GRANT WRITING TIPS

Indiana University

November 15, 2017

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A Presentation by the IU GradGrants Center

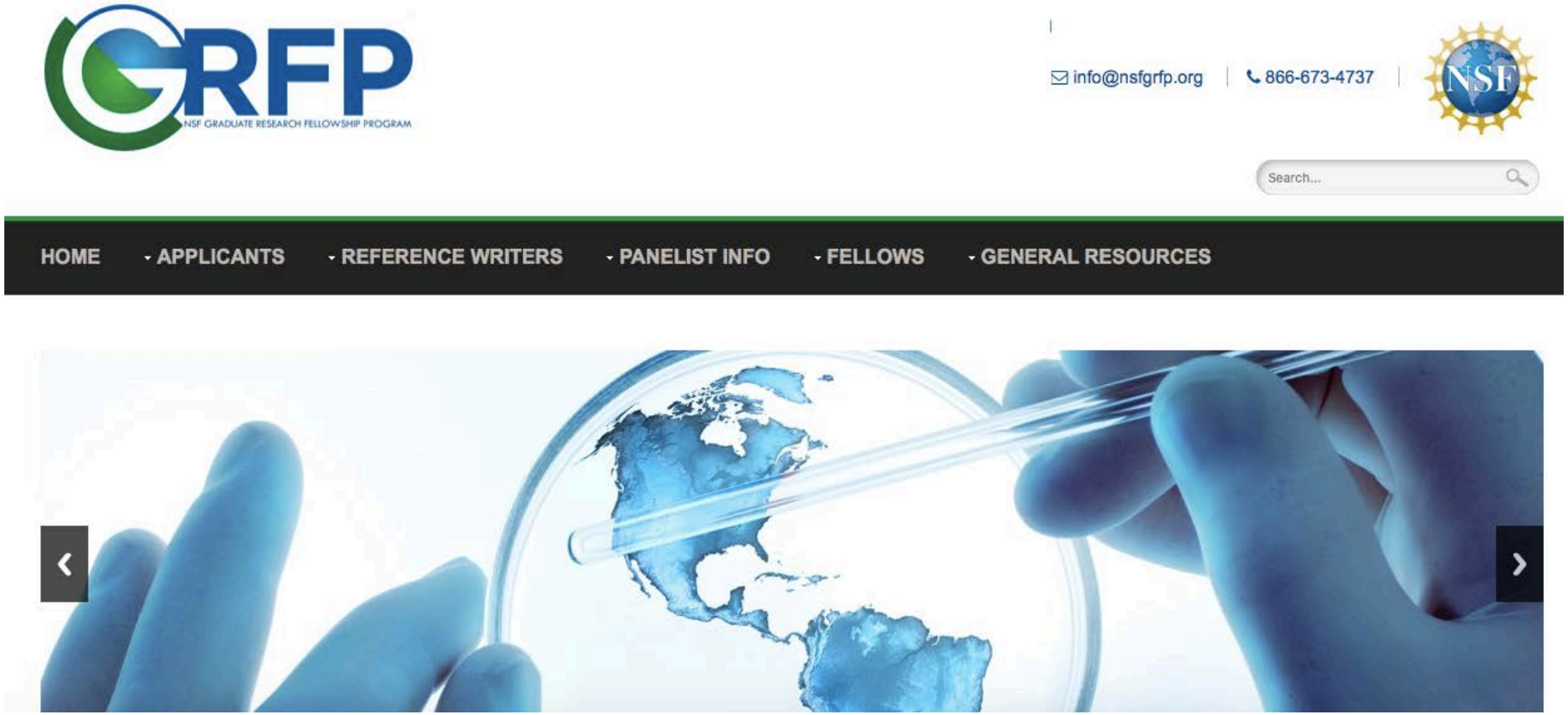
BASIC GRANT TIPS

- Start looking early
- Seek small grants first
- Search online funding databases regularly
- Know requirements specific to each grant
- Review funded applications as you prepare to write

GATHERING BACKGROUND INFO

- Who is funding the grant/fellowship?
  - Mission statements, key words
- What is the goal of this particular grant?
  - Expected results, types of candidates
- What types of projects has the grant funded in the past?
- What are the selection criteria?
  - Often links with mission statements
- Who reads the applications?
  - Know your audience
  - Assume an intelligent but "non-initiated" reader
- When is the grant typically due?

