College of Engineering
Inclusion & Diversity
(EGRID)
at Michigan State University
34% ↑ or 1 million additional STEM graduates needed
President’s council of Advisors on Science and Technology (2012)

“To deliver the highest quality engineering graduates, cutting-edge research and innovative technology for the benefit of society locally and globally.”


Attracting more women and traditionally underrepresented minorities to engineering is a challenge.
GOAL of the EGRID:
MSU COE is nationally recognized for its diversity and inclusion in Engineering Higher Education.
- measured by efforts, results, and reputation.

No matter where you stand, the culture shift requires we all move up on the diversity ladder via training, engagement, policy, initiatives.
Yue Qi, Associate Dean of Inclusion and Diversity, Faculty Excellence Advocate (FEA)

Kyle Foster, Director, Diversity Programs (DPO)

Judy Cordes, Co-director, Women in Engineering (WIE)

Teresa Vandersloot, Co-director, Women in Engineering (WIE)

Theo Caldwell, Assistant Dean, Student Inclusion and Diversity

Focus: Recruitment and K-12 Outreach

Focus: Student success

WIE connect …

Focus: Retention of underserved, underprepared, underrepresented students
Diversity Program office

- **Engineering and Science Success Academy ESSA**
  Summer 2018 (45 students)
  - 84% increased MPS (last 73% increased MPS)
  - Avg. MPS increase was 53% (last year avg. increase was 38%)
  - 78% of MTH 103A starters moved up at least 1 class
  - 80% of MTH 103 starters moved up at least 1 class
  - 53% of MTH 116 starters moved up 1 class

2019 ESSA Recruiting On-going

- **Guided Learning Center** (tutoring)
  - 58 students receiving tutoring in 1 or more classes

- **NSBE/SHPE**
  - 27 students attending national and regional conferences in Cleveland, Ohio

- **Freshmen Engineering Seminar** (EGR 160)
  - Enrollment (68) (>100% increase over Fall 2017)

- Help on 300, 400 level courses @ GLC
- Host/mentor Underrepresented students in research
- Inclusive Teaching
- Serve as NSBE/SHPE faculty advisors
Women in Engineering

- **Fall 2018**
  - 1300 Undergraduate Women in Engineering - highest number ever
  - 383 out of 1665 freshmen/freshwomen (23%) - highest number ever (16% in 2013)

- **Student Success**
  - Largest WIE Connect mentoring program - 225 participants
  - New Program WIE Rise - Professional Development and Personal Coaching
  - Co-sponsoring a series of Workshops on Changing the SySTEM for STEM students
  - Helped to support 55+ women to attend National Conferences or EWB oversees trips

- **Recruitment, Civic Engagement and K-12 Outreach**
  - Leadership Series for Women in Engineering students - Oct/Nov
  - HS Co-ed Programming competition - Saturday, November 3
  - Girls’ STEM Day - November 17
  - Introduce a Girl to Engineering - February 23

- Participate WIE activities
- Provide hands on activities
- Teach lessons for summer camps,
- Give lab tours
- Meet with prospective students and parents
Actions in progress

- Two Withrow Excellence in Diversity Awards
  - “Emerging Accomplishments” (<7 years)
  - “Sustained Excellence” (> 7 years).
- Diversity Statements from the Interviewing Faculty Candidates (highly recommend for each search)
- Engineering Classroom Inclusion and Diversity Training (1hr)
- Implicit Bias Training (scheduled for 2019 Spring)
- Faculty and EGRID for “Broader Impacts” Forum (planning)
- Providing Information and resources to support inclusion and diversity (new website)
New Grants / programs/ Initiatives

- OI3 Creating Inclusive Excellence Grants (2018)
  - Galit Pelled (BME) “Enhanced Inclusion of Women in Engineering through Leadership Programs.”
  - Theo Caldwell and Katy Colbry: “PerSIST: Pursuing Success through Inclusion, Support & Training”

- External Grants (2018)
  - Nelson Sepulveda (ECE): GAANN ($447,750 total) from the Department of Education

Congratulations & Thank you all.
Faculty Excellence Advocate (FEA)

View me as your resource:

The FEA in each college plays important roles in the hiring, development, and support of tenure system faculty.

Duties:

- **Tenure System Faculty Searches and Hiring**
  - Share best practice for faculty search
  - Be proactive to achieve a diverse applicant pool, search toolkit

- **Annual Review and Reappointment, Promotion, & Tenure**
  - Meet each year with department chairperson
  - Meet with new faculty, Meet with pre-tenure faculty, Mid-Career
  - Any concerns

- **Creating/Sustaining a positive work environment**
Be Bold for Change*

*2017 International Women's Day campaign theme

― Looking for help:
  ― ECAC help to identify gaps in our policies and culture
  ― Suggestions on Faculty Development Activities
  ― Propose New Initiatives (be Bold)
  ― Obtain external/internal resources

BACK UP SLIDES
Withrow Excellence in Diversity Award

There will be two awards to recognize individuals in the COE who exhibit exemplary commitment to creating a welcoming and inclusive environment in their classes, community, research and/or initiating/participating events and activities which promote diversity in Engineering. There are two categories for the awards, one is for “Emerging Accomplishments” (<7 years) and another one for “Sustained Excellence” (> 7 years). Any faculty member, academic specialist, or staff member within COE can be nominated.

These awards are modeled after the University Excellence in Inclusion and Diversity Awards which originated in 1990. The College of Engineering follows suit in recognizing its first awardees in Spring 2019.
Resources

• Campus resources
• Academic Advancement Network
• Office for Inclusion & Intercultural Initiatives
  • [http://www.inclusion.msu.edu/index.html](http://www.inclusion.msu.edu/index.html)
• Education and Development
  • Creating Inclusive Excellence Grants
• Diversity Resource Network

• External resources
  • [https://ctl.yale.edu/FacultyResources/Diversity-Inclusion](https://ctl.yale.edu/FacultyResources/Diversity-Inclusion)
  • [http://www.crlt.umich.edu/gsis/p3_1](http://www.crlt.umich.edu/gsis/p3_1)
  • [https://www.engageengineering.org/](https://www.engageengineering.org/)
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WIE Connect

Focus: Helping under-prepared students

NSBE, SHPE
MSU’s Core Message

- *Paulette Granberry Russell*, Director, Office for Inclusion and Intercultural Initiatives (I3) and Senior Advisor to the President

  • We are diverse, welcoming, and supportive campus community that offers opportunities for all students, faculty, and staff to learn, connect, and succeed

  • Inclusion is a core value of MSU, and I3 is a gateway to the programs and resources that address and support diversity, equity and inclusion at MSU
Diversity in STEM

“for the United States to remain competitive in a global technological society, the country as a whole must take serious steps to ensure that we have a diverse, well trained, multicultural workforce.”


Global and Domestic populations will continue to change dramatically over the next few decades

Diversity and inclusion are at the core of Innovation