For Applicants to
the NSF Graduate Research Fellowship Program

National Science Foundation

- Independent federal agency created in 1950

- Mission
  - To promote the progress of science
  - To advance the national health, prosperity, and welfare
  - To secure the national defense

- Funds ~20% of all federally supported basic research conducted by America's colleges and universities

Goals of GRFP

- To select, recognize, and financially **support individuals** who have demonstrated the potential to be high achieving scientists and engineers, early in their careers.

- To **broaden participation** in science and engineering of underrepresented groups, including women, minorities, persons with disabilities and veterans.

Outcome: Recruit and retain these individuals in the U.S. STEM workforce

NSF Graduate Research Fellowships

Five Year Awards – **$138,000**

- Three years of financial support
  - $34,000 Stipend per year
  - $12,000 Educational allowance to institution
- Professional Development Opportunities:
  GROW International Research
  GRIP Internships
- Career-Life Balance Initiative (family leave)
- FASED Individuals with Disabilities
- Supercomputer access: XSEDE

NSF GRFP Fellowship

- Awarded to individuals

- *Flexible:* choice of project, advisor & program

- *Portable:* Any accredited U.S. institution
  - MS, MS and PhD, PhD

- No service requirement

GRFP Solicitation (NSF 16-588)

- Provides the following information:

  - **Deadlines**

  - **Program description**

  - **Award information**

  - **Eligibility requirements**

  - **Application preparation**

  - **Submission instructions**

  - **Application review criteria**

Graduate Research Fellowship Program (GRFP)

PROGRAM SOLICITATION
NSF 16-588

REPLACES DOCUMENT(S):
NSF 15-597

National Science Foundation

Directorate for Biological Sciences

Directorate for Computer & Information Science & Engineering

Directorate for Education & Human Resources
    Division of Graduate Education

Directorate for Engineering

Directorate for Geosciences

Directorate for Mathematical & Physical Sciences

Directorate for Social, Behavioral & Economic Sciences

Office of Integrative Activities

Office of International Science and Engineering

Application Deadline(s) (received by 5 p.m. local time of applicant's mailing address):

October 24, 2016

Life Sciences, Geosciences

October 25, 2016

Computer and information Science and Engineering, Engineering, Materials Resea

October 27, 2016

Psychology, Social Sciences, STEM Education and Learning

October 28, 2016

Chemistry, Mathematical Sciences, Physics and Astronomy

October 23, 2017

Life Sciences, Geosciences

October 24, 2017

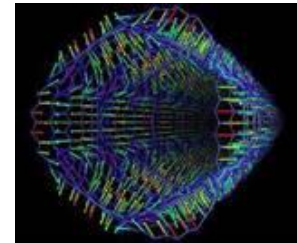Computer and information Science and Engineering, Engineering, Materials Resea

October 26, 2017

Psychology, Social Sciences, STEM Education and Learning

GRFP Fields of Study

- Chemistry
- Computer & Information Science/Engineering
- Engineering
- Geosciences
- Life Sciences
- Materials Research
- Mathematical Sciences
- Physics and Astronomy
- Psychology
- Social Sciences
- STEM Education

GRFP Eligibility

- U.S. citizens and permanent residents
- Early-career: undergrad & grad students
- Pursuing research-based MS or PhD
- Science and engineering
- Enrolled in accredited institution in US by Fall
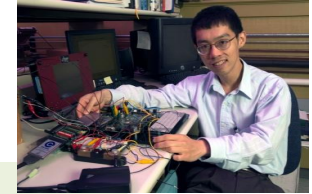
Academic Levels

- 1: Seniors or baccalaureates with no graduate study yet
- 2: First-year graduate students
- 3: Second-year graduate students

  (≤ 12 months of graduate study by August)
- **4:** >12 months graduate study, with interruption in graduate study of 2+ years (can have MS degree)

Eligibility

New Eligibility Rules (NSF 16-050)

