

GRACE HOPPER
CELEBRATION



PLEASE SIT IN
YOUR REGION



#GHC18



AVOID COMMON PITFALLS AND MAKE YOUR D&I EFFORTS COUNT

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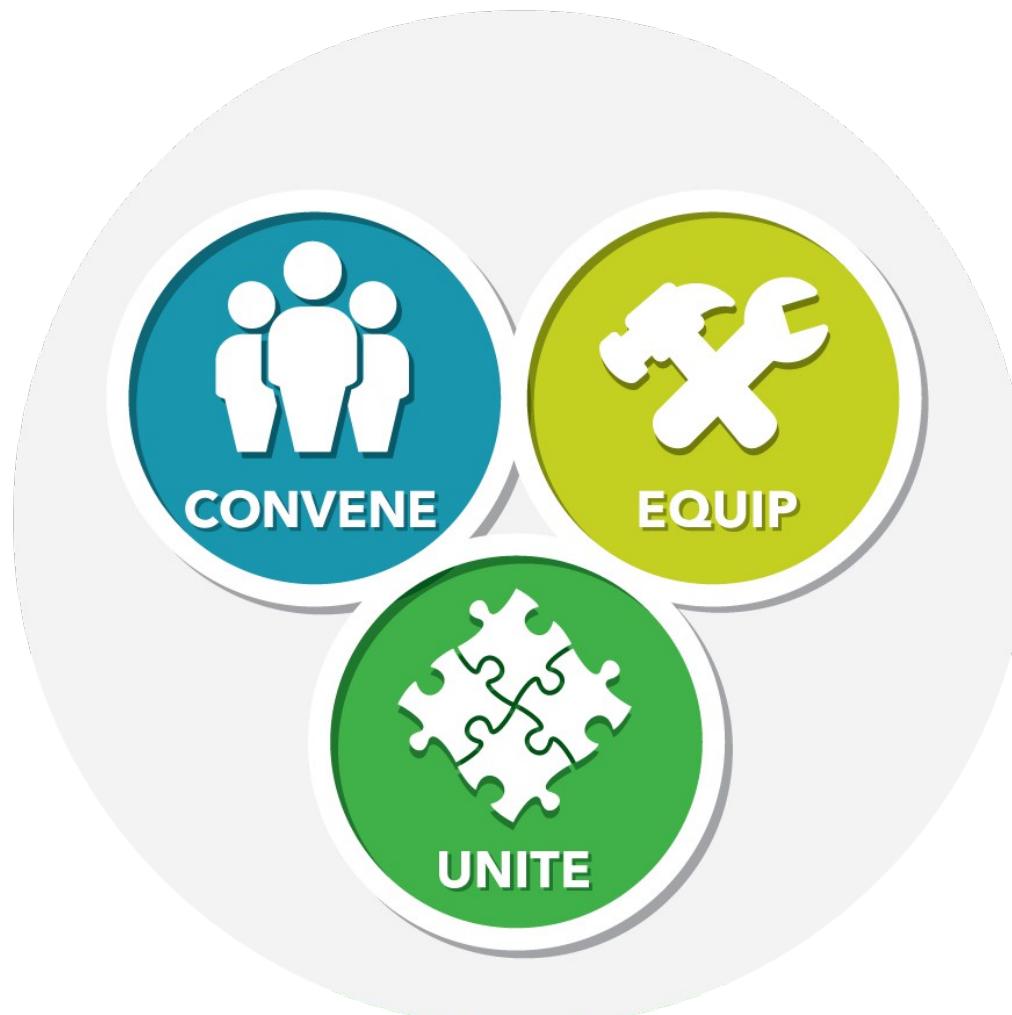
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#GHC18

NATIONAL CENTER FOR WOMEN & IT (NCWIT)



WHAT WILL YOU DO TODAY?



Learn 10 tips



Discuss with organizations in your region how to apply these tips for collective impact



Identify one BIG idea for regional collaboration

LEARN FROM HISTORY OR REPEAT IT

Research-based approaches can help us stop repeating the mistakes of the past:



- ✓ Lack of **ownership and accountability** by senior **technical** leadership
- ✓ Reliance on “**piecemeal**” rather than **systemic, multi-pronged** change efforts
- ✓ Embrace of “**checkbox**” or trendy **diversity solutions**
- ✓ Overattention to **unrealistic or inappropriate** metrics

AS WE GO, CONSIDER.....

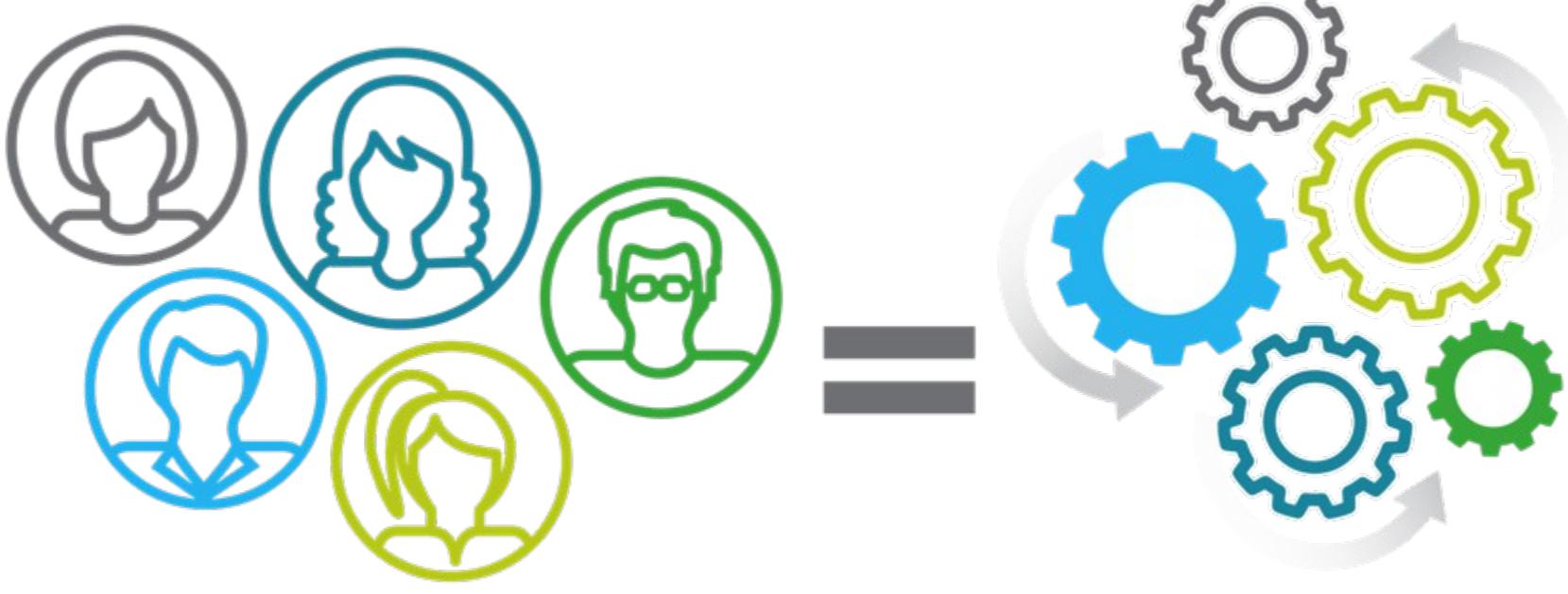
- ✓ Strengths and weaknesses of your efforts
- ✓ How you might implement missing elements
- ✓ How you might collaborate with others regionally to implement or accelerate some of these elements



