University of Mississippi

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Research and Sponsored Programs, Office of

9-7-2022

NSF GRFP Information Session, Sept 7, 2022

Jason Hale

University of Mississippi. Office of Research and Sponsored Programs

Robert Doerksen

University of Mississippi. Graduate School

Vivian Ibrahim

University of Mississippi. Office of National Scholarship Advisement

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The University of Mississippi



NSF GRADUATE RESEARCH FELLOWSHIP PROGRAM (GRFP)
INFORMATION SESSIONS
JUL 21, SEP 7, 2022

Housekeeping



- Mute your audio (until recognized to speak)
- Share Video if comfortable, bandwidth permitting
- Raise your Hand if you would like to speak (or just unmute and speak.)
- Use Chat to ask questions in the meantime
 - o Those with answers may type them into the chat as we go.
 - Other ??s will be answered at the end or following the session
- The slides and recording will be available soon at https://blackboard.olemiss.edu/webapps/blackboard/execute/courseMain?course_id=_82745_1

Co-Presenters



Jason Hale, M.S.
Director of Research Development, ORSP

Robert Doerksen, Ph.D. Associate Dean of the Graduate School

Vivian Ibrahim, Ph.D.
Director of the Office of National Scholarship
Advisement

and guests

Info Session Goals



- Understand what GRFP Fellowships are
- General idea of how, where, and when to apply
- Learn how NSF will evaluate your application
- Hear from GRFP experienced UM Faculty & Students
- Get tips on making a competitive application
- Start thinking abt/sharing your proposal ideas
- Identify your questions, show you where to find answers and access additional information & support
- Learn about UM's \$incentive for applying
 - o \$200 for seniors; \$1,000 for graduate students

What are GRFP fellowships?



- Graduate **fellowships** (scholarships) funded by NSF
 - o Investments in YOU!
 - o Bets on the **future U.S. STEM workforce**.
- Provides financial support for 3 years of graduate school
- For students in research-based STEM graduate programs exploring qualifying STEM research topics
- Very student-driven and flexible
 - o vs. typical "graduate assistantships" (faculty or department driven)
- Very **prestigious**, and **competitive**
 - ~16% of applications are awarded
 - Honorable Mentions for meritorious, but unawarded, applications are still significant national achievements!

What GR Fellowships Offer?



Three to Five Year Award Total – \$147,000

- 3 years of support towards graduate study (over 5 years)
 - \$34,000 \$37,000 Stipend per year (\$111,000 total over length of the award)
 - \$12,000 annual Educational allowance to institution
 - ➤ For tuition, fees, and other educational expenses (\$36,000 total over length of the award)
- Flexible choice of project, advisor, & program
- Portability to any accredited institution located in the US to pursue Master's or Ph.D. degree

How many GRFP fellowships?

- 1848
- For the 2020 competition, NSF received over 13,000 applications and made 2,076 fellowships offers. https://www.nsfgrfp.org/applicants/
- For the 2021 competition, NSF offered fellowships to 2,074 applicants. Another 1,830 received Honorable Mention.
- 2022: 2,193+ Offers; 1,413+ Honorable Mentions
- You can look them all up here:

https://www.research.gov/grfp/AwardeeList.do?method=loadAwardeeList

2,193 Applicants found, displaying 436 to 450			
<u>Name</u>	Baccalaureate Institution	Field of Study	Current Institution
I			
Williamson, Wyomia MyKayla	University of Mississippi	Social Sciences - Anthropology, other (specify) - Archaeology	University of Mississippi
Wallace, Austin	University of Mississippi	Chemistry - Chemical Theory, Models, and Computational Methods	University of Mississippi
Savino, Benjamin Sam	University of Mississippi	Engineering - Mechanical Engineering	University of Mississippi
Savino, Benjamin Sam	University of Mississippi	Engineering - Mechanical Engineering	University of Mississi

 For the 2023 competition (this year), 2,750 awards are expected!

Who led in GRFP awards last yr?