Level 1: Seniors/baccalaureates: **no graduate study**

Level 2: First-year **graduate students**

Level 3: Second-year **graduate students**

Only once in grad school

≤ 12 months of graduate study by August 1, 2017

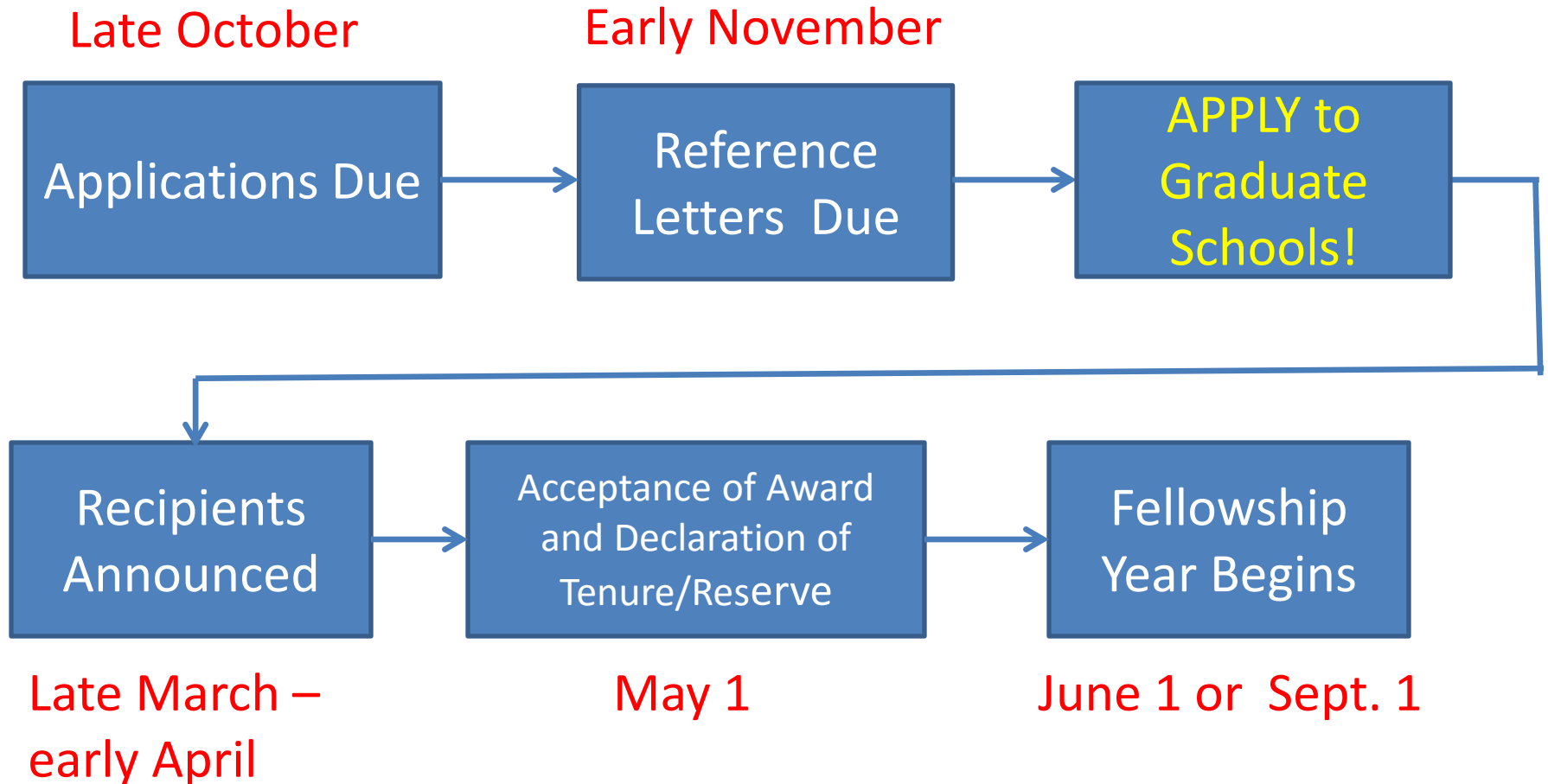**Level 4:** >12 months **graduate study**

with an interruption in graduate study of 2+ years

Directorate for Education and Human Resources

Division of Graduate Education

GRFP Application Timeline

Late October

Early November

Applications Due → Reference Letters Due → APPLY to Graduate Schools!

