



ILLINOIS

Grainger College of Engineering

February 12, 2020

Mission for our 21st Century GCOE

- To be a top ranked college of engineering—that has changed the world in the past and will continue to do so in the future
- To set the global standard of excellence in education, cutting-edge research and scholarship
- To excel as an innovation leader in the development of new paradigms for engineering education
- To develop transformative technologies and advances that create new economies
- To foster a diverse, inclusive, supportive, and collaborative ecosystem that prepares the leaders of tomorrow to address the world's most pressing challenges



Core Values: Diversity and Inclusion

A prerequisite for excellence !

- Improves learning outcomes
- Reflect demographics of society at large
- Level the playing field for all
- Produce leaders of tomorrow to make future impact
- Integrative and not add-on



ASEE “exemplar status”

2019 - Bronze award as part of the American Society of Engineering Education’s Diversity Recognition program.

- Highest distinction for diversity work given by ASEE
- Recognition of great work throughout the college; the portfolio of efforts and our plans for promoting diversity was compiled and submitted by the Diversity committee
- More progress to come



Diversity, equity, and inclusion efforts

Projects conceived and implemented by the Diversity Committee and colleagues

- Diversity training for undergrad advisors
- Development of department-level diversity plans
- Diversity statements for job applications
- New lines of communication for students with concerns
- Expanded high school visits
- Study of diversity administrative structures at peer institutions
- Create a new leadership position and research institute

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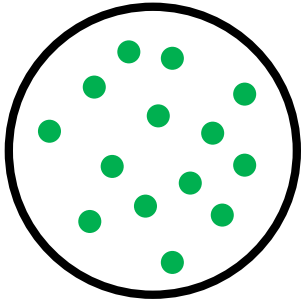
**The Institute for
Inclusion, Diversity,
Equity, and Access**

Director: Lynford Goddard

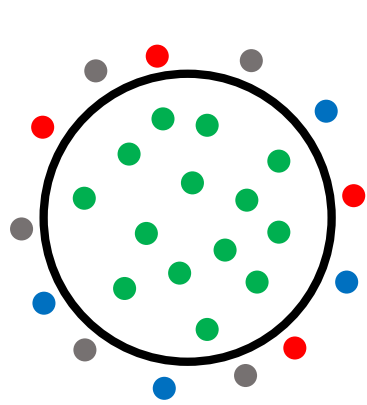
Mission of the IDEA Institute

To support scholarship, innovation, collaboration, and leadership in the areas of inclusion, diversity, equity, and access at all levels: faculty, staff, students, and K-12 outreach/public engagement

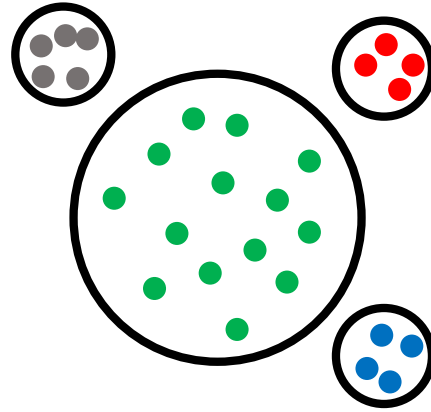
Definitions of these core values



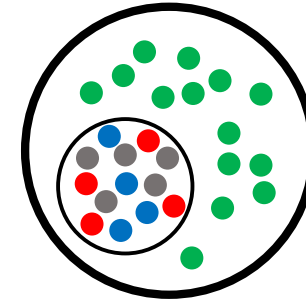
Not Diverse



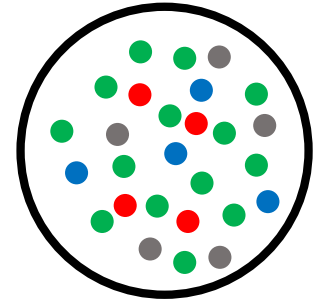
Exclusion



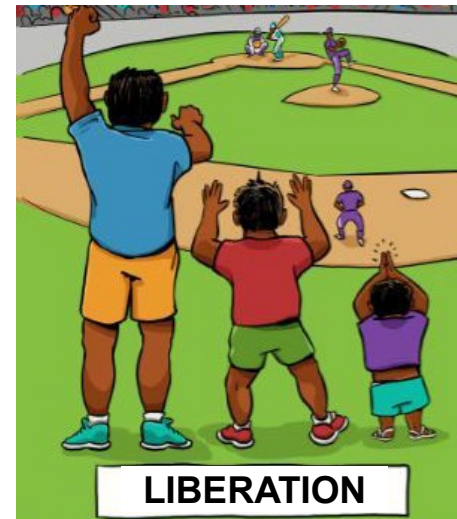
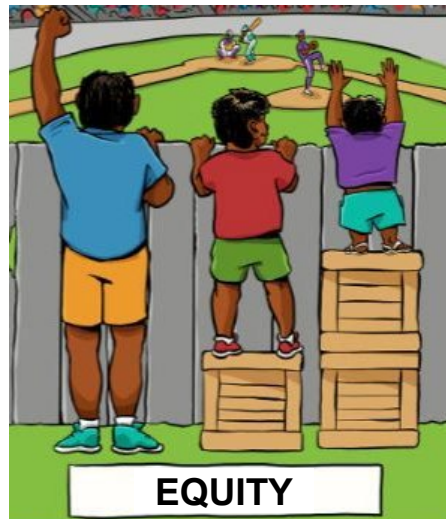
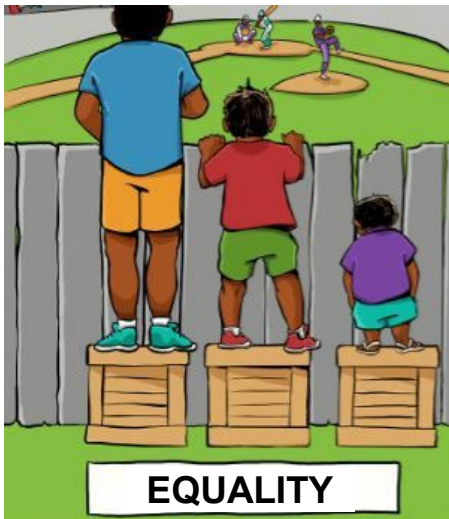
Segregation