Zoom Poll



- Cornell
- Georgia Tech
- MIT
- Stanford
- UC Berkeley
- UC San Diego
- Univ. of Michigan
- UT Austin
- Univ. of Washington

Who led in GRFP awards last yr?

Zoom Poll



- Cornell 48
- Georgia Tech 49
- MIT 122
- Stanford 69
- UC Berkeley 93
- UC San Diego 40
- Univ. of Michigan 44
- UT Austin 42
- Univ. of Washington 40

Who led in SEC GRFPs last yr?

Zoom Poll



- Mississippi State
- Texas A&M
- Vanderbilt
- U. of Alabama
- U. of Florida
- U. of Georgia
- U. of Kentucky
- U. of Mississippi
- U. of South Carolina
- U. of Tennessee

Who led in SEC GRFPs last yr?

1. Var	nderbilt:	32
2. U. o	of Florida:	17
3. Tex	as A&M:	10
4. U. o	of Georgia:	8
5. U. o	of S. Carolina:	5
6. U. o	of Tennessee:	5
7. U. I	Mississippi:	3
8. Mis	ssissippi State:	3
9. U. o	of Alabama:	3
10. U. o	of Kentucky:	3
11. U. o	of Missouri:	3
12. U. o	of Arkansas:	2
13. Aut	ourn:	2
14. LSU	J:	O

GRFP Awards vs. Student Enrollment

			• • • • • • • • • • • • • • • • •	
1.	Vanderbilt:	32	1 8 4 8	
2.	U. of Florida:	17	lugatitu ati a a	Enrollment
3.	Texas A&M:	10	Institution Texas A & M University-College Station	70,418
4.	U. of Georgia:	8	University of Florida University of Georgia	53,372 39,147
5.	U. of S. Carolina:	5	The University of Alabama	37,840
•	U. of Tennessee:	5	University of South Carolina-Columbia Louisiana State University and Agricultural	35,470
	U. Mississippi:	3	& Mechanical College University of Missouri-Columbia	34,285 31,089
8.	MSU:	3	Auburn University	30,737
	U. of Alabama:	3	The University of Tennessee-Knoxville University of Kentucky	30,559 29,986
	U. of Kentucky:	3	University of Arkansas	27,562
	U. of Missouri:	3	Mississippi State University University of Mississippi	22,986 21,014
	U. of Arkansas:	3 2	Vanderbilt University	13,537
	Auburn:	2		
	LSU:	0		

https://www.univstats.com/comparison/southeastern-conference/student-population/

GRFP Application Timeline

Application Deadlines

All applications are due at 5:00 PM Local Time of Mailing Address.

July/August

Solicitation Posted

- Oct. 17, 2022 Life Sciences
- Oct. 18, 2022 Computer and Information Science and Engineering, Materials
 Research, Psychology, Social Sciences, STEM Education and Learning
- Oct. 20, 2022 Engineering
- Oct. 21, 2022 Chemistry, Geosciences, Mathematical Sciences, Physics and Astronomy

Reference Letter Deadline

Oct. 28, 2022 – 5:00 PM ET

Recipients Announced

March - April

Acceptance of Award and Declaration of Tenure/Reserve

May 1

Fellowship Year Begins

June 1 or Sept. 1

How to Prepare and Submit



← Search for more funding opportunities





Important Information for Proposers

beta.nsf.gov/funding/opportunities/nsf-graduate-research-fellowship-program-grfp

A revised version of the NSF Proposal & Award Policies & Procedures Guide (PAPPG) (NSF 22-1), is

Synopsis

The purpose of the NSF Graduate Research Fellowship Program (GRFP) is to help ensure the quality, vitality, and diversity of the scientific and engineering workforce of the United States. The program recognizes and supports outstanding graduate students who are pursuing full-time research-based master's and doctoral degrees in science, technology, engineering, and mathematics (STEM) or in STEM education. The GRFP provides three years of support over a five-year fellowship period for the graduate education of individuals who have demonstrated their potential for significant research achievements in STEM or STEM education. NSF actively encourages women, persons who are members of groups historically underrepresented in STEM, persons with disabilities, and veterans to apply.

