Broader Impacts (BI), the NSF BI Criterion, and the Doctoral Dissertation Research Improvement Grant (DDRIG)

A CRASH COURSE

**Criterion** - a principle or standard by which something may be judged or decided. A standard of judgment or criticism; a rule or principle for evaluating or testing something

MICHAEL THOMPSON, PHD “THE BROADER IMPACTS GUY”

DIRECTOR OF BROADER IMPACTS IN RESEARCH (BIR): [HTTP://BIR.OU.EDU/](http://BIR.OU.EDU/)

OFFICE OF THE VICE-PRESIDENT FOR RESEARCH (OVPR)
Empowering a Research-Based Scholarly Approach to Broader Impacts

Overarching Goal
Institutionalize a broader impacts culture

What does broader impacts look like on a university, local, regional, global, and international scale?

What are the conceptual/theoretical underpinnings of broader impacts and its applicable practical/methodological applications, including for NSF?

What is a rigorous research-based definition of broader impacts not skewed by a criterion?

How can you create and implement meaningful broader impacts professional development that helps all faculty and others be more impactful and successful in every aspect of their professional careers?

How are we doing?
Overarching Goal:

1. To leave with an conceptual/theoretical base and practical understanding of how to develop and write your broader impacts in a National Science Foundation (NSF) proposal, specifically the NSF DDRIG.

Create an outline of what are the important parts to have and write
WELCOME!!!

Ground Rules:

1. Talking is encouraged
2. Jokes and happiness is allowed
3. Participation is required
4. Move around at will but write things down
5. No topic is taboo as long as it is professional
6. Reflection is required (biggest issue) - planning

We don’t allow faculty, graduate students, administrators, staff several structured ways to reflect
Getting Situated Exercise I:

1. Determine how well you retained some information in the videos assigned for homework.
   
   1. Small quiz – Write: (a) what year was NSF broader impacts officially implemented and (b) what are the five basic structures of broader impacts and turn it in (3 min)

2. Take a moment to reread what you wrote for your DDRIG broader impacts narrative** (2 min)

3. Use the post it notes on the paper I give you and write in this order…. (2 min)

** Read through Broader Impacts Conceptual Framework (BICF) Brochure
Meeting Our Objective:

1. Ground rules, handouts, and exercise I, II, and III (30 min)
2. Setting the stage (10 min)
3. What you might not be told, understanding NSF BI through the Research and Scholarship of Broader Impacts (SoBI), Exercise IV, (20 min)
4. Practical applications for developing, choosing, implementing, and writing your NSF broader impacts for the DDRIG, (30 min)
5. Exercise V (if time permits) (20 minutes)
6. Last Details or Questions
EXERCISE II.

What Do You Think and Know About Broader Impacts?

Purpose:
- Feedback for contextualization
- Increasing workshop engagement
There are at least 60 Foundations and Organizations committed toward funding Anthropological Research and other activities not including NSF

Outline


Overiew

The International Dissertation Research Fellowship (IDRF) Program

Program Components

Fellowship Opportunities for Advanced Study


- The Margaret Kincaud Warf Fellowship in Anthropology
- The Roy Anson Fellowship in Ethnography
- The Wilson Fellowship in American Studies
- The Katherine B. Davis Fellowship in Archaeology
- The Margaret Mead/Conrad J. Noll Fellowship in Social and Cultural Anthropology
- The Naftalin Fellowship in Southwestern American Indian Culture


- The National Academy of Sciences
- The American Association for the Advancement of Science
- The National Science Foundation
- The National Institutes of Health
- The American Psychological Association
- The American Sociological Association
- The American Anthropological Association


- The Council of European Universities
- The Council of European Research Directors
- The European Research Council
- The European Commission
- The European Union


- The National Endowment for the Humanities (NEH)
- The National Endowment for the Arts (NEA)
- The Institute of Museum and Library Services (IMLS)
- The Library of Congress
- The Smithsonian Institution


- The National Geographic Society
- The American Museum of Natural History
- The Field Museum
- The American Museum of History
- The American Museum of Natural History


- The American Psychological Association
- The American Sociological Association
- The American Anthropological Association
- The American Association for the Advancement of Science
- The National Academy of Sciences
Applicants are expected to write in clear, intelligible prose for a selection committee (no grammar, syntax, spelling mistakes).

Proposals should display a thorough knowledge of the major concepts, theories (theory driven), and methods in the applicant's discipline.

