

A National Science Foundation (NSF) Institutional Transformation Grant





# Meet Our Team

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#### Meet Our Team



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# What is ADVANCE?

- The goal of the NSF ADVANCE program is to increase the representation and advancement of women in academic science careers, thereby contributing to the development of a more diverse workforce.
- ADVANCE encourages institutions of higher education and the broader science, technology, engineering and mathematics (STEM) and Social and Behavioral Sciences (SBS) community to address various aspects of STEM/SBS academic culture and institutional structure that may differentially affect women faculty and academic administrators.

http://www.nsf.gov/crssprgm/advance/







# Why do we need ADVANCE?

 Only 23% of OSU's STEM/SBS faculty are women, and women make up only 20.8% of full professors in these disciplines.

| Table 1. Number of T/TT (excludes emeritus but includes administrators) Women Faculty in STEM/SBS |                     |          |          |          |          |  |             |                |                |                |
|---|---------------------|----------|----------|----------|----------|--|-------------|----------------|----------------|----------------|
|   |                     |          |          |          |          |  |             |                |                |                |
|   | Number of Women % \ |          |          |          |          |  |             |                |                |                |
| Category  | Oct 2009            | Oct 2010 | Oct 2011 | Oct 2012 | Oct 2012 |  | Instructor  | Assistant Prof | Associate Prof | Full Prof      |
| STEM  | 115                 | 114      | 119      | 129      | 20.8%    |  | 16.7% (1/6) | 25.2% (28/111) | 20.2% (38/188) | 19.6% (62/316) |
| SBS   | 29                  | 30       | 35       | 35       | 41.7%    |  | 0% (0/2)    | 60.9% (14/23)  | 37.9% (11/29)  | 33.3% (10/30)  |
| STEM/SBS  | 144                 | 144      | 154      | 164      | 23.3%    |  | 12.5%       | 31.3%          | 22.6%          | 20.8%          |





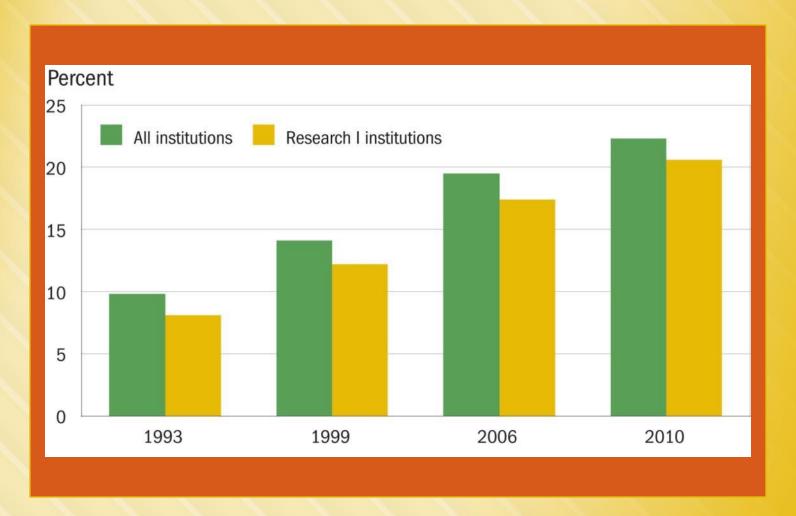
# Why do we need ADVANCE?

• Only 20 of the women faculty in STEM disciplines are U.S. women of color (3%), with another 5% in SBS

