Redefining Equity in STEM

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What is Diversity, Inclusion & Equity?

Definitions

- **Diversity** – includes all the ways in which people differ, encompassing the different characteristics that make one individual or group different from another. (race, abilities, SES, gender, appearance, etc.)

- **Inclusion** – is the act of creating environments in which any individual or group can be and feel welcomed, respected, supported, and valued to fully participate.

- **Equity** – the elimination of barriers that have prevented the full participation of some groups.
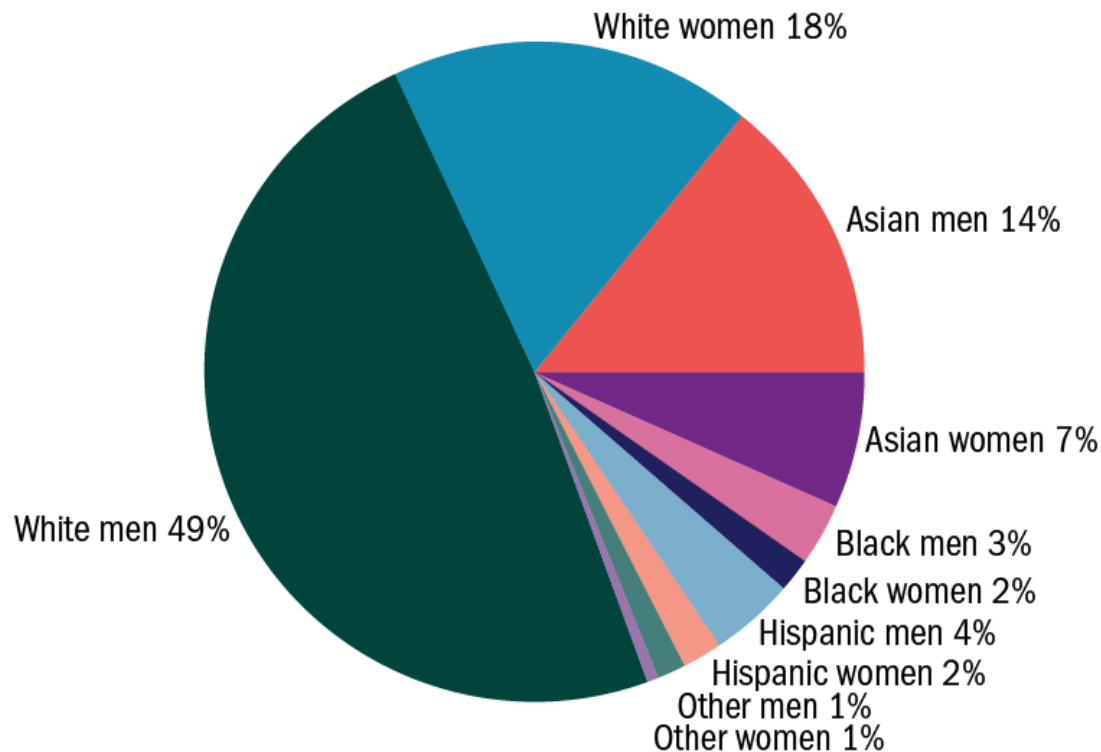
Let's Define URM

- Who does it include?

- Why are URMs important in STEM?

Scientists and engineers working in science and engineering occupations: 2015

White women 18%

Asian men 14%

Asian women 7%

Black men 3%

Black women 2%

Hispanic men 4%

Hispanic women 2%

Other men 1%

Other women 1%

White men 49%

NOTES: Hispanic may be any race. Other includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and multiple race.
Women, Minorities, and Persons with Disabilities in Science and Engineering: 2017

Why is diversity (URMs) important in STEM?

- Not enough graduates to fill STEM jobs. Need to produce one million more (36% more) STEM professionals in the next decade.

- Underrepresentation of students of color completing STEM majors.

- Minority groups will soon be the majority.

- Negative impact the workforce, the economy and the ability for the country to compete globally.

- Limits social mobility opportunities and economy.

In this session we will...

Discuss equity barriers in science and engineering.

Provide suggestions for building supportive and equitable infrastructure and environments for students, staff and faculty.