Bibliography relevant to the research.

Relevance of what you are doing and why you are doing it.

Well laid out objective, hypothesis (if applicable), and proposed activities.

The research design of proposals should be realistic in scope, clearly formulated, and responsive to theoretical and methodological concerns.

Applicants should provide evidence of having attained an appropriate level of training to undertake the proposed research.

How what is proposed advances the field and/or adds knowledge to it.

Well-written and thought out writing.

What makes NSF Unique in what it specifically requires?

DDRIG Similarities required between these funding organizations

1. Applicants are expected to write in clear, intelligible prose for a selection committee (no grammar, syntax, spelling mistakes).
2. Proposals should display a thorough knowledge of the major concepts, theories (theory driven), and methods in the applicant's discipline.
3. Bibliography relevant to the research.
4. Relevance of what you are doing and why you are doing it.
5. Well laid out objective, hypothesis (if applicable), and proposed activities.
6. The research design of proposals should be realistic in scope, clearly formulated, and responsive to theoretical and methodological concerns.
7. Applicants should provide evidence of having attained an appropriate level of training to undertake the proposed research.
8. How what is proposed advances the field and/or adds knowledge to it.
9. Well-written and thought out writing.

Go to the Writing Center

How many times should you read the solicitation?
Broader Impacts (BI) Criterion:

Broader Impacts (BI) - is defined as encompassing the ability to benefit society and contribute to achievement of specific, desired societal outcomes (NSF-18-1).
Exercise III: How many times BI is discussed

Depending on your field, program, or directorate there might be more focus on broader impacts.
Broader Impacts (BI) is an International Trend !!!

Research Excellence Framework
National Natural Science Foundation of China (NSFC)
Relevance
Value Creation
Responsible Research and Innovation
Broader Impacts
Societal benefit
Knowledge Mobilization
Valorisation
Equity in development
Societal impact
Significance
US Department of Education: Relevant Outcomes and Ultimate Outcomes
Part II: Setting the stage
Compliments of the National Alliance for Broader Impacts (NABI)
Broader Impacts (BI) is an International Trend !!!

Classification of Broader Impacts-Like Names, Terms, and Phrases:
A funding agency, foundation, organization, government entity that employs a societal benefit name, term, phrase, concept requirement in some fashion.

Number of Recognized Official Countries = 195

Current percentage (%) of countries who have organizations employing BI-Like NTP’s or Societal Benefitting Like (SB-Like NTP’s) = 82.05%
Broader Impacts (BI) is an International Trend !!!

Why and How Did This Occur?

Data Collection Still in Progress

The Broader Impacts in Research (BIR) Organization, Michael Thompson, Unpublished Data, January 2014-2018
The Official Start of NSF Broader Impacts Initiative:
1. Research performer competence -- relates to the capability of the investigators, the technical soundness of the proposed approach, and the adequacy of the institutional resources available.

2. Intrinsic merit of the research -- the likelihood that the research will lead to new discoveries or fundamental advances within its field of science or engineering, or have substantial impact on progress in that field or in other science and engineering fields.

3. Utility or relevance of the research -- the likelihood that the research can contribute to the achievement of a goal that is extrinsic or in addition to that of the research itself, and thereby serves as the basis for new or improved technology or assist in the solution of societal problems.

4. Effect on the infrastructure of science and engineering -- the potential of the proposed research to contribute to better understanding or improvement of the quality, distribution, or effectiveness of the nation’s scientific and engineering research, education, and manpower base.
National Science Board (NSB) and NSF Task Force on Merit Review Discussion Report:

In your packet
Utility or relevance of the research -- the likelihood that the research can contribute to the achievement of a goal that is extrinsic or in addition to that of the research itself, and thereby serves as the basis for new or improved technology or assist in the solution of societal problems.

Effect on the infrastructure of science and engineering -- the potential of the proposed research to contribute to better understanding or improvement of the quality, distribution, or effectiveness of the nation’s scientific and engineering research, education, and manpower base.

Current BI Criterion

NSF uses two merit review criterion for evaluating research proposals for funding: Intellectual Merit and Broader Impacts. Both criteria are to be given full consideration during the review and decision-making processes; each criterion is necessary but neither, by itself, is sufficient. Therefore, proposers must fully address both criteria.

