ADVANCE Seeks Collaborations with the University Senate

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Fall 2022
ADVANCE Mission

To promote faculty retention, career success, and STEM equity by changing culture and empowering underrepresented individuals and those disadvantaged by intersecting identities.

Long-Term Goals

- Increase diversity and success of individuals on campus
- Sustainable and responsive change on campus for inclusion and equity

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**ADVANCE Weekly Roundup**  Fridays
- Subscribe to Tech Today
- Education on all DEIS topics

**Twitter**  @ADVANCEmtu
- Resources
- Black History Month, Women’s History Month

**Program Advertising**
- Postcards sent via campus mail
- Emails, Tech Today

**Office central on campus**
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Email  advance-mtu@mtu.edu
Stressing Out: Connecting Race, Gender, and Stress with Faculty Productivity

This study uses multilevel modeling to analyze data from a national sample of full-time, undergraduate faculty at four-year institutions to examine the connections among race, gender, sources of stress, and productivity in the areas of research, teaching, and service. We find that stress due to discrimination has particular negative salience for faculty of color. By contrast, stress due to family obligations significantly and positively correlated with faculty’s adoption of student-centered teaching practices and participation in civic-minded activities.
New growth...

...is like writing and submitting proposals (or papers).
A review of more than two decades of data finds racial disparities in the success rate of National Science Foundation grant proposals.

United States National Science Foundation data collected between 1996 and 2019 show that white principal investigators were more likely to receive grant funding than their nonwhite colleagues, suggesting that “Systemic racism manifests at the NSF as higher funding rates for proposals by White PIs than those by non-White PIs,” a preprint posted this month argues.

NSF, which received a copy of the analysis, which has not been peer reviewed, does not dispute its conclusions, reports *Science*. The agency’s director, Sethuraman Panchanathan, “shares these concerns [about] systemic racial disparities in funding at NSF and other federal agencies,” an NSF spokesperson tells the outlet, adding that while the agency is proud of its programs aimed at improving equity and inclusion, “there is still much [work] to do.”
NSF isn’t alone

Mervis, Science 2016
http://science.sciencemag.org/content/351/6269/115.full
Challenge #1: Recognizing the extra wear, the extra stress on some members of our community.

Challenge #2 is then accepting the evidence that those members with inequitable stress haven’t historically been able to perform as well - not because they aren’t as good - but because they regularly and consistently experience stressors.
About quality – perceptions vs. actual
Proposal Scoring

- Reviewers Rated Applicant **Competence**
- CVs used to score **Impact** of publications
  - Perceived as equally competent? Women must publish >4 times more
  - Same number and impact publications? Men perceived as 10-40% more competent.

*Equal scientific productivity ≠ equal competence scores*

- Applied: 62 men, 52 women
- Outcome: 16 men (25%) and 4 (7.7%) women awarded

*Wenneras and Wold, Nature*

[https://www.nature.com/nature/journal/v387/n6631/pdf/387341a0.pdf](https://www.nature.com/nature/journal/v387/n6631/pdf/387341a0.pdf)
We can go on....

Let’s talk about ADVANCE’s approach and impact
Metrics for plant thriving:
- Plant height
- Fullness
- Color

Metrics for faculty thriving:
- Publications
- Grants
- Students Graduated
- Teaching Assessments/Evaluations
- Service Impacts

1. Resilience Against Stressors
2. Educate to Recognize/Interrupt Stressors
3. Improve Tools, Educate those Using the Tools

Improve workplace climate, improve retention
ADVANCE @Michigan Tech - Programs

282 participant engagement events on a campus with 93 women and 222 men tenured/tenure-track faculty.

**Advanced Career Management**
*Faculty Career Success*

Compliments ECM → Resilience against the stressors

**Advocates and Allies**
*Respect. Advocate. Include.*

Education to recognize and interrupt the stressors

**Academy for Responsive Leadership**

Improve the tools and educate those using the tools
Supports career navigation
Camaraderie & Community to thrive

Goals

Goals

Associate Professors

Audience → Impacts

→ Program enhances sense of belonging and aids in retention

Sign up now! New and longer time Associate Profs are welcome!
ACM introductory meeting is Friday, September 23 at noon
Supports career navigation
Camaraderie & Community to thrive

Goals

Sign up now! New and longer time Associate Profs are welcome! ACM introductory meeting is Friday, September 23 at noon

Attend a workshop - and - bring a friend!
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Goals

Workshops covering evidence of bias & ways to be an ally to change practices
All can model the strategies to reduce bias and promote inclusion and sense of belonging

Audience → Impacts

Associate Professors

→ Program enhances sense of belonging and aids in retention

All faculty & staff (emphasize men)

→ Program enhances unit climate and promotes equity

Attend a workshop - and - bring a friend!

Chairs, deans, & leaders

→ Program increases empathy skills, management skills, for retention and unit success

Encourage your chair/dean to attend.

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Attend a workshop - and - bring a friend!
Other Key ADVANCE Accomplishments

(1) ECM
- All new faculty participate in an ECM during their first 1.5 years at Michigan Tech

(2) ACM
- 25% associate professors participated in ACM in 3 years.
- 7 earned Full in 2021-22 (29%), and 7 participants/guides (20%) moved into leadership.