Challenges for URMs in STEM

_____

Students

Inputs (academic, cultural, socioeconomic, age, lived experience, transfers, family obligations, varied normality, disabilities, privilege)

Environments (campus culture, supportive faculty/staff, research opportunities, adequate mentor, inclusivity of students - sense of belonging, validation, "funds of knowledge" etc.)
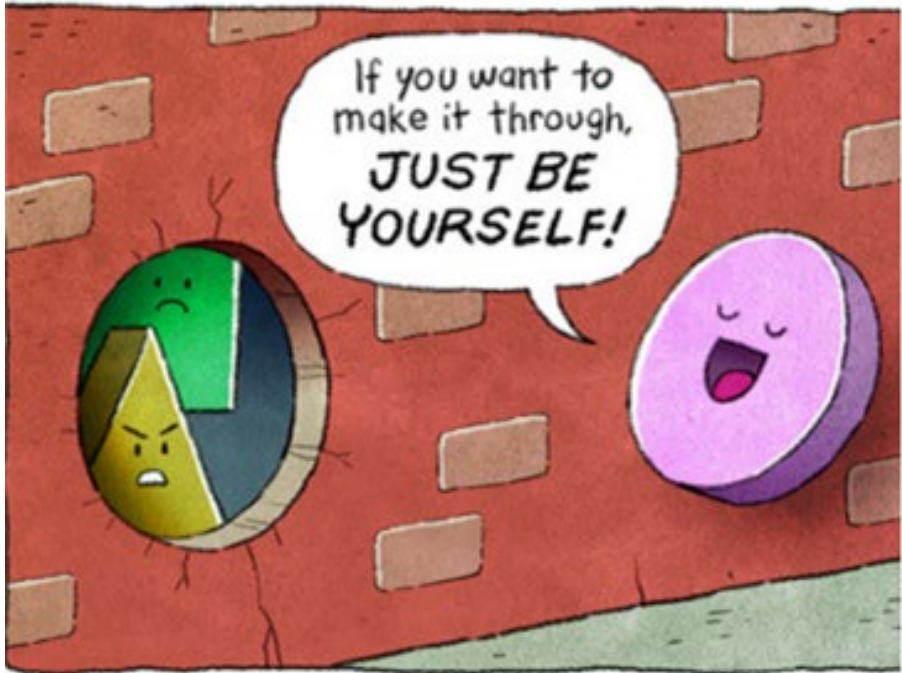
Faculty