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

Broader Impacts may be accomplished through the:
I. the research itself,
II. activities that are directly related to specific research projects
III. activities that are supported by, but are complementary to the project.

The following questions will be asked of BOTH CRITERIA when reviewing proposals:
1. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
2. 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?
3. How well qualified is the individual, team, or organization to conduct the proposed activities?
4. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

Past BI-like Criterion

NSF BI 1-9 Areas
NSF Broader Impacts Criteria:

NSF 1-9

NSF Sustainable Outcomes/Impacts

In your packet
III. Conceptually Understanding the Term Broader Impacts (BI):

Broader Impacts (BI) - is defined as encompassing the ability to benefit society and contribute to achievement of specific, desired societal outcomes (NSF-16-1).
Broader Impacts (BI) is an International Trend !!!

- Research Excellence Framework
- National Natural Science Foundation of China (NSFC)
- Responsible Research and Innovation
- Societal benefit
- Knowledge Mobilization
- Equity in development
- Societal impact
- Significance
- Valorisation
- Relevance
- Value Creation
What Does Broader Impacts (BI) Really Mean?: A Cross Case Analysis

Broader Impacts (BI) is defined as encompassing the ability to benefit society and contribute to achievement of specific, desired societal outcomes.

**EU- Davis and Laas, 2014**

So read, we may identify three important similarities between RRI and the criterion of broader impacts:

1. **Societally desirable** NSF apparently has a conception of science, technology, engineering, and mathematics as working to achieve “societally relevant outcomes”—presumably outcomes “relevant” in a positive way, that is, outcomes society should desire (even if it does not). Both RRI and broader impacts seek science and innovation that serve society.

2. **Process** There is in both criteria the idea of a process by which researchers in academia (and other research institutions) might work with industry and others to achieve societally desirable outcomes. Admittedly, the part played by process in the NSF criterion (“partnerships” and “participation”) seems far less central than in RRI (more about that below).

3. **Specific goals** the list of societally desirable outcomes that the broader impacts criterion aims at is at least partially the same as that Europe has or might be expected to get together. For example, Europe wants its research and innovation to increase its economic competitiveness just as the US wants its research and innovation to do (See, for example, Directorate-General 2013).

**England, Scotland, Wales, and Northern Ireland, 2014**

### Impact: 20 per cent of the overall results

**Definition for the REF** ‘Impact’ is any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia.

**Information provided in submissions**

- **Impact case studies.** These four-page documents described impacts that had occurred between January 2008 and July 2013. The submitting university must have produced high quality research since 1993 that contributed to the impacts. Each submission included one case study, plus an additional case study for every 10 staff.
- **An impact template.** This document explained how the submitted unit had enabled impact from its research during the period from 2008 to 2013, and its future strategy for impact.

**Assessment criteria**

Impact case studies were assessed in terms of the ‘reach and significance’ of the impacts.

Impact templates were assessed in terms of how far the approach and strategy are conducive to achieving impacts.

**Netherlands, 2014**

**What is valorisation?**

Over the last decade there is an ongoing debate about the societal impact and utilisation of academic research. This is also called ‘valorisation of knowledge’ or ‘technology transfer’ and can be defined as:

The process of value creation out of knowledge, by making this knowledge suitable and available for economic or societal utilisation and to translate this into high potential products, services, processes and industrial activity.

**Broader Impacts (BI):** **Process with stakeholders/people for Achieving a specified goal that is societally beneficial in a Finite time that is measured** (BICF Lexicon and SBT&P, 2014).

Is a process utilized by an entity or person to achieve a societal benefit in a finite measured amount of time. ((BICF) Lexicon, 2014 modified by Oludurotimi Adjetunji and Michael Thompson).
The Broader Impacts Conceptual Framework (BICF):

- An explicitly societal centric framework that allows for engagement from society into the institution and engagement from the institution into society

- An engagement-outcome-impact model for creating sustainable societal beneficial impacts

- A framework that is relevant for an entire institution, provides insight into how the BI community and engagement community can explicitly interact

- Provides a way to institutionalize BI and engagement, and introduces and brings together fields of study and practice - Societal Benefit Theory & Practice (SBT&P)
The Five Structures of Broader Impacts (BI):

**PROFFESIONAL/BI IDENTITY:**
Is who you are, the way you think about yourself, the way you are viewed by the world, and the characteristics that define you based off of a process/es with stakeholders/people to achieve a societal benefit in a finite amount of time that is measured. Everyone has a BI identity.