Integration



Inclusion



Why Diversity Matters

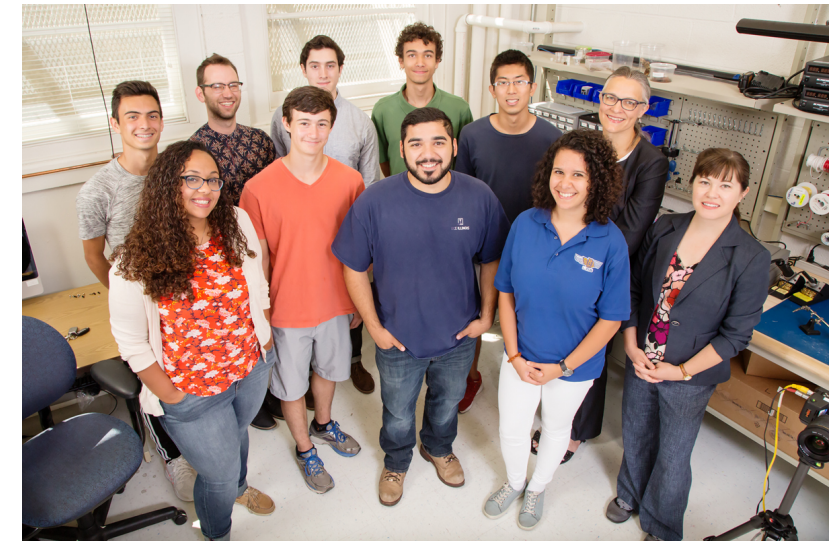
Diversity benefits
our teaching and
research mission

- **Diverse working groups are more productive, creative, and innovative** (e.g., Herring, 2009)
- **Ideas generated by diverse groups are of higher quality** (McLeod et al., 1996)
- **Level of critical analysis of decisions and alternatives are higher in groups exposed to minority viewpoints** (e.g., Sommers et al., 2006)

¹ Adapted using content from Prof. Wendy Heller



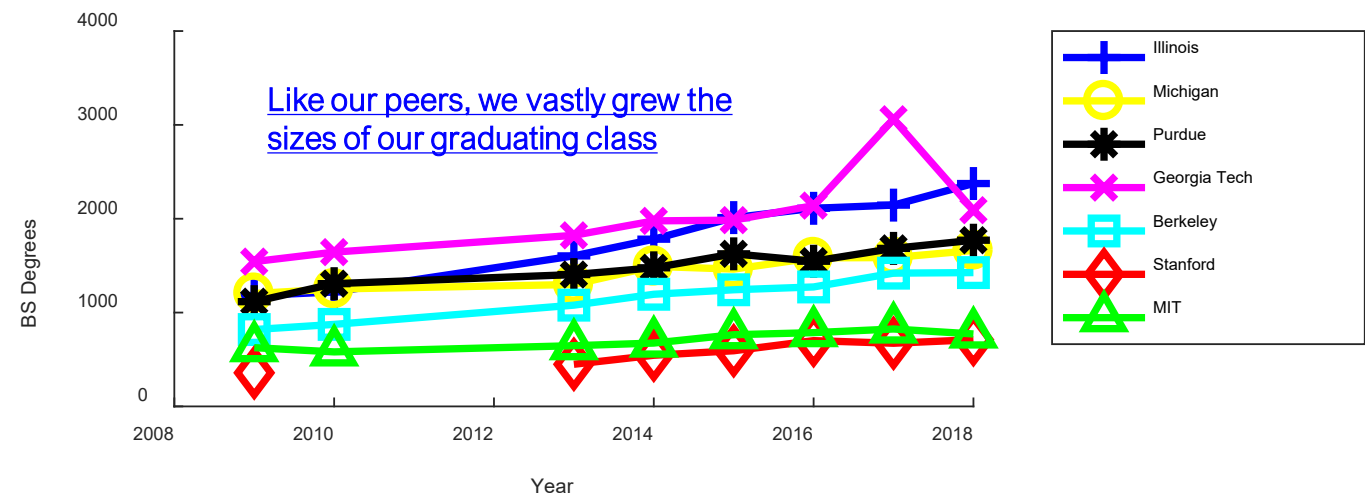
ISS NASA Student Launch Team



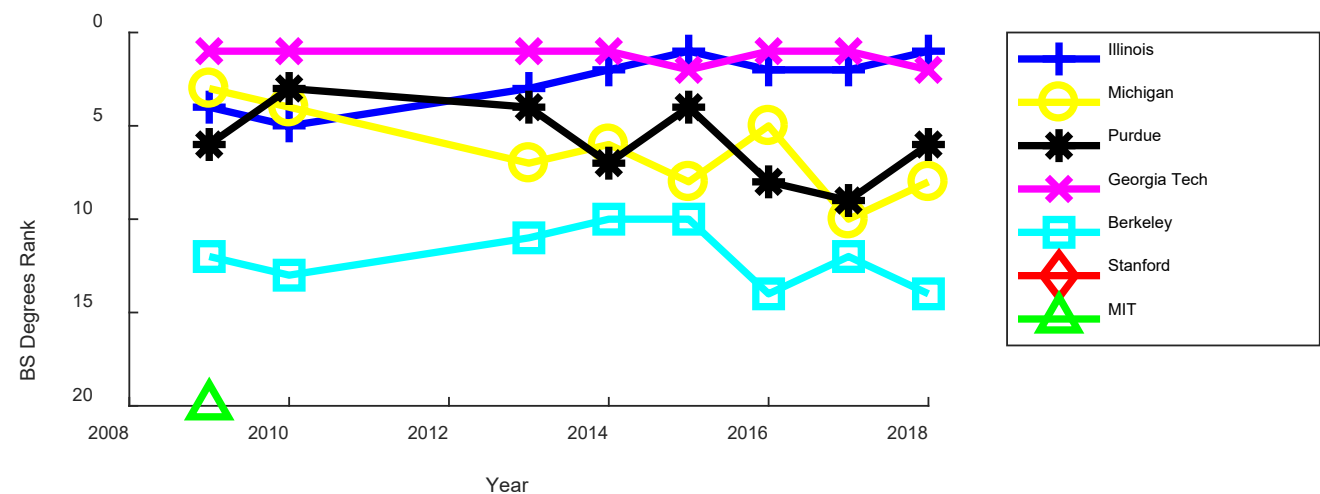
Prof. Wissa and Dunn (MechSE) and Alleyne (Entomology) publish on self righting robots. Team includes students from Illinois and Uni High. *Photo courtesy of Illinois News Bureau*