**1. Have a clear rationale
and make sure people
know what it is!**

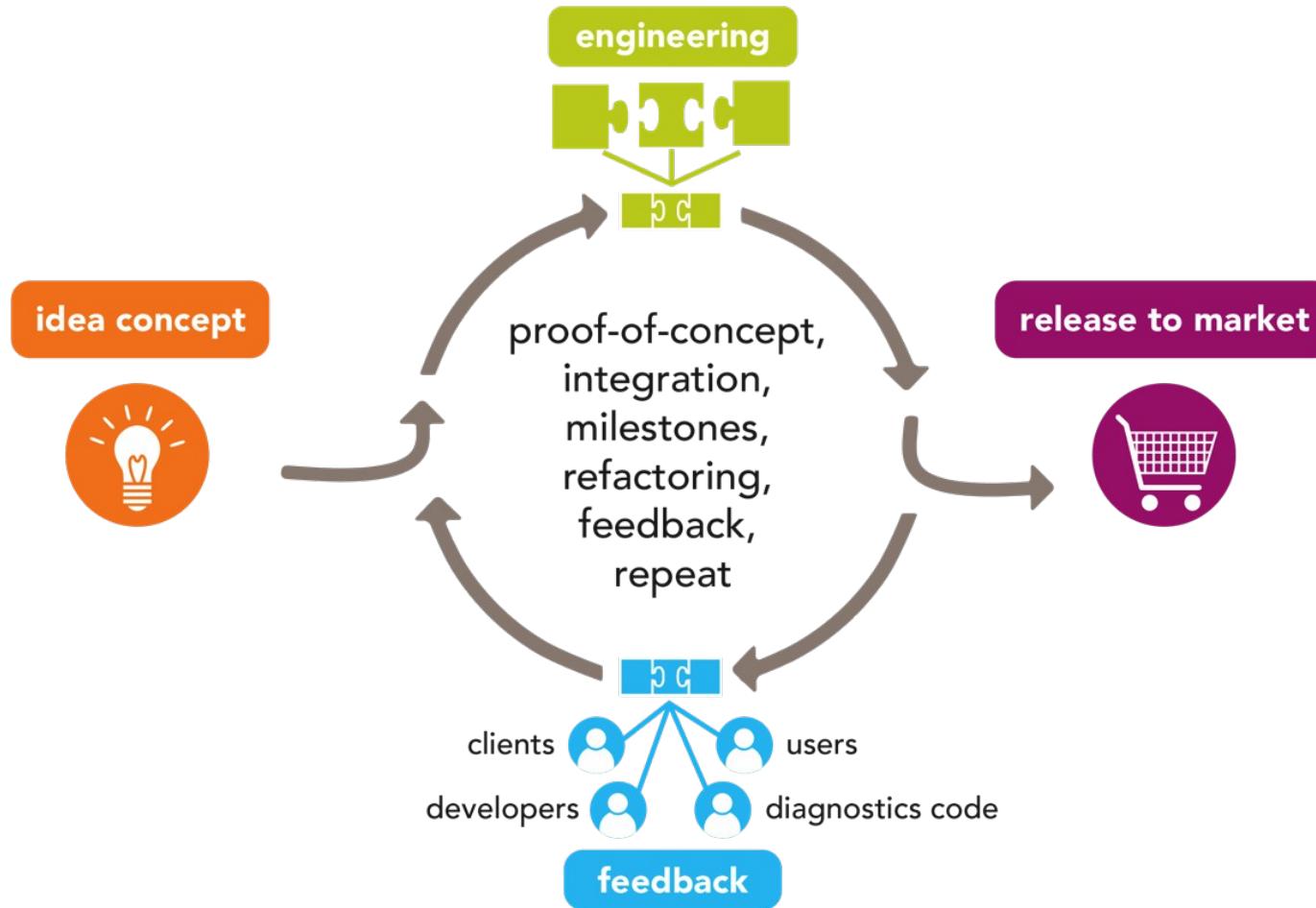
DIVERSITY BENEFITS CREATIVITY

Groups with **greater diversity** solve complex problems **better and faster** than homogenous groups.



Scott Page, The difference: How the power of diversity creates better groups, firms, schools, and societies, Princeton University Press, 2009.

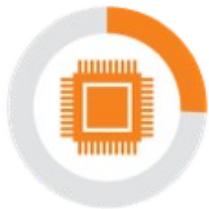
DIVERSE & INCLUSIVE TEAMS IN ALL ASPECTS OF TECHNOLOGY RESEARCH & INNOVATION



DIVERSITY IN TECH: THE FACTS



Women Comprise 57% of Professional Occupations



Women Hold 26% of Computing Jobs



Women Make Up 19% of Software Developers



Women Make Up 17% of Computer Hardware Engineers

Source: U.S. Dept of Labor Statistics, 2017 Current Population Survey

DIVERSITY IN TECH: THE FACTS



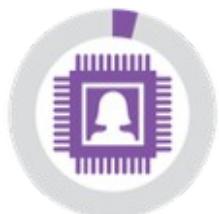
Black & Hispanic Professionals Comprise 20%
of Professional Occupations,



but **32% of U.S. Population**



Black & Hispanic Men Hold 11% of Computing Jobs



Black & Hispanic Women Hold 4% of Computing Jobs

Source: U.S. Dept of Labor Statistics, 2017 Current Population Survey

**2. Focus on fixing
systems not people**

WHAT DO WE MEAN BY FIXING PEOPLE?