URM faculty were once URM students

Ancillary expectations (to champion efforts, mentor, 'token' duties, etc.)
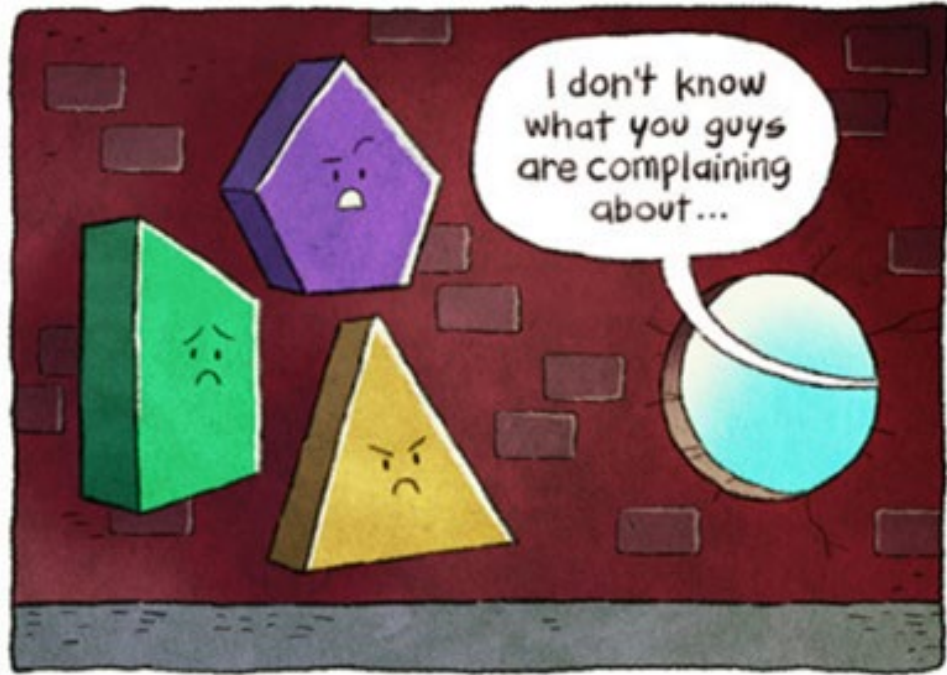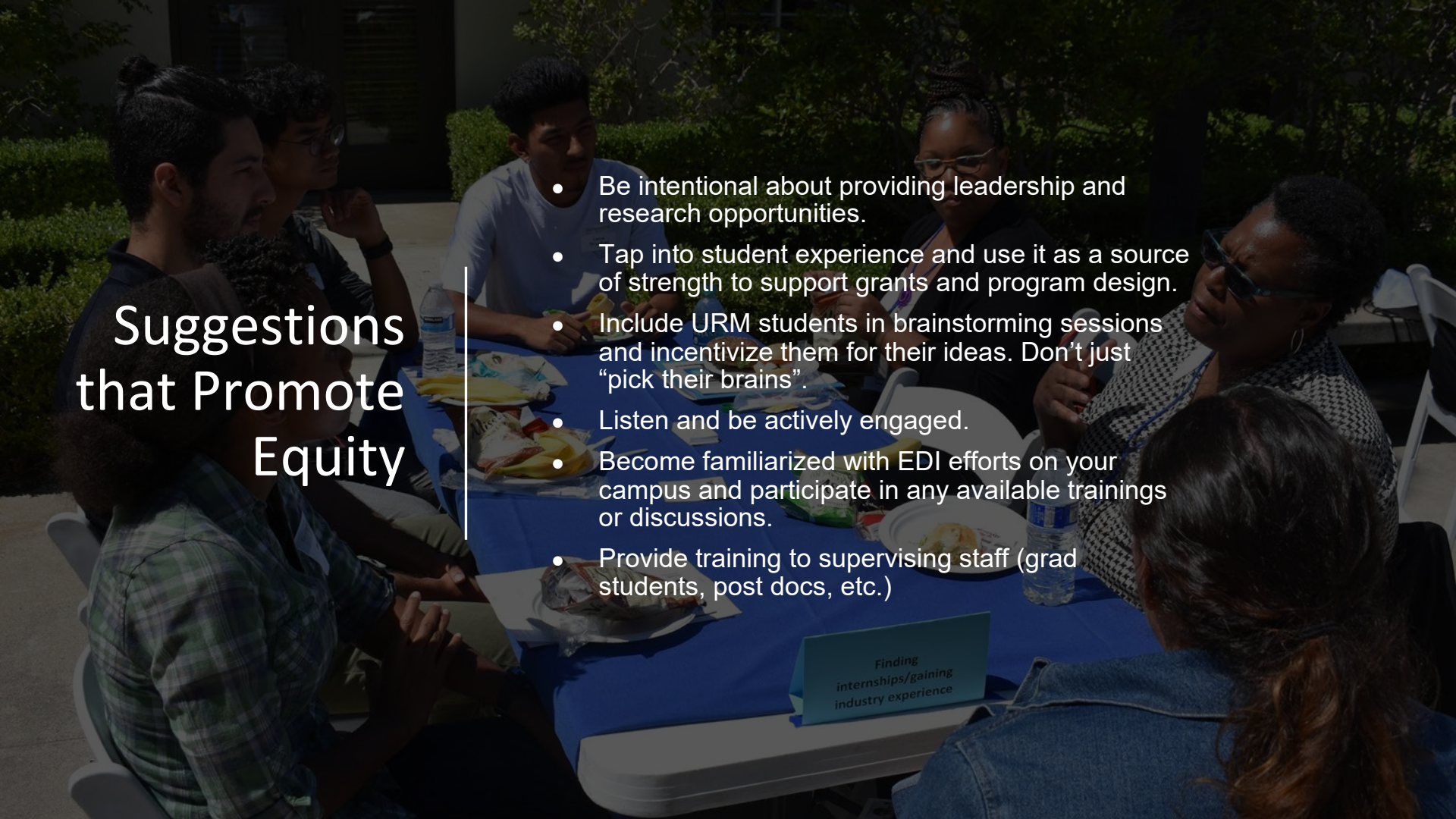
Often depended on by URM students

How things have been designed   vs. How things have panned out

Suggestions that Promote Equity

- Be intentional about providing leadership and research opportunities.

- Tap into student experience and use it as a source of strength to support grants and program design.

- Include URM students in brainstorming sessions and incentivize them for their ideas. Don't just "pick their brains".

- Listen and be actively engaged.

- Become familiarized with EDI efforts on your campus and participate in any available trainings or discussions.

