Tier II and III judges meet together at 9:00 AM and then join the Tier I judges for additional instruction. You will be assigned a group of Tier I judges (you will be responsible for collecting all their paperwork after judging). Then you will have 90 minutes to preview all the exhibits in your category. While previewing, you will also be alert for Special Award candidates. Tier II judges have a variety of different tasks during the Round 1 interview period – some also perform Tier I student interviews. After Round 1, you will meet with your Tier I judges to discuss their top projects. During Round 2, you will interview the top projects and pare the list down to your own Top Projects short list. After Round 2, discuss this list and your Best in Category choice(s) with your Tier III. Turn in any remaining score or comment sheets. Your Tier III judge will dismiss you once they have everything they need from you. Please keep your cell phone on until at least 9:00 PM, in case we need to clarify anything.

Senior Division Tier III: 9:00 AM – 9:00 PM **Needed: 10**

Tier III judges have at least 4 years of Tier II experience. Tier II and III judges meet together at 9:00 AM and then join the Tier I judges for additional instruction. After orientation, you will preview all exhibits in the Senior Division, looking for exhibits that fit the criteria of Special Awards. During judging, you will be discreetly talking with students, including those you suspect might end up on the Top Projects lists, and you will conduct interviews for some Special Awards. You may be asked to assist or fill in for a Tier I or II judge during Round 1 or 2 or be assigned other responsibilities. You are responsible for checking that your Tier IIs have turned in all materials before you dismiss them. In the evening, you will discuss the Top Projects and Best in Category suggestions and select winners.

Junior Division Judge: 10:00 AM – 3:00 PM **Needed: 125**

Junior Division judges include first-timers as well as many experienced judges. After checking in, you will have training and orientation, during which you will receive a text message or email link to the GSEF judging web app (no app download required). The app will provide a list of specific projects to judge, usually all in one category. After training you will have a quick lunch (provided) and head for the exhibits. Interview a student and score the project in the judging app. Once you have interviewed and scored all of your assigned projects and submitted all Comment Sheets, you are free to leave - or see the Help Desk for more project assignments!

Junior Division Category Leader: 3:30 PM – 5:00 PM (in addition to your Tier I or Junior Division judging time) **Needed: 20**

These are Tier I or Junior Division judges who are also responsible for helping select Best in Category for a Junior Division category.

Special Award Judge: 12:30 PM – varies **Needed: 20**

Special Award Judges judge for a specific sponsored award on behalf of its sponsor. If the sponsor plans to send a judge to interview and select their winners, this should be indicated on the Award Sponsorship Form; Special Award Judges do not need to fill out a Judge Volunteer Form unless you would also like to sign up for regular Junior/Senior Division judging. Upon arrival, you will receive an information packet and instructions for the specific award(s) you will be judging, as well as any nominations submitted by other judges during previews. Interview students who may be contenders for your award and enter winning projects on your Special Award Selection Form. Bring the form to the GSEF Help Desk before leaving. We may call your cell after you leave if we have any questions about your selection.

Judge Code of Ethics

Volunteer judges for the Georgia Science & Engineering Fair are expected to maintain the highest ethical standards. These include but are not limited to:

- **Timely Notification:** Volunteers are asked to notify GSEF (gsef@georgiacenter.uga.edu) promptly if they become aware of any circumstance that would potentially comprise their ability to attend the event or evaluate finalists' projects.
- **Fair Treatment:** Volunteers are expected to act in a positive, prudent, and ethical manner in which each student encountered is treated fairly and respectfully. This includes refraining from speaking to students about how the volunteer expects the project to place, even casually or encouragingly.
- **Integrity:** Volunteers are expected to disclose all conflicts of interest resulting from direct competitive, collaborative or other relationship with any student and to recuse themselves from judging in such circumstances.
- **Respect for Confidentiality and Intellectual Property:** Privileged information or ideas that are obtained through volunteer service must be kept confidential by volunteers; volunteers shall not use such information or ideas nor disclose such information or ideas to third parties.
- **Non-Discrimination and Anti-Harassment:** There shall be no harassment of or discrimination against any person because of race, color, sex, sexual orientation, gender identity, ethnicity or national origin, religion, age, genetic information, disability, or veteran status.