**Identity Development** is closely tied to **Career Development** which embodies crystallization, specification, and implementation, (Kail and Cavanaugh, 2000), can be extrapolated to **Graduate, Faculty, and etc., Development.**

**BI Identity Non-Academic definition:** Is who you are and how you plan to engage and benefit others by leaving a legacy through your research, teaching, occupation, and/or service.
Exercise III: Look at sample proposals

PROFESSIONAL/Bi IDENTITY

INPUTS → ACTIVITIES → OUTPUTS → OUTCOMES

- Inputs: Resources dedicated to or consumed during the event.
- Activities: What is done with the inputs to accomplish the goal, purpose, and objectives of the event.
- Outputs: The direct products and services of the inputs and activities of the event.
- Outcomes: Benefits for participants and other beneficiaries as a result of the activities and outputs of the event.

Inputs ➔ Activities ➔ Outputs ➔ Short-term Outcomes ➔ Intermediate Outcomes ➔ Long-term Outcomes
Providing a Research-Based Scholarly Definition of Broader Impacts

**Broader Impacts** – A process with people/stakeholders to achieve a societal benefit in a finite time that is measured. This can be through one’s teaching, research, service, and occupation. There can be broader impacts of almost anything. If done appropriately broader impacts can lead to sustainable positive impacts.

[3]. The Broader Impacts in Research (BIR) Organization. (2014). BI Definitions Guide: An abbreviated collection of explanations that begins to provide a common language when discussing, practicing, understanding, and better articulating the dimensions of broader impacts (BI). [Brochure], [Norman, Oklahoma], Thompson, M.
IMPACT:

To have a strong effect on someone or something and/or the action of something coming into contact with another resulting in a benefit (this is assumed but not always) which can happen in an infinite amount of time. This does not have to be planned.

Taxpayers don’t want impacts they want broader impacts and so do you!
Potential STEM and Social Science Stakeholders

- 200 US Taxpayers
- 74.3 Taxpayers Kids Ages 0-17
- 20.3 Students in Higher Education
- 1.56 Higher Education Staff and Faculty

References:
How Do **YOU** Specifically Demonstrate Your Stakeholders Have Made a Wise Investment?

**BENEFITS**

- 20.3 Students in Higher Education
- 1.56 Higher Education Staff and Faculty
- 74.3 Taxpayers Kids Ages 0-17
- 200 US Taxpayers

**Numbers in Million**

2017 Population = 325.7 million

2009/10 Population = 300-305 million

References:
- IRS Tax Statistics
- US Department of Labor – Statistics
- Census for students
- Higher education staff/faculty
NSF Broader Impacts
Criteria:

NSF Sustainable Outcomes/Impacts

NSF 1-9
IV. Practical Applications of BI Using the National Science Foundation (NSF) as an Example:

**Broader Impacts (BI)** - is defined as encompassing the ability to benefit society and contribute to achievement of specific, desired societal outcomes (NSF-16-1).
HOW DO I GET STARTED?

Understanding, Developing, Writing, and Implementing, Your Professional/Broader Impacts Identity (BII):

**Broader Impacts Identity (BII)** - Is who you are, the way you think about yourself, the way you are viewed by the world, and the characteristics that define you based off of a process/es with stakeholders/people to achieve a societal benefit in a finite amount of time that is measured. Everyone has a BI identity. (BICF Lexicon and SBT&P, 2014).

**BI Identity Non-Academic definition**: Is who you are and how you plan to engage and benefit others by leaving a legacy through your research, teaching, occupation, and/or service.

**Identity Development** is closely tied to **Career Development** which embodies crystallization, specification, and implementation, (Kail and Cavanaugh, 2000), can be extrapolated to **Graduate, Faculty, and etc., Development**.
The Components that Make up Your Identity...

1. Research and/or Teaching and/or Service

2. Societally Centric Beneficial Engaged Outcomes (SCBEO)

3. Legacy in Addition to Your Field
Process with stakeholders/people for **Achieving a specified goal that is societally beneficial** in a **Finite** time that is measured.