Recipients Announced → Acceptance of Award and Declaration of Tenure/Reserve → Fellowship Year Begins

Late March – early April

May 1

June 1 or Sept. 1

GRFP Complete Application

Complete Application Package:

1) Personal, Relevant Background and Future Goals **Statement** (3 pages)

2) Graduate **Research Statement** (2 pages)

3) Transcripts (uploaded electronically)

4) <u>Three</u> **letters of reference**

DEADLINES: October/November 2017

Refer to Solicitation NSF 16-588

Two Statements

Statement 1:

Personal, relevant Background and Future Goals (3 pages)

Describe your personal, educational and/or professional experiences that motivate your decision to pursue advanced study. Include examples of research and/or professional activities in which you have participated. Describe the contributions to advancing knowledge in STEM fields and the potential for broader societal impacts. Include future plans to contribute to broader impact.

Statement 2:

Graduate Research Plan (2 pages)

Present an original research topic that you would like to pursue in graduate school. Describe the research idea, your general approach.   Address the potential of the research to advance knowledge and understanding within science as well as the potential for broader impacts on society.

Application Review Process

- Applications are reviewed by panels of disciplinary and interdisciplinary scientists and engineers

- Applications **assigned** to panels based on the applicant's chosen Primary Field(s) of Study and the discipline(s) represented

- Applicants are advised to select the Primary Field of Study that is most closely **aligned** with the proposed graduate program of study

- **Holistic evaluation**: a flexible, individualized way of assessing an applicant's interests and competencies by which balanced consideration is given to experiences, attributes, and academic achievements and, when considered in combination, how the applicant has demonstrated potential for significant achievements in science and engineering.

NSF Review Criteria

National Science Board
GOVERNING BOARD OF THE NATIONAL SCIENCE FOUNDATION & POLICY ADVISORS
TO THE PRESIDENT AND CONGRESS

- Two National Science Board-approved criteria

  – Intellectual Merit

  – Broader Impacts

Intellectual Merit and Broader impacts

- How important is the proposed activity to advancing knowledge within its own field or across different fields?

AND

- How well does the proposed activity benefit society or advance desired societal outcomes?

  - **Separate sections for Intellectual Merit and Broader Impacts; address in both Statements**

Intellectual Merit Assessment

- Academic performance: grades, courses, awards, etc.
- Graduate Research plan
- Research/professional experience
- Reference letters

Broader Impacts Assessment

- Prior accomplishments and future plans
- Individual experiences
- Potential benefit(s) to society
- Community outreach
- Reference letters

Solicitation NSF GRFP: NSF 16-588

GRFP Advice for Applicants

- Start early
- Read Solicitation, and read it again
- Read NSF GRFP websites

- Select and confirm reference letter writers
- Pay attention to Merit Review criteria
- Identify several colleagues and have them comment on multiple statement drafts
- Share your application materials and the merit review criteria with reference writers
- Monitor receipt of reference letters (3 required for review)

Reference writers

- Select your reference writers carefully, as they will provide important information about your potential as a leader, researcher, and educator – **familiarity with you as a person is important**

- Your selected reference writers will submit their own references; provide them all necessary information well in advance of deadline

- You may request up to 5 references. It is your responsibility to ensure three letters of references are submitted by the published deadline in order for your application to be complete and reviewed

GRFP Resources

- NSF GRFP Website www.nsf.gov/grfp

  -Solicitation and links

- NSF GRFP FastLane Website: www.fastlane.nsf.gov/grfp

  – Application, guides, announcements

- GRFP Website: www.nsfgrfp.org

  (includes tips for applying,

  GRFP Experienced Resource List)

- Phone & e-mail

  – 866-NSF-GRFP (673-4737)

  – info@nsfgrfp.org

Portals for federally-sponsored opportunities in STEM for students

stemundergrads.science.gov

stemgradstudents.science.gov