## **GSPD 2023**

# How to Fund Your Graduate Education START NOW!

Presented by Patti Ordóñez, PhD NSF GRFP Fellow Equity in Computing Advocate



Graduate Research Fellowship Operations Center

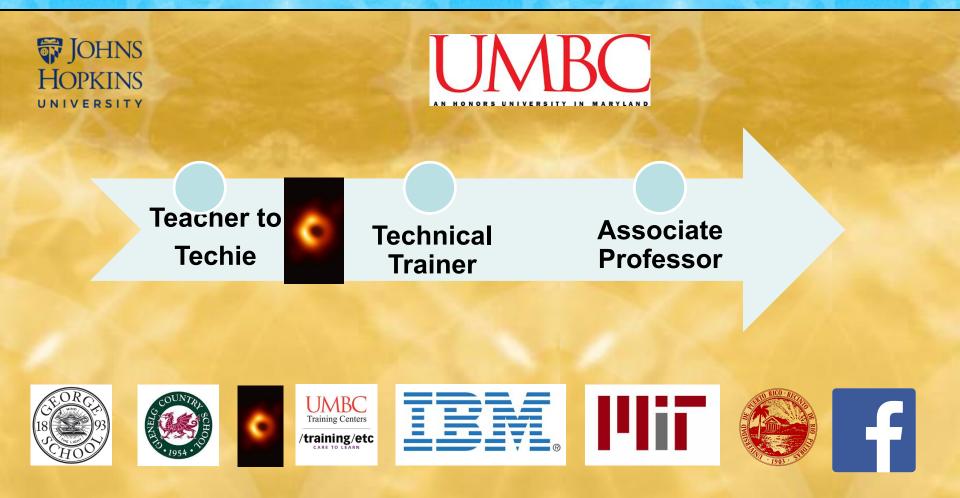






Apply at: <u>https://www.research.gov/</u>

#### Who is Patti?





National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org



Apply at: <u>https://www.research.gov/</u>



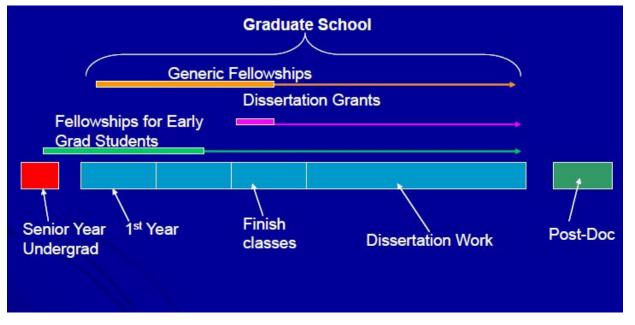
- Inform you of graduate funding opportunities
- Introduce several domestic and international fellowships
- Guide preparation of winning applications
- Discuss Personal Statement and Proposal
- Brainstorm on Personal Statements
- Begin to write Personal Statements





## When can I get the money?

#### Continuum







## Where is the money?

- Assistantships vs. Fellowships
- Types of Fellowships
  - University LSAMP BD, GAANN/Jacob Javits, Chateaubriand
  - State & Regional SREB, local congress representatives
  - Private Hertz, Ford Foundation, Hughes, Woodrow Wilson, Jack Kent Cooke
  - . Industry Honda, IBM, GEM...
  - Agency NASA, EPA, DHS, DoEd, DoEnergy, DOD, Air Force
  - National/International NSF GRFP/Fulbright





#### The Good, the Bad and the Ugly

| Y                                                    | University Fellowship                                                                            | Advisor Support                                                                               | External Funding                 |  |  |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------|--|--|
| Choose the advisor YOU want                          | May vary                                                                                         | Difficult to change advisors                                                                  | Easier to change<br>advisors     |  |  |
| Advisor runs out of money                            | Department <u>may</u> support<br>student, may need to<br>switch advisors,<br>sometimes dismissal | You or advisor need to come up with new source of funding                                     | You will still be paid!          |  |  |
| Partial funding                                      | First year only                                                                                  | At advisor's discretion                                                                       | Many fellowships for 3+<br>years |  |  |
| Teaching requirement                                 | Usually                                                                                          | At advisor's discretion<br>(may ask you to teach to<br>supplement their financial<br>support) | NO                               |  |  |
| Makes you more<br>competitive for<br>(academic) jobs | No                                                                                               | No                                                                                            | YES                              |  |  |