NSF GRFP was established to recruit and support individuals who demonstrate the potential to make

Upcoming due dates

Full proposal

2022

October 17 - Deadline date

Life Sciences

October 18 - Deadline date

Computer and Information Science and Engineering, Materials Research, Psychology, Social, Behavioral and Economic Sciences, STEM

How to Prepare and Submit

Solicitation found on NSF GRFP Program Page: https://beta.nsf.gov/funding/opportunities/nsf-graduate-research-fellowship-program-grfp
Provides the following information:

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

GRFP Application



Complete an Application Package at research.gov:

- 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 for app. details & requirements.

A competitive Personal Statement



Time to tell your story.



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?
 - O 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

Ask for feedback from: Good writers and story tellers.

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?
 - O 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-specialists
 - o Avoid jargon!
 - Make your contributions clear

Consult with
a faculty
member(s) on
technical
aspects of
the plan.

Consult with lay reader(s) (non-experts) on clarity.

Stories & Perspectives of GRFP-Expereinced Faculty, Students, and Support Staff

Dr. Ibrahim to go last (more time), with tips for successful applications/services available from ONSA.

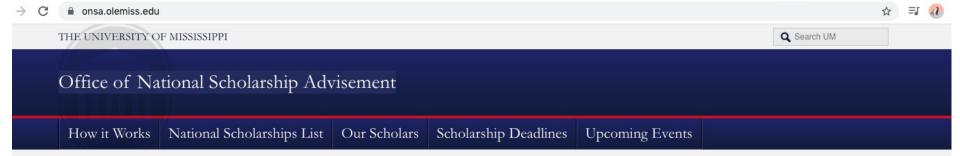
Faculty with GRFP experience can share their stories perspetives for 2-3 minutes eash.

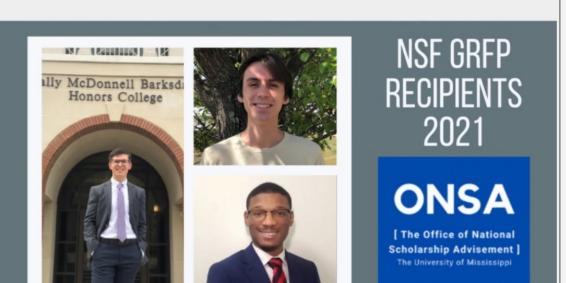
Other guest staff members or administrators may offer advice or support services (1-2 minutes each).

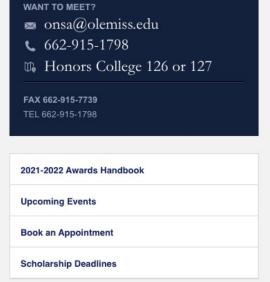
ONSA Perspectives & Services



Dr. Vivian Ibraham, vibrahim@olemiss.edu







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.

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? Why will other **scientists** care?

- Broader Impacts

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

Why will other **citizens** care?



Zoom Poll: Who are you?

- 1. What is your classification?
- 2. What is your (likely) graduate field of study?

Intellectual Merit

Your 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 advance your field of study and your Research Plan to lead to new knowledge

Broader Impacts



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

Societal benefits may include, but are *not limited* to:

- Increasing participation of underrepresented groups: women, underrepresented racial or ethnic minorities, students w/disabilities, veterans
- Education outreach: Mentoring; improving STEM education
- Increasing **public scientific literacy**; increased public engagement with science and technology
- Community outreach: science clubs, radio, TV, blogs
- Potential to impact a diverse, globally competitive **workforce**
- Increasing collaboration: 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.

GRF Ops Center

15 seconds

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.

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.