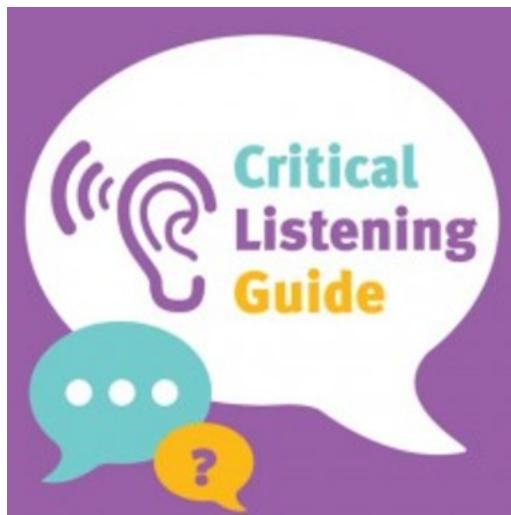
For Women To Rise We Must Close
'The Confidence Gap'

How to Take Charge of Your Career

Women's Negotiation Academy
Creating Skilled and Sophisticated Negotiators

FIXING X EOPLE

PROFESSIONAL DEVELOPMENT GOOD FOR EVERYONE BUT WILL NEVER FIX SYSTEM



the guardian

US world opinion sports soccer tech arts lifestyle fashion business travel environment ≡ all sections

The female 'confidence gap' is a sham
Jessica Valenti

A screenshot of a Guardian article. The title is "The female 'confidence gap' is a sham" by Jessica Valenti. Below the title is a small portrait photo of Jessica Valenti, a woman with long brown hair, smiling. The background of the article area is light grey.

The Washington Post

ComPost | Opinion

Famous quotes, the way a woman would have to say them during a meeting.

A 1029 Save for Later Reading List

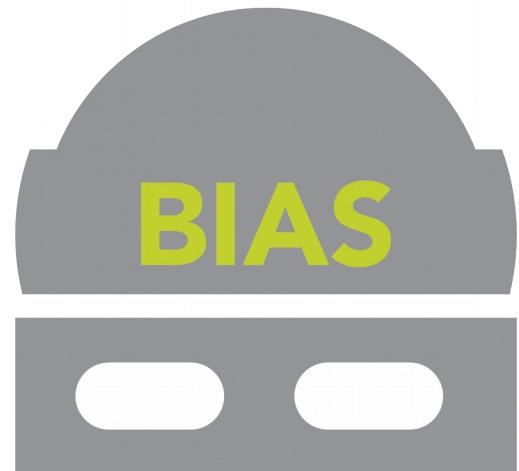
By Alexandra Petri October 13, 2015 Follow @petridishes

Most Read

A screenshot of a Washington Post article. The title is "Famous quotes, the way a woman would have to say them during a meeting." by Alexandra Petri. The article has 1029 saves. At the bottom, there are links for "Save for Later" and "Reading List". Below the article, it says "By Alexandra Petri October 13, 2015 Follow @petridishes". On the right side, there is a "Most Read" sidebar.

LET'S CUT TO THE CHASE

- ✓ Minority groups aren't broken.
- ✓ Majority groups aren't the enemy.
- ✓ The culprit is **societal bias** (shared by both women and men) that manifests itself in technical cultures.
- ✓ We know what to do and should take action together.



WHAT FIXING SYSTEMS LOOKS LIKE

Examining & Reducing Bias in:

- ✓ Job Ads
- ✓ Interviewing & Selection Processes
- ✓ Performance Evaluation Criteria
- ✓ High Potential Criteria
- ✓ Task Assignment Patterns
- ✓ Interruptions in Meetings



3. Avoid checkbox solutions

WHAT DO THEY LOOK LIKE? HOW DO YOU KNOW?

- ✓ Trendy, “quick-fix” or formulaic solutions
- ✓ Not connected to larger strategic vision or plan
- ✓ Little or no follow through
- ✓ Tied to unrealistic or ill-conceived metrics/goals



**4. Take a strategic,
multi-pronged approach**

SYSTEMIC STRATEGY

REMEMBER NOT JUST ONE THING!



TAKE THE TECH INCLUSION JOURNEY

Industry & Academic Change Models The Map

A research-based **model** to inform strategic change efforts in specific **focus areas**.



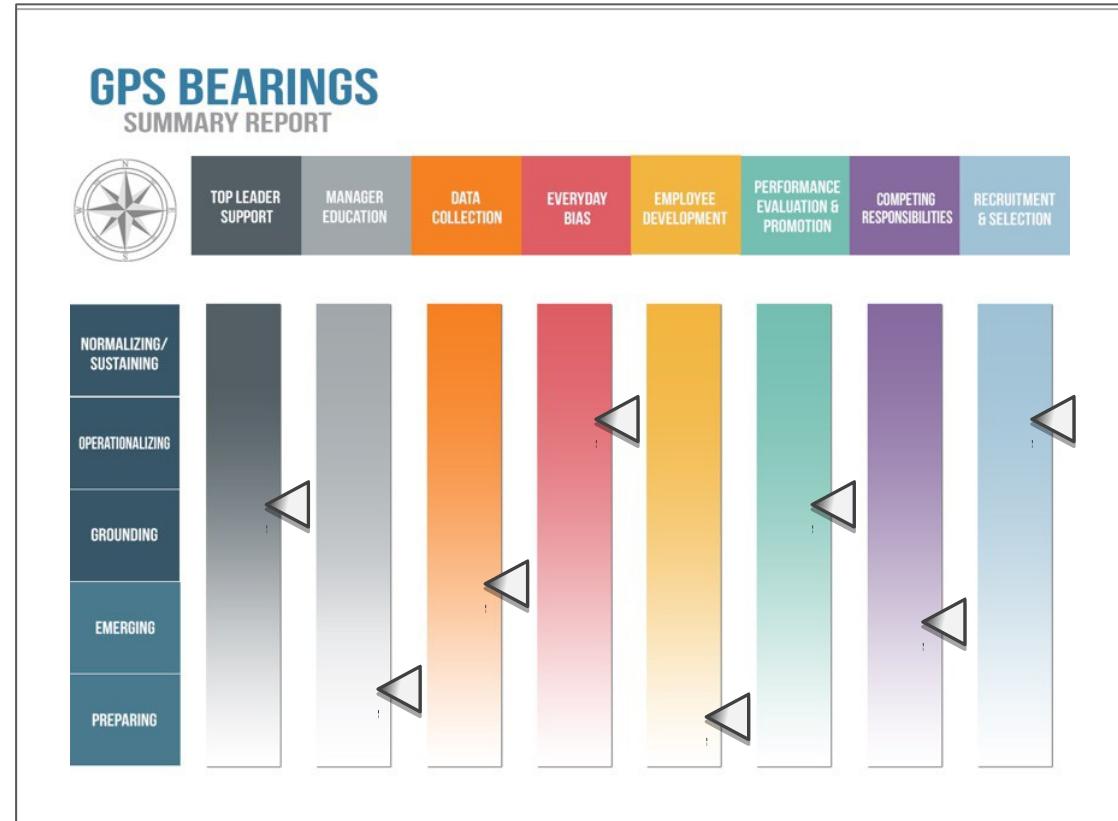
Industry & Academic Tech Inclusion GPS The GPS

A diagnostic tool for locating your organization's “bearings” on the **inclusion landscape**



GPS “BEARINGS” REPORT

- ✓ Assess org in each area of change model
- ✓ Determine your zone
- ✓ Identify actions to move to next zone



5. Involve Top *Tech* Leadership

TOP LEADERSHIP SUPPORT: WHAT DOES IT LOOK LIKE?