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Apply at: https://www.research.gov/



### Show me the money...

- <u>http://gradschool.umbc.edu/funding/fellowships/</u>
- <u>http://www.fastweb.com/</u>
- <u>https://bigfuture.collegeboard.org/scholarship-search</u>
- http://sites.nationalacademies.org/pga/Fellowships/PGA\_046301
- <u>http://www.scholarshipexperts.com/</u>
- <u>http://fulbrightonline.org/</u> (International)
- https://www.chateaubriand-fellowship.org
- https://grad.illinois.edu/sites/default/files/pdfs/walkerrobinnsfguides heets.pdf





### International style money

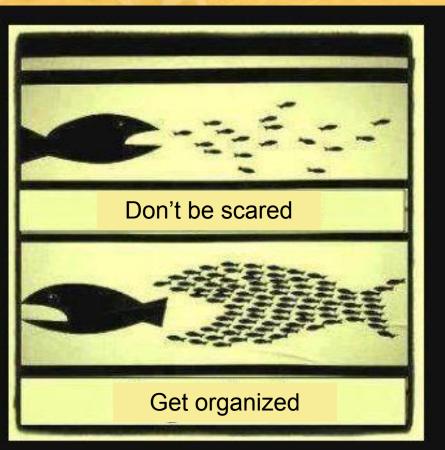
- Websites to help you find the money
  - http://www.hhmi.org/programs/international-student-research-fello wships
  - <u>http://www.conacyt.gob.mx/index.php/becas-y-posgrados</u>
  - <u>http://www.scholarshipportal.com/</u>
  - http://sites.nationalacademies.org/pga/Fellowships/PGA\_046301
  - http://www.scholarshipexperts.com/
  - http://www.intlstudent.org/scholarships.html
  - <u>http://foreign.fulbrightonline.org/</u>





