GRFP Info Session Agenda

- 11:15 to 11:30
  - **Arrive, Grab Lunch, Find a Table, and Dig In**
  - **Only one faculty or staff member per table, please!**
- 11:30 to 12:10
  - **Welcome and Introductions**
  - **Presentation of Information; Breakout Discussions**
- 12:10 to 12:25
  - **Questions and Answers**
  - **Open Mic!**

  Slide deck downloadable from
  http://research.olemiss.edu/presentations

- 12:30
  - **Dismiss**

The University of Mississippi

NSF GRADUATE RESEARCH FELLOWSHIP PROGRAM (GRFP)

INFORMATION SESSION

SEPT 11, 2019

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Associate Dean of the Graduate School

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90 Second GRF Video

https://www.nsfgrfp.org/general_resources/60th_anniversary/video_contest

Ask students to pick which video to watch

Info Session Learning Goals

- **Understand** what GRFP Fellowships are
- **Meet other students** thinking of applying
- Learn wither you are **eligible**
- Learn~ whether **field of study** qualifies
- General idea of **how, where**, and **when to apply**
- Learn how NSF will **evaluate** your application
- **Get tips** on making a competitive application
- Answer your **questions**, or show you where to find answers and additional information

What are GRFP fellowships?

- Graduate student **fellowships** funded by **NSF**
  - Investments in **YOU!**
  - Bets on the **future U.S. STEM workforce.**
- Provides **financial support** for graduate school
- Only for **eligible STEM graduate programs** and **qualifying STEM research topics**
- Very **student-driven** and **flexible**
  - vs. typical graduate assistantships (faculty or department driven)
- Very **prestigious,** and very **competitive!**
  - **~16% of applications are awarded**
  - **Honorable Mentions** for meritorious, but unawarded, applications are still **significant national achievements!**

What GR Fellowships Offer?

Five Year Award – $138,000

- 3 years of support towards graduate study (over 5 years)
  - **$34,000 Stipend** per year
  - $**12,000 Educational allowance** to institution
    - For tuition, fees, and other educational expenses
- Flexible choice of project, advisor, & program
- Portability to any accredited institution located in the US to pursue Master's or Ph.D. degree

1,600 fellowship awards expected in 2020!

Are You Eligible?

- **U.S.** citizens, nationals, and permanent residents
- **Early-career**: undergraduates, baccalaureate recipients, or 1st & 2nd year graduate students

- in Science, Technology, Engineering, or Mathematics (**STEM**)

- To **accept** a fellowship offer, you must be **accepted** to a **qualifying graduate program**

- Must (be) **enroll**(ed) in a **full-time**, **research-based**, **M.S. or Ph.D.** degree program in **summer** or **fall** of **GRFP award offer year** (not necessarily at the time of application).

GRFP Eligibility- Academic Levels

Academic Levels

Applicants compete against others from same Academic Level

1: Seniors or baccalaureate recipients with no graduate study
How many in this category?

2: First-year graduate students. *How many?*

3: 2nd-year grad students (no more than 1 yr of graduate study)

4: More than 12 months of graduate study with an interruption of greater than 2 years *(can have M.S. degree)*

How often can you apply?

Only one application per person per annual competition

Academic Levels

1: Seniors or baccalaureates with no graduate study

> ***No restriction*** *– can apply every year until enrolled in graduate school*

2: First-year graduate students

> ***Apply only once, in 1ˢᵗ or 2ⁿᵈ year***

How many have applied before?

3: Second-year graduate students
No more than one year of graduate study as of August 1 of the year the application is submitted)

Concurrent Table Activity

With the people at your table, please QUICKLY share any or all of:

- Your Name and Current Academic Level
  - e.g., senior, 1st year graduate, 2nd year graduate.
- Current Academic Program (major, etc.)
- Proposed Program of Study (if known)
- Proposed Graduate institution (if known)
- Research Area of Interest (if known)
- Any prior GRFP Experience (yes/no)
- Faculty or Staff just give your name and current appointment, and any GRFP experience.