NSFGRFP.ORG


GRFP
NSF GRADUATE RESEARCH FELLOWSHIP PROGRAM
info@nsfgrfp.org
866-673-4737
NSF
Search...
HOME
APPLICANTS
REFERENCE WRITERS
PANELIST INFO
FELLOWS
GENERAL RESOURCES

NSF GRFP MISSION STATEMENT

- ”…recognizes and supports outstanding graduate students in NSF-supported science, technology, engineering, and mathematics disciplines who are pursuing research-based Master's and doctoral degrees at accredited United States institutions.”

NSF GRFP GOAL

- "Provides support for those at the beginning of their graduate career and individuals seeking to reenter graduate studies following an interruption of at least two consecutive years. "
- "Supports outstanding graduate students who are pursuing research-based master's and doctoral degrees in fields within NSF's mission."
- "Provides up to 3 years of support for the graduate education of individuals who have demonstrated potential for significant achievements in science and engineering research."
- "The GRFP supports over 100 sub disciplines, including social sciences and psychology as well as the hard sciences. "

NSF GRFP SELECTION CRITERIA

- **1. What is the potential for the proposed activity to:**
  - **Advance knowledge and understanding within its own field or across different fields (Intellectual Merit)**
  - **Benefit society or advance desired societal outcomes (Broader Impacts)?**
- 2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- 3. 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?

NSF GRFP PANELISTS

- Disciplinary and interdisciplinary scientists, engineers and other professional graduate education experts, who read a selection of applications in their discipline(s)
- GRFP Panelists Include:
  - Faculty who work with undergraduate and graduate students
  - Individuals who conduct research in NSF-supported fields
  - Individuals who are able to review interdisciplinary research plans

BEFORE DRAFTING

- Know the requirements of each grant
- Schedule your work for ALL components of the application
  - Also familiarize yourself with word counts, length, formatting, eligibility, other specifics
- Arrange for letters of recommendation
- Ask for language evaluations
- Review funded applications
- Contact funding agencies <u>directly</u> with any questions not answered on the website

NSF GRFP APPLICATION COMPONENTS

- **Reference Letters:** "Applicants are required to submit **3** reference letters. There are **5** slots available for applicants to list reference writers. Applicants are **strongly** encouraged to utilize **all** available slots."
- Tips for obtaining **strong** reference letters:
  - Choose carefully people who can speak to your abilities and potential, rather than someone with a prominent title
  - Provide referees sufficient time
  - Discuss your application and share your essays with them
  - Inform them that letters should reflect your "intellectual merit" and "broader impacts."
  - Track submission of letters using your status page in the FastLane application module - if necessary, remind reference writers about deadline. No late letters will be accepted.
  - Have backup references

NSF GRFP APPLICATION COMPONENTS

- **Academic Transcript:** An academic transcript is required for **every** institution you have listed in the application module.

NSF GRFP APPLICATION COMPONENTS

- **Personal, Relevant Background and Future Goals Statement:** Outline your educational and professional development plans and career goals. How do you envision graduate school preparing you for a career that allows you to contribute to expanding scientific understanding as well as broadly benefit society? **(3 pages)**

- **Important questions to ask yourself before writing the statement:**
  - Why are you fascinated by your research area?
  - What examples of leadership skills and unique characteristics do you bring to your chosen field?
  - What personal and individual strengths do you have that make you a qualified applicant?
  - How will receiving the fellowship contribute to your career goals?
  - What are all of your applicable experiences?
  - For each experience, what were the key questions, methodology, findings, and conclusions?
  - Did you work in a team and/or independently?
  - How did you assist in the analysis of results?
  - How did your activities address the Intellectual Merit and Broader Impacts criteria?