- From 2009-2018, we significantly grew the number of female graduates with a BS degree from our College from 165 to 464; our percentage grew from 14% to 19.5% - we had an amazingly dedicated effort to achieve these incredible successes
- The national average grew from 18% to 21.9% – so, we still have work to do in striving for gender parity at scale
- Our female faculty count grew tremendously, from 44 to 78, i.e., 10.5% to 17.3%
- National average grew: 12.7% to 17.4%
- Our African-American/Black faculty count grew from 9 to 11, i.e., 2.2% to 2.4%
- National average flat: 2.5% to 2.4%
- Our Hispanic/Latino faculty count grew from 11 to 20, i.e., 2.6% to 4.4%
- National average flat: 3.5% to 3.7%

Number of BS degrees

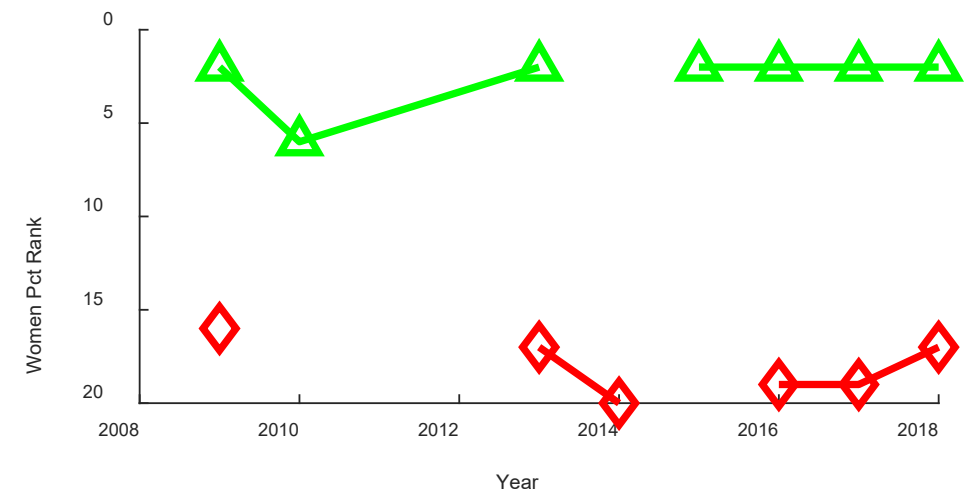
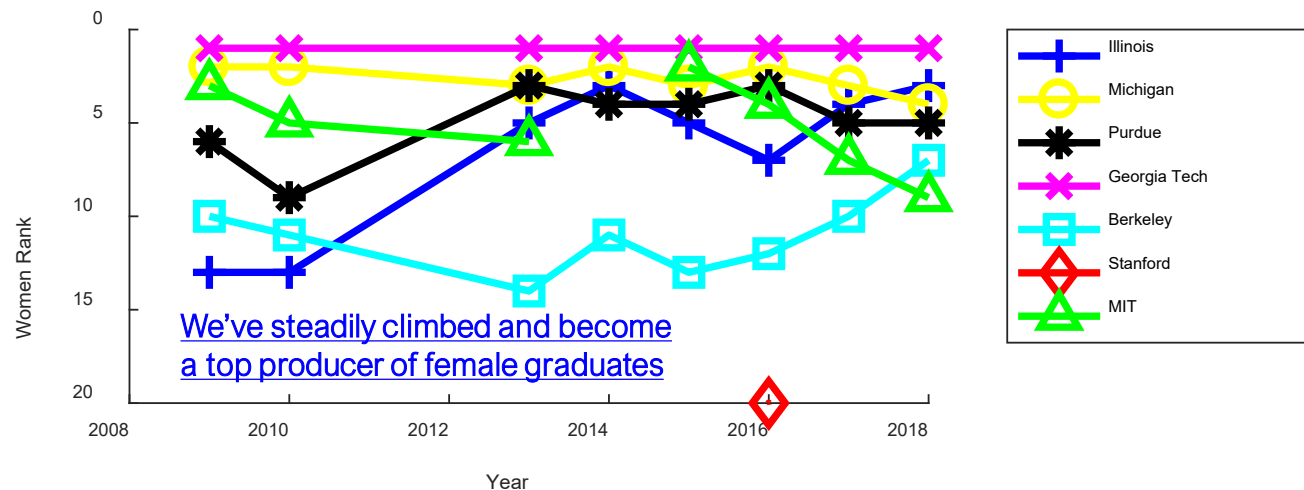
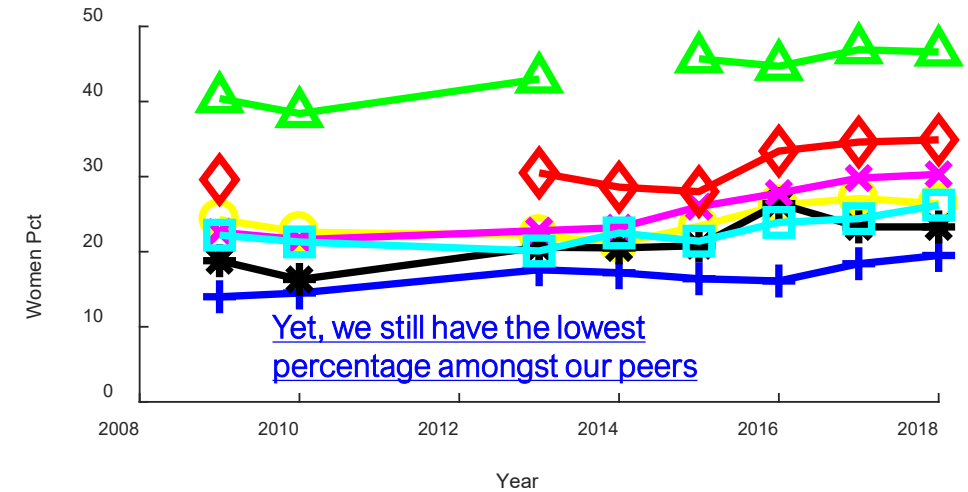
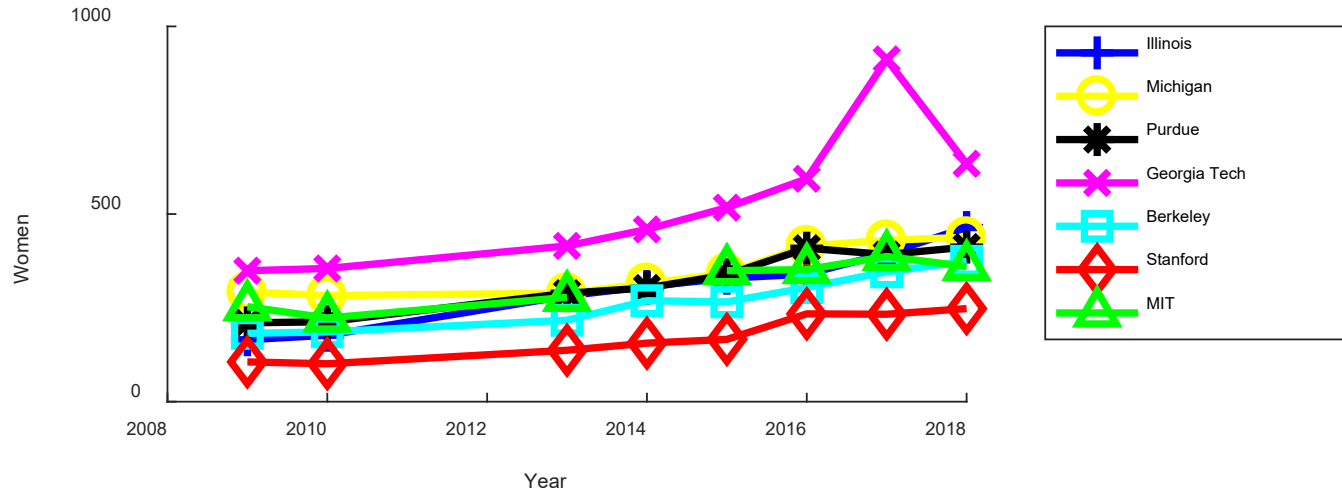