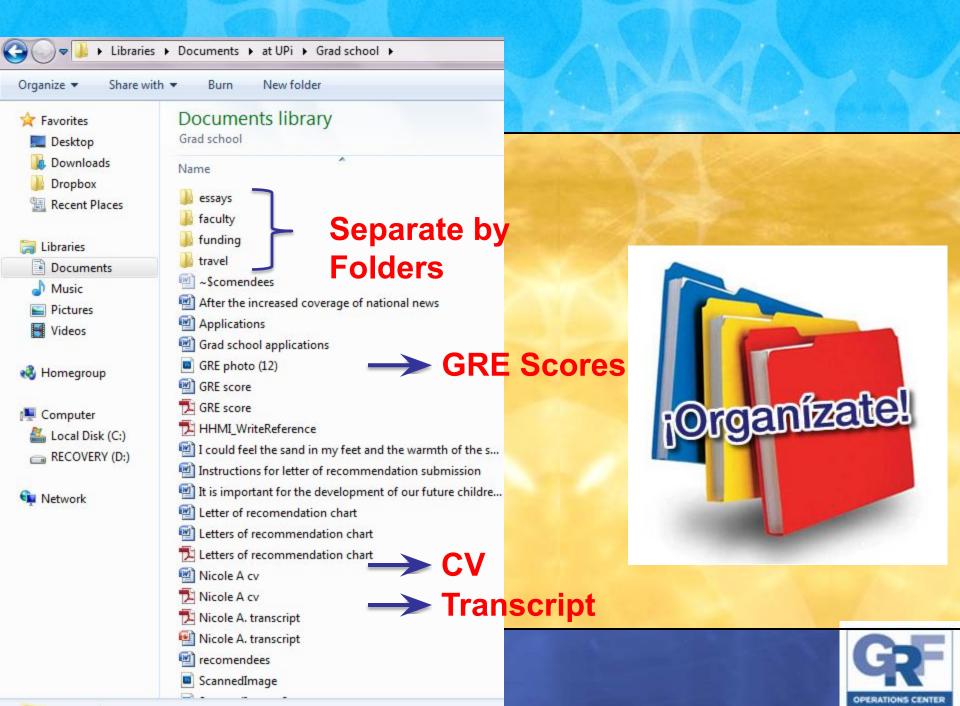
#### **Organize Yourself**



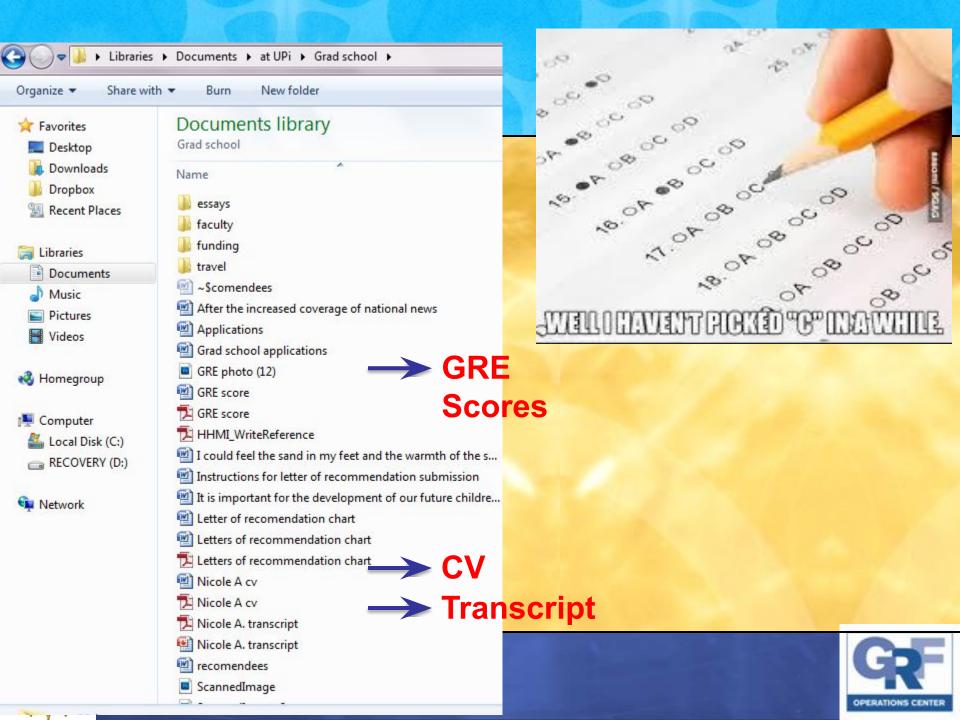








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#### **Keep Track**

- -Universities
- -Links
- -Usernames
- -Passwords
- -Essay questions
- -Transcript submission instructions
- -Application submission instruction -Color coordinated (helps!)



| Link                          | username               | deadline | Statement of Purpose | Research Experiences | TOEFL | GRE | Transcripts   | Garcia | Marshall | Rudnick |
|-------------------------------|------------------------|----------|----------------------|----------------------|-------|-----|---------------|--------|----------|---------|
| https://apply.ucsf.edu/gradua | edwin.rosado5@upr.ed   | 1-Dec    | 650 words            | 650 words            | X     | X   | HardCopy      | XX     | XX       | XX      |
| http://studentaffairs.stanfo  | edwin.rosado5@upr.ed   | 3-Dec    | Two pages in length  |                      | х     | Х   | HardCopy      | XX     | XX       | XX      |
| https://app.applyyourself.co  | ZC267M3365N            | 2-Dec    |                      |                      | х     | Х   | HardCopy      | XX     | XX       | XX      |
| https://www.yale.edu/gradi    | 85ZA48MF539            | I-Dec    |                      |                      | х     | Х   | online        | XX     | XX       | XX      |
| https://app.applyyourself.co  | edwin.rosado5          | 2-Dec    |                      |                      | х     | Х   | Del and onlir | XX     | XX       | XX      |
| http://www.rackham.umich      | .edu/prospective-stude | 1-Dec    |                      |                      | х     | X   | online        | XX     | XX       | XX      |
| https://gradapply.mit.edu/b   | edwinrosado5           | 1-Dec    |                      |                      | х     | Х   | online        | XX     | XX       | XX      |





