

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

<https://www.mtu.edu/advance/>

Website www.mtu.edu/advance

- Details on each program
- Events
- History & Resources

We are a permanent part of Michigan Tech
Connect with Us!

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

- Staffed
- Lending library & educational resources



Email advance-mtu@mtu.edu



Photo Credit: Charlie Swan

Path wear
=
stressors

M. Kevin Eagan Jr.
JE Jason C. Garvey

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.



Andy Carstens
Jul 27, 2022

PDF VERSION



US 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.

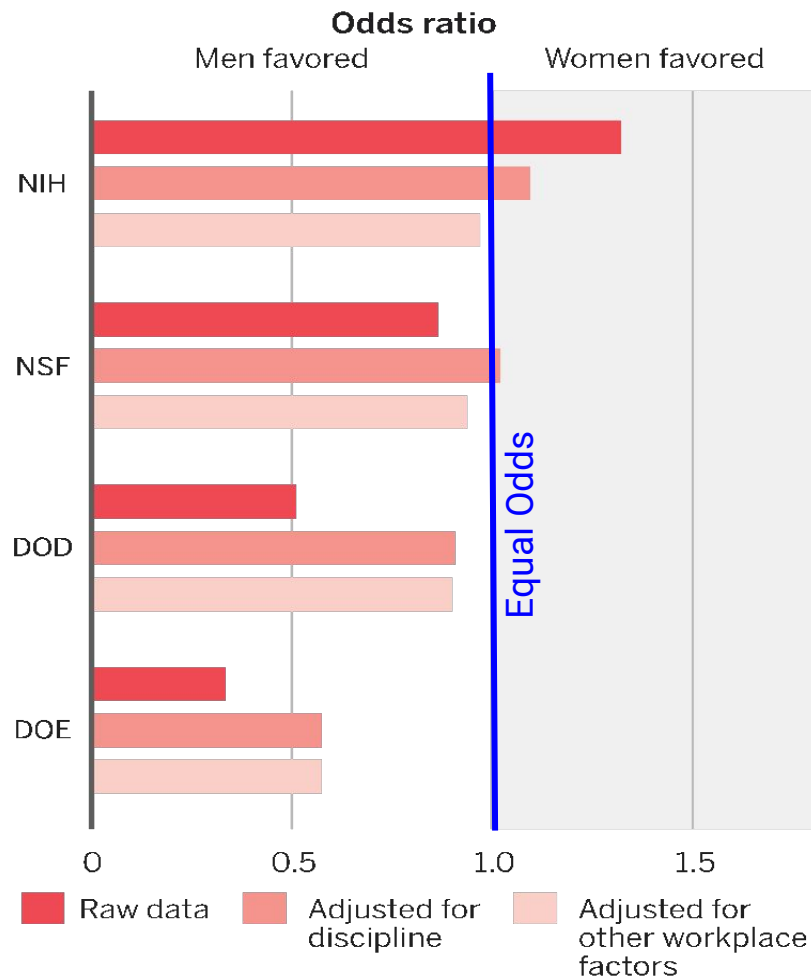
ABOVE:
NSF.GOV

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.”