- ✓ Treat like any other critical business issue!
- ✓ Set goals & provide adequate resources
- ✓ Hold leaders accountable for meeting goals
- ✓ Can't be sole responsibility of HR or D & I



ASSESS YOURSELF WITH THE GPS: TOP LEADER OWNERSHIP & ACCOUNTABILITY

5 Zones

- ✓ Preparing
- ✓ Emerging
- ✓ Grounding
- ✓ Operationalizing
- ✓ Normalizing

Top Leadership Ownership & Accountability	
	Key Indicators <ul style="list-style-type: none">• How Leadership “Shows Up”• Staff and Budget Allocation• Shared Exec Understanding & Language• Shared Strategi Plan & Goals <p><i>Key: 2-5 Preparing; 6-9 Emerging; 10-13 Grounding; 14-18 Operationalizing; 19-20 Normalizing/Sustaining</i></p>
Preparing Zone 2-5	Leaders verbally supportive but not very familiar with research on bias & inclusion; Not actively involved in developing strategic vision or goal-setting and primarily hold others accountable for making change; Limited or no dedicated budget and staff
Emerging Zone 6-9	Sr. leaders stay for diversity events and may weigh in on strategy and goal-setting but still delegate responsibility & accountability to others; Some leaders beginning to learn about research on bias/inclusion; budget likely still under resourced and staff limited to D&I
Grounding Zone 10-13	At least one senior leader is actively involved and has begun to take personal ownership and accountability for strategic vision and goal-setting; Explicit efforts underway to develop a shared language among sr. exec team; adequate budget and HR/D&I actively work with tech personnel to make change

6. Develop a shared language and understanding

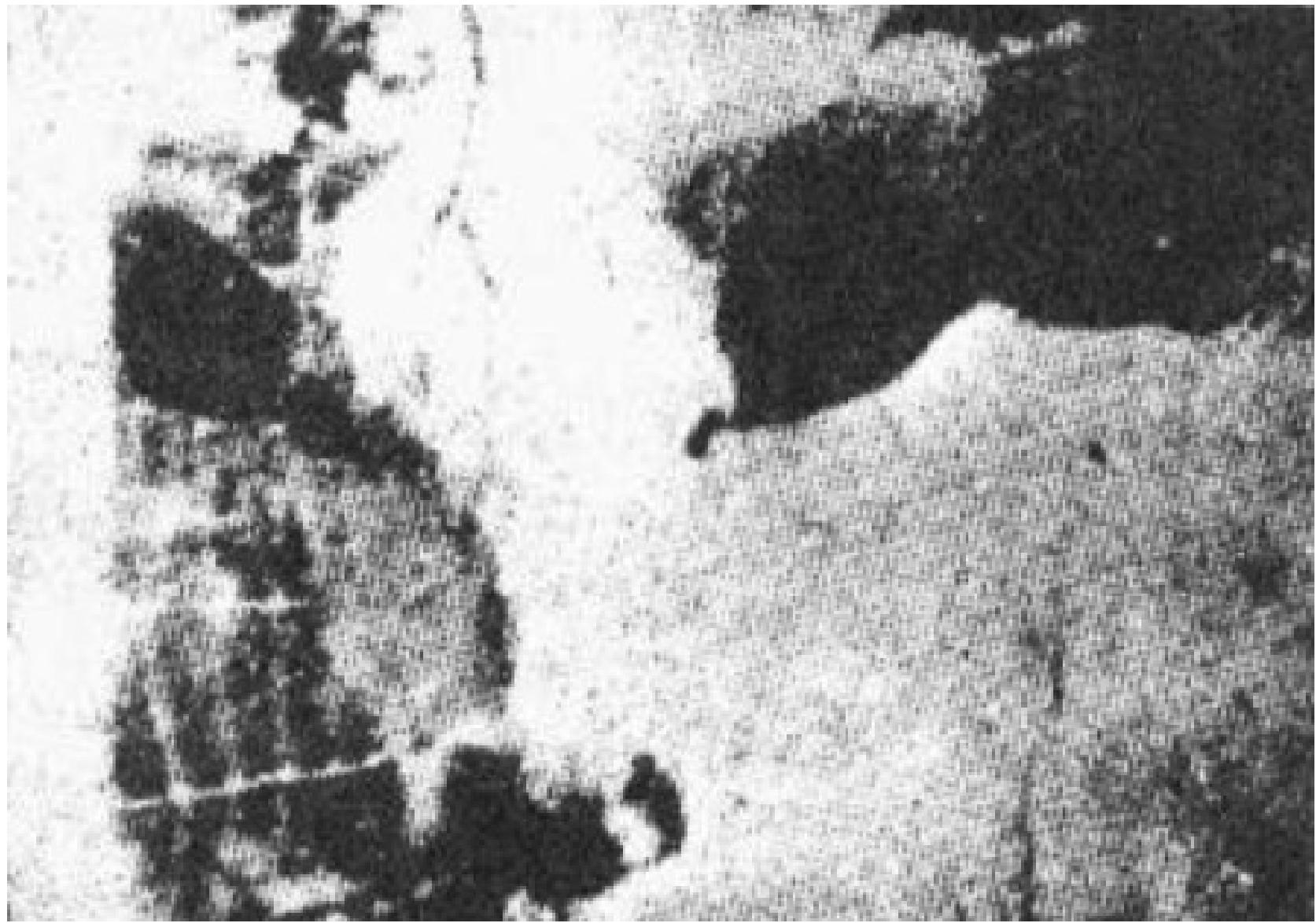
QUICK REVIEW:

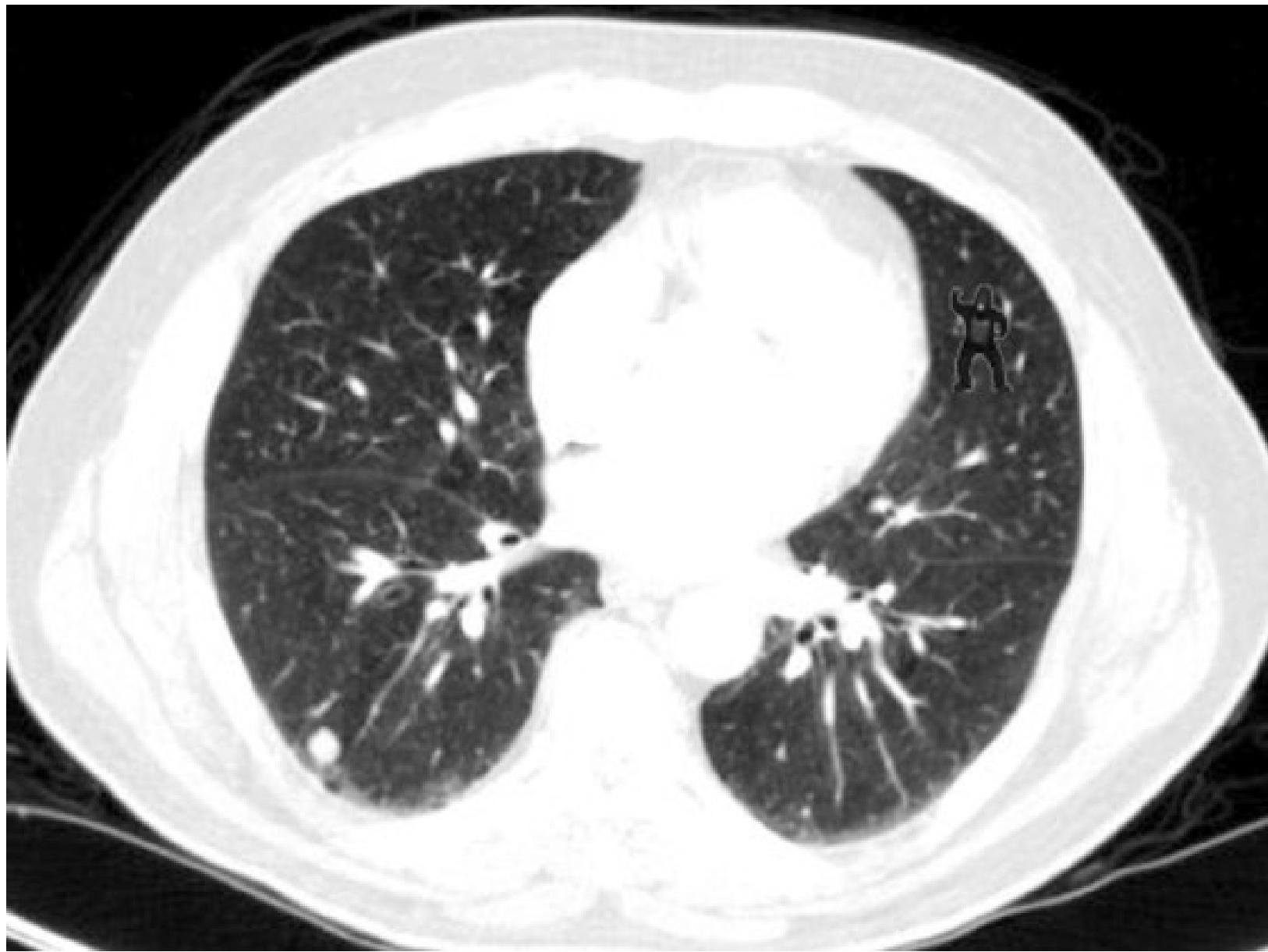
WHAT THE RESEARCH SAYS

WHAT CAUSES SOCIETAL BIAS?



We all have shortcuts, or “schemas,” that help us make sense of the world. But our shortcuts sometimes make us misinterpret or miss things. That’s **unconscious bias**.





SOCIETAL BIAS EXAMPLES



Microinequities

Singled out,
over looked, ignored
for unchangeable
characteristics

“Speak up more in
meetings.

“She can take
the notes.”

Personality Penalties

Penalized for being too
much/little of what's
expected in a
given 'system'

“Pushy.”
“Bossy.”
“Aggressive.”
“Tone it Down.”

- requires more evidence

Stereotype Threat

Fear that performance
will confirm a negative
stereotype;
often unconscious

Raises anxiety;
reduces performance,
confidence and
risk-taking

7. Practice interrupting biases

PRACTICE - WHAT WOULD YOU DO OR SAY?

<p>In the hall, a colleague mentions Ramira has potential, if only she could learn to tone it down a bit and not be so abrasive.</p>	<p>You notice that someone is repeatedly interrupted in a meeting.</p>	<p>You hear someone coach a colleague on how to get ahead, encouraging her to take it "low and slow," meaning to lower her voice and speak more slowly.</p>
<p>You're sponsoring an employee who is unsure whether or not they should take on a risky assignment.</p>	<p>You see someone getting credit for something another colleague said earlier in the meeting.</p>	<p>While standing at the buffet at a company-catered event, you overhear someone ask a colleague of color for more coffee.</p>
<p>You recommend an employee you're sponsoring for an opportunity, but get the response, "we're not sure she's the right fit; she's not really a natural leader."</p>	<p>Work meetings typically include spirited discussion and argument, but Janelle consistently avoids engaging in that manner; instead, she prefers to respond via email later on.</p>	<p>You hear someone say that there's been a push to hire more women (or other underrepresented groups) and that they are being hired over men or other groups, even when not as qualified.</p>

PRACTICE - WHAT WOULD YOU DO OR SAY?

<p>You overhear a student (or faculty member) complain that Serena is too abrasive. Nobody is going to want to work with her unless she learns to tone it down a bit.</p>	<p>An underrepresented student comes to you and complains that some students have made general demeaning comments related to gender, race, and/or other groups during lab. The student is uncomfortable but doesn't want you to intervene directly as people might find out who reported it.</p>	<p>While standing at the buffet at a department-catered event, you overhear someone ask a colleague of color for more coffee.</p>
<p>In the capstone course, a student group decides to "divide and conquer." They suggest that the lone woman in the group take the role of communicating with the client.</p>	<p>In lecture, the instructor announces to the class that he is going to use cosmetic and fashion examples to create an inclusive climate for women.</p>	<p>During a meeting, a faculty member says, "Yeah, we really do need to bring in more female students and faculty. They just bring a different perspective and skill set. And hey, it would make this a more civilized place – we men just behave better when women are around."</p>
<p>You recommend a student for a research experience with one of your colleagues, and get the response, "I'm not sure she's the right fit. But I think she'd make a great TA."</p>	<p>This class typically includes spirited, sometimes hostile, discussion and debate. The instructor notices that Janelle is consistently quiet during these discussions and has suggested that maybe she's just not cut out for CS.</p>	<p>You hear someone say that there's been a push to hire more women (or other underrepresented groups) and that they are being hired over men or other groups, even when not as qualified.</p>

8. Pay attention to intersectionality

END GAME:

DIVERSE AND INCLUSIVE TECHNOLOGY CULTURES FOR ALL GROUPS



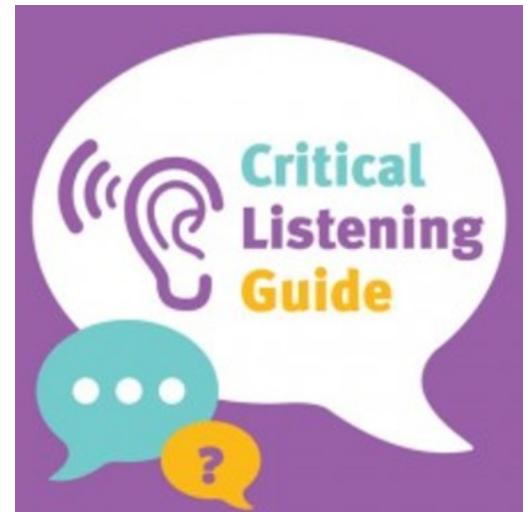
APPLYING AN INTERSECTIONAL LENS

- ✓ To challenge “prescription” thinking:

What are the top 3 things we need to do to help women succeed here? To help black employees? To help LGBTQ folks succeed?