#### **Sample Charts**

| Link                          | username               | deadline | Statement of Purpose | Research Experiences | TOEFL | GRE | Transcripts   | Garcia | Marshall | Rudnick |
|-------------------------------|------------------------|----------|----------------------|----------------------|-------|-----|---------------|--------|----------|---------|
| https://apply.ucsf.edu/gradua | edwin.rosado5@upr.ed   | 1-Dec    | 650 words            | 650 words            | Х     | Х   | HardCopy      | XX     | XX       | XX      |
| http://studentaffairs.stanfo  | edwin.rosado5@upr.ed   | 3-Dec    | Two pages in length  |                      | Х     | Х   | HardCopy      | XX     | XX       | XX      |
| https://app.applyyourself.co  | ZC267M3365N            | 2-Dec    |                      |                      | х     | Х   | HardCopy      | XX     | XX       | XX      |
| https://www.yale.edu/gradi    | 85ZA48MF539            | 1-Dec    |                      |                      | Х     | Х   | online        | XX     | XX       | XX      |
| https://app.applyyourself.co  | edwin.rosado5          | 2-Dec    |                      |                      | Х     | Х   | Del and onlir | XX     | XX       | XX      |
| http://www.rackham.umich      | .edu/prospective-stude | 1-Dec    |                      |                      | х     | Х   | online        | XX     | XX       | XX      |
| https://gradapply.mit.edu/b   | edwinrosado5           | 1-Dec    |                      |                      | х     | х   | online        | XX     | XX       | XX      |

| Fellowship                                                               | Letter Submission                                                                                                                                                                     | Deadline                         |
|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| NSF GRFP                                                                 | Recommendation letter must be submitted<br>electronically via the web application<br>system. Automated email will be sent with<br>detailed instructions for submitting the<br>letter. | November 14 <sup>th</sup> , 2013 |
| Ford Foundation Fellowship Program-<br>Predoctoral Competition           | Recommendation letter must be submitted<br>electronically via the web application<br>system. Automated email will be sent with<br>detailed instructions for submitting the<br>letter. | January 9 <sup>th</sup> , 2014   |
| Graduate Program                                                         | Letter Submission                                                                                                                                                                     | Deadline                         |
| UCSF Biomedical Sciences BMS                                             | Recommendation letter must be submitted<br>electronically via the web application<br>system. Automated email will be sent with<br>detailed instructions for submitting the<br>letter. | December 1 <sup>st</sup> , 2013  |
| Yale Combined Program in the Biological<br>and Biomedical Sciences (BBS) | Recommendation letter must be submitted<br>electronically via the web application<br>system. Automated email will be sent with<br>detailed instructions for submitting the<br>letter. | December 1 <sup>st</sup> , 2013  |

Recommendation letter must be submitted

Recommendation letter must be submitted

electronically via the web application system. Automated email will be sent with detailed instructions for submitting the

electronically via the web application

letter.