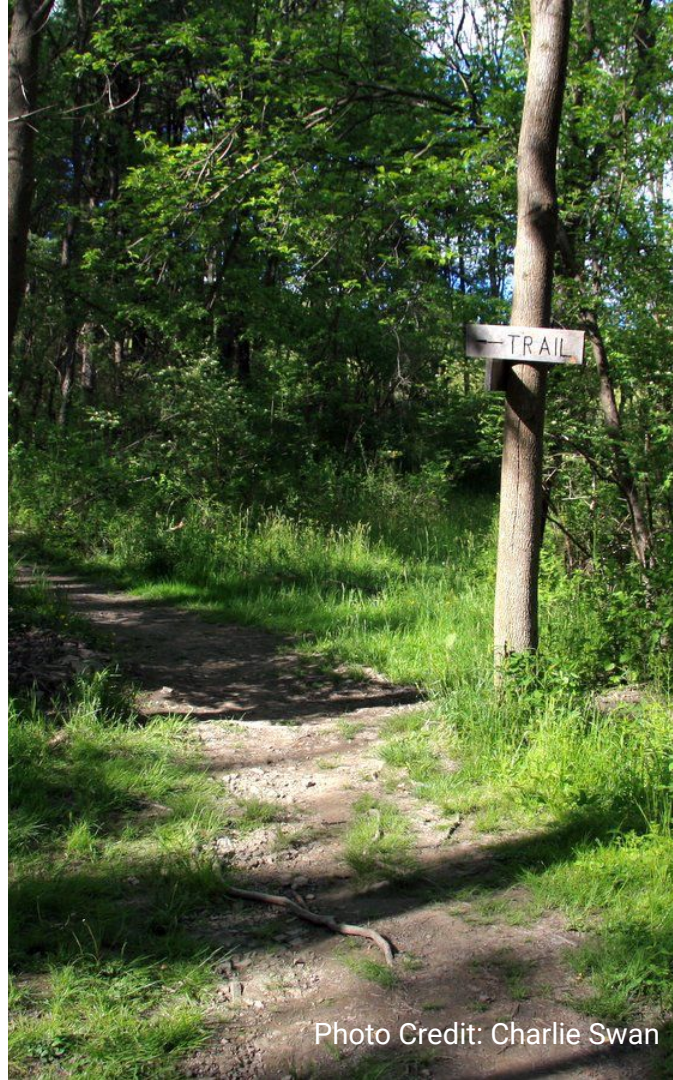
NSF isn't alone

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.

Photo Credit: Charlie Swan



About quality -
perceptions vs. actual

Proposal Scoring

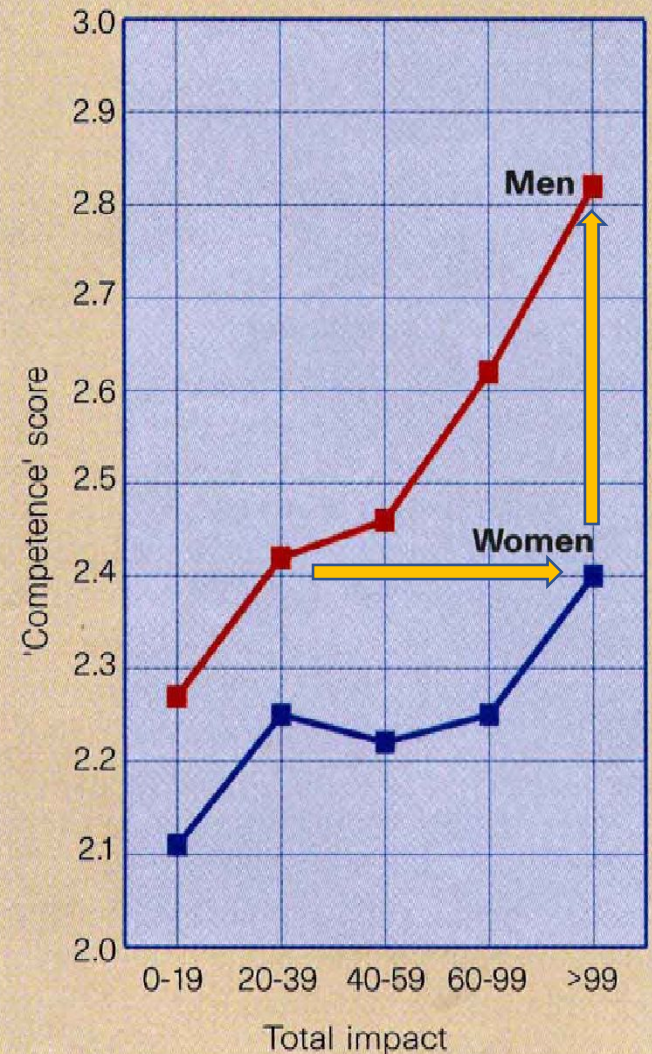
- Reviewers Rated Applicant **Competence**
- CVs used to score **Impact** of publications
 - Perceived as equally competent? Women must publish >4 times more
 - Same number and impact publications? Men perceived as 10-40% more competent.

