Inclusive Astronomy 2015 Vanderbilt University Nashville, TN



During this talk, please feel free to manage your experience in the way that is best for you. That might include:

Taking pictures of the board Making audio/video recordings Using a laptop or other device Stimming Eating or drinking Leaving the classroom for a period Sitting or laying on the floor Ftc.

We will be discussing racism.

You may find yourself uncomfortable. Don't panic. Sit with your discomfort and try to understand it.

Dwelling with that discomfort is the beginning of change.

Why Inclusive Astronomy?

People of color are 37% of the US population (2013)

Astronomers (2014)

2.1% Black/African American

3.2% Latin@(Latinx)/Hispanic/Spanish origin

African American astronomy faculty in US: 7 Hispanic astronomy faculty in US: 4.

No university has both.

Almost no data on LGBTQIA or disability status

1992 Baltimore Charter: Things have improved for white women, but leadership positions are still limited.

https://www.aip.org/statistics

The pre-higher ed pipeline

- ONE out of school suspension in 9th grade DOUBLES a student's risk of dropping out.
- 25% of schools with the largest populations of Black, Latino, and Native American students don't offer Algebra II
- < 50% of Native American students attend a school with a "full complement" of math & science classes (compared to 71% of white students, and 81% of Asian-American students)
- In the US, only half of all high schools offer calculus. 63% offer physics

What struck me?

- Microaggressions: What They Are and How They Negatively Affect Learning and Work Environments
- For the uninitiated...
 - Microaggressions: everyday verbal, non-verbal, and environmental slights, snubs, or insults, whether intentional or unintentional, which communicate hostile, derogatory, or negative messages to target persons based solely upon their marginalized group membership.
 - Term coined by Prof. Chester Pierce, MD in the context of racial microaggressions against African-Americans.

- "Psycho-pollutants" in the social environment
 - Recipient experiences added psychological stress
 - Physiological energy is also spent during and after the exchange
 - Occurs whether or not microaggression was intentional or not

- "Micro" doesn't mean small or insignificant
- Actually implies the incessant, mundane, and camouflaged nature of these interactions
 - "Death by a thousand cuts"
- Manifests itself in the recipient in many ways
 - Pain, hurt, anger, stress, self-doubt, poor academic performance, poor health outcomes

- Spotlight of poor health outcomes...
 - African-Americans have some of the poorest health outcomes regardless of socio-economic status
 - PoC that achieve higher levels of success in education have even worse outcomes than those that don't go on into higher education/academic spaces
 - Speaks to higher level of exposure to white supremacy
 - With "success" comes being surround by less people that look like you

- Potential biological marker of microaggressions
 - Telomere Shortening the protective caps on the ends of chromosomes deteriorate as a response to racerelated stress
 - A Black woman at the age of 30 is biologically 7 years older than a White woman of the same age
 - Current study is looking at the coping mechanisms/ responses PoC have to the microaggressions they experience and whether a difference in their biological weathering can be observed

- So....what can we do?
 - "...we ought not sit back and wish away, rather than confront, the racial inequality that exists in our society." Supreme Court Justice Sonia Sotomayor
 - We should be having candid conversations about racism, sexism, ableism,...
 - Recognition, critical reflection, appropriate action

"There is no greater disability in society, than the inability to see a person as more." Robert M. Hensel

I. Oppression, prejudice, stereotyping, or discrimination against disabled people on the basis of actual or presumed disability.

2. The belief that people are superior or inferior, have better quality of life, or have lives more valuable or worth living on the basis of actual or perceived disability.

Ableism in Astronomy



People with:

Mobility Impairments

Depression

Anxiety

Dyslexia/Dysgraphia/Dyscalculia

Hearing limits/Deafness

Limited vision/Blindness

Autism

Not Neurotypical

Developmental disabilities



Some facts about disability

- 19% of the American population reports having a disability,
 half of those reported as "severe" (2010 Census report)
- 8.6% of students in public schools have been identified as having a disability that affects their ability to learn
- 32% of youth in juvenile detention facilities meet that criteria

Some myths about disability

- People with disabilities are brave and courageous
- People with disabilities are more comfortable with "their own kind"
- Non-disabled people are obligated to "take care of" people with disabilities
- Curious children should never ask people about their disabilities
- There is nothing you can do to make the world more accessible

Situation: You are teaching a lecture class. You have a student who fidgets a lot, and is often using their computer or phone while you are talking.

First - What is your external response?

Situation: You are teaching a lecture class. You have a student who fidgets a lot, and is often using their computer or phone while you are talking.

First - What is your external response?

Second - What is your internal response?

How does UT handle disability in the classroom?

SSD determines eligibility and approves reasonable accommodations for students with disabilities at the University of Texas at Austin.



Call 512-471-6259 Videophone 512-410-6644 Email ssd@austin.utexas.edu "The person in charge of disability services will, in my experience, always support the professor rather than the student."

