

## **Broadening Participation of Trainees into the Scientific Community of Practice Through Communication Skills Mentoring**

NSF IGE 2020 PI meeting workshop  
Noon–4 pm, Thursday, January 30, 2020

*This workshop will be presented by Anthony DePass, PhD, co-chair of Understanding Interventions that Broaden Participation in Research Careers, and Carrie Cameron, PhD, PI of the Scientific Communication Advances Research Excellence project funded by the NIGMS, which is active in UI. Dr. DePass will begin the workshop by introducing participants to the mission, goals, and activities of UI; the interactive workshop led by Dr. Cameron will follow.*

**Background:** Few researchers would dispute that the ability to communicate and disseminate research findings is critical to a trainee's eventual scientific impact and career success. But although research mentors may be highly proficient communicators themselves, they are typically not specialists in linguistic disciplines and pedagogy. When the additional dimension of ethnic, socioeconomic, and linguistic diversity is brought into consideration, the landscape becomes even more challenging.

Our theoretically-grounded research shows that the fostering of scientific communication skills—written and spoken—can be an effective strategy in helping to increase trainees' career commitment. Mentors are in an ideal position to influence them, given the intimate and dependent nature of the mentoring relationship.

The role of the mentor is to actively and intentionally invite the trainee into the research community of practice, not simply to recommend books or to rewrite paragraphs. Our workshop approach is based on 1) understanding the social, affective, and cognitive aspects of SciComm learning, 2) encouraging greater practice of writing, presenting, and speaking, and 3) increasing outcome expectations through positive feedback and acknowledgement. Mentors are also in a position to address ethnic and linguistic stereotype threat because they are in long-term relationships with trainees, introducing them to the world of academic research, and because within the fabric of the relationship they have a major influence over trainee speaking and writing. In a safe mentoring relationship, trainees can flourish.

**Objectives:** The interactive workshop will be based on sophisticated linguistic models leveraging the powerful links between language, culture, and identity. Participants will acquire knowledge, skills, and sensitivity to recognize and respond to this mentoring opportunity.

The program includes the following:

1. Brief overview of evidence base for SciComm mentoring
2. Orientation to cognitive, social, and psychological facets of language use  
*-Case study: Mentoring Scott*
3. Techniques and resources for mentoring writing  
*-Extended interactive exercise on scaffolding a research report*
4. Techniques and resources for mentoring speaking ("speaking up") and presenting
5. Ideas for providing acknowledgement and feedback  
*-Table discussions: What techniques will you try?*

**Impact:** Participants will leave the workshop with a variety of new techniques and resources, a personalized plan for implementing the techniques, and a deeper understanding of the powerful impact that communication has on broadening participation in research training.

**Audience:** Mentors of research trainees; training program directors; administrators with an interest in trainee professional development and broadening participation.