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>



We can go on....

Let's talk about
ADVANCE's approach
and impact



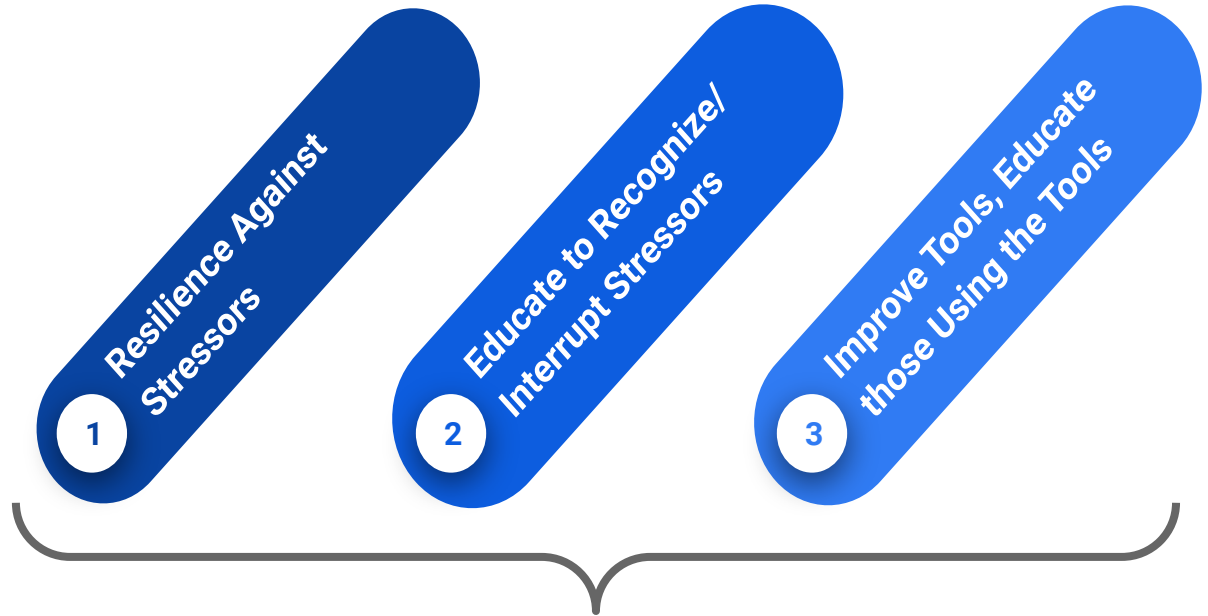


Metrics for plant thriving:

- Plant height
- Fullness
- Color

Metrics for faculty thriving:

- Publications
- Grants
- Students Graduated
- Teaching Assessments/Evaluations
- Service Impacts



ADVANCE @Michigan Tech – Programs



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



Compliments ECM → Resilience against the stressors



Education to recognize and interrupt the stressors



Improve the tools and educate those using the tools



- Panel Discussions
- Peer Mentoring Training
- Career Path Workshops
- Senior Guide Training
- Affinity Groups

Goals

- Supports career navigation
- Camaraderie & Community to thrive

Audience → Impacts

Associate Professors

→ 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**



Advanced Career Management

Faculty Career Success

- Panel Discussions
- Peer Mentoring Training
- Career Path Workshops
- Senior Guide Training
- Affinity Groups

Advocates and Allies

Respect. Advocate. Include.

- Ally Workshops
- Listening Sessions
- Gender in Higher Education Workshops
- Tailor advocacy training models to MTU

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- 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

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All faculty & staff (emphasize men)

→ Program enhances unit climate and promotes equity

Attend a workshop - and - bring a friend!