Georgia Tech
had a reporting
blip in 2017



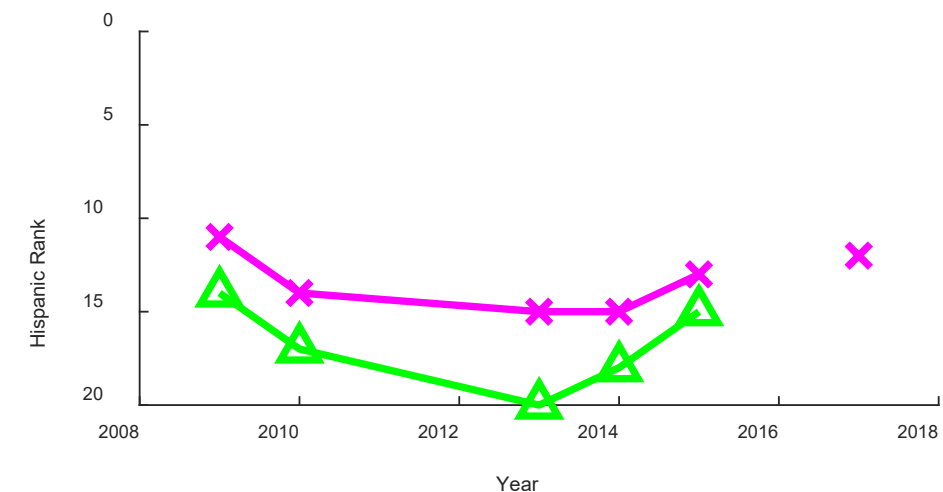
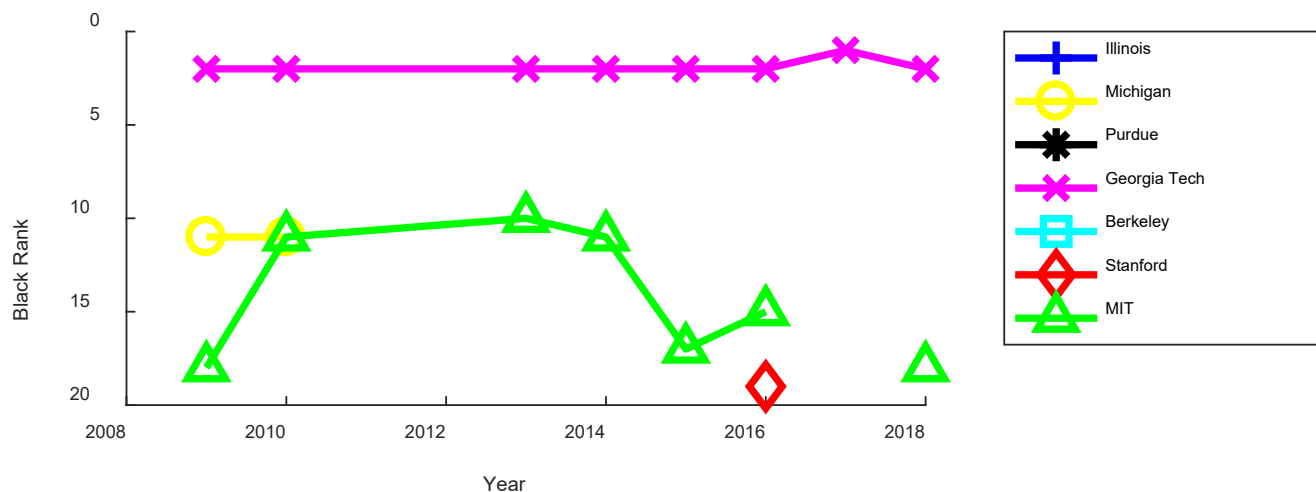
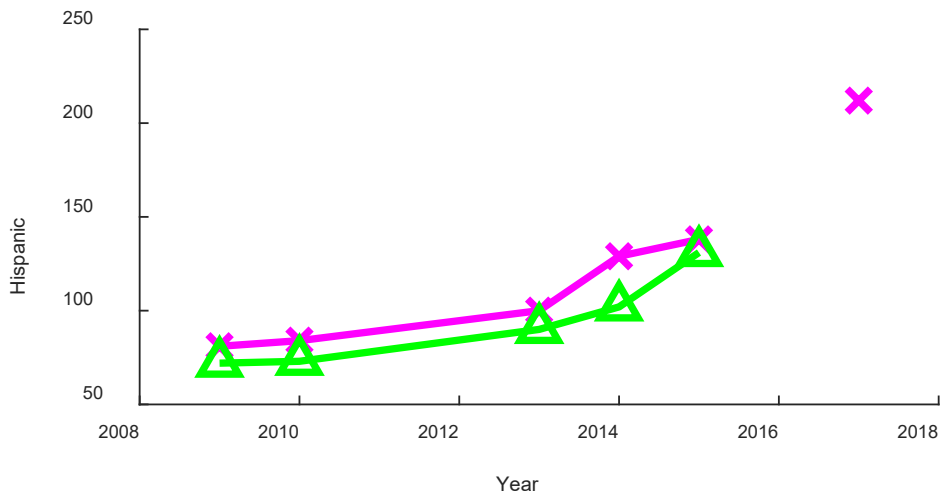
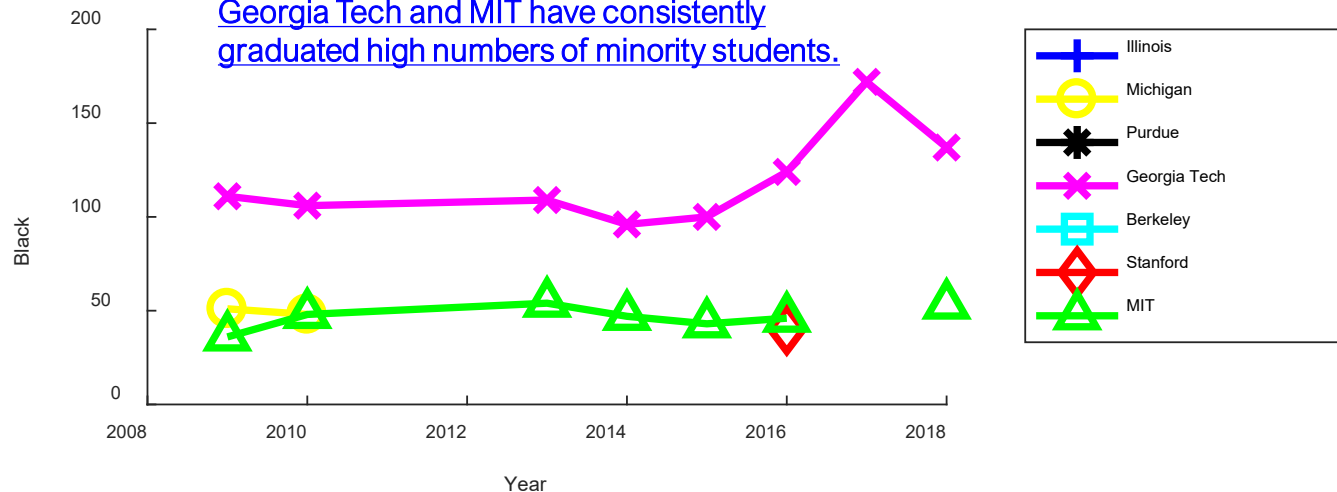
¹ ASEE reports 2009-2010, 2013-2018