Aspects of Society

- University Community
- Local Community
- State Community
- Regional Community
- National Community
- Global / International Community (*caveat here*)

**NSF Recommended areas of BI**

**Aspects of Society Used to Help Achieve NSF BI Areas**
NSF Recommended areas of BI

1. Full participation of women, persons with disabilities, and underrepresented minorities in STEM (specifically African Americans, Hispanics, Native Americans, Alaska Natives, and Pacific Islanders)
2. Improved STEM education and educator development at any level
3. Increased public scientific literacy and public engagement with science and technology
4. Improved well-being of individuals in society
5. Development of a diverse, globally competitive STEM workforce
6. Increased partnerships between academia, industry, and others
7. Improved national security
8. Increased economic competitiveness of the United States
9. Enhanced infrastructure for research and education

NSF Broader Impacts Categories:
I. Broadening Participation
II. Education and Infrastructure
III. Industry and Competitiveness
IV. Everything Else
Developing and Knowing Where Your Broader Impacts (BI) and Broader Impacts Activities (BIA) Fit Into Proposals:

**Broader Impact/s (BI)** - A process with stakeholders/people to achieve a societal benefit in a finite amount of time that is measured. (BICF Lexicon and SBT&P, 2014).
Broader Impacts are Everywhere!!!
Including Other Agency and Foundation Solicitations

- a. Project Summary (required) ★
- b. Project Narrative/Description (required) ★
- c. Biosketch (publications, synergistic activities, collaborators, students) ★
- d. Current and Pending (pursuing funding related to broader impacts)
- e. Facilities, Equipment and Other Resources (FEOR) ★
- f. Letters of Commitment
- g. Data Management Plan ★
- h. Postdoc Mentoring Plan
- i. Suggested Reviewers
- j. BI language
- k. Ask for Help Early

NSF - National Science Foundation
NIH - National Institutes of Health
NASA - National Aeronautics and Space Administration
ACS - American Chemical Society
UNESCO - United Nations Educational Scientific and Cultural Organization

Reference: Alicia Knoedler, Associate VP of Research - revised by Michael Thompson
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**To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?**

- PIs might remember to write about the innovation of their research and how it is potentially transformative
- Most PIs do not think this way about broader impacts (but now they need to)

**Is the plan for carrying out the proposed activities well-reasoned, well-organized, based on a sound rationale? Does the plan incorporate a mechanism to assess success?**

- Most PIs see this as describing their methodology, giving details so that reviewers can see that PIs know how to perform their research. Most PIs assume that assessing success comes in publications (although planned dissemination should be described in the proposal)
- Most PIs vaguely list that they want to work with particular groups (e.g., HS students, teachers, the public) but give no details as to how they will do this or evaluate its success (but they need to)

**How well qualified is the individual, team, or organization to conduct the proposed activities?**

- Most PIs think about this in the context of their research (biography, research expertise, facilities available to the research, etc.)
- Most PIs don’t address their proposals (but they need to) that they have the expertise and people power to carry out the activities or have support at their institution

**Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?**

- Most PIs understand that they should describe what is available to perform the research or other collaborators and the expertise they bring to the project
- Some PIs will have found others to partner with to carry out broader impacts activities (e.g., K20 Center, Outreach, OK EPSCoR office, etc.); others will try to do everything on their own.

**When proposals are reviewed, where are the gaps in understanding most visible?**

- Project summary, project description, biosketch, FEOR, DMP, PMP – almost everywhere

**Reference:** Alicia Knoedler, Associate VP of Research
Treat Your Broader Impacts (BI) Like You Would Treat Your Intellectual Merit (IM) !!!

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Reference: Aliisa Brooks, Associate VP of Research
Facilities, Equipment, and Other Resources (FEOR) is an excellent place to show your infrastructure for NSF Broader Impacts (BI)!!!

### Examples – Faculty Could Provide These in Their FEOR:

- The Broader Impacts in Research (BIR) organization
- Center for Research Program Development and Enrichment (CRPDE)
- Office of Undergraduate Research (OUR)

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Reference: Alisia Brooker, Associate VP of Research
Implementing, Writing, Implementing, and Choosing /Developing Your Broader Impacts (BI) and Broader Impacts Activities (BIA):

**Broader Impacts Activity (BIA)** - Is a planned pursuit, experience, type of engagement, action, function, work, specific deed/s used with stakeholders/people to achieve a societal benefit a finite period of time. BIA is part of one’s broader impacts program and fits in one’s broader impacts identity. This is what is done with the broader impacts inputs. BIA should be measured (BICF Lexicon and SBT&P, 2014).
9 Practical Applications for Developing/Choosing, Implementing, and Writing Your BI Activities in Tour DDRIG:

1. Talk to program officer and know how NSF will evaluate your proposal****

2. All reviewers in the directorates are different- i.e. traditional vs very innovative bia’s (try to hit a middle ground to cover all your bases unless you know what the reviewers in your directorate are partial to... (For the DDIG pick one or two things -)****

One paragraph to one page (more like a page)
Too Many Broader Impact Activities (BIA’s) can ALARM Reviewers You Are Not Serious About What Your Really Going to Do.