| Table 2. F | e 2. Representation of OSU STEM/SBS Minority T/TT Faculty |           |             |           |       |            |           |                   |           |       |                       |
|------------|---|-----------|-------------|-----------|-------|------------|-----------|-------------------|-----------|-------|-----------------------|
|            |   | Mino      | rity Male F | aculty    |       |            | Minori    | Minority Female % |           |       |                       |
| STEM       | Instructor  | Asst Prof | Assoc Prof  | Full Prof | Total | Instructor | Asst Prof | Assoc Prof        | Full Prof | Total | of STEM for this year |
| 2009       | 0   | 21        | 26          | 26        | 73    | 0          | 8         | 4                 | 4         | 16    | 3%                    |
| 2010       | 0   | 20        | 24          | 27        | 71    | 0          | 8         | 3                 | 5         | 16    | 3%                    |
| 2011       | 0   | 17        | 25          | 28        | 70    | 0          | 7         | 6                 | 6         | 19    | 3%                    |
| 2012       | 0   | 14        | 27          | 29        | 70    | 0          | 7         | 6                 | 7         | 20    | 3%                    |
| SBS        | Instructor  | Asst Prof | Assoc Prof  | Full Prof | Total | Instructor | Asst Prof | Assoc Prof        | Full Prof | Total | of SBS for this year  |
| 2009       | 0   | 1         | 4           | 2         | 7     | 0          | 1         | 3                 | 0         | 4     | 5%                    |
| 2010       | 0   | 1         | 3           | 3         | 7     | 0          | 1         | 3                 | 0         | 4     | 5%                    |
| 2011       | 0   | 1         | 3           | 3         | 7     | 0          | 2         | 3                 | 1         | 6     | 7%                    |
| 2012       | 0   | 2         | 3           | 3         | 8     | 0          | 2         | 2                 | 1         | 5     | 6%                    |

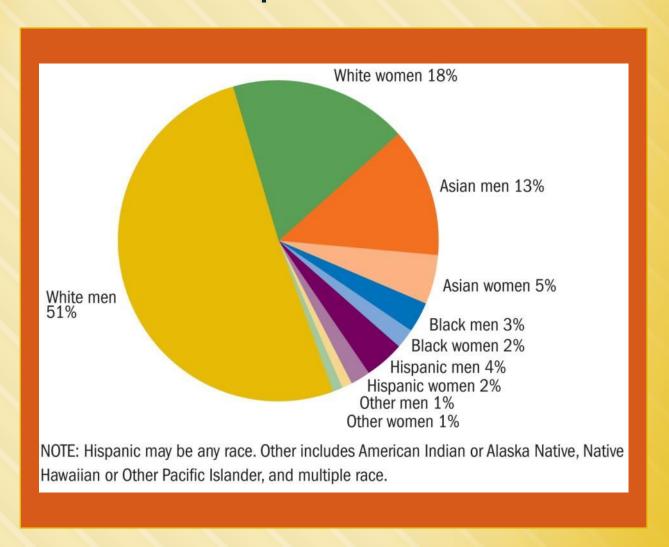


# Women as a percentage of full-time, full professors with science, engineering, and health doctorates, by institution of employment: 1993–2010





# Scientists and engineers working in science and engineering occupations: 2010





# Difference, Power, and Discrimination (DPD)

- One of OSU's most innovative and effective programs for supporting diversity
- Seminar that focuses on theories of systems of oppression and teaches faculty to center issues of power, privilege, and difference within their disciplines
- The DPD model will be the innovation and centerpiece of OREGON STATE ADVANCE.





# **Key DPD Lessons:**

- how social constructions are used to maintain systems of oppression
- ways systems of oppression work to maintain social inequality
- ways systems of oppression are manifested in and maintained by social institutions
- viewing social institutions, trends, and events through a lens of gender, along with the intersecting lenses of race, social class, sexual identity, age, ability, religion





• The goal of OREGON STATE ADVANCE is to transform the institution's climate and structures, and promote more positive and affirming interpersonal interactions, in order to create an equitable and just workplace for women and others from traditionally underrepresented groups.





Three major objectives will guide our work:

• (1) Recruit, retain, and promote more women STEM/SBS faculty across the majority of OSU's Colleges by building upon established initiatives and implementing new policies and programs that will lead to a significant increase of women faculty at OSU.





Three major objectives will guide our work:

• (2) Recognize the importance of gender's intersections with race/ethnicity, social class, sexual identity, and other axes of oppression in affecting women's lives, including their professional experiences within academia, and situate this understanding as a central component in our efforts to transform the institutional culture.





Three major objectives will guide our work:

• (3) Adapt and offer OSU's DPD faculty development program to provide tailored educational opportunities for STEM/SBS faculty and administrators.





