

PROJECT SUMMARY

Overview:

Through the activities of TRANSCEND (Transforming the Campus Climate to Foster Excellence and Diversity), the University of Tennessee, Knoxville (UT) seeks to create a sustained increase in the participation and advancement of women in STEM academic disciplines. TRANSCEND will draw upon a conceptual model that situates the sources of gender inequities in work cultures rather than individuals. Guided by this model, TRANSCEND will move beyond solely formal/professional policy changes and will program interventions in the informal and personal domains as well. Within this framework, we will address three specific problems that limit the full participation and advancement of women in STEM at UT: (1) implicit bias, (2) professional and personal isolation, and (3) lack of work-life integration. The portfolio of innovative activities proposed for TRANSCEND targets these three problems across all four formal/informal, personal/professional domains. In all cases, our goals are not to facilitate the assimilation of some women into problematic work cultures, but to identify and change problematic aspects of campus work cultures.

Intellectual Merit :

The project's intellectual merit comes from its potential to advance knowledge about organizational change processes in STEM academic settings, particularly the ways in which implicit bias operates and may be reduced. It is innovative in its application of a model for changing organizational culture by calling out the hidden gendered assumptions underlying the culture and then changing the work practices that perpetuate problematic systems. Adding to the intellectual merit of the project is our social science research project, which will reveal how unconscious social signals in informal-personal interactions, which may be missed by self-report or even third-party observers, subtly perpetuate a culture of gender inequity. It will also examine if and how intergroup dialogue - an intervention designed to build relationships and communication skills across genders, develop awareness of gender inequity, and develop coalitions - can shape institutional culture and advance the recruitment and retention of women in STEM. In response to results of focus groups at UT, where female STEM faculty reported microaggressions and implicit bias from students, the social science research project is also pioneering research into the role that students play in the creation of the institutional climate. The social science research project includes a novel application of a theoretically grounded and empirically supported intervention (intergroup dialogue), as well as the innovative use of sociometric badge technology that collects data on unconscious social signals in a non-invasive way. TRANSCEND initiatives will be informed by the social science research project on how implicit bias manifests itself through gendered communication patterns, which will allow us to develop and refine interventions to raise awareness about the role of implicit bias in perpetuating gender inequities in STEM at UT and other campuses.

Broader Impacts :

The broader impacts of our proposal go beyond simply increased participation and advancement of female STEM faculty at UT. By bringing awareness of the impact of implicit bias into the entire environment (rather than in hiring committees alone, as it is now usually addressed), by seeking solutions to social and professional isolation, and by providing institutional support for the integration of professional and personal roles, TRANSCEND will be very well positioned to transfer the knowledge gained about organizational change in an academic environment to promote increased participation and advancement of underrepresented minority groups in general at any institution of higher learning. This broader impact of TRANSCEND will be maximized through a comprehensive dissemination plan that describes effective ways to network and share the new knowledge, encouraging other universities to implement the most beneficial activities. The results of the social science research project will also be disseminated widely through presentations at national conferences (e.g., the American Psychological Association) and publications in social-science journals. In addition, we will prepare guidebooks and materials to disseminate to other campuses to help them develop and facilitate activities, such as the intergroup dialogues on gender in STEM, at their institutions.