March 2021 Speakers Series

Building Gender Equity in the Academy: Institutional Strategies for Change
Drs. Sandra Laursen and Ann Austin
Welcome by NSF’s Diana Elder and Karen Marrongelle
Introductions by former ADVANCE program officer Sharon Bird

March 3

AccessADVANCE: Advancing Women with Disabilities in Academic STEM Careers
Drs. Sheryl Burgstahler and Brianna Blaser
Introduced by former ADVANCE program officer Dana Britton

March 17

An Inclusive Academy: Achieving Diversity and Excellence
Drs. Virginia Valian and Abigail Stewart
Introduced by the first ADVANCE program officer Alice Hogan

March 31

Faculty Equity in a Time of COVID - panel
Drs. Jessi Smith, Kimberly Griffin, Leslie Gonzales, and Jeni Hart
Moderated by former ADVANCE program officer Laura Kramer

March 10

Systemic Change in Minority-Serving Institutions - panel
Drs. Marcia Owens, Anna Lee, Ala Qubbaj, Suzanna Rose, Stephanie Jones, and Stassi DiMaggio
Moderated by former ADVANCE program officers Minerva Cordero and Beth Mitchneck

March 24

www.nsf.gov/ADVANCE
Dr. Beth Mitchneck, former ADVANCE program officer 2012-2014
Professor Emerita in the School of Geography, Development & Environment, University of Arizona

She has a dual research focus on migration and displaced populations with an emphasis on former Soviet countries, Georgia and Ukraine, and on gender equity in STEM. She has served on national boards for the Social Science Research Council, the Kennan Institute and editorial boards for the Annals of the Association of American Geographers and Soviet Geography. She has received substantial funding from the NSF and other federal agencies. She has held numerous administrative positions including, most recently, vice provost for faculty success at the University of Massachusetts at Lowell and at the University of Arizona associate dean for academic affairs of the College of Social and Behavioral Sciences.

- 2019-20 ARC Network Visiting Scholar
- Vice Provost for faculty success at the University of Massachusetts at Lowell
- Public Voices Fellow – the OpEd project
Dr. Minerva Cordero, former ADVANCE program director 2018-2019
Professor of Mathematics and Senior Associate Dean for Research and Graduate Affairs, University of Texas at Arlington

She is a renowned researcher in the area of Finite Geometries and has presented her research at numerous national and international conferences. Her passion for mathematics began early in her life with what she calls “the sternest teacher ever”, her fourth-grade math teacher. She describes her research as creating the building blocks necessary to develop secure encrypting mechanisms. Her teaching career spans over 25 years, and her passion and excellence in the classroom have been recognized by several prestigious teaching awards.

- AAAS IF/THEN Ambassador 2019
- Mujeres Legendarias de Ford 2016 (Ford Legendary Woman)
- Great Minds in STEM Education Distinction award 2016
- Only former ADVANCE program officer with her own life size statue!
Systemic Change in Minority Serving Institutions – Panel
Drs. Marcia Owens, Ala Qubbaj, Anna Lee, Stephanie Jones, Stassi DiMaggio, and Suzanna Rose

Moderated by former ADVANCE program officers Drs. Minerva Cordero and Beth Mitchneck

The panelists will share their experience implementing ADVANCE faculty gender equity programs at Historically Black Colleges and Universities (HBCUs) and Hispanic-Serving Institutions (HSIs). They will discuss the unique challenges they face and how important this work is to their institutions’ teaching and research missions.

ADVANCE Institutions:
- Florida A&M University – Inst. Transformation
- University of Texas Rio Grande Valley – Inst. Transformation
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- Texas Tech University – Adaptation
- Xavier University – Adaptation
- Florida International University – Inst. Transformation
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1. Need for department chair leadership development

2. Dissatisfaction with department collegiality in STEM departments

3. Lack of organizational infrastructure and professional development opportunities to support faculty success
TTU-ADVANCE-ADAPT
Adopted/Adapted Strategies

- Training and mentoring of department chairs
- Data dashboard system to support informed decision making
- Review/revision of operational policies that impact faculty work
- Practices to ensure transparency about faculty workloads
- Faculty Equity Advocates in STEM colleges
- Faculty Success Center and Faculty Resource Network structures
TTU-ADVANCE-ADAPT
Progress in a Year of COVID-19