90 Second GRF Video

https://www.nsfgrfp.org/general_resources/60th_anniversary/video_contest

Ask students to pick which video to watch

Listen for jargon!

GRFP Fields of Study

- Chemistry
- Computer & Information Systems Science/Engineering
- Engineering
- Geosciences
- Life Sciences (includes Biological Sciences)
- Materials Research
- Mathematical Sciences
- Physics and Astronomy
- Psychology
- Social Sciences (includes Economics)
- STEM Education

NOT SUPPORTED

- Joint science-professional degree programs
  - e.g. **MD/PhD, JD/PhD**
- **Business administration** or **management**
- **Counseling**, **Social work**
- Education (except in science and engineering education)
- History (except in history of science)
- **Research with primarily disease-related goals**
- Clinical research, patient-oriented research, epidemiological and behavioral studies, outcomes research, health services, public health research, focus on disease etiology and treatment

Are your program and research area supported?

For a more detailed list of SUPPORTED and UNSUPPORTED fields of study, see the Program Guidelines.

You can also look up fields of study here: https://www.nsfgrfp.org/applicants/application_components/choosing_primary_field

If in doubt whether your proposed program of study, or your proposed research topic, are considered SUPPORTED fields, contact the The Graduate Research Fellowship Operations Center.

GRF Ops Center

The Graduate Research Fellowship Operations Center is responsible for responding to questions about the program.

For questions concerning eligibility and fields of study, contact the Graduate Research Fellowship Operations Center, (866) 673-4737, international (202) 331-3542, or info@nsfgrfp.org.

How to Apply?

NSF GRFP Program Page provides the following information:

- Outreach presentation (PPT or PDF)
- Link to **program guidelines**
- Application due dates (Oct 21 – Oct 25, 2019)
- Reference letter due date (Nov 1, 2019)
- **FAQs**
- List of Fellows and Honorable Mentions
- Other resources

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf19590

GRFP Solicitation (NSF 19-590)

Provides the following information:

- Deadlines
- Program description
- Award information
- Eligibility requirements
- Application preparation
- Submission instructions
- Application review criteria