To Receive \$200 Incentive



For Undergraduates and for Graduate students that submit but don't meet the other EFG Scholarship eligiblity criteria:

- Submit your application on-time to NSF
- Submit proof of NSF acceptance of application, and copy of submitted proposal, to Dr. Doerksen no later than November 15, 2023 (rjd@olemiss.edu)
- A \$200 scholarship will be awarded by the end of the fall semester

Graduate Students: To Receive \$1,000 EFG Scholarship

- Submit an EFG Notice of Intent at https://olemiss.infoready4.com/ by 9/15/2022.
 - You will receive an email within 10 business days confirming eligibility and availability of funds and providing additional instructions, terms, and conditions.
- Submit proof GRFP Submission/acceptance to NSF to https://olemiss.infoready4.com/ 11/10/2022.
- Your readers will be asked to confirm having reviewed your application. Once that happens,
- Your \$1,000 EFG scholarship will be deposited to your bursar account before the end of the year or in January.
- See https://orspresdev.olemiss.edu/efg/

Graduate EFG Scholarship Program

orspresdev.olemiss.edu/efg/

THE UNIVERSITY OF MISSISSIPPI

ORSP Research Development

IDRUM

Internal Grants

Graduate EFG Scholarships

The UM Graduate EFG Scholarship Program

What is the Graduate EFG Scholarship Program?

Numerous federal agencies, professional societies, and other external organizations offer programs where graduate students can compete for grants and fellowships to support their research and creative scholarship activities. In a new University of Mississippi (UM) program, the UM Graduate Encouraging Fellowship & Grant Applications (EFG) Scholarship Program, UM graduate students who compete for qualifying external fellowships or grants may be eligible to receive an EFG Scholarship as an incentive just for applying. With input from the Graduate Student Council (GSC), the EFG Scholarship Program is being piloted by the Graduate School and the Office of Research and Sponsored Programs (ORSP) in fiscal year FY23 (through the end of June 2023), as a replacement to the former GSC Grants Program.

What are the Elicibility Requirements and Instructions?

Who Else Can Assist?

Dr. Ibrahim: Will provide mentoring on student applications as previously discussed.

Dr. Doerksen: Will review and provided feedback on any grad students' personal statements and/or research statements received by October 1, 2022 (email rjd@olemiss.edu).

Jason Hale: Will review and provided feedback on any students' personal statements and/or research statements received by Sept 21, 2022 (email jghale@olemiss.edu).

Others? Adam Smith: aes@olemiss.edu

Writing Centers







writing centers

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reservation system.

CONTACT or VISIT your campus center

GRADUATE STUDENTS

SCHEDULE AN APPOINTMENT

check out our

SPECIAL EVENTS

and workshops



If Awarded...



- ORSP and the Graduate School have developed a set of guidelines for GRFP awardees electing to conduct their fellowships at UM.
- See https://gradschool.olemiss.edu/nsf-grfp

Noted in this Year's Solicitation



IMPORTANT INFORMATION AND REVISION NOTES

- This solicitation covers the Fiscal Year (FY) 2023 competition.
- Applications must be submitted in Research.gov through the GRFP Application Module https://www.research.gov/grfp/Login.do
- Applications are due at 5:00 p.m. local time of the applicant's mailing address.
- NSF will continue to emphasize high priority research in alignment with the priorities laid out in https://www.whitehouse.gov/wp-content/uploads/2022/03/budget_fy2023.pdf.
- Portions of the eligibility criteria have been rewritten for clarity.
- Reference letters are due October 28 at 5:00 p.m. Eastern Time (ET).
- Applicants and reference letter writers requiring accessibility accommodation are asked to notify the GRF
 Operations Center at least four weeks before the deadline to coordinate assistance with NSF in submitting the
 application or reference letter.

Eligibility Criteria



Eligibility is based on the applicant's status at the application deadline.