(3) AFEQT with training and tutorials
- 100% of department chairs and deans participated in training and received access to AFEQT in Spring 2022

(4) ADVANCE Hiring Improvements
- Emphasis on preparation steps and active searching/recruiting (collaborative with EOC and HR).
- Equity Advisors provide guidance on the process; now positioned on all search committees (run by the Provost Office).

(5) A&A
- A3B and Advocates teams conduct workshops each semester.
- 162 participants have attended workshops and completed surveys (38% of the 425 faculty).

(6) Weekly Roundup
- Article/week provides insight on a marginalization, bias, or tool to improve climate and achieve equity.

(7) Diversity Equity and Inclusion addition to the Faculty Handbook
- Gives credit (within service) to DEI work.

(8) DEIS Where to go for What
- Resource compiles all DEIS efforts on campus together into a single webpage.

(9) Guide to Writing COVID Impact Statements
- Resource on how to best describe, without introducing sources of bias, how COVID impacted careers.

(10) Advocacy for Childcare
- Childcare Task Force in 2021-2022 → Meaningful action is important for retention
Why the ADVANCE Faculty Equity Query Tool (AFEQT) is valuable...

- **Did you know...**
  - Over the last 10 years, on average, Michigan Tech has lost ~12 people a year at a cost of ~$3.3 million per year?
    - Women faculty and Racial/Ethnic faculty are more likely to depart Michigan Tech than White men (45% higher and 94% higher respectively)
  - Assistant → Associate: Time to promotion is longer for women than men (9% longer).
    - Identical promotion rates would yield 12 additional women Associate Professors.
  - Associate → Full: A higher percent of men (36.1%) than women (29.2%) are promoted to full professor
    - Identical promotion rates would yield 3 additional women Full Professors.

- **So we ask department chairs if they know within their department if....**
  - Retention (promotion, time in rank) over time is different between demographics?
  - Student credit hours, startup funding, and space allocations are equitable?

We tell them that quick, easy access to data compiled from Institutional Research, Banner, HR and other vetted university databases can help them more efficiently make the fairest decisions possible.
Advocates and Allies

Respect. Advocate. Include.

● Learn to be allies and advocates for women, gender diverse and racially/ethnically diverse individuals
  ○ Broad engagement of majority men to change university culture

● Advocates and Allies Advisory Board (A3B)
  ○ Women, gender diverse, and historically underrepresented individuals

● Advocates Team
  ○ Conducts workshops and other educational sessions once per semester

https://www.mtu.edu/advance/initiatives/advocates-and-allies/
● A&A Workshop Friday, Nov. 4 11:30-1:00
  ○ Each of you, as individuals, can attend these workshops and practice the skills

● Advocates and A3B Applications due by Thursday, September 15

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ADVANCE (A&A and PI Team) would like to partner with the University Senate to:

a) Acknowledge stressors
b) Adjust and develop new tools to reduce the stressors

Impact at scale requires many people working together toward a common goal.
Key Issues → Potential Projects

(1) Supervisor Selection, Training, Evaluation of Performance

- **SELECTION:**
  - Evaluate skill sets needed to manage including empathy, awareness of stressors, and responsiveness to addressing stressors

- **TRAINING:**
  - Personnel development organization

- **EVALUATION OF PERFORMANCE:**
  - Include evaluation of equitable resource allocation, unit climate, and success and retention of faculty and staff.

(2) Whole Faculty/Staff Health

- Childcare → Largest risk to retention
- Family-friendly calendars, meeting-times, schedules, and infrastructure
- Flexible and friendly policies

(3) Develop Process for Transparency of Workloads

- Unit dashboards are a tool for equity - UMD ADVANCE

U Michigan ASEE webinar: [https://edge.asee.org/webinar-series/](https://edge.asee.org/webinar-series/)
Examine your own University Senate Data (then publish it and adjust practices dynamically)

Population of men/women faculty at Tech

- 31.7% women

Population of White/non-White faculty at Tech

- 22.0% non-White

Permission received from IR to share in this forum, 9/12/22
Assess whether those represented in the University Senate feel included, feel that they belong, and feel respected
Diversity does not = Inclusion

No Diversity (within organization)
No Inclusion

Diversity Poor Inclusion

Diversity AND Inclusion
1) Supervisor Selection, Training, Evaluation of Performance

2) Revisit policies and practices paying attention to whole Faculty/Staff health (childcare, family friendly)

3) Develop transparency within units

4) Look at your own data and practices
ACM Introductory Meeting is Friday, September 23 at 12 noon

A link to sign up was sent to dean/chairs, new associate professors, and was in Tech Today last week.

An additional email announcement will be sent to all associates this week and will re-run in Tech Today next week.

Advocates and A3B Applications due by Thursday, September 15

Personalized invitations have been sent in addition to an open call in Tech Today.

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Thank you!

Read our Weekly Roundup in Tech Today

We’d love to collaborate! Advance-MTU@mtu.edu