PERSONAL STATEMENT DO'S AND DON'TS

DO

- Use active voice and make confident statements
  - Avoid forms of the verb "to be"
  - Avoid phrases like "I hope to…" or "I would like to…"
- Show, don't tell!
  - Use **concrete examples** to illustrate your ideas.
- Weave a **narrative** (with *relevant* material)
- If discussing a setback or problem:
  - State the facts then move on to positive statements
  - What was learned? How did you grow from the experience?
  - Provide a character arc.

DON'T

- Whine about setbacks
  - You want to illustrate growth, not provide excuses
- Write fantasy or exaggeration
  - Back up your statements with evidence
- Disclose *too much* personal information
  - Evidence has to be relevant to your overall proposal
- Use inappropriate humor and clichés
  - Written humor does not always translate
- Annotated CV, chronological life story, resume in sentence form
  - Your work experience and educational history are included elsewhere

NSF GRFP APPLICATION COMPONENTS

- **Graduate Research Plan Statement:** Present an original research topic that you would like to pursue in graduate school. **(2 pages)**
- **Important questions to ask yourself before writing the statement:**
  - What issues in the scientific community are you most passionate about?
  - Do you possess the technical knowledge and skills necessary for conducting this work, or will you have sufficient mentoring and training to complete the study?
  - Is this plan feasible for the allotted time and institutional resources?
  - How will your research contribute to the "big picture" outside the academic context?
  - How can you draft a plan using the guidelines presented in the essay instructions?
  - How does your proposed research address the Intellectual Merit and Broader Impacts criteria?

ORGANIZING A PROPOSAL

- Hook
- Project overview
- Research questions
- Background and Significance
- Literature review
- Methods
- Academic background/preparation
- Expected results and broader impacts

THE HOOK

- Grab the reader's attention with a
  - challenging problem/enigma
  - provocative statistic
  - stimulating question
- Put the "what" and "why" up front
  - Good proposals emerge from clear ideas of project goals and their significance
- Central issue should stick in reader's mind an hour later

Population growth coupled with loss of arable land poses a threat to food security in the next decade.

97% of the world's population will be diabetic or pre-diabetic within the next 30 years.

Was the decline of population growth in Brazil the result of government policies?

PROJECT OVERVIEW

- Similar to an "Abstract"
- Open with a hook (one or two sentences)
- Follow with a micro-level representation of the main components of your project/proposal
  - What are you studying? (one or two sentences)
  - Why are you studying it? (one or two sentences)
  - What methodology will be used? (one or two sentences)
- Conclude with the specific Research Questions that will guide your overall project.
  - Only two or three questions
- Be wary of citing other scholarship in this section
  - It should be your voice alone.

RESEARCH QUESTIONS

- Craft a clear hypothesis
- Avoid foregone conclusions
- Avoid a long list of questions
  - Two or Three will suffice
- Number, bullet, boldface, or italicize
  - Make them easy to find on the page.

LITERATURE REVIEW

- Not all grants require full literature reviews, but almost all require that you show knowledge of your field
  - Who else has asked questions similar to yours?
  - What did they find?
  - What didn't they look into?
  - How do you build off of and add to previous scholarship?
  - What is the broader significance outside your specific area/discipline?

