Top Tips and Best Practices for Broader Impacts

View this as your **career-long passion**. Leverage your **personal background** to match your project with an area that fits into Broader Impacts and is of interest to you.

Devote at least 1 page of your proposal to a description of your Broader Impacts.

You need to have a detailed, comprehensive plan.

Help reviewers by framing your Broader Impacts program.

Address these questions:

- **Who** is the audience for the activity?
- Why was this particular activity chosen?
- What does the activity involve?
- **How** will the activity accommodate human nature?
- With whom is the activity to be designed or performed?

For detailed information about this framework, review the article <u>Crafting and Evaluating</u> Broader Impacts Activities: A Theory-Based Guide for Scientists by Megan M. Skrip.

If your field is easily **relevant**, take advantage of this.

- Can your research help to understand some **fundamental or important questions**?
- Can your **results/techniques** be used by researchers in other areas?

Don't take the "information deficit" approach.

- The "deficit model" approach to science outreach is where the public is seen to have an "information deficit" that is fixable by the provision of data.
- This approach is ineffective to accomplish educational goals or achieve lasting attitudinal/behavioral changes.
- The "public" is not an empty vessel waiting for scientific knowledge; rather, the varied and complex social needs of different audiences must drive the efforts of scientists.

For more information, review the article <u>Crafting and Evaluating Broader Impacts</u> <u>Activities: A Theory-Based Guide for Scientists</u>.

Understand the goals of NSF.

- It is important to incorporate these into your proposal. Know what the program directors and reviewers are looking for in your proposal.
- View NSF's strategic plan through 2018 at https://www.nsf.gov/about/performance/strategic_plan.jsp.

NSF focuses on a variety of outcomes for broader impacts.

- Think about the possible impact on society, economy, environment, or health.
- Some outcomes include building STEM talent, innovating for the future, improving society, reaching beyond borders, and engaging a wider audience.
- More info can be found at http://www.nsf.gov/od/oia/special/broaderimpacts/.

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Find ways to make your project creative.

 For example, interactive displays are a good way to present your data as well as engage your audience and increase participation in STEM. (See <u>NSF Award</u> <u>1521110</u> for an example.)

Incorporate national reports (such as those from the <u>National Academies Press</u>) into your proposal.

 This shows that you are aware of the current national conversations and findings related to STEM in education, policy, and the workforce.

Take advantage of local resources.

- Focus on the strengths of your location.
 - Highlight your plan to work with programs in cities and communities that are nearby.
- Use what already exists!
 - Find programs on campus and in the community that you can collaborate with. Take advantage of the opportunities they provide.

Get support letters from people who will be involved with your project.

 For example, if you plan to incorporate K-12 outreach as your broader impacts, get letters of support from local teachers or the superintendent of the district or school you plan to work with.

Partner with experts outside of your field.

- Collaboration with other experts helps strengthen your approach to addressing social, environmental, policy, and other issues.
- A social scientist can be invaluable as they can study program outcomes and are experienced with program assessment and evaluation, including surveys and focus groups.

Get an evaluator for your project.

 The School of Education and Human Services faculty may be able to serve as an internal evaluator. Contact Michael MacDonald, Associate Dean of SEHS (<u>mmacdona@oakland.edu</u>) to discuss evaluation and assessment.