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ICALEPCS



Founders of ICALEPCS (mid-1980s)

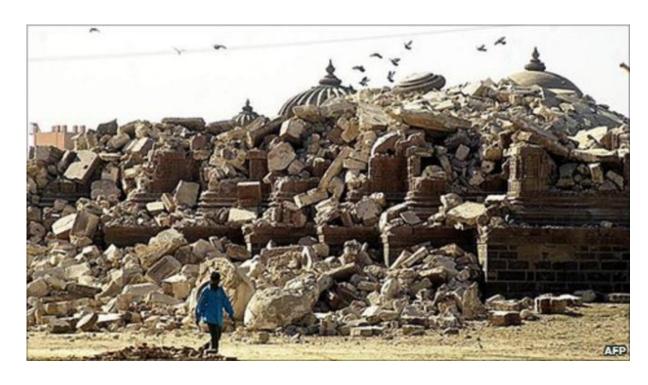


ICALEPCS 2019 International Scientific Advisory Committee and Local Organizing Committee

Motivation

- Studies show diverse workgroups are more productive, more innovative, more creative
- Companies now invest in building a diverse workforce because studies show, this increases their profits
- What happens when we workgroups are not diverse?

Disasters



Earthquake Gujarat 2001

Tsunami Sri Lanka 2004





Automotive Safety

• In the US, first mandatory car safety testing began in 1973

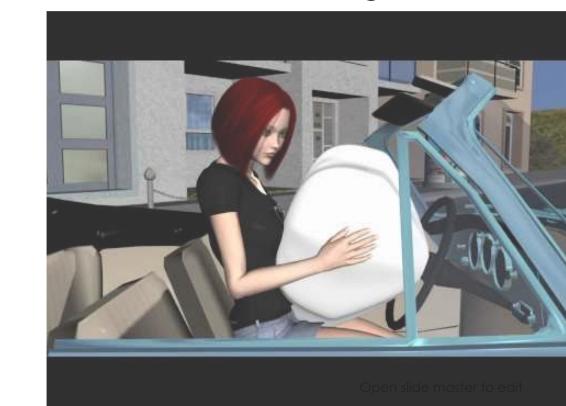
Tests used only average male size crash dummies (5'8" 165 pounds)

 Airbags have saved a lot of lives, but initially caused some injuries and deaths to shorter drivers (sitting too close to the steering wheel

< 10")

 Testing requirements changed to include women and child size dummies in 2011

 We now have "smart airbags" with deployment pressure and speed modified according to the size of the occupant



Medical Care

- Vast majority of medical studies conducted on white males
- Data used to determine diagnosis and treatment protocols
- Medical care based on this data bias is optimized for 31% of the population
- This data bias has led to
 - Women receiving excessive medication dosages
 - Women treated based on normal blood levels for men
 - Misdiagnosis and inadequate treatment
 - Heart attacks in women often missed in the ER because they often have different symptoms which men symptoms



Implicit Bias

- Also called unconscious bias
- Limits are ability to become more inclusive
- Learn about your bias
 - https://implicit.harvard.edu/implicit/
- Reflects our learned stereotypes rather the values we believe we live by
- Affinity Bias people are generally more comfortable with people similar to themselves – your "comfort zone"

Social and cultural factors

- Girls and boys treated differently from birth
- Gendered language, toys, clothing, activities, roles
- Girls steered away from math, science and engineering
- Boys encouraged, easily viewed in STEM roles
 - Most role models are white males
 - Reinforced by media images
 - Powerful stereotypes

Men and women are treated differently



Dr. Ben Barres Neurobiologist 1954-2017

- Advocate for equality for women in science
- First openly transgender scientist in the National academy of Science (2013)
- Unique perspective from working in science as a woman and a man

Organizational bias

- Most organizations now recognize the boundaries in place limiting diversity in STEM fields
- Historically, approached as a problem for HR, women and minorities
- Women encouraged to be more like men
- Misguided notion that would limit the value diversity brings
- You can't "fix' the women they are not broken
- We have to fix our biased organizations
- Diversity is not a problem, but rather an opportunity for organizations to excel



Why are you successful?

- Intelligence?
- Hard work?
- Lucky breaks?
- Fortunate opportunities?
- Opportunities = Advantages = Privilege
- Privilege is usually comes from factors you did not control
- Most privilege is shared by the dominant group with others in the dominant group
- Real change requires the dominant group to become allies for diversity and extend their privilege equitably



Extend your privilege

- Work toward equity in career building business practices
 - Hiring
 - Professional development
 - Mentoring
 - Recommendations
- Speak out against inequitable practices
- Include women and minorities in decision making committees
- Build accountability into organizational processes

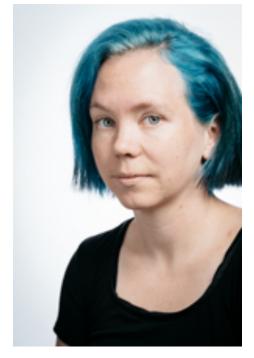
More on Diversity and Inclusion

Breaking Down Barriers to Diversity and Inclusion

Panel Discussion

Wednesday 10/9/19

2:30 – 4:00 PM Allan Casey



Allison Bishop



Allan Casey



Florence Hudson

