

Values-based Academic Leadership Trajectories for Women in STEM: The Northwest Regional Partnership

Project Summary:

Advancement into leadership roles is often more difficult for women than for their male counterparts. Research shows that women in STEM disciplines are as committed to their academic careers as men, and have a similar desire to advance to the upper ranks of leadership in their discipline and/or institution (Hill, Corbett & St. Rose, 2010). However, more women in STEM experience the “associate professor rut”, lingering at this rank longer than men--sometimes indefinitely (O’Meara, 2015). This innovative project, “Values-based Academic Leadership Trajectories for Women in STEM” (VAuLTS) aims to help mid-career female faculty advance in STEM disciplines by providing training designed for the transition from associate to full professor rank. We will achieve this goal through the following programmatic objectives:

1. Revise existing Tidal Leadership programming to include modules targeting diverse leadership tracks for women STEM faculty (i.e., administrative, professional, cultural).
2. Integrate and field-test the Tidal Leadership STEM modules with the External Mentor program at WSU.
3. Disseminate and evaluate the dual leadership and mentoring program to Tier-1 Partner Institutions (Montana State University, University of Montana, Oregon State University, Western Washington University).
4. Extend dual programs to diverse Tier 2 regional institutions (e.g. Whatcom Community College, and Wenatchee Valley College), without a history of prior ADVANCE funding.

This customized Tidal STEM Leadership Training and External Mentor programming builds on our prior ADVANCE IT project, as well as Tier-1 partner ADVANCE experience, leveraging our expertise in implementation, evaluation, and dissemination. Preliminary evidence indicates that combining these two approaches will increase the likelihood participating women will reach the rank of full professor and serve in disciplinary and organizational leadership roles.

Intellectual Merit:

Our short-term goal is to provide evidence that participation in customized Tidal Leadership and External Mentor experiences will lead to positive outcomes: advances in scholarly productivity, leadership, and rank, for mid-career female faculty in STEM. We expect that participants will be prepared to take full advantage of the External Mentor program after taking part in the leadership training. That is, formal mentoring following Tidal Leadership training will result in measurable impacts, such as more grants/publications submitted, more active roles in discipline/scientific organizations, advancement in institutional leadership. This project will provide valuable new evidence concerning the contribution of leadership training and formal mentoring to career advancement and discipline leadership of mid-career faculty women in STEM. The focus on identity complexities and intersectionality in the Tidal Leadership Training adaptation enables us to elucidate content/activities critical to positive outcomes. We will also examine “dose-response” relationships, expecting higher ratings of mentoring effectiveness and authentic leadership to translate into career advancement/leadership gains.

Broader Impacts:

This project aims to increase women’s representation at the highest levels of STEM professoriate through regional partnerships and national dissemination. Our expert team spanning Montana State University, University of Montana, Oregon State University, and Western Washington University, and partnering community/tribal colleges, is committed to overcoming the barriers women face in career advancement and discipline leadership in STEM fields. This regional Partnership project will serve as a flagship model for implementing successful programs at other institutions, tailored for mid-career women in STEM. Findings will be broadly disseminated at national, and international conferences (discipline-specific and gender-focused), and through peer-reviewed publications. This project will produce institutional and societal impacts, addressing unresolved issues of women’s representation in advanced ranks of STEM fields. VAuLTS programming is sustainable beyond the grant period, as Tidal modules will be made available to mid-career women in STEM nationwide. External Mentor programs will also be sustained by the partners, institutionalized in a manner that best fits the needs and resources of each university/college. Our long-term goal is to provide a mechanism to enhance diversity at the top of the academic hierarchy.