Participants' Guide

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Website: www.nsf.gov/gradchallenge/

Contact us at GradChallenge@nsf.gov

CHALLENGE DESCRIPTION

The Division of Graduate Education at the National Science Foundation challenges STEM graduate students across the nation to submit innovative ideas to prepare them for tomorrow's opportunities and challenges. Entries are solicited for ideas with the potential to improve graduate education and professional development. Ideas can be directed toward, for example, students, faculty, departments, institutions, professional societies, and/or federal agencies.

Who: Currently enrolled STEM graduate students (see additional eligibility criteria)
What: A 1000 to 1500 word submission responding to this challenge
Where: Submission made to www.nsf.gov/gradchallenge/
When: Entries must be submitted by **11:59PM Pacific Time on April 15, 2013**
Why: The NSF seeks innovative ideas about improving graduate education from graduate students themselves! Make your voice heard about STEM graduate education!

Be sure to include the following elements in your submission:
1. The title of your submission (150 characters or less);
2. The issue in graduate education you wish to address;
3. Your solution or idea;
4. How your idea will change graduate education.

See the full list of rules below.

PRIZE INFORMATION

Contest winners will be awarded cash prizes. The prizes will be awarded to the registered individual or team leader and may be shared among any team members at the team leader's discretion.

First prize: (1 awarded):	$3,000
Second prize (2 awarded):	$2,000
Third prize (3 awarded):	$1,500
Community choice prize:	$1,000

Note: The community choice award is only available for those submissions that have passed the first round of judging. The community choice award is not exclusive with the other prizes; that is, a participant may win both a judge---determined prize and the community choice prize.

ELIGIBILITY CRITERIA

- Individuals or teams may submit.
- All participants must have a bachelor's degree and be currently enrolled as a graduate student pursuing either a Masters or PhD in a STEM discipline within the mission of the NSF. See below for a list of eligible STEM disciplines.
- Graduate students currently enrolled at accredited academic institutions located in the United States and its territories are eligible.
- Participants must be US citizens or permanent residents.
- Participants must self-certify their eligibility as part of the online submission.

JUDGING CRITERIA

Vision 30%
Is the submission compelling, inspiring, and forward looking? Does it provide an innovative or creative solution to the needs of graduate students and/or graduate education?

Impact 25%
Does the idea have potential for significant impact on STEM graduate students and/or graduate education?

Potential for Success 20%
Is the idea viable?

Rationale 15%
Does the author articulate effectively the needs of graduate students and how her/his proposed idea addresses those needs? Does the author explain how and why the idea would help graduate students and/or improve graduate education? Is the idea adequately developed?

Presentation 10%
Is the submission effectively written?

JUDGING ROUNDS

Preliminary Round April 24 – May 8
- Qualifying entries (those that meet eligibility criteria and abide by all contest rules) are scored by current graduate students and professionals within 4 years of earning their PhD or Masters.
- Each entry is scored by a panel of judges.
- All entries are scored anonymously.
- Top scoring entries will move on to the final round.

Final Round May 15 – May 29
- Entries are scored by scientists, engineers, educators and other professionals from NSF and other institutions or organizations interested in higher education and STEM research.
- Each entry is scored by a panel of judges.
- All entries are scored anonymously.
- All judges' decisions are final.

Community Choice Award
- Entries that reach the final round are eligible to be voted for the community choice award. Community choice voting will open on May 15 and close on May 29, 2013.
- The community vote will be held online at https://nsf---edchallenge.skild.com/vote
- The Community Choice award will be announced with the other winners on June 13, 2013

TIMELINE

The challenge will go live on February 15, 2013.
Submissions must be received by **11:59PM Pacific Time on April 15, 2013**.
Community choice voting will open on May 15 and close on May 29, 2013.
Winners will be announced publically on June 13, 2013.

WHAT WILL NSF DO WITH THE IDEAS?

This is your chance to share your ideas widely! The ideas that advance to the final round will be publicly posted on the NSF Innovation in Graduate Education Challenge website. Individual ideas as well as analysis of all the ideas could be published, shared with the press, institutions of higher education, other federal agencies, professional societies, and additional organizations interested in higher education. It is hoped that submissions will help inform future directions at NSF and more broadly.

