From Insight to Action

What can each of us do to have a better environment in STEM Departments?

(OR: How applied research can lead to positive outcomes for faculty excellence and diversity)

Suzanna Rose & Sanaz Farhangi
Office to Advance Women, Equity & Diversity (AWED), PC 230
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BACKGROUND: FIU in 2010

- FIU 42,000 students
- 59% Hispanic; 57% women
- 1st in the nation in awarding STEM degrees to underrepresented minorities and Hispanic students
- Hispanic and URM women earned 43% of BS degrees in STEM
- In 2011, only 14% of STEM faculty were women
OPPORTUNITIES:
NSF ADVANCE GRANT #1

Expected Increase in Faculty Hiring
• Expected enrollment growth of 10,000 students

2010 Faculty Climate Survey
• Women and minorities reported less influence in department
• Women and minorities more instances of disrespect/discrimination
• Both women and men were dissatisfied with faculty mentoring

Annual FIU Women Faculty Leadership Institute request for:
• career development strategies
• communication and assertiveness skills
• negotiation techniques.
FIU NSF PAID GRANT (2011-2015)

MAIN OBJECTIVE
• Increase the number of tenure-track women faculty in STEM

GOALS
• Awareness
• Commitment
• Empowerment

ACTIVITIES
• Climate Surveys
• STRIDE Workshops
• Interactive Theater Performances
• Leadership and Networking for Women
• FIU Faculty Mentor Program

The subject of tonight’s discussion: Why are there no women on this panel?
FIU NSF PAID GRANT: Outcomes

• Increased women in STEM from 14% to 18%
• But very few women (or men) of color
• STRIDE Workshops – Unconscious bias and best practices (N~300)
• Interactive Theater – Four performances (N~200)
• Women Faculty Leadership Institute – annually (N= 50 to 85)
• Faculty Mentor Program – annually (N=120 to 163); increased faculty satisfaction with mentoring; increased grant success
• Faculty Satisfaction Survey: problems at departmental level
NSF Institutional Transformation Goal

Develop institutional structures, processes, and climate that build an affirming and fair workplace for women and underrepresented groups.

Particular focus on recruiting and retaining STEM Hispanic and Black women (and men)
NSF Institutional Transformation Grant Overview

FIU ADVANCE is supported by a five-year $3.2 million Institutional Transformation grant awarded in 2016 by the National Science Foundation (NSF) for FIU to develop innovative organizational change strategies to produce comprehensive change within the institution across all STEM disciplines.

PIs: Kenneth Furton, Suzanna Rose, Yesim Darici, Mike Heithaus, Ranu Jung
Number of FIU Tenure Line Faculty by Gender
Fall 2016
Number of FIU Faculty at Professor Ranks x Ethnicity 2016

- **EMINENT/DISTINGUISHED**
  - WHITE
  - ASIAN
  - HISPANIC
  - BLACK

- **PROFESSOR**
  - WHITE
  - ASIAN
  - HISPANIC
  - BLACK

- **ASSOCIATE**
  - WHITE
  - ASIAN
  - HISPANIC
  - BLACK

- **ASSISTANT**
  - WHITE
  - ASIAN
  - HISPANIC
  - BLACK

FIU - Advance Women, Equity & Diversity
Departmental and Leadership Issues

Discontent among women faculty at lack of voice within departments and lack of leadership opportunities

CASE EXAMPLES

• You, the only woman in your department, attend a faculty meeting where a decision is made. A few hours later, a male colleague tells you the decision was changed. You ask: “Why? How? We just decided.” Your colleague says: “Well, we were in the men’s room together and we changed our minds.”

• A female colleague asks for her promotion to full professor. She has very strong case and reviews, but the chair of her department says that she looks too young to be promoted.

"That's a very good suggestion, Miss Wilson - perhaps one of the men would like to make it?"
Relevance of Nationality Hiring Patterns

How might nationality-based and race-based preferences within departments affect our NSF goal to hire Hispanic-American and African-American women in STEM?

CASE STUDY: FIU College of Engineering and Computing 2015

• In 2015-16, a majority of the permanent faculty were foreign-born (72%), including Asian (47%), Middle Eastern (18%), and European (7%).

