



# ADVANCE-Nebraska Internal Evaluation Executive Summary



## Program Description

The National Science Foundation funded ADVANCE-Nebraska from September 2008 to August 2013 with a \$3.8 million grant. The grant aimed at 1) increasing the number of tenure-track and tenured Science, Technology, Engineering and Math (STEM) women faculty at the University of Nebraska-Lincoln (UNL), 2) increasing the retention of women STEM faculty at UNL and support their promotion into positions of leadership, and 3) conducting innovative research on network structures that best support the success of women STEM faculty.

## Program Activities and Reach

Programming, focused on tenured and tenure-track faculty, showed wide reach the 24 targeted UNL STEM departments, with especially strong awareness and participation among STEM women and STEM department chairs and heads. The College of Arts and Sciences was most involved, followed by the Institute of Agriculture and Natural Resources; the College of Engineering was least involved.

### *Recruitment Activities*

- 5 Showcase Visitors
- 7 Recruitment Ambassadors
- 11 Search Committee Visits
- 11 Short-List Candidate Meetings
- 8 Recruitment-Focused Events

### *Retention Activities*

- Information Dissemination through Website and Enews
- 4 Informal Networking Events
- 5 Writing Retreats
- 29 Retention-Focused Events

### *Recruitment and Retention Activities*

- ADVANCE Faculty Committee (distribution of Best Practices)
- 3 Recruit and Retain Workshops
- 3 Department Chair and Head Data Discussions
- Deans and Chairs/Heads Luncheon
- 6 Department Visits
- Chancellor's Award Given to 3 Departments
- 14 Dual Career Hires
- Network Research

## Recruitment Outcomes

- UNL STEM departments increased the use of several ADVANCE-Nebraska recommended search practices, such as talking to candidates at conferences and writing broad job advertisements. In response, the proportion of STEM women job applicants reporting word of mouth as their referral source increased over time, and a STEM woman hosted as a Showcase Visitor was hired.
- Overall, the proportion of women in UNL STEM assistant professor applicant pools increased modestly, but more importantly, the proportion of women hired nearly doubled, increasing from 16% in 2007 to 30% in 2012. The proportion of these women hired through searches exceeded the proportion of women receiving doctorates at the national level in 8 of the 24 targeted departments.
- The proportion of women among tenured and tenure-track STEM hires of all ranks, including opportunity hires where no search was conducted, increased from 20% to 23%. By college, the proportion of STEM women hired increased by 7% for IANR and 6% for A&S, while the COE experienced a slight decrease of 1%.

- The dual career program exceeded expectations by placing 14 hires (8 hires was the original goal). Furthermore, attitudes toward dual career hires changed from mostly negative to mostly positive, with most departments perceiving dual career hires as an opportunity rather than a burden by 2013.

### **Retention Outcomes**

- The proportion of tenured and tenure-track STEM women at UNL increased by 1%. In comparison to trends at CIC peer institutions, 2 of the 3 targeted UNL colleges showed modest net increases, suggesting the increases were not simply reflections of national trends.
- Gender disparities were not evident when examining salaries or tenure and promotion rates, either in the 5 years before or during ADVANCE-Nebraska.
- Gains were observed in the proportion of STEM women serving as department chairs and heads due to a combination of promotion and hiring, increasing from none in the first year of ADVANCE-Nebraska to three by the end of the grant.
- The use of work-life integration policies and programs was higher for women than men, with many newly-hired women reporting discovery of these policies through ADVANCE-Nebraska.
- In general, STEM men and women left UNL at similar rates (with some variation by rank and college) and voluntary attrition did not change over the five-year funding period. Self-reports of wanting to leave UNL decreased from 2011 to 2013 for women at the assistant and associate ranks, but increased at the full rank. Decreases among women in wanting to leave UNL to pursue a more supportive work environment, to increase research time, to improve tenure/promotion prospects, and to improve work-family balance reflect improvements in the UNL work environment.
- Perceptions of climate improved from 2008 to 2013, as levels of department and institution satisfaction increased for all targeted colleges. Additionally, improvements were observed from the midpoint of ADVANCE-Nebraska (2011) to the end of the funding period (2013). Gender disparities were reduced over time, most notably due to gains among assistant professor women who reported the most positive department climate of all groups in 2013. In general however, full professor women perceived the least positive climate. Gender disparities in work time allocation also decreased, with women reporting an increase in research-time dedication. In the College of Engineering, increased department chair and faculty participation in ADVANCE-Nebraska were correlated with improvements in perceived climate over time.
- UNL STEM faculty perceived a modest positive impact of ADVANCE-Nebraska on increasing understanding of issues related to women in STEM and improving the climate at UNL, with women perceiving the strongest improvements.
- Network analysis found that both at the individual and department levels, social networks are significant predictors of faculty outcomes. This research was shared within UNL and to a broader audience through collaborative work with other institutions, and numerous publications and presentations.

### **Conclusion**

ADVANCE-Nebraska did not fully meet all intended outcomes, but significant progress was made over the five-year funding period. Gains were observed in the proportion of women hired, promoted to department chair/head, and in the overall representation among all STEM tenured and tenure-track faculty. Improvements in perceived climate were evident over the funding period, especially for junior women faculty, but less so for senior women faculty. Finally, scientific knowledge was increased in the understanding of how network connections predict faculty success.