https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=6201

GRFP Application Timeline

July/August | Mid-late October | Early November

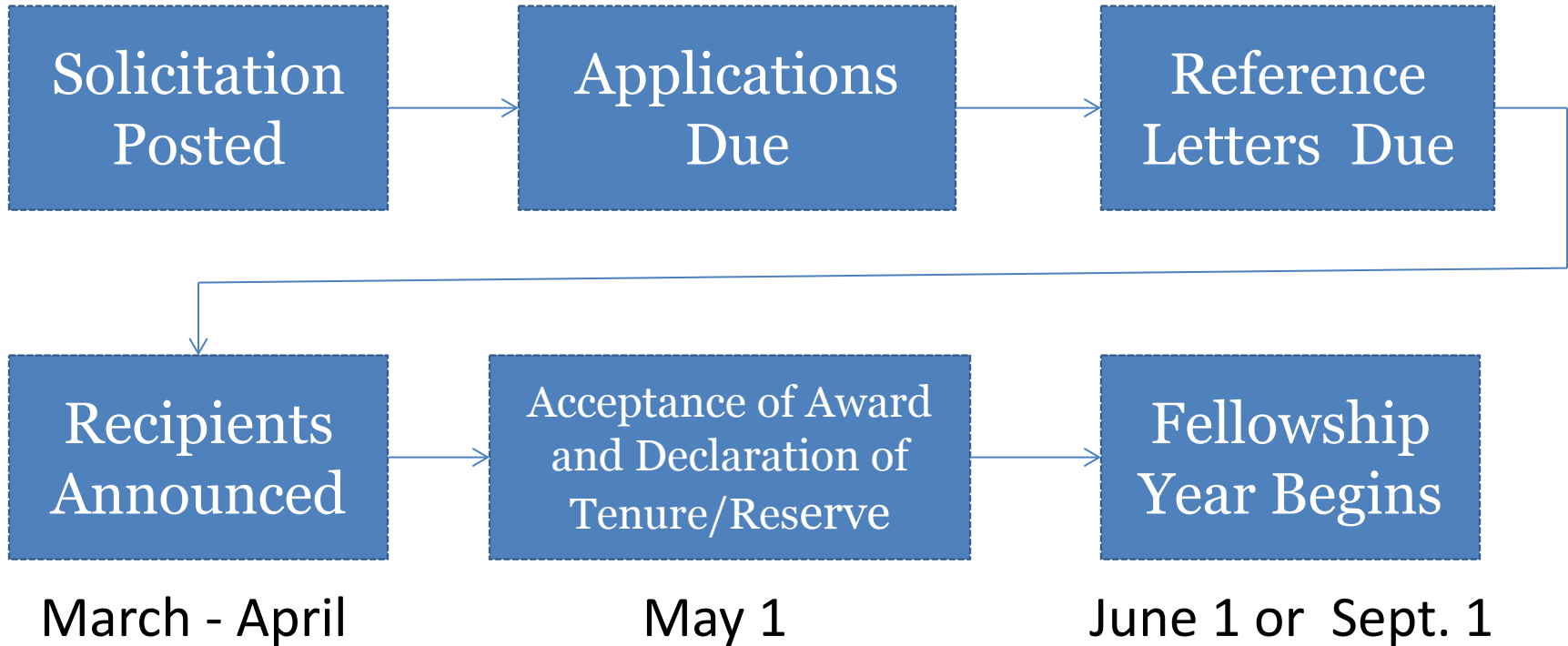| Solicitation Posted | → | Applications Due | → | Reference Letters Due |

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

March - April | May 1 | June 1 or Sept. 1

GRFP Complete Application

Complete Application Package: *Due in late October*

1) Personal Information, Education, Work/Research Experience, Proposed Field of Study, Academic Honors, Publications

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

3) Graduate Research Statement (2 pages)

4) Transcripts (uploaded electronically)

5) Three letters of reference

See the most recent Solicitation (NSF 19-590) for app. details & requirements.

A competitive Personal Statement

- **3 pages max**
- **Experiences** (personal and professional) **contributing** to your **motivation** and **preparation** for **pursuing a STEM career**
- Previous **research/industrial/professional experiences**
  - *What was the project?*
  - *How did you become involved? Where was it done?*
  - *Why was this project worth doing?*
  - *What was your contribution to the project?*
  - *How did your part of the project fit into the whole?*
  - *What have you learned? Any advanced course work?*
- Career aspirations and future goals
  - *How have your experiences shaped your goals?*
- Address NSF's review criteria
  - Labeled Intellectual Merit section
  - Labeled Broader Impacts section

A competitive **Research Statement**

- **2 pages max**
- Describe your **Research Plan**
  - Communicate your **research idea** and **approach**
  - Explain your **research plan** and **methods**
  - What do you expect to **learn**?
  - How will you know if the project is **successful**?
  - What would you do **next**?
- Address NSF's review criteria
  - Labeled Intellectual Merit section
  - Labeled Broader Impacts section
- Communicate clearly for **non-specialist**s
  - **Avoid jargon**!
  - Make your **contributions clear**

Formatting your application

- Follow formatting instructions in the solicitation!

- Fonts, margins, number of pages, etc.

- Check your application PDF

- Applications that don't comply with format requirements will be **returned without review**.