# The ADVANCE STEM/SBS Summer seminar

- a specialized examination of systems of oppression theories as they relate to STEM/SBS
- a higher level of awareness and understanding of relational power and how that is connected to structures within STEM/SBS at OSU
- a greater appreciation of what is involved in building authentic alliances across difference, and gain motivation to engage in the transformation of institutional culture.







# The ADVANCE STEM/SBS Summer seminar

- We will offer two ADVANCE DPD summer seminars per year specifically for STEM/SBS faculty and administrators.
- All STEM/SBS department heads/chairs will be expected to participate in the seminar.





#### **Recruitment and Advancement Activities**

- recruitment packets with information important to diverse women including information about work-life balance practices, the general community, and opportunities for employment for significant others
- model P & T letters to external reviewers that include explicit verbiage reflecting the value the university places on differing career paths and diverse contributions
- childcare support information and advocacy (identified as a critical need at OSU)
- collaboration with Oregon HERC and advancement of the current Dual Career Hiring Initiative to improve dual-career hires



#### **Educational Activities**

- annual renowned woman scientist lecture addressing both the speaker's expertise and her experiences in STEM
- annual half-day campus ADVANCE workshop to provide the community with updates, offer DPD education, and receive input on improving project success
- workshop for administrators on applying DPD principles to administration (in Years 2-5): generate specific sets of action items (theory → action)
- regional conference in Year 5
  - a primary dissemination tool geared towards the communication of successful practices at different institutions.







### **Mentoring Activities**

- annual Provost's retreat for pre-tenure STEM/SBS faculty to build alliances between men and women around shared values of institutional citizenship
- retreats for STEM/SBS women faculty
  - including a one-day writing retreat to enhance success in publication and a one-day leadership
- mentor training for senior STEM/SBS professors and administrators to help them become more effective mentors
- leadership internships for STEM/SBS women
  - opportunity to work in an administrative unit (e.g. Dean, Provost) to gain an increased understanding of the inner workings of university leadership and administration.





# **Policy and Procedure Activities**

- family friendly policies such as telecommuting opportunities, floating parking passes, etc.
- system for tracking composition of P&T committees by gender to arrive at a data set



- attrition tracking system and exit interviews to identify circumstances surrounding the decision to leave OSU
- tracking system for P&T process to gather information about the effectiveness of current practices



# **Community-Building Activities**

- quarterly President's lunches to foster community, encourage collaborative efforts, and explore DPD concepts as applied in STEM/SBS
- quarterly STEM/Liberal Arts meetings for transdisciplinary conversations and collaborations
- Northwest ADVANCE consortium to inform and educate participants about the OSU ADVANCE program and inspire them to follow our progress and advocate for the implementation of successful strategies on their campuses
- the establishment of a peer-reviewed online, open access ADVANCE journal to publish findings from OREGON STATE ADVANCE and other ADVANCE projects across the nation





#### **Social Science Research**

 Will participating in the ADVANCE summer seminar empower and motivate institutional leaders and faculty members to actively contribute to campus climate transformation (through improving their interpersonal interactions)?





### **Dissemination**

- Bring OREGON STATE ADVANCE individuals or teams to offer the workshops to other campuses
- develop a summer "train-the-trainer" institute so other institutions can send campus leaders to learn how to lead the seminar
- develop an online support program and resources for seminar graduates
- develop an online peer-reviewed, open access ADVANCE journal which will be of great value to ADVANCE as a whole, providing a unique forum for dissemination of NSF's 10+ year investment in gender equity





# **Dissemination (cont.)**

- coordinate the development of a Northwest Consortium of ADVANCE institutions to share ideas, experiences, and evaluations
- develop an OREGON STATE ADVANCE website that will be updated as project initiatives are launched and evaluated
- present OREGON STATE ADVANCE findings in high-quality journals and at conferences
  - Association of American Colleges and Universities, the National Women's Studies Association, and the American Society for Engineering Education
- host a regional conference that will focus on effective strategies for transforming institutions to improve the climate for diverse people and to enhance faculty success





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