



ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

## Leadership Team

- **Susan Shaw**, PI, Director of the School of Language, Culture, & Society and Professor of Women, Gender, & Sexuality Studies
- **Becky Warner**, co-PI, Senior Vice Provost, Professor of Sociology
- **Tuba Ozkan-Haller**, co-PI, Professor of Oceanography
- **Michelle Bothwell**, co-PI, Associate Professor of Biological Engineering
- **Sarina Saturn**, co-PI, Assistant Professor of Psychological Sciences
- **Lisa Gaines**, co-PI, Director of the Institute for Natural Resources
- **Jennifer Almquist**, project manager
- **Dwaine Plaza**, senior personnel, Professor of Sociology
- **Nana Osei-Kofi**, senior personnel, Director of the Difference, Power, & Discrimination Program and Associate Professor of Women, Gender, & Sexuality Studies
- **Deborah John**, senior personnel, Assistant Professor of Public Health and Human Sciences



# The National Science Foundation's ADVANCE Program

The goal of the National Science Foundation's (NSF) ADVANCE program is to increase the representation and advancement of women in academic science and engineering careers, thereby developing a more diverse science and engineering workforce.



# Institutional Context

Only 23% of OSU's STEM/SBS faculty are women, and women make up only 20.8% of full professors in these disciplines (only 19.6% in STEM disciplines alone). Minority women are only 3% of STEM faculty at OSU.

**Table 1. Number of T/TT (excludes emeritus but includes administrators) Women Faculty in STEM/SBS**

| Category        | Number of Women |            |            |            | % Women      | % Women Oct 2012 |                |                |                |
|-----------------|-----------------|------------|------------|------------|--------------|------------------|----------------|----------------|----------------|
|                 | 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)  |
| <b>STEM/SBS</b> | <b>144</b>      | <b>144</b> | <b>154</b> | <b>164</b> | <b>23.3%</b> | <b>12.5%</b>     | <b>31.3%</b>   | <b>22.6%</b>   | <b>20.8%</b>   |

**Table 2. Representation of OSU STEM/SBS Minority T/TT Faculty**

|      | Minority Male Faculty |           |            |           |       | Minority Female Faculty |           |            |           |       | Minority Female %<br>of STEM for this year |
|------|-----------------------|-----------|------------|-----------|-------|-------------------------|-----------|------------|-----------|-------|--|
|      | Instructor            | Asst Prof | Assoc Prof | Full Prof | Total | Instructor              | Asst Prof | Assoc Prof | Full Prof | Total |  |
| STEM |                       |           |            |           |       |                         |           |            |           |       |  |
| 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  |                       |           |            |           |       |                         |           |            |           |       |  |
| 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%   |

Of the 60 new COE tenure track faculty, only 7 are women (11.7%) .

# Goals of OREGON STATE ADVANCE

- 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.
- 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.
- Adapt and offer OSU's Difference, Power, and Discrimination faculty development program to provide tailored educational opportunities for STEM/SBS faculty and administrators.

# The ADVANCE Summer Seminar



Through readings, lectures, films, discussions, and experiential activities, this 60-hour seminar introduces theories of gender, race, class, and other forms of difference, particularly as they relate to STEM fields. Participants also reflect on their own experiences of difference in their lives and careers, and they build a supportive community within the cohort. The seminar further provides opportunities to explore structural inequities within the university and to imagine a transformed future in which institutional structures and personal behaviors are both professionally and personally life-affirming for all people across their differences.

- Two weeks, 9-4, lunch provided
- Small cohorts of 12-15
- Two seminars offered each summer of 2015, 2016, 2017, and 2018



# Other Activity Areas and Sample Activities

## 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 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
- regional conference in Year 5
- annual renowned woman scientist lecture addressing both the speaker's expertise and her experiences in STEM



# Dr. Rita R. Colwell

## Tuesday, April 21, 2015

**Just because you are a  
pawn, you do not have to  
lose the game**  
3:30 P.M.  
Kearney 112

*Reception to follow*

**Oceans, Human Health  
and Infectious Disease:  
The story of a marine  
bacterium, *Vibrio cholerae***  
7 P.M.  
LaSells Stewart Center  
Construction and  
Engineering Hall

Both events are free and open to the public.

OREGON STATE ADVANCE is an Institutional Transformation grant funded by the National Science Foundation. The annual lecture features renowned women in Science, Technology, Engineering and Mathematics.

[advance.oregonstate.edu](http://advance.oregonstate.edu)



Dr. Colwell is Distinguished University Professor both at the University of Maryland at College Park, and at Johns Hopkins Bloomberg School of Public Health. Colwell also served as the 11th Director of the National Science Foundation, from 1998-2004.

**Oregon State**  
UNIVERSITY



## **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**
- **writing retreat to enhance success in publication**
- **mentor training for senior STEM/SBS professors and administrators to help them become more effective mentors**
- **leadership internships for STEM/SBS women**

## **Policy and Procedure Activities**

- **family friendly policies such as telecommuting opportunities, floating parking passes, etc.**
- **guidelines for central administration to use when evaluating deans'/chairs' contributions to diversity efforts and mentoring practices, as a means to increase accountability across campus**
- **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 pre-tenure faculty lunches to foster community**
- **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**

# OREGON STATE ADVANCE Scientific Research Project

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

Methodology: Includes surveys, diaries, interviews, and focus groups



## How can you get involved?

- Attend public events, such as lectures, conferences, and workshops
- Visit the website: <http://advance.oregonstate.edu>
- Tell your peers about ADVANCE
- Contact us to ask questions, make comments, or volunteer at [sshaw@oregonstate.edu](mailto:sshaw@oregonstate.edu) or [jennifer.almquist@oregonstate.edu](mailto:jennifer.almquist@oregonstate.edu)

# Questions?