Applicants must self-certify that they are eligible to receive the Fellowship. To be eligible, an applicant must meet all of the following eligibility criteria at the application deadline:

- Be a U.S. citizen, national, or permanent resident
- Intend to enroll or be enrolled full-time in a research-based master's or doctoral degree program in an eligible Field of Study in STEM or STEM education (See Appendix and Section IV.3 for eligible Fields of Study)
- Have never previously accepted a Graduate Research Fellowship
- If previously offered a Graduate Research Fellowship, have declined by the acceptance deadline
- Have never previously applied to GRFP while enrolled in a graduate degree program
- Have never earned a doctoral or terminal degree in any field
- Have never earned a master's or professional degree (see joint bachelor's-master's degree information below) in any field, or completed more than one academic year in a graduate degree-granting program, unless (i) returning to graduate study after an interruption of two (2) or more consecutive years immediately preceding the application deadline, and; (ii) are not enrolled in a graduate degree program at the application deadline
- Not be a current NSF employee

Examples of GRFP Proposals?

https://www.alexhunterlang.com/nsf-fellowship

- UM ORSP cannot confirm whether all of these are legitimate or not, but you might want to take a look at some of them.

NSF	GREP	Examp	es

Name	Year	Area	Age of Applicant	Success	Proposal	Personal	Previous	Ratings
Brandon Barker	2019	Astronomy and Astrophysics	Senior Undergrad	Winner!	Yes	Yes	NA	Yes
Logan Pearce	2019	Astronomy, high-contrast imaging	Senior Undergrad	Winner!	Yes	Yes	NA	No
Dara Storer	2019	Astrophysics	First Year Grad	Winner!	Yes	No	NA	Yes
Ava Vargason	2019	Biomedical Engineering	Second Year Grad	Winner!	Yes	Yes	NA	No
Hannah Viola	2019	Biomedical Engineering	Second Year Grad	НМ	Yes	Yes	NA	Yes
Kevin Wyss	2019	Chemical Catalysis	Senior Undergrad	Winner!	Yes	Yes	NA	Yes
Anonymous	2019	Civil Engineering	Senior Undergrad	Winner!	Yes	Yes	NA	No
Noemi Glaeser	2019	Computational Science and Engineering	Senior Undergrad	Winner!	Yes	Yes	NA	Yes
Nate Weinman	2019	Computer Science - Human Computer Interaction	Second Year Grad	Winner!	Yes	Yes	NA	Yes
Dave Klinges	2019	Ecology	Senior Undergrad	Winner!	Yes	Yes	NA	Yes
Haihao Liu	2019	Interdisciplinary: Physics - Condensed Matter and Materials Research	First Year Grad	Winner!	Yes	Yes	NA	Yes
Jeffrey Letourneau	2019	Life Sciences - Microbial Biology	Second Year Grad	Winner!	Yes	Yes	NA	Yes
James Howe	2019	Life Sciences - Neuroscience	Second Year Grad	Winner!	Yes	Yes	NA	Yes
Samantha Moore	2019	Mathematics	Second Year Grad	Winner!	Yes	Yes	NA	Yes
Carleen McKenna	2019	Mechanical Engineering	Senior Undergrad	Winner!	Yes	Yes	NA	Yes
Adina Feinstein	2019	Physics & Astronomy	First Year Grad	Winner!	Yes	Yes	NA	Yes
Raphael Erik Hviding	2019	Physics and Astronomy - Astronomy and Astrophysics	First Year Grad	Winner!	Yes	Yes	NA	Yes
Kyle David	2019	Systematics and Biodiversity	Second Year Grad	Winner!	Yes	Yes	NA	No
Wenzer Qin	2019	Theoretical Physics	Senior Undergrad	Winner!	Yes	Yes	NA	No
Ellis Avallone	2018	Astrophysics	Senior Undergrad	НМ	Yes	Yes	NA	No
Ryan Rubenzahl	2018	Astrophysics	Senior Undergrad	Winner!	Yes	Yes	NA	Yes
Emmet Francis	2018	Biomedical Engineering	First Year Grad	Winner!	Yes	Yes	NA	Yes

Q&A and Discussion





Good luck!