Quality Not Quantity!!!!
3. In the BI statement don’t use complicated language and make it easy to find

Start with (a) “The societal benefits of this research... (NSF 1-9)”; then (b) “State why this is important (for you and others if possible)”; then (c) “This will be done through...”

(one to three main activities/things for broader community)
(last paragraph is benefit to broader academic community**)

4. When writing and choosing bia think and include at what level, the particular population, how this ties in with your assessment*, how reasonable it will be to accomplish bia (quality over quantity), include partnerships.

Be specific in your writing****!

**Does not have to be as detailed
5. Have documented evidence of your BI identity- i.e. posters, Twitter, Facebook, your website, other peoples websites****
Have Documented Evidence of Your Broader Impacts!!!

Other Examples: Websites, Posters, Blogs, Articles, Local News, Get Featured on Facebook, and etc.,
6. Generate a timeline for the research and your BI

7. Talk about outcomes of your bia with a guaranteed roadmap for success (always make sure you can accomplish what you say you will do!!!!!!)**

8. Write how your bia fits to help accomplish at least one of the nine NSF Recommended BI (ties in with #3)***

9. You need to have BI pilot data like you need research pilot data!!!!****
An Example: There are Multiple ways to write a BI Project Summary and Narrative- However you write them make it clear !!!

The importance of photoperiod-dependent flowering relates to both natural ecology (e.g., timing flowering to seasons when seeds have the best chance for survival) and human-manipulated agricultural processes (e.g., suppressing early flowering in biofuels related crops). Understanding this process can expand our basic knowledge of plant physiology and direct our future ability to fine tune crops for increased biomass production. The proposed research focuses on the specific functions of NF-Y transcription factors in photoperiod-dependent flowering, but NF-Ys also have roles in other agriculturally-important plant processes, including drought resistance, nitrogen fixing root nodulation, and embryogenesis. Thus, mechanistically dissecting the roles of NF-Y transcription factors in flowering will provide essential information for scientists broadly studying plant development and stress response programs. Additionally, students at the University of Oklahoma currently have limited access to research opportunities in plant molecular biology. Inquiry-based research will provide undergraduates students with opportunities to perform cutting-edge plant physiology and molecular biology. To achieve this goal, many of the proposed experiments will be integrated into a newly developed Plant Physiology course. Additionally, the development of "Oklahoma Plant Molecular Biology Forums" is proposed. During each forum, select labs (principal investigators and their students) from regional research institutes (OU, OSU, Noble Foundation, etc.) will meet to present their ongoing research activities and future plans. The goals of these workshops will be to 1) improve student and PI familiarity with the regional research community, 2) improve opportunities to receive professional feedback and find local collaborators, and 3) provide additional opportunities for graduate and undergraduate students to speak in small groups and interact with PIs.

The BI Narrative

*ANOTHER IDEA*

Use at least one of the nine (9) NSF recommended broader impacts and say how what you are doing fits to support at least one of these areas.

Include your BI statement
Include your previous NSF supported bia and how it fits into your bip / portfolio
Include any bia you have done before and/or results that is being expanded on because NSF funding
Include your specific bia that will or are being used to achieve your goals to benefit all stakeholders
Include how you specifically will assess/evaluate your success
EXERCISE V.

What is missing from your narrative and the sample DDRIG awarded proposals?

What gets funded in the past may not be relevant or fundable now!
Resources Available:


International Dissertation Research Fellowship (IDRF) program: https://www.ssrc.org/programs/view/idrf/

List of other resources for funding: http://www.wennergren.org/resources?page=0

PI funded and rejected proposal with reviews: https://jabunce.wordpress.com/sample-nsf-proposals/

Lisa Overholtzer graduate student research website 2013 examples: https://loverholtzer.wordpress.com/about/proposals/

Cultural Anthropology DDRIG proposals: http://gravlee.org/ang5091/proposals.htm