Gender Diversity (BS degrees)



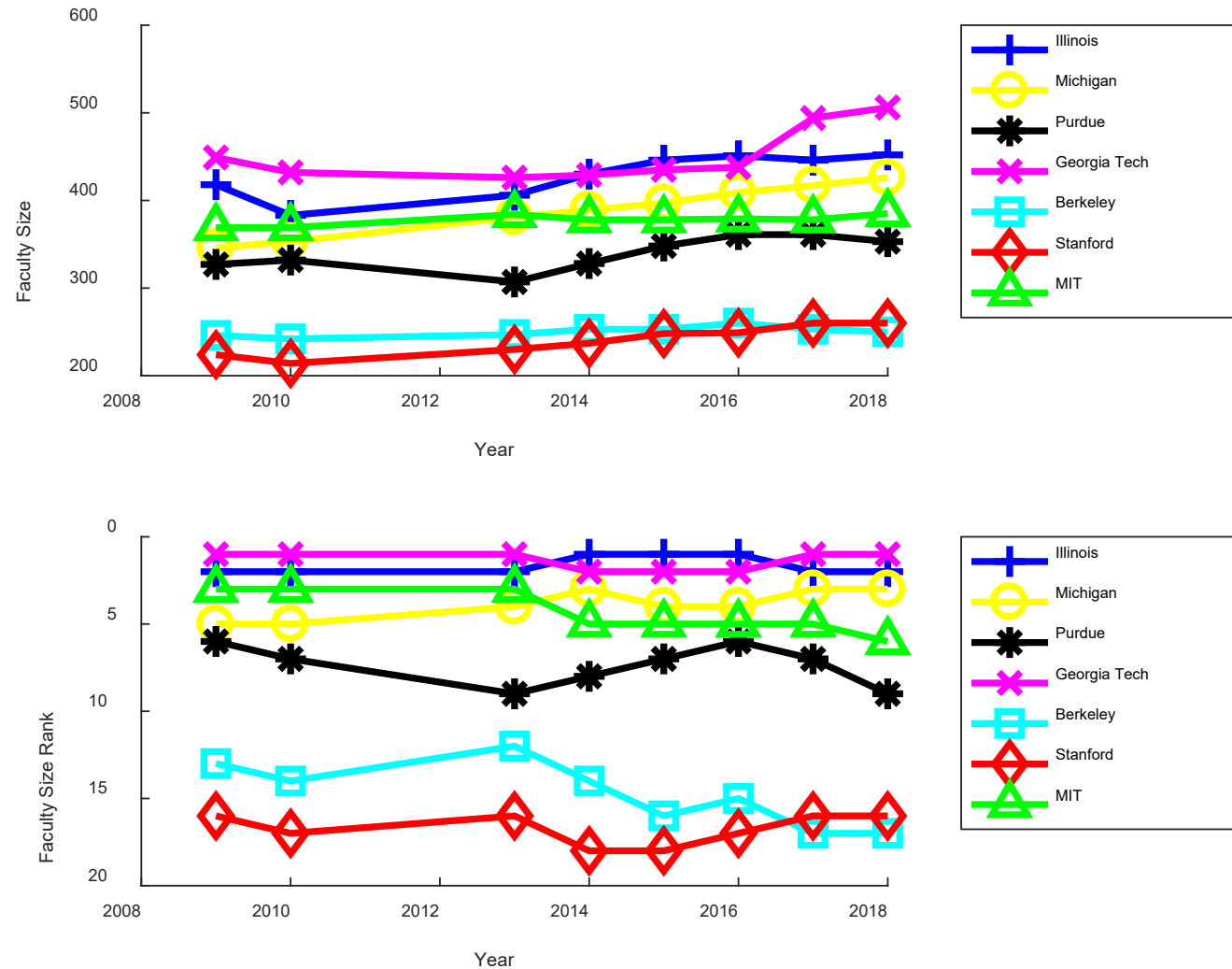
Racial/Ethnic Diversity (BS degrees)