- Avoid citing secondary sources outside your lit review

METHODS

- Link methods explicitly to research questions
  - "Research Question 1 concerning X will be explored by…"
  - Explain why a particular method is the best way to answer a particular question?
- Address feasibility
  - Consider time frame, personal skillset, environment, likely obstacles (e.g., internet access)
- Methods sections often include explicit timelines
  - "From January to March, I will conduct fifteen semi-structured interviews with . . ."
  - "The first phase of my project will occur . . ."
- Strong, active verbs of intent especially important here

ACADEMIC BACKGROUND/PREPARATION

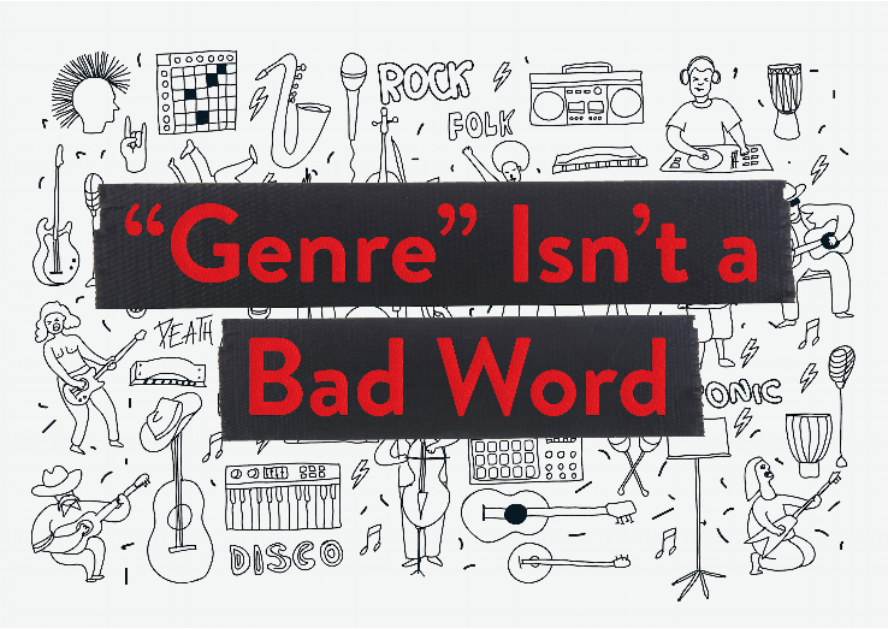
- Do you possess the technical knowledge and skills necessary for conducting this work, or will you have sufficient mentoring and training to complete the study?
  - Coursework and other training/work experience
  - Internships
  - Extracurricular activities
- Do you have the appropriate institutional resources available to you (labs, materials, mentors)?

CONCLUSIONS AND BROADER IMPACTS

- Re-address importance of the project
- How is your project innovative?
- Re-emphasize your merits
- State impacts of grant on personal and professional trajectory
  - "I will do X, Y, and Z upon finishing my studies or after the grant period"
- Note impacts on mission of funder and on your discipline more broadly
  - What is important depends on funder's goals

PROPOSAL WRITING AS GENRE

Proposal writing is a genre unto itself



- Use direct, clear language (readable/skimmable)
  - **Bold**, *italic*, and bullet points help readers navigate
- Avoid jargon
- Repeat main objective/question and its important
- Use self-referential salesmanship
- Have a singular, feasible plan drawing on personal strengths/training

Not beautiful or elegant prose, but the clearest, most lucid writing you ever produce

PROPOSAL GRAMMAR

- Try your best to avoid:
  - contractions
  - repeated "I + verb" constructions
    - especially as topic sentences
  - passive voice
  - conditional verbs
  - forms of the verb “to be”
  - overly long sentences
    - strive for under 25 words each

- Strive to use:
  - careful word choice to show fit between different sections
  - clear, confident statements
  - active constructions
  - consistency in voice