- ✓ To challenge tokenism and essentialism:

*We're excited that you can bring a _____
(woman's, Latina's, African American's)
perspective to the discussion.*



APPLYING AN INTERSECTIONAL LENS



Interrupting Everyday Biases

When might you be an ally? When might you need an ally?

Do we want to call these “male” ally or “majority group” ally initiatives?

If the former, how do we frame it and what complementary efforts should we think about?



APPLYING AN INTERSECTIONAL LENS



Employee Development/Sponsorship

Are women's leadership programs really what we need?
If so, how will we attend to a diverse range of women?

Might we incorporate inclusive leadership into all development programs instead?



9. Involve Majority-Group Allies

INCLUDE BOTH WOMEN & MEN

Don't depend only on
underrepresented employees to advance
your **diversity and inclusion** goals



BE CLEAR ABOUT WHAT ALLIES ARE ADVOCATING **FOR** **NOT**

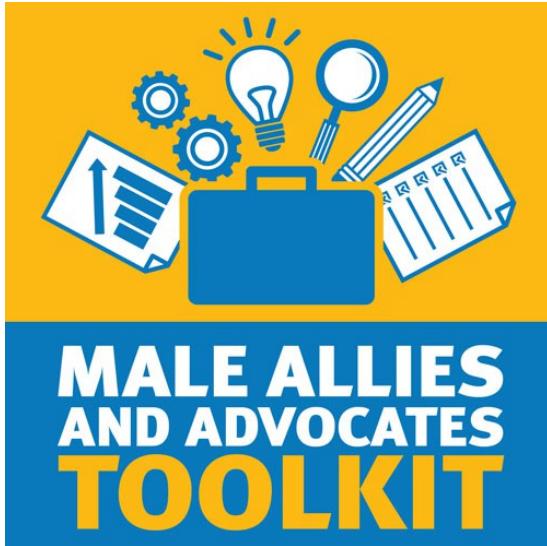
about “helping/saving”
or “fixing” individual people

IS

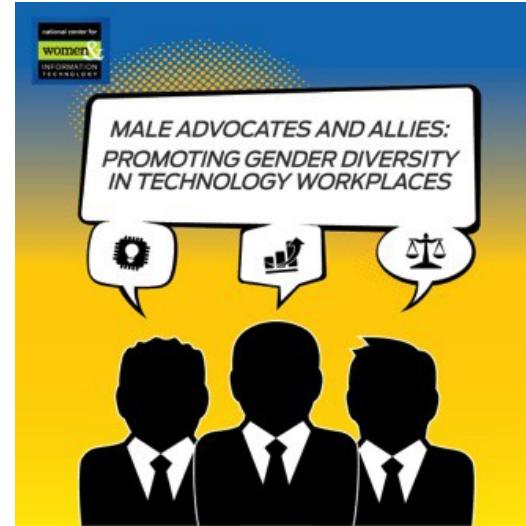
about changing the
environment



FIND OUT MORE: NCWIT RESOURCES TO HELP



www.ncwit.org/ma-toolkit

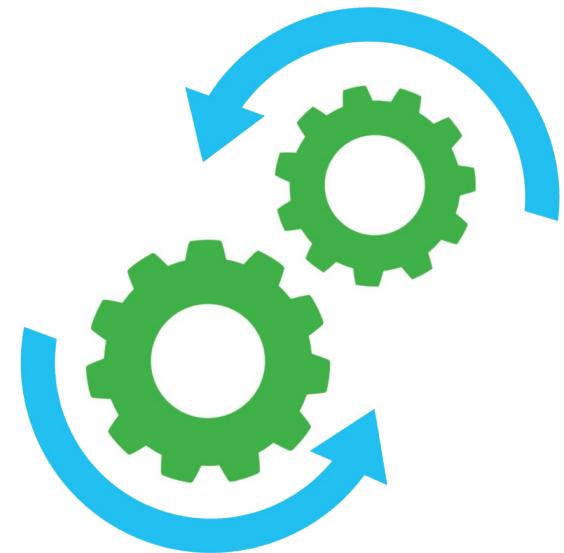


www.ncwit.org/maleadvocatesindustry

10. Collaborate and share learnings to accelerate success

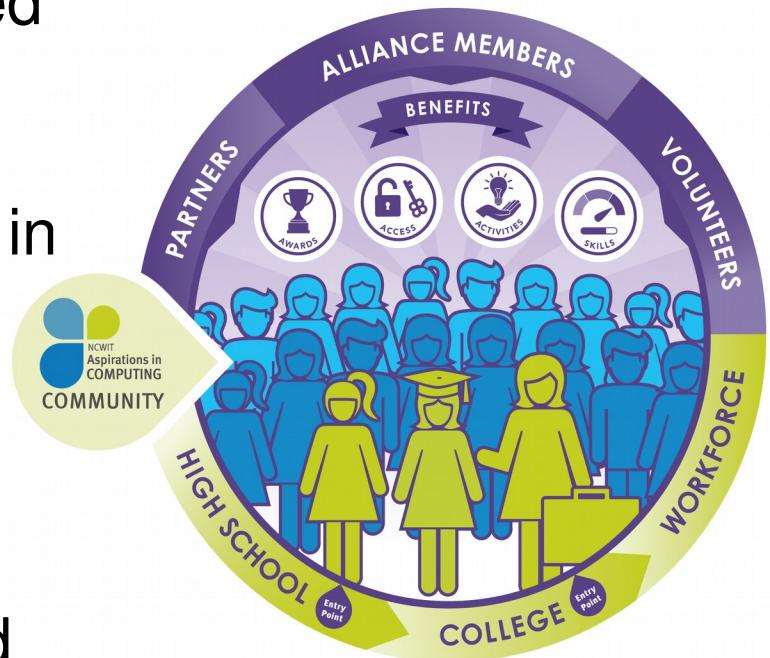
COMMUNITIES OF PRACTICE CAN ACCELERATE LEARNING AND SOCIAL CHANGE

- ✓ Complex social problems require collaborative efforts addressing multiple levels
- ✓ Key stakeholders work and learn together toward shared mission/goal
- ✓ Shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems



ASPIRATIONS IN COMPUTING:

- ✓ Effective collaboration for accelerated impact
- ✓ Provides key factors for persistence in computing:
 - Multiple, repeated exposure and situated learning
 - Different kinds of community and peer support/encouragement



Sources: DuBow, Kaminsky, Weidler-Lewis, 2016; Ito, Gutierrez et al., 2013; Robnett & Leaper, 2012

KEY THINGS TO CONSIDER

- ✓ Strengths and weaknesses of your efforts
- ✓ Engaging a diverse array of stakeholders at all stages of "pipeline"
- ✓ How you might collaborate with others regionally to implement or accelerate some of these tips and principles



QUESTIONS?