• Advisory boards are functional and are providing exceptional guidance and feedback
• Faculty Equity Advocates are established in the STEM colleges
• Data dashboard collaborations
  • University initiative versus solely grant focus
• Department Chair knowledge development:
  • Department Chair Mentoring Program
  • Department Chair workload
    • Task analysis
  • Department Chair pay review
Dr. Marcia Owens, Florida A&M University
ADVANCE Institutional Transformation 2018

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FAMU ADVANCE IT: Using Cultural Humility to Balance the Institutional and Intersectional Barriers to Advancement of Women STEM/SBS Faculty at a Large HBCU

National Science Foundation - Systemic Change in Minority Serving Institutions
March 24, 2021

Marcia Allen Owens, J.D., Ph.D.
Associate Professor of Environmental Science & Policy
Director/Principal Investigator – FAMU ADVANCE
Funded by NSF Award HRD-1824267
Science, technology, engineering, and mathematics (STEM) and the social and behavioral sciences (SBS) Faculty

Infuse cultural humility into the university infrastructure through applicable tools and strategies to promote equitable personal and professional interactions at all levels.

1. Enhance FAMU’s infrastructure and overall campus climate to promote gender equity by working to increase awareness of the role of cultural humility in decision-making and by institutionalizing successful ADVANCE initiatives; and

2. Increase the persistence and retention of women faculty in STEM/SBS by providing professional development, career coaching, and mentoring to increase the number of tenured women faculty, particularly at the Associate and Full Professor ranks.

“Cultural humility is a lifelong process of self-reflection and self-critique whereby the individual not only learns about another’s culture, but one starts with an examination of her/his own beliefs and cultural identities.”

CH is “more than just self-awareness, but requires one to step back to understand one’s own assumptions, biases and values.”
## FAMU STEM/SBS Faculty by Rank and Gender – Fall 2020
Source: FAMU Office of Institutional Research and Analytics Interactive Reporting Tool

<table>
<thead>
<tr>
<th>Discipline/Subject</th>
<th>Professor</th>
<th>Associate Professor</th>
<th>Assistant Professor</th>
<th>Instructor</th>
<th>Number of Female/ Percent Female (All Ranks)</th>
<th>Total FT Instructional Faculty All Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture/Ag Science/Food Science</td>
<td>14</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>11 / 27.5%</td>
<td>40</td>
</tr>
<tr>
<td>Architecture</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1 / 20.0%</td>
<td>10</td>
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<tr>
<td>Biological Syst. Eng.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2 / 16.6%</td>
<td>6</td>
</tr>
<tr>
<td>Biology</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>6 / 38.8%</td>
<td>18</td>
</tr>
<tr>
<td>Chemistry</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>2 / 33.3%</td>
<td>12</td>
</tr>
<tr>
<td>Physics</td>
<td>9</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1 / 23.1%</td>
<td>13</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>1 / 33.3%</td>
<td>18</td>
</tr>
<tr>
<td>Computer &amp; Info. Sciences</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>1 / 54.5%</td>
<td>11</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0 / 9.1%</td>
<td>11</td>
</tr>
<tr>
<td>Engineering (All)</td>
<td>14</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>4 / 12.5%</td>
<td>24</td>
</tr>
<tr>
<td>Engineering Technology</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1 / 20%</td>
<td>5</td>
</tr>
<tr>
<td>Economics</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2 / 25.0%</td>
<td>4</td>
</tr>
<tr>
<td>Pharm. Sci. (Ph.D.)</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3 / 35.3%</td>
<td>17</td>
</tr>
<tr>
<td>Political Science</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1 / 22.2%</td>
<td>9</td>
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<tr>
<td>Psychology</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1 / 66.7%</td>
<td>9</td>
</tr>
<tr>
<td>Sociology &amp; Crim. Just.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>2 / 64.3%</td>
<td>14</td>
</tr>
<tr>
<td>Social Work</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1 / 73.6%</td>
<td>11</td>
</tr>
<tr>
<td>Education (Science &amp; Math Ed)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2 / 100%</td>
<td>2</td>
</tr>
</tbody>
</table>

| Percent Female STEM/SBS Faculty (By Rank) | 23.0% | 50.9% | 30.5% | 45.4% | 75/32.1% | 234 |
| FAMU ALL Disciplines | 31.4% | 50.3% | 52.7% | 60.9% | 257/46.9% | 547 |
Why Focus on Black Women at HBCUs?

