Goal
The Iowa State University ADVANCE Program aims to increase the participation and advancement of women faculty in the sciences, technology, engineering, and mathematics fields at ISU through a comprehensive institutional intervention plan. The program uses an integrated approach to examine cultures, practices, and structures within the University and determine how these enhance or hinder the careers of all ISU faculty, and especially women faculty in STEM disciplines. This information will be used to inform best practices at all levels of the University.

Constituents:
Faculty in 30 STEM department across 5 colleges, representing over 750 faculty members in total, are included in the program’s constituents. Additionally, 9 focal departments in the STEM disciplines, representing 3 colleges have been selected for targeted departmental transformation intervention over the course of the project.

Project award size and length
5 years, 2006-2011. $3.3 million

Activities & Initiatives

Building Infrastructure in the University, Colleges & Departments
- ADVANCE Professors and Equity Advisors represent ISU ADVANCE in STEM departments and colleges
- ADVANCE Council of key institutional partners meets regularly to guide the program

Departmental Transformation
- Participatory action research into departmental culture, practices and structure within STEM focal departments
- Focus groups and interviews generate qualitative data
- Findings reported to departments and used to guide collaborative transformation within each focal department

Combating Isolation
- Networking events and retreats for faculty in STEM disciplines
- Development of external mentoring program for women faculty of color in STEM disciplines

Research
- Departmental transformation focus groups and interviews
- Quantity of space data set
- Survey of faculty perceptions of quality of workspace
- Faculty climate survey
- Quantitative indicators required by NSF

National Conference
October 10-11, 2008
- Re-creating academic work in STEM

Selected Results
Synthesis of baseline data from 2001–2006, prior to the ISU ADVANCE Program, shows that the percentage of STEM faculty that are female increased from 15.6% (123 women) to 18.9% (145 women). In the social and behavioral sciences (SBS) fields and at the university in total, the percentage of women increased also. Data will be collected during the five years of the grant for comparison.

Dissemination
- For the public and ISU community: Web site www.advance.iastate.edu; newspaper articles in ISU, Ames and Des Moines papers; descriptive brochure; posters; open house events
- For STEM partners and constituents: PowerPoint presentations; printed and Web based resources; poster for disciplinary and University events
- For scholarly dissemination: presentations, peer-reviewed papers and white paper forums
ISU ADVANCE Project Summary, Fall 2007

Products

- Web site: resource for Iowa State University partners, other institutions, and the public: www.advance.iastate.edu
- Mentoring resources: literature references, definitions, handbook http://www.advance.iastate.edu/mentoring/mentoring.shtml
- “Elevator speech” to describe program to STEM partners
- Presentations (4) to disciplinary conferences in sociology, philosophy and ornithology
- Year One Annual Report for NSF
- WebCT resources for use by Iowa State partners (password protected)
- Research protocols, including authorship guidelines, overview of departmental collaborative transformation process
- Diversity workshop materials for Equity Advisors, ADVANCE Professors and Department Chairs
- Case studies on subtle gender bias for use in discussion and training
- PowerPoint presentations for focal departments, department chairs, deans, networking event participants
- Posters for public, disciplinary and university events
- Research article summaries for use by ADVANCE Council and partners
- Library of articles on mentoring, implicit bias, participatory action research, and other topics

ADVANCE Council

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Sandra Gahn, Institutional Research
Florence Hamrick, Educational Leadership & Policy Studies
Frankie Santos Laanan, Educational Leadership & Policy Studies

Department and College Partners

ADVANCE Professors
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Fredric Janzen, Department of Ecology, Evolution, and Organismal Biology
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