• Similarly from 2010 to 2015, a majority of the new hires were Asian, Middle Eastern, and European (56%).

• When women were hired, they tended to fit within these nationalities as well.
Objectives

1. **Attract, recruit, retain, and promote** more women STEM faculty, particularly Hispanic and Black women, to better reflect the demographics of the FIU student body.

2. **Educate faculty** about gender-by-nationality preferences and microclimates that affect the advancement of women.

3. Move faculty from **insight to action** to promote gender and ethnic/racial equity by developing and offering an evidence-based bystander intervention program to increase inclusion.

4. Develop the **Advance Florida Network** for women STEM faculty and postdoctoral fellows from FIU, UCF, and USF.
Microclimate Study

The term “microclimate” refers to local social climates within a department that may differ from the larger organizational climate (Ackelsberg et al., 2008).

“faculty members from underrepresented groups ... may experience different conditions than the majority of the faculty in any given institution . . . and it is imperative for any academic community to attend not only to the microclimate, but also the diverse range of microclimates that constitute the intellectual health of the academy” (p. 100).
Faculty and Doctoral Students by Gender and Nationality in a Science Department at FIU

- **US**
  - Female Faculty: 35%
  - Male Faculty: 30%
  - Female Student: 10%
  - Male Student: 15%

- **Asia**
  - Female Faculty: 25%
  - Male Faculty: 20%
  - Female Student: 15%
  - Male Student: 20%

- **M-East**
  - Female Faculty: 10%
  - Male Faculty: 20%
  - Female Student: 5%
  - Male Student: 5%

- **EU/CAN**
  - Female Faculty: 15%
  - Male Faculty: 25%
  - Female Student: 10%
  - Male Student: 10%

- **Latin**
  - Female Faculty: 5%
  - Male Faculty: 15%
  - Female Student: 10%
  - Male Student: 5%

- **AF/CAR**
  - Female Faculty: 0%
  - Male Faculty: 5%
  - Female Student: 0%
  - Male Student: 5%
Faculty and Doctoral Students by Gender and Nationality in an Engineering Department at FIU
Intersectionality

• Intersectionality is defined as the “the mutually constitutive relations among social identities” (Shields, 2008).

• For our research, it will be used to investigate the multiple identities of STEM faculty, both men and women, specifically those involving gender x nationality biases and preferences.
Microclimate Study

The study of faculty dynamics within FIU’s STEM departments to:

• explore the role ethnic/race/nationality biases play in creating departmental microclimates that affect power, status and decision-making and specifically the hiring of underrepresented minority women (URMs).

Components

• Focus groups, Interviews, Network Survey

Uses of research

• To provide original material for Interactive Theater content
• To provide case studies for the Bystander Intervention program
From Insight to Action: Active bystander intervention and prevention

Help create a social system that supports and institutionalizes positive change in several key areas:

1. Demonstrating greater appreciation for diversity and a reduction in prejudicial attitudes
2. Greater knowledge of and confidence in using intervention and diversity skills and strategies
3. Increasing diversity-affirming behaviors
Bystander Intervention
Potential Curriculum Elements

• Unconscious bias/bias literacy
• Interactive Theater to illustrate issues
• Active intervention strategies
• Active prevention strategies
• Development of departmental and college diversity and inclusion plans
Bystander Intervention Opportunity

• Will launch it in 2017-18

• One day workshop (8 hours) – Will be recruiting volunteers

• STEM and Social and Behavioral Science (SBS) Faculty will be paid to attend
Other Opportunities for Involvement

• STRIDE Committee
  • Meets bimonthly
  • Offers the Faculty Hiring Workshops

• Mentor Program
  • Developing an Associate Professor Mentor Program

• Facilitators sought for the Bystander Intervention Program

• AWED Policy Committee to help develop FIU’s Diversity, Inclusion and Excellence Plan

• Faculty Fellows positions – 2 per year
Thank You!
Is it bias?

Is acting too costly?

What can I do?

Am I responsible?

Is it urgent?

Goodwin, Ashburn-Nardo, & Morris (2007)
Ashburn-Nardo, Morris & Goodwin (2008)
Parenting/ Stop Tenure Clock Policy
Leadership: Who Belongs?

Who belongs?