December 2nd, 2013

December 3rd, 2013





University of Pennsylvania- Biomedical

Stanford University- Stem Cell Biology

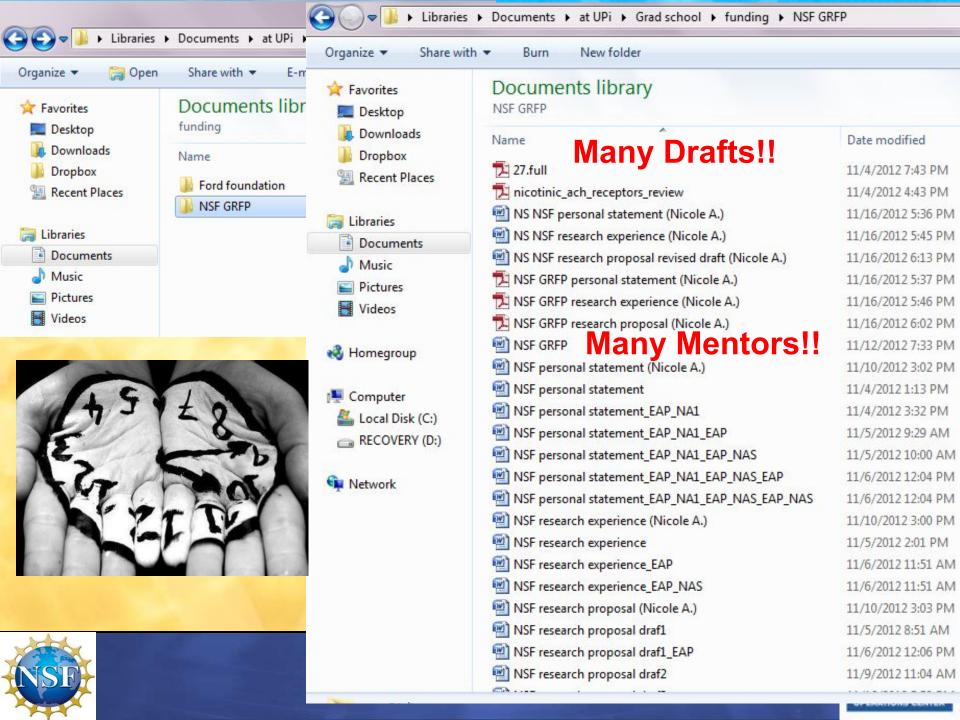
and Regenerative Medicine

Graduate Studies

#### **Sample Charts**

| University                           | Program or Department                                    | How to submit the<br>letter                                    | Deadline                                               |
|--------------------------------------|----------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------|
| Washington University<br>at St Louis | Division of Biology and<br>Biomedical sciences<br>(DBBS) | Submit online. An email will be sent to the recommender.       | As soon as possible but<br>before November 23,<br>2012 |
| NSF GRFP                             | -                                                        | Submit online. An email<br>will be sent to the<br>recommender. | November 27, 2012                                      |
| MIT                                  | Department of Biology                                    | Submit online. An email<br>will be sent to the<br>recommender. | December 1, 2012                                       |
| UT Southwestern                      | Graduate School of<br>Biomedical Sciences                | Submit online. An email<br>will be sent to the<br>recommender  | December 1, 2012                                       |
| UC Berkeley                          | Molecular and Cell<br>Biology                            | Submit online. An email<br>will be sent to the<br>recommender. | December 1, 2012                                       |
| UC San Diego                         | Division of Biological                                   | Submit online. An email                                        | December 1, 2012                                       |





#### **Many Mentors**

- Identify mentors that are eager to be exposed to your ideas and willing to guide you during the process.
- Choose those mentors that encourage strategic thinking and creativity while imparting a set of skills.

#### • Mentors **in and outside** of your field of study.







 With what you know now, how are you better prepared to fund your graduate education?







#### National Science Foundation

# The NSF Graduate Research Fellowship Program



Graduate Research Fellowship Program Operations Center



#### Questions to Answer

- Are you eligible?
- What does the application consist of?
- What do you have to submit and where?
- When is it due? Do you have time to apply?
- What are they looking for? Are you competitive?
- What are the goals/mission of the program?
- What are key elements?
- What is unique about the opportunity?
- What is the review criteria? How are you evaluated?
- Any tips?





### **GRFP General Eligibility**



- U.S. citizens, nationals, and permanent residents
- Early-career students
- Pursuing research-based MS or PhD in NSF fields
- Enrolled in accredited U.S. institution by fall 2023
- Applicants must **self-certify in the application** that they meet the GRFP Eligibility criteria





### **GRFP General Eligibility**

U.S. citizens, nationals and permanent residents that will be enrolled in an accredited STEM research-based graduate program in the Fall.

Academic levels:

- Seniors with no graduate study yet
- Graduate students can apply 1 TIME ONLY in graduate school either as:
- First-year graduate students **OR**
- Second-year graduate students (≤ 12 months of graduate study by August)
- Greater than 12 months of graduate study, with interruption in graduate study of 2 or more years (can have MS degree no doctoral degrees)





#### **Complete** Application

#### **Research.gov**

- Personal, Relevant Background and Future Goals Statement (3 pages)
- Graduate Research Statement (2 pages)
- Transcripts, uploaded into Research.gov
- **Three** letters of reference recommended but two required
- Additional information required for some candidates See Solicitation for eligibility requirements (available on www.nsfgrfp.org)











#### • **Application**: Available online August

- **Deadlines**: Late October, early November (varies by field)
- Awards: Announced late March to early April
- Best Time to Start Preparing: **Now**



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org

Apply at: https://www.research.gov/





#### **2020 Deadlines:**

<u>All documents are due by 5pm local time of applicant's mailing address</u> October 16, 2023 (Monday): GRFP application deadline for Geosciences and Life Sciences October 17, 2023 (Tuesday): GRFP application deadline for Computer and Information Science and Engineering, Engineering and Materials Research October 19, 2023 (Thursday): GRFP application deadline for Psychology, Social Sciences and STEM Education and Learning October 20, 2023 (Friday): GRFP application deadline for Chemistry, Mathematical Sciences and Physics and Astronomy October 27, 2023 (Friday): GRFP application deadline for Reference letter





### **GRFP** Supported Disciplines

- Chemistry
- Computer and Information Science and Engineering
- Engineering
- Geosciences
- Life Sciences
- Materials Research
- Mathematical Sciences
- Physics and Astronomy
- Psychology
- Social Sciences
- Science, Technology, Engineering and Mathematics Education (research-focused)





