

Complementary Resources for the AAPA 2019 Workshop

Understanding the NSF Broader Impacts Criterion and Developing the Societal Impact of Your Science

Organizers: Rebecca Ferrell (rferrell@nsf.gov) and Holly Dunsworth (holly_dunsworth@uri.edu)

Workshop Panelists Making Excellent Broader Impacts

Ripan Malhi

https://www.eurekalert.org/pub_releases/2018-04/uoia-ria042318.php

<http://grantome.com/grant/NIH/R25-HG007158-05>

Cara Ocobock

<https://www.capsincy.org/fw-event-slug/human-physiology-in-extreme-environments-cara-ocobock/>

Briana Pobiner

https://www.nsf.gov/awardsearch/showAward?AWD_ID=1621194&HistoricalAwards=false

https://nmnh.typepad.com/rogers_archaeology_lab/2014/05/brianapobinerinterview.html

Jill Pruetz

<http://savannachimp.blogspot.com/>

<https://www.youtube.com/watch?v=p6zSmuhFYTE>

Laurie Reitsema

<https://www.charlestonmuseum.org/news-events/bragg-boxes/>

https://www.nsf.gov/awardsearch/showAward?AWD_ID=1560227

Jessica Rothman

http://pages.nycep.org/rothman/field_work.html

<https://www.nytimes.com/2011/06/07/science/07obgorilla.html>

Matt Ravosa

<https://biology.nd.edu/people/matthew-ravosa/>

Denise Su

<https://www.cmnh.org/su>

Just a Handful of Examples of Public Engagement by Other Community Members

Magazine articles

<https://www.scientificamerican.com/article/humans-evolved-to-exercise/>

Blogs

<https://www.npr.org/sections/13.7/> ; <http://johnhawks.net/> ; <https://ecodevoevo.blogspot.com/>;

<https://blogs.plos.org/sciomm/>

Vlogs and videos

<https://www.youtube.com/channel/UCG9GrYOnwDbFE1mMX9liKA>

Podcasts

<https://www.startalkradio.net/startalk-all-stars/> ; <https://www.humbio.org/podcasts/> ;

<https://periodpodcast2.libsyn.com/>

Kids' books

<http://www.grandmotherfish.com/>

Newspaper op-eds

https://www.washingtonpost.com/news/speaking-of-science/wp/2017/07/13/human-evolutions-biggest-problems/?utm_term=.a757c317efc1

Media collaborations

<http://www.pbs.org/your-inner-fish/home/>

WOW!

<http://mammalssuck.blogspot.com/2019/02/march-mammal-madness-2019.html>

NSF Broader Impacts

All NSF proposals are evaluated through use of **two National Science Board approved merit review criteria**. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The NSF Merit Review process considers five elements:

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

Broader impacts may be accomplished through:

- the research itself,
- through the activities that are directly related to specific research projects, or
- through activities that are supported by, but are complementary to, the project.
-

Some examples of broader impact goals:

- development of a diverse, globally competitive STEM workforce;
- increased partnerships between academia, industry, and others;
- improved national security; increased economic competitiveness of the US; and
- enhanced infrastructure for research and education.
- 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 engagement with science and technology;
- improved well-being of individuals in society;

Links for more information:

- PAPPG (NSF Policy and Procedures Guide)
https://www.nsf.gov/pubs/policydocs/pappg19_1
- [NSF YouTube video](#) “NSF GRFP Video Part 4: Merit Review Criteria”
- National Alliance of Broader Impacts (NABI) https://broaderimpacts.net/wp-content/uploads/2016/05/nabi_guiding_principles.pdf
- <https://www.nsf.gov/od/oia/special/broaderimpacts/>
- https://www.nsf.gov/od/oia/publications/Broader_Impacts.pdf