Lifetime Partner:



Strategic Partners:



Microsoft

Bank of America

Google intel

MERCK
Be well



AVAYA

Pfizer

Bloomberg

Hewlett Packard
Enterprise

QUALCOMM

facebook

Investment Partners:



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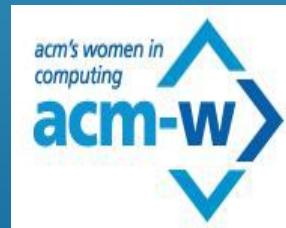
Tracy Camp | Professor and Head, Colorado School of Mines, CRA-W



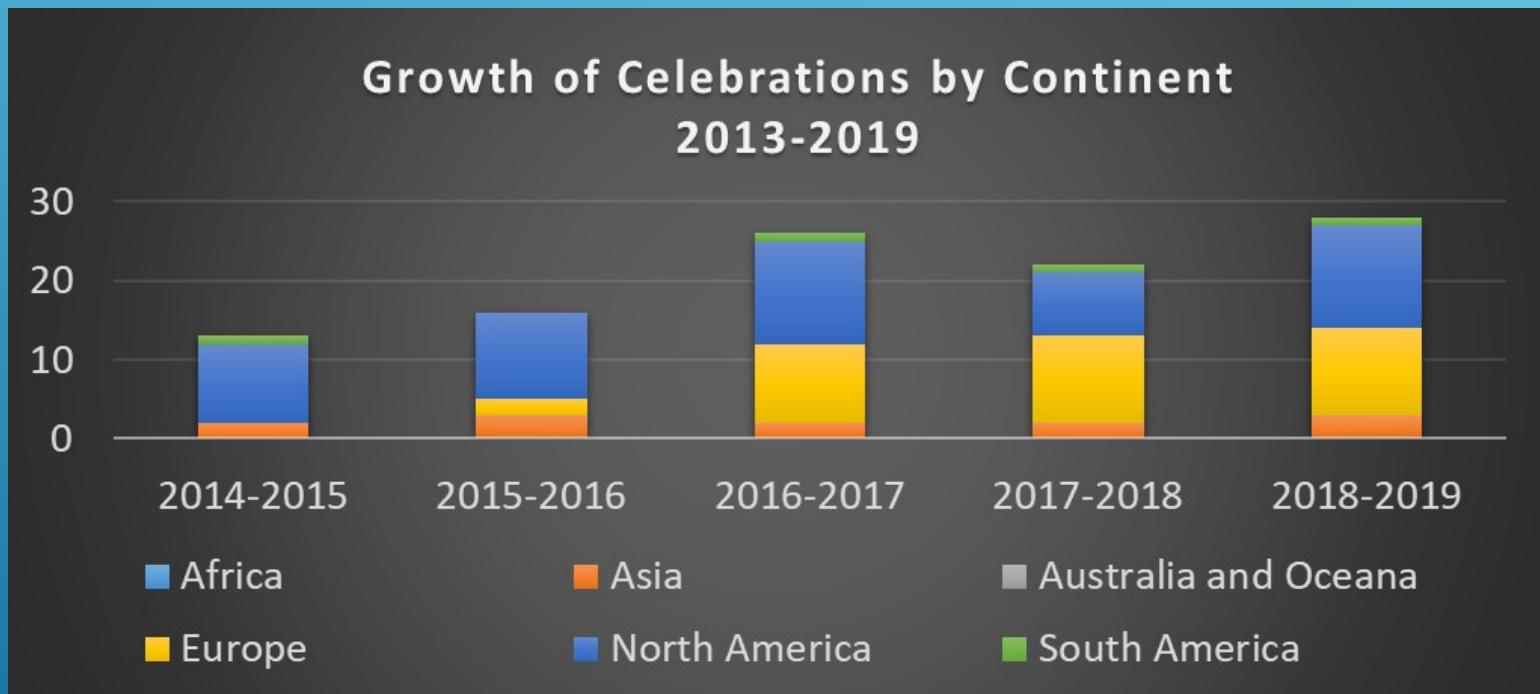
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ACM-W: ACM COUNCIL ON WOMEN IN COMPUTING

“Supporting, Celebrating and Advocating
for Women in Computing”



ACM-W CELEBRATIONS



WAYS TO GET INVOLVED WITH CELEBRATIONS

- Be a sponsor
- Participate in the career fair
- Volunteer to help with resume review or other mentoring sessions
- Start one!

ACM-W STUDENT CHAPTERS

- At the end of 2013...
 - 21 student chapters worldwide
 - 15 in the US
- As of May 2018...
 - 218 student chapters worldwide
 - 155 in the US

INFLUENCE OF STUDENT CHAPTERS...IN THEIR OWN WORDS

- I can learn recent technology
- [My chapter] has helped me a lot to improve my personality and to be confident
- Provided networking opportunities, career advice, and created lasting relationships
- Connecting with other women in my major so I feel less alone
- Leading people
- Connecting with women with dreams in a career field that, otherwise, felt impossible to navigate
- Opportunity to support others

WAYS TO GET INVOLVED WITH STUDENT CHAPTERS

- Start one!
- Volunteer as a speaker
- Host an event at your company
- Provide mentoring
- Partner to do outreach to K-12 schools, girl scout troops, etc.