Data is only tabulated for top 20 schools. Only Georgia Tech and MIT have consistently graduated high numbers of minority students.



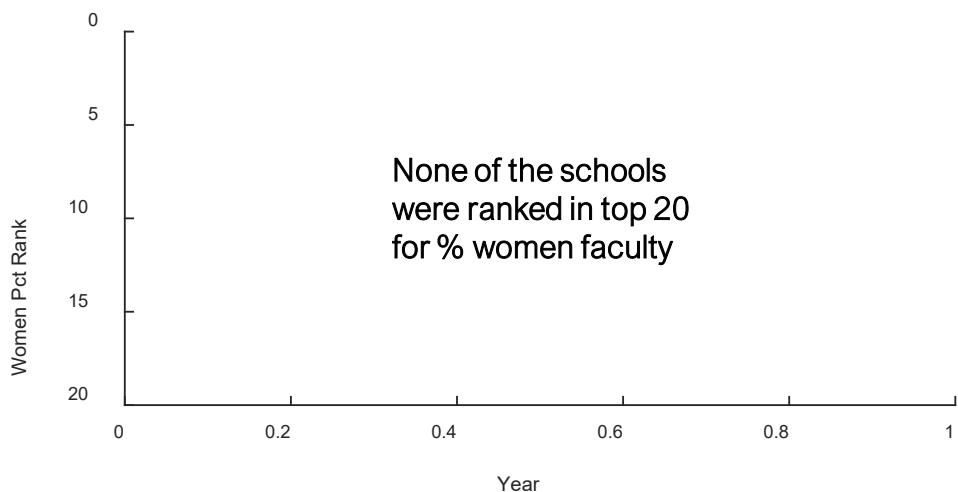
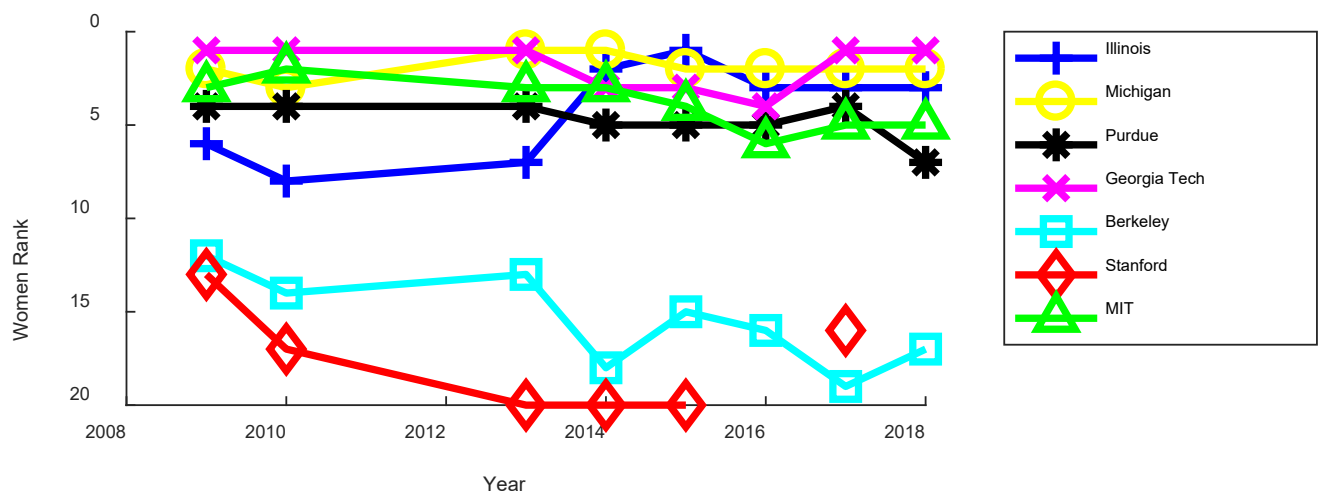
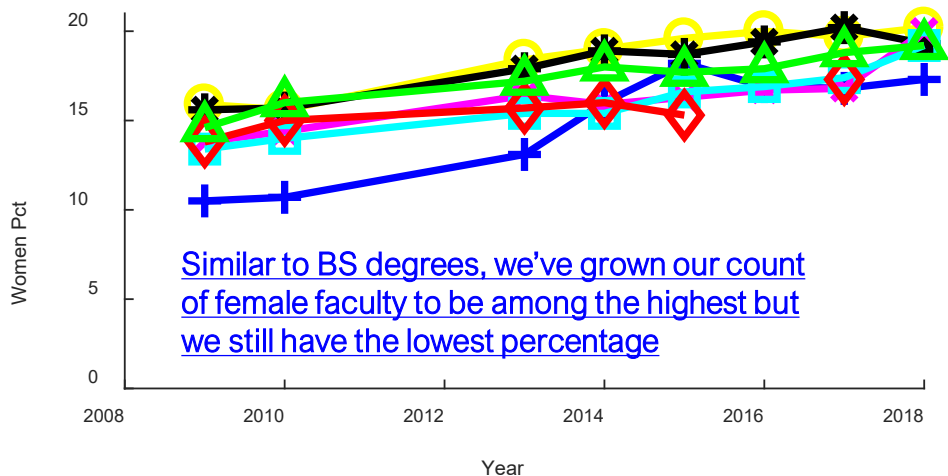
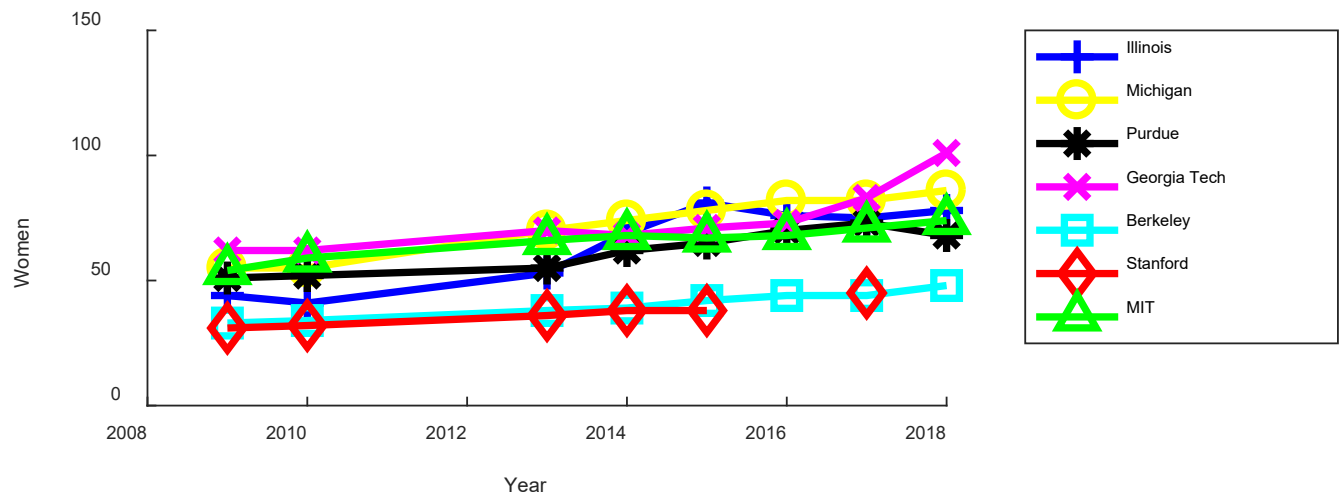
No data available for racial/ethnic diversity of graduate programs