National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org

Apply at: https://www.research.gov/



### Not Supported by NSF GRFP

- Business administration or management
- Social work
- Medical, dental, law, or public health programs
- Joint science-professional degree programs, e.g., MD/PhD, JD/PhD, etc.
- Education (except research-focused STEM Education programs)
- See Solicitation (www.nsfgrfp.org)







#### NSF Graduate Research Fellowship Program Goals



- To increase the Nation's human capacity in science and engineering by providing fellowships for early-career graduate students who pursue research-based master's and doctoral degrees in NSF-supported disciplines
- To support the development of a diverse and globally engaged US science and engineering workforce



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org

Apply at: https://www.research.gov/



### **GRFP Key Elements**

- Five Year Award \$159,000
- Three years of financial support
  - \$37,000 Stipend per year
  - \$16,000 Educational allowance to institution per year
- International research through GROW
- Internships through GRIP
   Access to XSEDE
   cyberinfrastructure resources

Perform research through the GRFP in countries such as Chile, Denmark, Finland, France, Ireland, Japan, the Netherlands, Norway, Singapore, South Korea, Sweden and Switzerland!





### **GRFP Unique Features**

- Flexible: choice of project, advisor & program
- Unrestrictive: No service requirement
- Portable: Any accredited U.S. institution
   MS \_\_\_\_\_D
- 2,500 Fellowships offered annually out of average 14,000 applications from 2010-2019
- 2018 2019 ~ 16% success rate (~12,300 applications)





# **Emphasis on three high priority research areas in alignment with NSF goals in 2020**

- Artificial Intelligence
- Quantum Information Science
  Computationally Intensive Research

NSF will continue to fund outstanding Graduate Research Fellowships in all areas of science and engineering supported by NSF. Applications are encouraged in all disciplines supported by NSF that incorporate these high priority research areas.







#### **Review Criteria**

Two National Science Board-approved Review Criteria:

- **Intellectual Merit**: this criterion encompasses the potential to advance knowledge
- **Broader Impacts**: this criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes





#### **Intellectual Merit**

Panelists may consider the following with respect to the **Intellectual Merit** Criterion:

 the potential of the applicant to advance knowledge based on the totality of the content in the application, including the strength of the academic record, the proposed plan of research, the description of previous research experience or publication/presentations, and references



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Apply at: https://www.research.gov/



#### **Broader Impacts**

Panelists may consider the following with respect to the **Broader Impacts** Criterion:

 the potential for future broader impacts as indicated by personal, professional, and educational experiences





### Intellectual Merit and Broader Impacts Assessment

- Personal, Relevant Background and Future Goals Statement
- Graduate Research Statement
- Reference Letters
- Transcripts









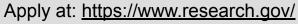


# The following elements should be considered in the review for both criteria:

- 1. What is the potential for the proposed activity to
  - A. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
  - B. Benefit society or advance desired societal outcomes (Broader Impacts)?
- To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
- 4. How well qualified is the individual, team, or organization to conduct the proposed activities?
- 5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org





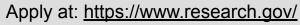
## Resources at nsfgrfp.org



- Tips for applying
- Frequently asked questions (FAQ)
- Find GRFP contacts
- Important links for the GRFP
- Panelist registration



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org





### Preparing a Competitive Application

#### **Choose at least three reference writers**

- •Give them ample time
- Must know you as a scientist and personally
- •Share your application materials and the merit review criteria (Intellectual Merit and Broader Impacts) <u>http://nsfgrfp.org/reference\_writers/requirements/</u>
- Track letter submission using FastLane
- •Must have 2 letters but no more than 3
- <u>http://renettatull.wordpress.com/2011/03/03/youve-just-asked-for-a-letter-of-recommendation-now-i-need-some-things-from-you/</u>



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org Apply at: <u>https://www.research.gov/</u>



### Preparing a Competitive Application

- Read the Solicitation carefully Are you eligible? What are requirements?
- 2. Address the Review Criteria (two NSF Merit Review Criteria -Intellectual Merit and Broader Impacts throughout)
- 3. Check for spelling and grammatical errors
- 4. Verify statements and transcripts uploads
- 5. For NSF, you must self-certify your eligibility according to the criteria in the Solicitation and that is your original work
- 6. Make sure you Press "Submit" button
- 7. Regularly check application status for # of reference letters
- 3. Make sure you are enrolled in graduate school by Fall 2023