PROFESSIONAL CHAPTERS

- As of July 2018
 - 15 worldwide
 - 3 in the US (2 in OH, 1 in FL)
- Building the number of professional chapters is a major focus of ACM-W this year
- Connecting professional chapters to student chapters in a region can
 - Provide opportunities for mentoring
 - Facilitate internships
 - Help women transition from college to career



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THE COMMITTEE ON THE STATUS OF WOMEN IN COMPUTING RESEARCH

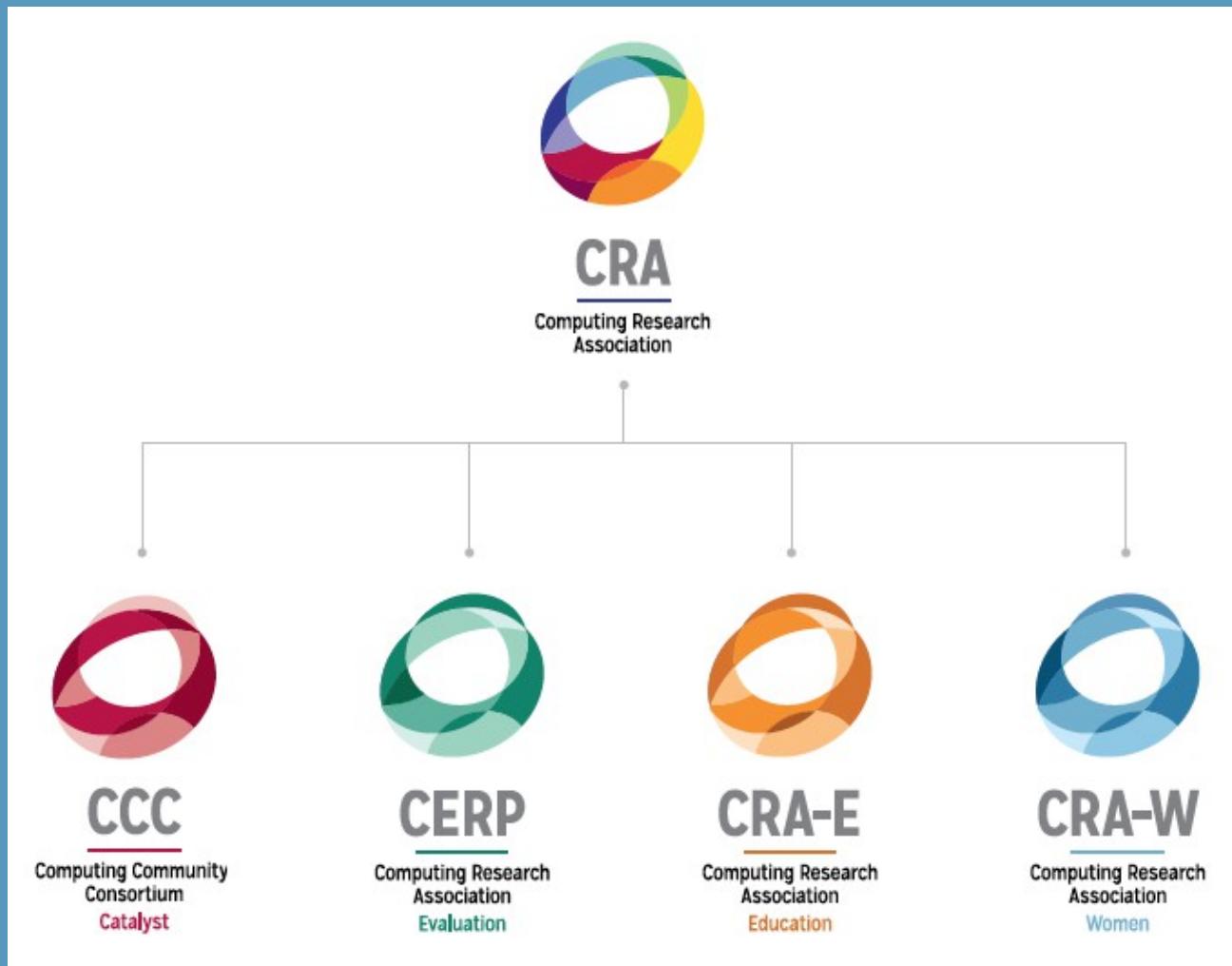
Tracy Camp, Colorado School of Mines

CRA-W Former Co-Chair

CRA-W Board/Steering Committee Member

*CRA-W.org
@CRAWomen*

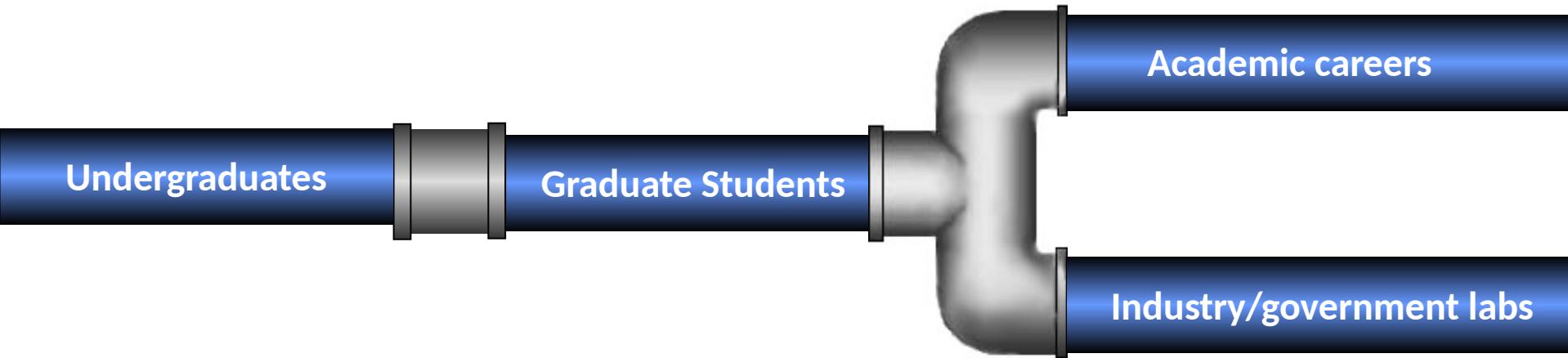
CRA-W IS A SUB-COMMITTEE OF CRA



CRA-W MISSION AND GOALS

*TO INCREASE THE SUCCESS AND
PARTICIPATION OF WOMEN AND
UNDERREPRESENTED GROUPS IN
COMPUTING RESEARCH AND
EDUCATION AT ALL LEVELS.*

PRIMING AND SUSTAINING THE PIPELINE OF WOMEN/URM RESEARCHERS



Distinguished Lecture Series (DLS)

- Brings prominent faculty and industry researchers to events across the U.S.
- Speakers give technical talks as well as participate in activities with the host community



The Virtual Undergraduate Town Hall Event

A virtual mentoring event for undergraduate majors in CSE towards research and graduate school.



Discipline Specific Workshops (DSW)

- Provide career mentoring and networking opportunities for researchers in a given computing discipline
- Workshops include coverage of technical topics



RECOGnition

- GOAL: study the recognition and visibility of women in different sub-disciplines of computing
- Create CRA-W Discipline Advocates Committee
- Nominate your women

REGIONAL TABLE TIME!

1. Introductions; state one thing your organization has done to impact diversity.
2. Are any ACM-W/CRA-W/NCWIT programs/activities being used locally? If not, how might you get involved?
3. What extent do your current activities use the 10 tips discussed? Where are you strong? Where are you weak? How could you improve?
4. What regional work could be done, crossing the boundaries, to achieve collective impact?
5. How can local industry connect with local colleges/universities to increase opportunity for

REPORT OUT
COMMENTS
QUESTIONS