Standard NSF Review Criteria

Two National Science Board-approved review criteria:

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

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

Intellectual Merit

<u>Your</u> potential to discover new knowledge

- Demonstrated **intellectual ability** (grades, curricula, awards...)
- Other evidence of your **potential for scholarly scientific study**, such as your ability to:
  - Plan and conduct research
  - Work as a member of a team as well as independently
  - Interpret and communicate research
  - Take initiative, solve problems, persist
- The **potential** of **your approach** to your field of study and your Research Plan to lead to **new knowledge**

Broader Impacts

- **Your** potential **impact on society**
- **Your research's** potential impact on society: why it's important

Societal benefits may include, but are not limited to:
- Increasing participation of underrepresented groups, including women, underrepresented minorities, students with disabilities, veterans
- Outreach: Mentoring; improving STEM education in schools
- Increasing public scientific literacy; increased public engagement with science and technology
- Community outreach: science clubs, radio, TV, newspapers, blogs
- Potential to impact a diverse, globally competitive workforce
- Increasing collaboration between academia, industry, others

Intellectual Merit & Broader Impacts

Evidence of **intellectual merit** can be found in all parts of the application - Personal Statement, Research Plan, letters, experiences, awards, achievements, transcripts.

Likewise, evidence of **broader impacts** can be found in all parts of the application - Personal Statement, Research Plan, letters, experiences, awards, achievements.

However, the both the Personal, Relevant Background, and Future Goals Statement, as well as the Graduate Research Plan Statement, must **explicitly** address **Intellectual Merit** and **Broader Impacts** under **separate headings** to help reviewers evaluate these criteria.

Additional GRFP Review Criteria

- **Applicants' potential to advance knowledge** and to **make significant research achievements** and **contributions to their fields throughout their careers**.

- Reviewers are asked to assess applications using a **holistic, comprehensive approach**, giving balanced consideration to all components of the application, including the **educational and research record**, **leadership**, **outreach**, **service activities**, and **future plans**, as well as **individual competencies, experiences, and other attributes**.

- The aim is to recruit and retain a diverse cohort of early-career individuals with high **potential for future achievements**, contributions, and broader impacts in STEM and STEM education.

Review Process

- All applications will be reviewed and rated holistically by **disciplinary** and **interdisciplinary scientists** and **engineers**, and other professional graduate education experts.

  Know your audience. Write for your audience.

- NSF will select applications for **Fellowships** and **Honorable Mention**.

- Applicants will be able to view **reviewer comments**.

  Ask previous applicants about their reviews.

Last 90 Second GRF Video

https://www.nsfgrfp.org/general_resources/60th_anniversary/video_contest

Notice there is no jargon!

Tips for a competitive application

- **Start early!** Look at the NSF GRFP website (www.nsfgrfp.org).
- Print, **read**, highlight, re-read, and refer often back to the latest **NSF Solicitation (NSF 19-590)** in preparing your application.
- Read the **Frequently Asked Questions (FAQs) (NSF 19-081)** and **call NSF** if something is confusing to you
- Describe your honors, experiences, presentations, and any publications (etc.) clearly for the reviewers.
- Select and confirm your reference letter writers and monitor receipt of their letters on the GRFP website.
- Share your application materials and the merit review criteria with your reference letter writers.
- Pay attention to NSF's merit review criteria.
- Your statements should be interesting and clear. **Ask several colleagues to read and comment on drafts.**
- **Leverage existing UM GRFP experience!**

UM NSF GR Fellows

Johnathan Hill

- Master of Arts Student in Teaching
- Undergraduate Degree: Math, Jackson State University
- Applied for GRFP in senior year

Amber Kay

- Ph.D. Student in Pharmaceutical Sciences
- Undergraduate: Biochemistry and Molecular Biology
Mississippi State University
- Applied for GRFP in senior year

NSF GRFP Fellow: Prof. Brian Foster

- BA in African American Studies at UM

- Ph.D. in Sociology at University of North Carolina at Chapel Hill

- Held NSF GRFP

- UM Assistant Professor of Sociology & Southern Studies

https://www.bbrianfoster.com/single-post/2017/04/13/Use-Three-Hands---A-Note-of-Thanks-to-Folks-and-Things

NSF GRFP Reviewer: Prof. Cole Stevens

- Served on a review panel for NSF GRFP
- UM professor in Department of BioMolecular Sciences

http://www.stevenslab.com/

Q&A and Discussion

Thank you!