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org Apply at: https://www.research.gov/



### **Evaluation of applications**

- Panelists are academic and research experts in general discipline, not necessarily in your research topic
- Panelists rate your application using the two Merit Review Criteria, Intellectual Merit and Broader Impacts
- NSF requests panelists to provide constructive comments (applicants receive anonymous copies of the reviews)
- Panels make recommendations to NSF
- NSF awards fellowships and honorable mentions



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### **Insight From An Experienced Panelist**

#### Common Reasons Applicants Not Successful:

- Poor Broader Impacts
- Choice of prestigious school over research-matched school
- Inappropriate or uninformative references
- Weak personal statement





National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org



## Resources at Your University







#### **TUTORÍAS Y TALLERES** en inglés y español

• ERA 101 lunes - jueves: 8:00 a.m. - 5:00 p.m. viernes: 8:00 a.m. - 11:30 a.m.



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org





### More NSF Resources

#### NSF GRFP Website (nsf.gov/grfp)

- Solicitation
- FAQ and Guide links

### Research.gov

• Online application, user guides, official announcements

#### Phone and email

 866-NSF-GRFP (673-4737) info@nsfgradfellows.org

#### And ..

- Research Mentors
- Former panelists
- Program coordinators
- Professors
- NSF GRFP recipients
- Family
- Friends



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org



### More External Resources

# NSF GRFP Winning Essays <a href="http://tinyurl.com/NSFGRFPExamples">http://tinyurl.com/NSFGRFPExamples</a>



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org



### Win by Believing in Yourself, Your Community, and Your Talents

#### **Avoid Self-Disqualification**

- All other applicants are "more qualified"
- Research, activities, or contributions are not impressive enough
- Not enough experience
- Not able to express things well



NSF funds studies of emperor penguins who are rife with belief in themselves



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org



### Apply to Win

- Applying always produces a winning result!
- Besides feedback on your ideas from experts, it is great preparation for:
  - Other award applications
  - Graduate school applications
  - Job applications
  - Writing publications
  - Professional connections

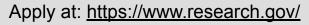
<u>...and you just might win the</u> <u>fellowship too!</u>



WATCH Your Destiny



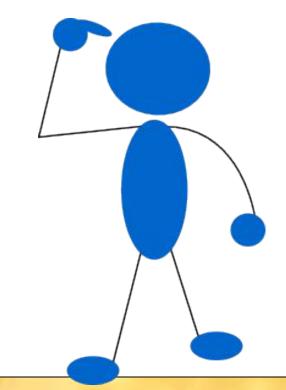
National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org





### Reflection

 What is graduate funding and Why is it important to try to fund your graduate education?







### FORD FOUNDATION FELLOWSHIPS



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org



### Ford Foundation Deadlines

#### 2021 Competition Dates:

2023 Dissertation and Postdoctoral application deadlines: December 12, 2023 5:00 PM Eastern Standard Time (EST)

**2021 Predoctoral application deadline:** December 12, 2023 5:00 PM Eastern Standard Time (EST)

Supplementary Materials deadline for submitted applications January 31, 2024 5:00PM Eastern Standard Time (EST)

> Notification of 2021 Awards Mid-to-late March 2021



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org



# Thank you

Questions?? Feel free to contact us...

- Jorge Colón, PhD jorge.colon10@upr.edu
- Patricia Ordóñez, PhD <u>pattiordonez@gmail.com</u>
- Nora Álvarez, PhD
   <u>P</u>oner tu email aqui
- Diana Silva, PhD (c) <u>dianavsilva@gmail.com</u>



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Thanks to Frances Carter-Johnson, CAHSI, Woodrow Winchester, Nicole Aponte, Jorge Ortiz-Carpena, Edwin Rosado for their



This presentation and several other resources can be found http://ccom.uprrp.edu/~pordonez/NSFworkshop



### For the Writing Workshop Worksheets in Participants.zip http://ccom.uprrp.edu/~pordonez/NSFwo rkshop Worksheets in Essays.zip http://ccom.uprrp.edu/~pordonez/NSFwo rkshop Self-Scoring Rubric for Essays https://grad.illinois.edu/sites/default/files/ pdfs/walkerrobinnsfguidesheets.pdf



National Science Foundation Graduate Research Fellowship Program Information: www.nsf.gov/grfp and www.nsfgrfp.org Apply at: <u>https://www.research.gov/</u>