The slides (and possibly the recording) will be available soon at

https://blackboard.olemiss.edu/webapps/blackboard/execute/courseMain?course_id=_82745_1



Bonus/Extra Slides...



Applicants

Am I Eligible?

How do I Apply?

FAQs

GRFP recognizes and supports outstanding graduate students who have demonstrated the potential to be high achieving scientists and engineers, early in their careers. Applicants must be pursuing full-time research-based master's and doctoral degrees in science, technology, engineering, and mathematics (STEM) or in STEM education at accredited US institutions.

Application Deadlines

All applications are due at 5:00 PM Local Time of Mailing Address.

- Oct. 17, 2022 Life Sciences
- Oct. 18, 2022 Computer and Information Science and Engineering, Materials Research, Psychology, Social Sciences, STEM Education and Learning
- Oct. 20, 2022 Engineering
- Oct. 21, 2022 Chemistry, Geosciences, Mathematical Sciences, Physics and Astronomy

Reference Letter Deadline

Oct. 28, 2022 – 5:00 PM ET

Upcoming Events

- Aug. 31, 2022 11:15 AM to 1:15 PM ET Info for Applicants Webinar 1
- Sept. 21, 2022 11:15 AM to 1:15 PM ET Info for Applicants Webinar 2
- Sept. 28, 2022 11:15 AM to 1:15 PM ET
 Reading the Fine Points of the GRFP Solicitation Webinar

https://www.nsfgrfp.org/



Reviewers

Register Here

FAQs

NSF welcomes scientists and engineers to serve as reviewers of GRFP applications. Serving as a GRFP Reviewer is an excellent opportunity to apply your research and career expertise to help identify future science and engineering leaders.

Reviewer registration is now open.

Reviewer Registration Deadline

Sep. 15, 2022 – 5:00 PM ET

Upcoming Events

- Nov. 1, 2022 11AM to 1 PM ET Reviewer Training Webinar #1
- Nov. 4, 2022 2 PM to 4 PM ET
 Reviewer Training Webinar #2
- Nov. 10, 2022 2 PM to 4 PM ET Reviewer Training Webinar #3
- Nov. 15, 2022 2 PM to 4 PM ET
 Reviewer Training Webinar #4

https://www.nsfgrfp.org/



Reference Writers

Requirements

FAQs

Reference letters are a key component of a strong GRFP application package. The most effective reference letters provide detailed and specific information about how an applicant meets the NSF Merit Review Criteria of Intellectual Merit and Broader Impacts.

Reference Letter Deadline

Oct. 28, 2022 – 5:00 PM ET

Upcoming Events

- Oct. 5, 2022 11:15 AM to 1:15 PM ET
 Info for Reference Writers & Research Mentors
- Oct. 6, 2022 11 AM to 1 PM ET Reference Writers Webinar

UM Faculty Perspectives



Molecular Biophysics and Engineering Lab

Home Research

Publications

Teaching

Lab Members

PΙ

Joining the Lab

Nikki Reinemann-Goss

Assistant Professor of Biomedical Engineering

Affiliate Assistant Professor of Chemical Engineering

EDUCATION

2018 Ph.D. Chemical and Biomolecular Engineering, Vanderbilt University

2013 B.S. Chemical Engineering (Honors), University of Mississippi

2013 B.S. Chemistry (Honors), University of Mississippi

RESEARCH INTERESTS

- Investigating the biophysics of cytoskeletal hierarchy using optical tweezers, force spectroscopy, and fluorescence microscopy
- · Systems that include molecular motors, proteins, microtubules, actin, and other cytoskeletal components
- Implications of their synergy in vital life processes such as cell division, motility, muscle contraction, etc.
- Using higher order in vitro systems to model physiologically relevant environments for testing cytoskeletal drugs and effects
 of mutations/disorders in disease states



UM Faculty Perspectives



Interdisciplinary NanoBioSciences Lab

Home Re

Research Overview

Publications

Teaching

People

Join the Lab!

