Welcome to the MCB Virtual Office Hours, we will begin at 2pm EST!

Please submit questions by selecting the Q&A function available to you on Zoom.

Previous office hours: https://mcbblog.nsfbio.com/office-hours/
MCB Virtual Office Hour
Question and Answers Session:

Submit your questions via the Q&A function.

Click on the Q&A icon on the bottom of your Zoom screen, shown here:

A Q&A box should appear on your screen. Please enter your question or comment in the box. You may select to submit your question anonymously.

*For specific questions about your project, please contact a Program Director.
MCB Virtual Office Hour

Today’s Topic

How to Make Your Broader Impacts and Broadening Participation Plans Have IMPACT

Submit your questions via the chat/message box on your screen!
Dr. Susan Renoe
University of Missouri

Assistant Vice Chancellor for Research, Extension & Engagement

Assistant Professor
Strategic Communication
Missouri School of Journalism

Principle Investigator & Executive Director
Center for Advancing Research Impact in Society
How to Ensure That Your Broader Impact and Broadening Participation Plans Have IMPACT

Susan D. Renoe, PhD
Executive Director
Assistant Vice Chancellor
Assistant Professor

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The Road Ahead

• Broader Impacts Basics
• Creating a Great Broader Impacts Plan
• Resources
• Questions?
Broader Impacts Basics
All proposals submitted to the NSF are evaluated on their intellectual merit (whether or not they advance the field) and their broader impacts (benefit to society).
Your research **CAN BE** the broader impact

BIAs can be directly related to your project

BIAs can be supported by or complementary to the project

The **BEST** broader impacts plans are seamlessly integrated into the research.
Creating a Great Broader Impacts Plan
Make Broader Impacts Work for YOU!!!
Building Your BI Identity

• What parts of your research do you really want to share?
• What are your hobbies?
• What do you NOT like to do?
• What things are you juggling?
The big challenge...

DESIRE
Create unique, innovative, impactful, evidence-based public engagement activities with strong evaluation plans.

REALITY
- No money
- No time
- No expertise
- No resources
• Approach it the same way as your research—find the right fit
• Look at what is already happening & partner when appropriate
• Anticipate reviewer objections and address them head on
• Be programmatic—no lists
Training the next generation: Mindset shift

“We don’t suddenly learn how to care about Broader Impacts (BI) when we become faculty…This is something that should be learned along the way, and grad students should be aware of those other elements of research.”

Right now, expecting serious BI participation from students seems like adding time and effort without changing the number of hours in the day.

Suggestion: Graduate & Undergraduate Student Mentoring Plans
DON'T WAIT UNTIL THE LAST MINUTE!!!!
Assessing Impact

Photo Credits: https://togroundcontrol.com/innovation-accounting/
What is impact?

Impact is defined as an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia. --UK Research Excellence Framework

(1) Increasing the economic competitiveness of the United States.
(2) Advancing of the health and welfare of the American public.
(3) Supporting the national defense of the United States.
(4) Enhancing partnerships between academia and industry in the United States.
(5) Developing an American STEM workforce that is globally competitive through improved pre-kindergarten through grade 12 STEM education and teacher development, and improved undergraduate STEM education and instruction.
(6) Improving public scientific literacy and engagement with science and technology in the United States.
(7) Expanding participation of women and individuals from underrepresented groups in STEM.

--US Congress, AICA 2017, Section 102

Image Credit: https://www.kellogg.northwestern.edu/social-impact/about.aspx
• Full participation of women, persons with disabilities, and underrepresented minorities in STEM
• Improved STEM education and educator development at any level
• Increased public scientific literacy and public engagement with science and technology
• Improved well-being of individuals in society
• Development of a diverse, globally competitive STEM workforce
• Increased partnerships between academia, industry, and others
• Improved national security
• Increased economic competitiveness of the United States
• Enhanced infrastructure for research and education
Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics, keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects. If the size of the activity is limited, evaluation of that activity in isolation is not likely to be meaningful. Thus, assessing the effectiveness of these activities may best be done at a higher, more aggregated, level than the individual project.

Even if assessment of Broader Impacts outcomes for particular projects is done at an aggregated level, PIs are expected to be accountable for carrying out the activities described in the funded project. Thus, individual projects should include clearly stated goals, specific descriptions of the activities that the PI intends to do, and a plan in place to document the outputs of those activities.
So what does this mean for you?

- Not all BI activities and evaluation will be the same—individuals v. centers
- It is okay to leverage existing assessments or to create your own—but you are still responsible for the BI activities
- A plan for measuring outcomes should be included
- What are you going to do? Why? How will you know it worked?
Broader Impacts 101

The Broader Impacts Wizard will help you develop a broader impacts plan that will satisfy the National Science Foundation (NSF) Broader Impact requirements and fulfill your interest in communicating your science.

The quick and easy process will help frame discussions with your BI partner(s) to produce an outline of important points to include in your NSF proposal.

Note, as you go through the Wizard, there are questions you can answer to save your thoughts. This data is only saved locally in your web browser and is not shared with our server. When you are done, you can copy all your work from the summary page. This will give you the notes you need to continue your work on the Broader Impact elements of your proposal.
• The revised Guiding Principles Document:
• The original GP:
  https://www.researchinsociety.org/media/wysiwyg/Extensiondata/Pro/ARIS/Docs/nabi_guiding_principles.pdf
• Interested in joining ARIS:
  https://www.researchinsociety.org/about-us/aris/aris-community
Review of Your Broader Impacts
Review of Your Broader Impacts Plans

Reviewers

• Fit with the research?
• Above and beyond your usual job?
• Who will benefit? What is the need?
• What will be done?
• How, and by whom?
• What do you expect to achieve?
• How will you measure success?

Strengths & Weaknesses
Review of Your Broader Impacts Plans

Program Directors

Strong Broader Impacts & Intellectual Merit

Funding!
Review of Your Broader Impacts Accomplishments

As reported in:

- Your next NSF proposal
  - Results of Prior NSF Support should include both intellectual merit and broader impacts info

- Your Annual Reports
  - Should include activities and accomplishments in both intellectual merit and broader impacts
Review of Your Broader Impacts Plans and Past Accomplishments

Program Directors

Strong Plans & Record of Success

More Funding!
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Next MCB Virtual Office Hour:  Dec 2, 2-3pm EST

Topic:  Funding Opportunity:  Planning for a Molecular and Cellular Information Synthesis Center