Number of T/TT Faculty



¹ ASEE reports 2009-2010, 2013-2018

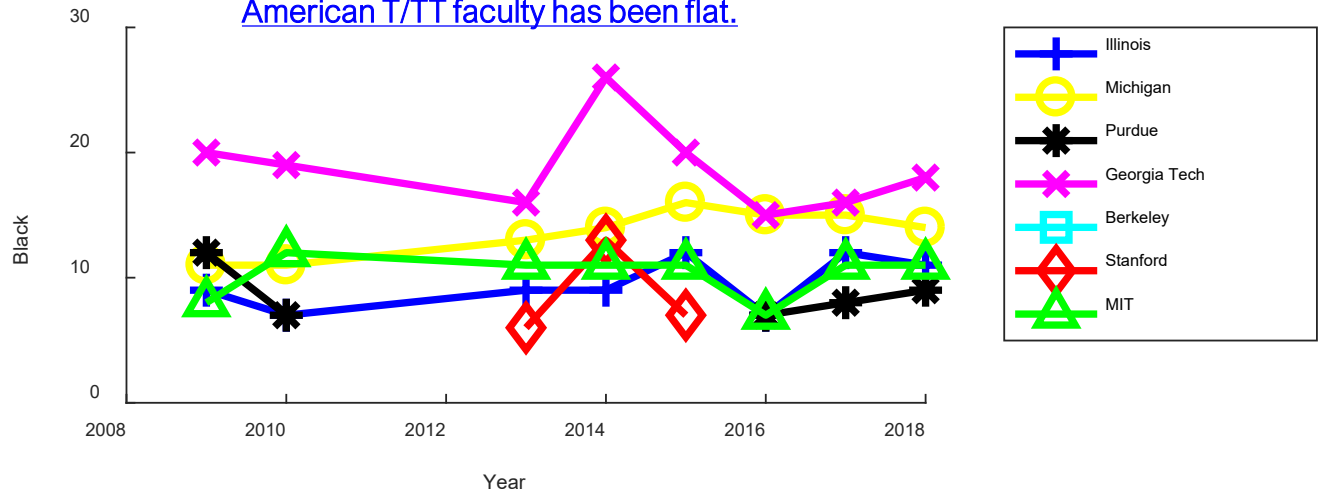
Gender Diversity (T/TT Faculty)