2020 GSEF PROJECT CATEGORIES

Life Sciences

ANIMAL SCIENCES
Animal Behavior
Cellular Studies
Development
Ecology
Genetics
Nutrition & Growth
Physiology
Systematics & Evolution

BIOCHEMISTRY
Analytical Biochemistry
General Biochemistry
Medical Biochemistry
Structural Biochemistry

CELLULAR & MOLECULAR BIOLOGY
Cell Physiology
Cellular Immunology
Genetics
Molecular Biology
Neurobiology

MICROBIOLOGY
Antimicrobials & Antibiotics
Applied Microbiology
Bacteriology
Environmental Microbiology
Microbial Genetics
Virology

PLANT SCIENCES
Agriculture & Agronomy
Ecology
Genetics/Breeding
Growth & Development
Pathology
Plant Physiology
Systematics & Evolution

Math, Computing & Engineering

EMBEDDED SYSTEMS
Circuits
Internet of Things
Microcontrollers
Networking & Data Communications
Optics
Sensors
Signal Processing

ENGINEERING MECHANICS
Aerospace & Aeronautical Engineering
Civil Engineering
Computational Mechanics
Control Theory
Ground Vehicle Systems
Industrial Engineering-Processing
Mechanical Engineering
Naval Systems

MATHEMATICS
Analysis
Combinatorics, Graph Theory, Game Theory
Geometry & Topology
Number Theory
Probability & Statistics

ROBOTICS & INTELLIGENT MACHINES
Biomechanics
Cognitive Systems
Control Theory
Machine Learning
Robot Kinematics

SYSTEMS SOFTWARE
Algorithms
Cybersecurity
Databases
Human/Machine Interface
Languages & Operating Systems
Mobile Apps
Online Learning

Earth, Energy & Environment

EARTH & ENVIRONMENTAL SCIENCE
Atmospheric Science
Climate Science
Environmental Effects on Ecosystems
Geosciences
Water Science

ENVIRONMENTAL ENGINEERING
Bioremediation
Land Reclamation
Pollution Control
Recycling & Waste Management
Water Resources Management

ENERGY: CHEMICAL
Alternative Fuels
Computational Energy Science
Fossil Fuel Energy
Fuel Cells & Battery Development
Microbial Fuel Cells
Solar Materials

ENERGY: PHYSICAL
Hydro Power
Nuclear Power
Solar
Sustainable Design
Thermal Power
Wind

Medicine & Health

NOTE: The Medicine & Health area is new for GSEF 2019 and includes categories that were previously in Life Sciences, as well as Computational Biology & Bioinformatics, previously in Math, Computing & Engineering.

BEHAVIORAL & SOCIAL SCIENCES
Clinical & Developmental Psychology
Cognitive Psychology
Neuroscience
Physiological Psychology
Sociology & Social Psychology

BIOMEDICAL & HEALTH SCIENCES
Cell, Organ, & Systems Physiology
Genetics & Molecular Biology of Disease
Immunology
Nutrition & Natural Products
Pathophysiology

BIOMEDICAL ENGINEERING
Biomaterials & Regenerative Medicine
Biomechanics
Biomedical Devices
Biomedical Imaging
Cell & Tissue Engineering
Synthetic Biology

COMPUTATIONAL BIOLOGY & BIOINFORMATICS
Computational Biomodeling
Computational Epidemiology
Computational Evolutionary Biology
Computational Neuroscience
Computational Pharmacology
Genomics

TRANSLATIONAL MEDICAL SCIENCE
Disease Detection & Diagnosis
Disease Prevention
Disease Treatment & Therapies
Drug Identification & Testing
Pre-Clinical Studies

Physical Sciences

CHEMISTRY
Analytical Chemistry
Computational Chemistry
Environmental Chemistry
Inorganic Chemistry
Materials Chemistry
Organic Chemistry
Physical Chemistry

MATERIALS SCIENCE
Biomaterials
Ceramic & Glasses
Composite Materials
Computation & Theory
Electronic, Optical & Magnetic Materials
Nanomaterials
Polymers

PHYSICS & ASTRONOMY
Atomic, Molecular, & Optical Physics
Astronomy & Cosmology
Biological Physics
Condensed Matter & Materials
Mechanics
Nuclear & Particle Physics
Theoretical, Computational, Quantum Physics