CONFIDENT PROSE

Instead of conditionals like can, could, would, hope to

Use strong verbs of intent like plan, envision, imagine, seek to

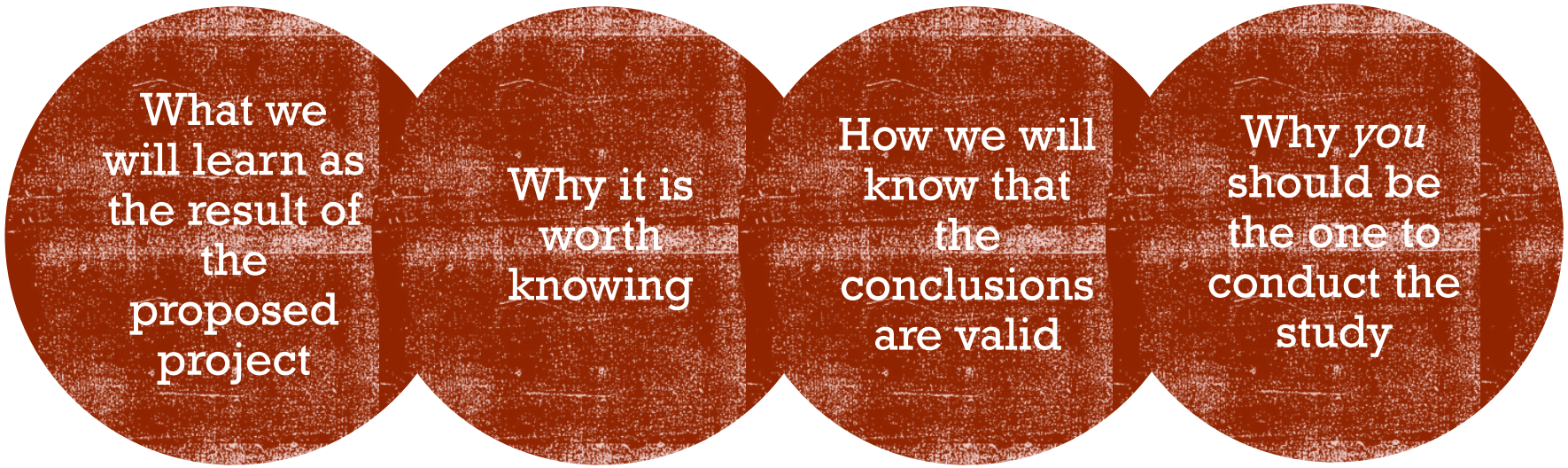
I would like to attend the Summer Language Workshop

By attending the Summer Language Workshop, I will

ACTIVE VERBS

- Identify
- Assess
- Contrast
- Apply
- Examine
- Employ
- Illustrate
- Debate
- Integrate
- Predict
- Suggest
- Measure
- Distinguish
- Infer
- Synthesize
- Differentiate
- Translate
- Revise
- Generalize
- Evaluate
- Appraise
- Compose
- Collect
- Complete
- Deduce
- Estimated
- Gathered
- Instructed
- Assembled
- Detected
- Created
- Initiated
- Illustrated
- Guided
- Classified
- Compiled
- Critiqued
- Generated
- Hypothesized

THE MAJOR POINTS EVERY PROPOSAL SHOULD ADDRESS



FEEDBACK

- Circulate your proposal for feedback
  - ADVISORS, colleagues, friends, GGC, past winners of the grant
  - Choose readers in accordance with particular grant (e.g., NSF vs. Fulbright)
  - Account for lots of time to review longer proposals (especially during summer)
- Explain to others (orally) what the project will accomplish and why it's important
- Remember: critical feedback is *good* feedback
- Write and re-write based on the various critiques

HOW THE GRADGRANTS CENTER CAN HELP

- In-person appointments
  - Email gradgrnt@indiana.edu
  - Provide GGC with draft materials 48 business hours in advance of consultation
- Brainstorming, drafting, editing grant proposals
  - Either in-person or electronically via email or Skype
- Searches for external (non-IU) funding opportunities

Grad Grants Center

WEEKLY WALK-IN HOURS

- 12:00pm to 2:00pm, Tuesdays & Fridays
- Wells Library, Room 544 (5th floor, East Tower)
- Internal and external grants, funding searches, and general questions

GGC SPRING 2017 WORKSHOP SERIES

Grant-writing for International Students

1:00pm, Wednesday, November 15

Social Science Research Commons

Grad Grants Center

Social Science Research Commons
Woodburn 200

CONTACT THE GGC

GradGrants Center

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