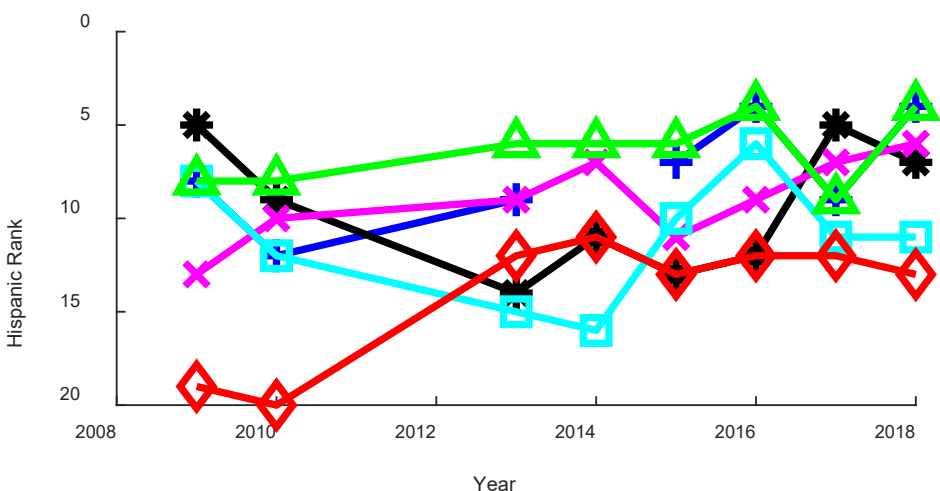
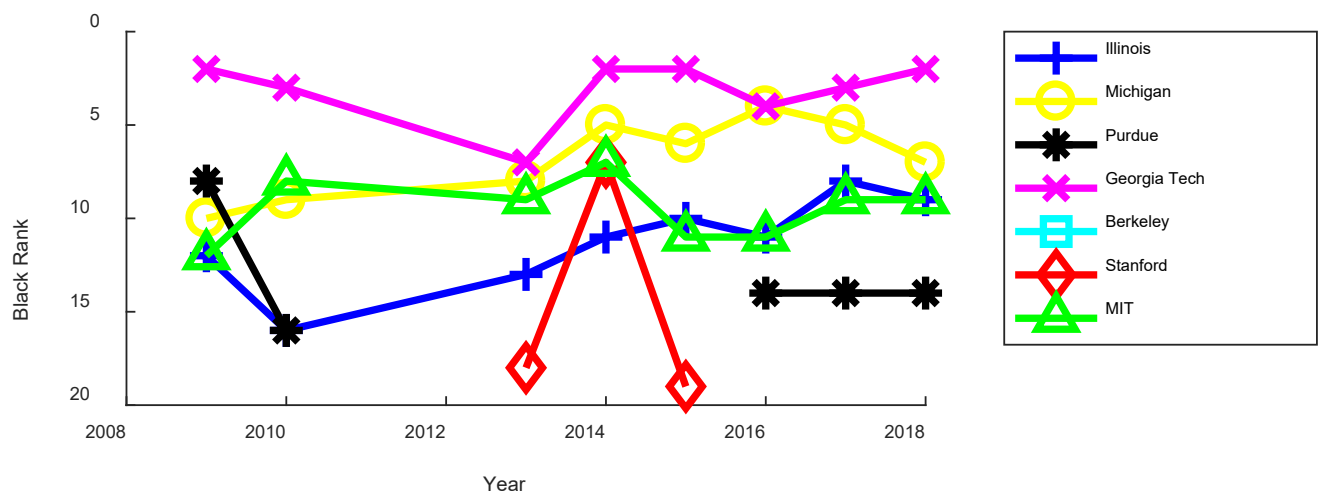
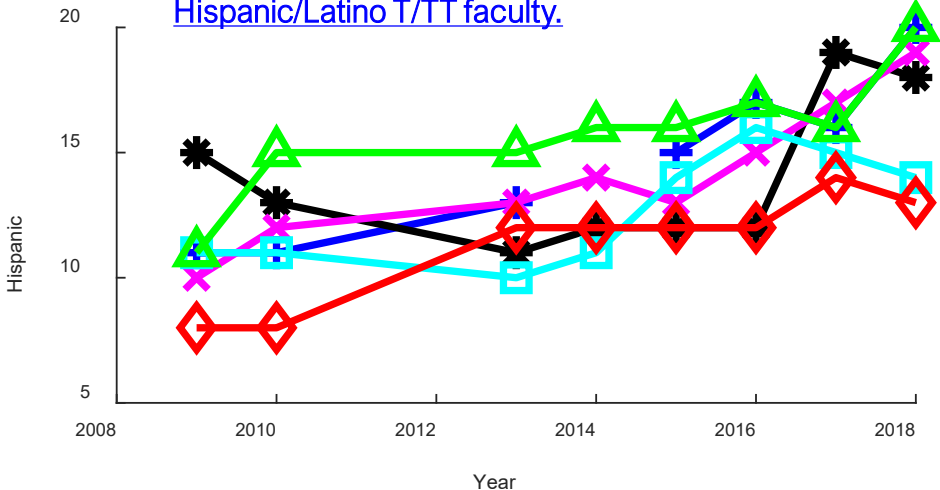
¹ ASEE reports 2009-2010, 2013-2018

Racial/Ethnic Diversity (T/TT Faculty)

Our count and percentage of Black/African-American T/TT faculty has been flat.



We've grown in count and in percentage of Hispanic/Latino T/TT faculty.



¹ ASEE reports 2009-2010, 2013-2018

- Conduct scholarly research, including evaluation/assessment
- Understand climate and how our practices affect IDEA
- Study the integration of diversity in engineering education
- Enable teams of faculty, staff, and students to create or sustain initiatives that address the Institute's core mission
- Organize workshops, bring thought-leaders to campus, and disseminate best practices through publications
- Support the development and implementation of broadening participation activities in proposals

- Advise department and college leadership; co-develop cohesive plans to increase expectations and accountability
- Serve as a point contact for campus/external diversity initiatives and partnerships
- Implement recommendations of the Grainger College Diversity Committee
- Help to institutionalize best practices

Structure

- Permanent staff: Director, Research Faculty Member, and Assistant Director/Program Manager
- Student interns: undergraduates and graduates
- Advisory board: College Diversity Committee
- Core members: Faculty, staff, and students from across campus whose primary research, teaching, or service is focused on inclusion, diversity, equity, or access
- Affiliate members: Faculty, staff, and students who are committed to helping to implement or institutionalize best practices to address key issues





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How can I be involved?

1. Visit the idea.illinois.edu website
 - Apply to be an affiliate or a core member
 - Learn about diversity-related events on campus
 - Find programs or resources to contribute to or benefit from
 - Help organize or attend upcoming workshops topics on
 - Leveraging broadening participation activities for proposals
 - Bias training for faculty search committees
 - Join a task force or assist on a project
2. Form a team and propose to the [Grassroots Initiatives to Address Needs Together \(GIANT\)](#) program

- GIANT is built upon the College's Strategic Instructional Innovations Program (SIIP) model, which competitively awards grants and also provides mentors to teams of faculty to work on education innovation
- GIANT seeks to not only support faculty-led teams, but also teams led by staff or students, and even collaborations of RSOs. Teams identify and address needs pertaining to inclusion, diversity, equity, or access and document best practices
- Up to 4 projects, each at the \$12-15K level will be supported. At least 2 will be for student-led teams or multi-RSO collaborations
- Proposals (2 page narrative + budget spreadsheet) are due March 4
- Projects start March 16 and run through December 31



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