CONTEST RULES

- Contest entry constitutes agreement to adhere to the rules and stipulations set forth by the contest sponsors.
- Any entrant or entry found to be in violation of any rule or stipulation will be disqualified.
- Submissions must be submitted by **11:59PM Pacific Time on April 15, 2013**.
- One submission per individual/team. If you submit as an individual you cannot also submit as part of another team and vice versa.
- The title should be brief and informative (150 characters or less).
- The submission has a minimum of 1000 words and a maximum of 1500 words including all references, and citations, if applicable. **The submission must be uploaded as a Word document (2007 or 2003 format).**
- Applicants should not send extraneous information or materials such as CDs, manuscripts, resumes, or news clippings. These items will not be reviewed with the submission. No additional information may be provided by links to web pages within the submission. Review of the submission is based solely on materials received by the submission deadline.
- By entering the contest the entrant agrees to hold harmless NSF for all legal and administrative claims, to include associated expenses that may arise from any claims related to his or her submission or its use.
- Entrants retain all copyright and equivalent rights but give NSF nonexclusive rights to use their names, likenesses, quotes and submissions for educational publicity and/or promotional purposes. This includes but is not limited to website display, print materials and exhibits. NSF reserves the right to use (or not use) the submissions however they determine.
- Winners whose submissions are published by NSF will be required to sign an agreement confirming ownership/use rights and granting nonexclusive publication and web rights.
- Winners are responsible for all taxes or other fees connected with the prize received and/or travel paid for by the sponsoring organizations.
- NSF will not respond to any claims or inquiries regarding contest results.
- NSF has the final say on any point not outlined in the entry rules.
- Information requested on the entry form will be used to determine how and if the contest is meeting its goals, purposes and audience. Submission of this information is also necessary to contact entrants.
- NSF employees, NSF contractors, and individuals on temporary duty to NSF are not eligible to enter the contest.
- Judges are not eligible to enter the contest.
- If an insufficient number of qualified entries are received, NSF reserves the right to modify or cancel the contest prior to announcing winners.
- Should NSF decide to bring winning contestants to Washington, D.C., or to any other location for promotional and other purposes, expenses paid by NSF will be within the limits set forth in law according to federal travel regulations.
- All contestants agree that they, their heirs and estates shall hold harmless the United States, the employees of the federal government, and all employees of the NSF for any and all injuries and/or claims arising from participation in this contest, to include that which may occur while traveling to or participating in contest activities.
- A team leader must be designated for team submissions. The order in which names are listed on the entry form is how the names will appear on the NSF challenge website.
- Submissions must not contain material that is inappropriate, indecent, obscene, hateful, defamatory, slanderous or libelous.

FREQUENTLY ASKED QUESTIONS (FAQs)

If I win, how will I get the prize money?
Winners will be contacted in mid-June.

What does this challenge mean by "innovative and creative?" Does my idea have to be one of a kind to stand a chance of winning?
Ideas do not have to be one of a kind. Innovation can come from improvements or new perspectives on previous ideas.

What does the challenge mean by "viable" in the judging criteria?
Viable does not have to mean inexpensive or easy to implement, but it does have to be within the limits of reason or within the limits of reason over a period of time.

If I win, do I have to implement my idea?
No. This is an idea challenge only.

What is meant by "team" for the purposes of the contest?
When registering for the contest, team leaders may list a number of team members for acknowledgment, as well as a team name. All team members must satisfy the Eligibility Criteria. There is no limit to the size of your team, but you will only be able to list the names of up to 50 individuals in the online submission form. If you wish to submit on behalf of a larger team (for example, a larger student group or club), simply cite the name of the group in the entry form.

If I submit as an individual, can I also join a team and submit another idea as part of a team?
No. Individuals may only submit one idea whether it is individually or as part of a team.

Once I submit my idea, can I revise it or replace it with another idea prior to the April 15 deadline?
No. Once you submit an idea to the contest it is considered a final submission and cannot be revised or replaced.

Am I eligible to submit an entry if my discipline/research is _____?
See the Participants Guide for a full listing of eligible STEM disciplines (below) within the mission of NSF. Graduate students pursuing clinical research are not eligible to apply.

ELIGIBLE STEM DISCIPLINES

CHEMISTRY

- Chemical Catalysis
- Chemical Measurement and Imaging
- Chemical Structure, Dynamics, and Mechanism
- Chemical Theory, Models and Computational Methods
- Macromolecular, Supramolecular, and Nanochemistry

- Chemistry of Life Processes
- Environmental Chemical Systems
- Sustainable Chemistry
- Chemical Synthesis

COMPUTER AND INFORMATION SCIENCES & ENGINEERING

- Data Mining and Information Retrieval
- Databases
- Human Computer Interaction
- Informatics
- Machine Learning
- Natural Language Processing
- Robotics and Computer Vision