Comprising less than two percent of faculty nationwide, Black women are in the minority everywhere, even at HBCUs. Women faculty in STEM, at all institutions, face challenges in disciplines with few female colleagues and administrators. Most of the women at HBCUs—faculty, staff, and students—are Black. While we may not confront issues of race in the manner that may be encountered at majority institutions, Black women at HBCUs do face challenges when race, class, gender, academic discipline, and history intersect in a context where Black women students are the majority, but where Black women STEM faculty are the minority. – Marcia Allen Owens - 2020
The panelists will share their experience implementing ADVANCE faculty gender equity programs at Historically Black Colleges and Universities (HBCUs) and Hispanic-Serving Institutions (HSIs). They will discuss the unique challenges they face and how important this work is to their institutions’ teaching and research missions.

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Attracting & Nurturing Women Faculty @ an HSI

**Issues**
- Under-representation of women faculty
- Under-representation of women Leaders
- Lack of family friendly policies/practices & work-life support

**Objectives & Outcomes**
- Increase representation of women faculty
- Increase the representation of women in leadership
- Promote a positive workplace and climate

**Categories**
- Recruitment
- Advancement
- Policy & Climate
- Education & Empowerment
- Social Science Study
Mid-Career Faculty

Recruitment (Process & Culture)

Accountability

Holistic Evaluation (Recruitment & Promotion)

Mentoring & Retention

Family Friendly Policies

Women Voice & Networking Opportunities

Campus & Departmental Climates (Chairs & Deans)

Systematic & Cultural Change
Impact on Student Success & STEM Workforce
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Institutional transformation, via an empowerment approach, will impact women and men across the entire campus of NC A&T by increasing the research/leadership capabilities of all faculty and by supporting their overall professional achievement.
Goals

Objective 1
• Increase recruitment, retention and advancement of women in STEM/SBS at N.C. A&T by building a strategic pipeline for academic and professional success.

Objective 2
• Increase opportunities for sustained achievement for all faculty by creating a whole campus culture of excellence in STEM research and scholarship.

Objective 3
• Increase the knowledge of roles of gender and gender/race intersectionality within the academy.

To catalyze and implement approaches that significantly increase the representation and career advancement of women in STEM and SBS disciplines at North Carolina A&T State University.

To fill knowledge gaps on the empowerment and equity of women in the academy.
<table>
<thead>
<tr>
<th><strong>Recruitment</strong></th>
<th><strong>Retention &amp; Advancement</strong></th>
<th><strong>Leadership</strong></th>
<th><strong>SBS Study Outcomes</strong></th>
</tr>
</thead>
</table>
| 300 completed Search Committee Certification Program (SCCP) | • Full professors ↑ by 25%  
• Assistant professors ↑ 35%  
• 2 women chairs moved to Tier 1 administrative positions  
  • Senior VP for Academic Affairs  
  • Interim VP for Undergraduate Education  | Leadership Development External  
(UNC BRIDGES, STEM WOC Conclave, Conclave Leadership Academy FCU, AAC&U PKAL STEM Leadership Institute, HERS)  
• 27 women participants | • 1 publication  
• Barriers to the Advancement of Women of Color Faculty in STEM: The Need for Promoting Equity using an Intersectional Framework. *Equality, Diversity and Inclusion: An International Journal*.  
  • 1 accepted  
• Pathways to Institutional Transformation at HBCUs: Recommendations from HBCU Black Women STEM Faculty. *SN Social Sciences*  
  • 1 under review  
• Narratives of Women of Color STEM faculty: Breaking Barriers to Promote Institutional Transformation at Historically Black Colleges and Universities  
  • 3 manuscripts in development  
  • 3 presentations  
  • NCA&T Empowered to Lead  
  • AAC&U PKAL Winter Meeting  
  • Faculty WOC in the Academy  
  • 3 abstracts under review  
  • *Added Study: Black Women STEM Faculty Experiences of COVID-19* |
| Commitment to Faculty Success Workshop Series (Implicit Bias Focused Interactive Theater Project)  
• “The Perfect Fit”  
• “Tenure and Promotion, The Play”  | 3 cohorts of ADVANCE IT Scholars  
• $18,410,600 grant funding  
• 108 proposals submitted  
  • 73 funded  
• 134 publications  
• #tenured & promoted to Assoc. = 3  
• #promoted to Full = 2  | Internal  
3 Leadership Lunch and Learn  
• 123 STEM/SBS and non-STEM women participated  |  