Thomas Werfel

Assistant Professor of Biomedical Engineering

Joint Assistant Professor of BioMolecular Sciences

Affiliate Assistant Professor of Chemical Engineering

Education:

Postdoctoral Fellow, Vanderbilt School of Medicine, 2017-2018

Ph.D. Biomedical Engineering, Vanderbilt University, 2017

M.S. Biomedical Engineering, Vanderbilt University, 2015

B.S. Physics, Murray State University, 2013



NSF GRFP Reviewer Perspectives



Cole Stevens

Assistant Professor of Pharmacognosy stevens@olemiss.edu www.stevenslab.com





Courtney Roper

Assistant Professor of Environmental Toxicology clroper@olemiss.edu courtneyroper.wixsite.com/roper

Are You Eligible?

1 minute

- U.S. citizens, nationals, and permanent residents
- Early-career: senior undergraduates, baccalaureate recipients, or graduate students who have completed no more than ONE academic year of study at time of application
- 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).
- Professional degree programs are NOT qualifying

GRFP Eligibility- Academic Levels

30 seconds

Academic Levels

Applicants compete against others from same Academic Level

1: Seniors or baccalaureate recipients with no graduate study

2: First-year graduate students.

3: 2nd-year grad students

4: More than 12 months of graduate study with an interruption of greater than 2 years (can have M.S. degree, but not terminal 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

3: Second-year graduate students

No more than one year of graduate study as of

August 1 of the year the application is submitted

GRFP Fields of Study

20 seconds

- 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

30 seconds

- Joint science-professional degree programs
 - o 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

Not Sure about Your Field?

30 seconds

• See Appendix at end of the NSF GRFP Solicitation If your proposed subfield is not covered by the one of the listed subfields, it may not be eligible for GRFP.

X. APPENDIX

NATIONAL SCIENCE FOUNDATION GRADUATE RESEARCH FELLOWSHIPS

Major Fields of Study

Note: Applications are reviewed based on the selection of a Major Field of Study. As an example, CHEMISTRY is a Major Field of Study, and Chemical Catalysis is a subfield under CHEMISTRY.

Selection of a Major Field of Study determines the application deadline, the broad disciplinary expertise of the reviewers who will review the application, and the discipline of the graduate program if the Fellowship is accepted. The subfield category designates specific expertise of the reviewers. Applicants can select "Other" if their specific subfield is not represented in the list of subfields under the Major Field of Study. The "Other" subfield category should be selected only if the proposed subfield is not covered by one of the listed subfields, and should not be used to designate a subfield that is more specific than the subfields listed. If the proposed subfield is not listed in the Appendix, it may not be eligible for Fellowship support.

Tips for a competitive application

- Start early! Look at the NSF GRFP website (<u>www.nsfgrfp.org</u>).
- Print, read, highlight, re-read, and refer often back to the latest NSF
 Solicitation in preparing your application.
- Read the Frequently Asked Questions (FAQs) 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!

GRF Winning Videos



The Secrets of Nitrogenase

https://www.youtube.com/watch?v=vsiJToUuHMg

Whales in Fjords

https://www.youtube.com/watch?v=S84GQL3IAjw

Sonic Reef

https://www.youtube.com/watch?v=tBCmIG7zKmU

InterActivity

8 minutes



- 1. Spend **3 full silent minutes** considering **at least ONE** of these questions relative to your GRFP application (each person can decide which question)
 - 1. What is a career goal you have?
 - 2. What is a research idea or topic you'd like to explore?
 - 3. What personal aspect might motivate your career, anchor your story?
 - 4. What is a question you have about GRFP?
 - 5. What weakness do you need to address (or what are you afraid of)?
 - 6. What strength can you capitalize on (or what are you confident about)?
- 2. Think about how to state your answer in 5 or 10 words or so (but don't share yet)
- 3. When I say "GO":
 - 1. Type one of your answers in the chat. OR
 - 2. Raise your hand to be called on to share out loud.