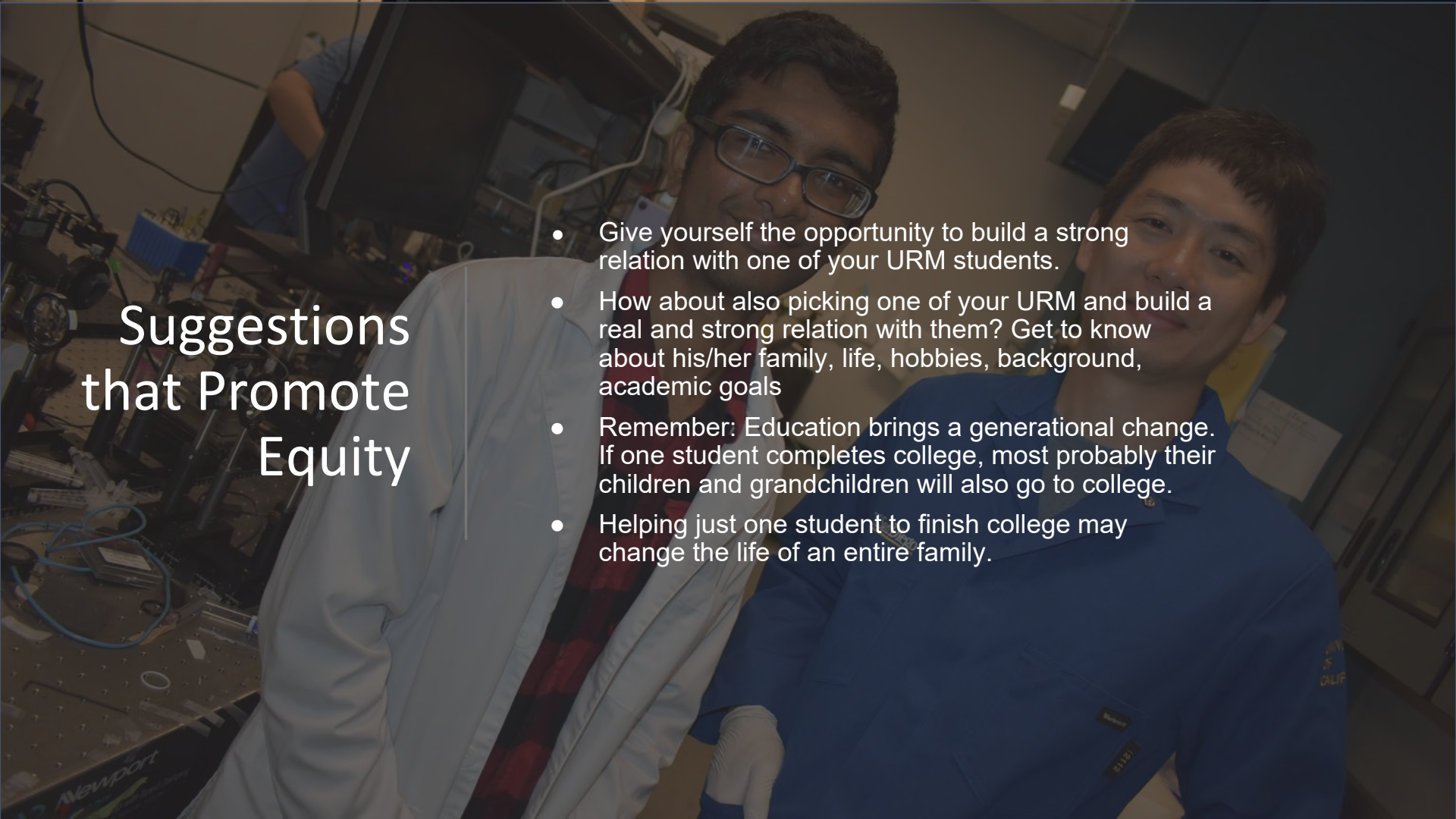- Provide training to supervising staff (grad students, post docs, etc.)

Finding
internships/gaining
industry experience

Suggestions that Promote Equity

- Try to build real mentor-mentee relations

- Most URM programs are evaluated by numbers, by how many URM participated in a program. Quantity is important, but let's not forget about quality

- Real mentor-mentee relations can help us to get a better understanding of the reality and challenges that URM communities face and to build bridges across different communities.

- Ask them if they are first generation in their family to attend college, if they work to support themselves or their families. Try to discover by yourself some of the real challenges that URM students have faced in life.

Suggestions that Promote Equity

- Give yourself the opportunity to build a strong relation with one of your URM students.

- How about also picking one of your URM and build a real and strong relation with them? Get to know about his/her family, life, hobbies, background, academic goals

- Remember: Education brings a generational change. If one student completes college, most probably their children and grandchildren will also go to college.

- Helping just one student to finish college may change the life of an entire family.

Let's do our part to redefine equity in STEM and increase a sense of belonging, validation, engagement and productivity.

Thank you!

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