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Academy for Responsive Leadership

Include. Support. Empower.

- Resources for leaders
- Development of Best Practice Guides
- Interactive workshops and learning modules
- Inclusively crafting unit climate
- Collaborative Professional Development

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- Leaders Access, Participate, & Act
- Examine the departmental data & use it to inform decisions
- Model strategies to enhance department climate & support diverse faculty

Chairs, deans, & leaders

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

Encourage your chair/dean to attend.

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.

A

dvocates 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

A

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Respect. Advocate. Include.



- 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

<https://www.mtu.edu/advance/initiatives/advocates-and-allies/>

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*

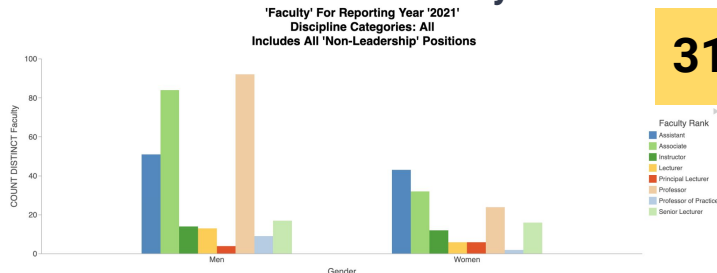
(3) Develop Process for Transparency of Workloads

- *Unit dashboards are a tool for equity - UMD ADVANCE*

<https://www.youtube.com/watch?v=fmqLr7PFqUA>

Examine your own University Senate Data (then publish it and adjust practices dynamically)

Population of men/women faculty at Tech



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- 2) Reporting year is a snapshot of employee data as of October 1st.
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- 4) Includes faculty split positions at college and departmental levels.
- 5) Leadership includes deans, associate deans, and department chairs. All others are grouped into a 'Non-Leadership' category.
- 6) Includes fixed term and temporary faculty. Includes those faculty on sabbatical and on unpaid leave of absence.
- 7) Excludes Research Faculty.
- 8) This is a customized report.

31.7% women

Population of women/men
faculty and staff in the University
Senate

Population of White/non-White faculty at Tech



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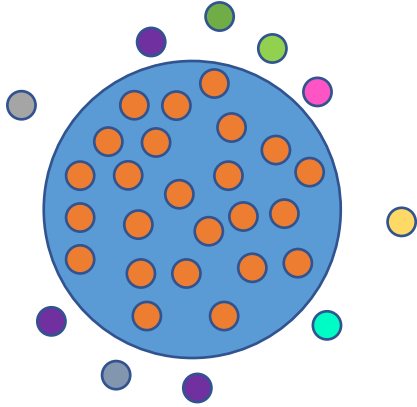
22.0% non-White

Population of White/non-White
faculty and staff in the University
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Assess

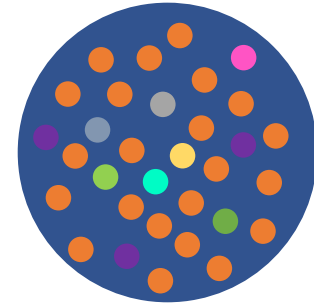
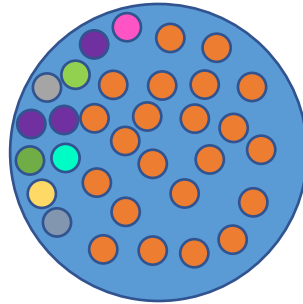
whether those represented in the University Senate
feel included, feel that they belong, and feel respected

Diversity does not = Inclusion



No Diversity
(within organization)
No Inclusion

Diversity
Poor
Inclusion



Diversity
AND
Inclusion



Summary of Asks (Possible Collaborations)

- 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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Events this week, this semester

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Email advance-mtu@mtu.edu

Thank you!

Read our Weekly Roundup in Tech Today

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