- Algorithms and Theoretical Foundations
- Communication and Information Theory
- Computational Science and Engineering
- Computer and Information Security
- Computer Architecture
- Computer Systems, Networking, and Embedded Systems
- Graphics and Visualization
- Software Systems and Software Engineering

ENGINEERING

AEROSPACE & OTHER ENGINEERING FIELDS

- Aeronautical and Aerospace Engineering
- Energy Engineering
- Nuclear Engineering
- Optical Engineering
- Systems Engineering

BIOENGINEERING

- Bioengineering

BIOMEDICAL ENGINEERING

- Biomedical Engineering

CHEMICAL ENGINEERING

- Chemical Engineering
- Polymer Engineering

CIVIL & ENVIRONMENTAL ENGINEERING

- Civil Engineering
- Environmental Engineering
- Ocean Engineering

COMPUTER & ELECTRICAL ENGINEERING

- Computer Engineering
- Electrical and Electronic Engineering

MATERIALS ENGINEERING

- Industrial Engineering and Operations Research
- Materials Engineering

MECHANICAL ENGINEERING

- Mechanical Engineering

GEOSCIENCES

- Atmospheric Chemistry
- Biogeochemistry
- Biological Oceanography
- Chemical Oceanography
- Geobiology
- Hydrology
- Marine Biology
- Paleoclimate
- Paleontology and Paleobiology

- Aeronomy
- Climate and Large---Scale Atmospheric Dynamics
- Geochemistry
- Geodynamics
- Geophysics
- Glaciology
- Magnetospheric Physics

- Marine Geology and Geophysics
- Physical and Dynamic Meteorology
- Physical Oceanography
- Solar Physics
- Petrology
- Sedimentary Geology
- Tectonics

LIFE SCIENCES

BIOCHEMISTRY, BIOPHYSICS & STRUCTURAL BIOLOGY

- Biochemistry
- Biophysics
- Structural Biology

CELL BIOLOGY

- Cell Biology

ECOLOGY

- Ecology
- Environmental Science

EVOLUTIONARY BIOLOGY

- Evolutionary Biology

GENETICS, GENOMICS & PROTEOMICS

- Genetics
- Genomics
- Proteomics

MICROBIOLOGY

- Microbiology

MOLECULAR & DEVELOPMENTAL BIOLOGY

- Developmental Biology
- Molecular Biology

NEUROSCIENCES & PHYSIOLOGY

- Neurosciences
- Physiology

ORGANISMAL BIOLOGY

- Organismal Biology
- Systematic Biology

MATERIALS RESEARCH

- Biomaterials
- Ceramics
- Chemistry of materials
- Electronic materials
- Materials theory
- Metallic materials
- Photonic materials
- Physics of materials
- Polymers

MATHEMATICAL SCIENCES

- Algebra, Number Theory, and Combinatorics
- Analysis
- Geometric Analysis
- Logic or Foundations of Mathematics
- Topology
- Probability

- Applied Mathematics
- Biostatistics
- Computational and Data---enabled Science
- Computational Mathematics
- Computational Statistics
- Mathematical Biology
- Statistics

PHYSICS & ASTRONOMY

- Astronomy and Astrophysics
- Atomic, Molecular and Optical Physics
- Nuclear
- Plasma

- Condensed Matter Physics
- Particle Physics
- Physics of Living Systems
- Solid State
- Theoretical Physics

PSYCHOLOGY

- Cognitive
- Cognitive Neuroscience
- Computational Psychology
- Experimental or Comparative
- Neuropsychology
- Perception and Psychophysics
- Physiological
- Quantitative

- Developmental
- Industrial/Organizational
- Personality and Individual Differences
- Psycholinguistics
- Social

SOCIAL SCIENCES

ANTHROPOLOGY AND ARCHEOLOGY

- Archaeology
- Biological Anthropology
- Medical Anthropology

CULTURAL ANTHROPOLOGY AND LINGUISTICS

- Cultural Anthropology
- Linguistic Anthropology
- Linguistics

ECONOMICS

- Decision Making and Risk Analysis
- Social Sciences, Economics

POLITICAL SCIENCE & OTHER SOCIAL SCIENCES

- Communications
- International Relations
- Law and Social Justice
- Political Science
- Public Policy

SOCIOLOGY & GEOGRAPHIC SCIENCE

- Geography

- History and Philosophy of Science
- Science Policy
- Sociology
- Urban and Regional Planning

STEM EDUCATION & LEARNING RESEARCH

- Engineering Education
- Mathematics Education
- Science Education
- Technology Education