5 Writing Retreats  
• 111 STEM and non-STEM women participants  
• 6 grants awarded  
• 18 peer-reviewed publications  | Informal Group Mentoring and Coaching Sessions  
• 525 STEM/SBS/non-STEM/SBS women  |
| Women and Minority Faculty Recruitment Directory  
• Compilation of targeted publications and organizations to assist in the recruitment (adapted from UW-Madison)  | ADVANCE IT Recruitment Grants  
• 2 women STEM faculty candidates were supported for on-campus interviews  | ADVANCE IT team member served on the faculty handbook committee  
3 iterations of the climate survey  
• Results being used for institutional transformation strategic plan  |  |
| ADVANCE IT Recruitment Grants  
• 2 women STEM faculty candidates were supported for on-campus interviews  |  |  |  |
| **Policy and Climate** |  |  |  |
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GOALS
1. Increase number of women and URM faculty in STEM
2. Attract, retain and promote more women and URM faculty overall
3. Facilitate a more inclusive climate

MAJOR INNOVATIONS
• Intersectionality study
• Bystander Leadership Program
• New inclusive excellence programs and departmental metrics
FIU Bystander Leadership™ Program

One-day, highly interactive program that moves faculty from “insight” to “action” to address gender and racial bias and discrimination.

- Provides practice using **different strategies to intervene**.
- Nearly **400 faculty** have participated
- Results:
  - decrease in bias
  - increase in intention to intervene
  - increase in actual interventions.
- Videos: go.fiu.edu/bystander
  go.fiu.edu/AWEDtheater
AWED Inclusive Excellence Workshops: Faculty Attendance Past 5 Years

University-Wide Faculty Professional Development Programs

- Faculty Mentor Program (809)*
- Bystander Leadership Workshop (472)
- STRIDE Hiring Workshop (1297)
- Diversity Advocate Training (93)
- STRIDE Tenure & Promotion Workshop (171)
- Women Faculty Leadership Institute (685)
- Salary Equity Program (72)
- Departmental/College Diversity Plans
- Equity Advisors

Established Fall 2016

OUTCOMES 2016-2021:
- Tenure-track STEM women increased from 17% to 20%
- Tenure-track STEM women of color increased from 1.5% to 2.5%
- Tenure-track SBS women increased from 38% to 40%
- All ranks: Women faculty overall increased from 38% to 43%
- All ranks: Hispanic faculty overall increased from 16% to 21%
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Addressing systemic barriers to support advancement of African-American women faculty in STEM

How do intersectional identities impact the advancement of women in the academy?

Mehnaaz Ali, Stassi DiMaggio, Anne McCall
Florastina Payton-Stewart, Erica Severan-Webb

XULA STTrIDES
Interventions and Outcomes

- **Diversity Fellow**: Institutional policy for implementing transformational change is identified and applied.
- **Leadership Training**: Creating well-informed leaders at all levels and transforming the cultural policies and practices that stifle female faculty, particularly women of color.
- **Mentoring Network**: Increasing retention and promotion of female STEM faculty, particularly faculty of color.

Increased representation of women and minorities in leadership and at all faculty ranks, and an equitable, inclusive, and energizing workplace for all.
Early Successes

RECRUITMENT

- Standardized Search Committee training and procedures have led to 85% of tenure-track STEM faculty hires 2017-20 have been African-American or Black faculty members. Of those, 54% have been women and ALL women STEM tenure track faculty members hired have been Women of Color, mostly African American or Black women (6/7).

RETENTION

- New Exit Interview policy helps identify issues affecting retention.
- New policy giving tenure-track faculty members receive an automatic two-semester extension of the tenure clock for the birth or adoption of a child.
- Mentoring Networks have grown into Mentoring and Peer Networks.
Thank you!

Dr. Utibe Bickham-Wright,
ADVANCE AAAS Science and Technology Policy Fellow 2020-2022

The ADVANCE program thanks all the speakers and the NSF events management staff that made these webinars possible.

March 31

An Inclusive Academy: Achieving Diversity and Excellence
Drs. Virginia Valian and Abigail Stewart

Introduced by Alice Hogan, the first NSF ADVANCE program officer