

## Broader Impact Assurance Structure

Matt Gilligan

### Nutshell:

CoPe 'hub' structure should have a broader impact assurance criterion such that its research can be justified as people-driven with people-useful outcomes.

### Differentiated recommendation:

Research proposal review criteria should include assurances that the questions addressed include input from and outcomes benefitting one or more vulnerable communities and neighborhoods. If proposed CoPe 'hub' research does not include questions based on vulnerable community/neighborhood needs, include resident participation, or cannot be explained easily to a local resident in terms its potential benefit to their concerns, it will not meet the criterion of broader impact assurance.

### Impact/Value:

The immediate value will be providing trust relationships that enable citizen science, STEM education improvement, and pathways to science among vulnerable/underrepresented populations and the broader community.

If tested and validated, outcomes might stimulate discussion of desegregation or merger of merit review categories (1 and 2) across the Foundation.

### Reasoning/Evidence:

A priori, the separation of intellectual merit and societal impact merit is an impediment to rapid progress.

Based on current merit review guidelines and information, it is not surprising that addressing broader impacts on society intellectually with research goals, objectives, plans and budget on most proposals is a liability rather than an asset. As a result, broader impact merit is generally not taken seriously in proposals or by reviewers and hence it no surprise that achieving greater social diversity in many STEM fields has remained elusive.

CoPe offers an opportunity to test the integration of intellectual and broader impact merit in society in order to rapidly bridge gaps among research, applications and people. It could save lives and money.