"...my chair complained about this and told other faculty that he thought I didn't need services because my grades were high."

This model requires disclosure.

Requiring disclosure, and requiring students to improvise their own accommodations can interfere with successful learning.

Disabled scientists may choose not to disclose due to perceived ableism in their field.

Accessibility statements - One approach

"I believe in the principles of universal design, which state that maximizing accessibility for participants with disabilities improves learning environments for everyone. I try to minimize barriers posed by course structures and materials, and I will do my best to work with any student who requires specific accommodations for a disability."

Rochester Institute of Technology/ National Technical Institute for the Deaf



Began in 1968

About 1500 students

Mixed instruction in ASL, spoken, and other adaptive technologies

Annie Jump Cannon



You cannot self-define as an ally. It is not an identity.

It is a designation given by those you seek to ally yourself with.

Allyship defined by consistent action

Allyship IS:

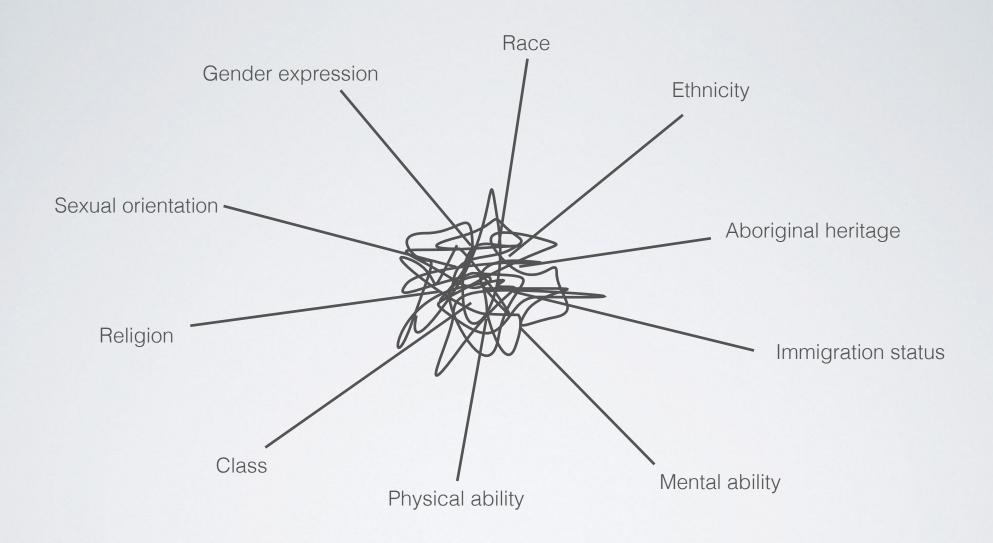
- Vital to the future of our field
- Defined by purposeful action and self-education
- Your responsibility

Allyship IS NOT:

- Difficult or costly
- Way to assuage your own guilt
- Badge of honor or a shield against criticism

So, what can you do?

 Consider axes of identity. Some people are marginalized along multiple axes (for example, an agender person of color).



(not exhaustive, just illustrative)

- Consider axes of identity. Some people are marginalized along multiple axes (for example, an agender person of color).
- Know your areas of privilege

2. I can avoid spending time with people whom I was trained to mistrust and who have learned to mistrust my kind or me.

3. If I should need to move, I can be pretty sure of renting or purchasing housing in an area which I can afford and in which I would want to live.

4. I can be pretty sure that my neighbors in such a location will be neutral or pleasant to me.

5. I can go shopping alone most of the time, pretty well assured that I will not be followed or harassed.

6. I can turn on the television or open to the front page of the paper and see people of my race widely represented.

7. When I am told about our national heritage or about "civilization," I am shown that people of my color made it what it is.

8. I can be sure that my children will be given curricular materials that testify to the existence of their race.

9. If I want to, I can be pretty sure of finding a publisher for this piece on white privilege.

10. I can be pretty sure of having my voice heard in a group in which I am the only member of my race.

11. I can be casual about whether or not to listen to another person's voice in a group in which s/he is the only member of his/her race.

12. I can go into a music shop and count on finding the music of my race represented, into a supermarket and find the staple foods which fit with my cultural traditions, into a hairdresser's shop and find someone who can cut my hair.

13. Whether I use checks, credit cards or cash, I can count on my skin color not to work against the appearance of financial reliability.

14. I can arrange to protect my children most of the time from people who might not like them.

15. I do not have to educate my children to be aware of systemic racism for their own daily physical protection.

16. I can be pretty sure that my children's teachers and employers will tolerate them if they fit school and workplace norms; my chief worries about them do not concern others' attitudes toward their race.

17. I can talk with my mouth full and not have people put this down to my color.

18. I can swear, or dress in second hand clothes, or not answer letters, without having people attribute these choices to the bad morals, the poverty or the illiteracy of my race.

19. I can speak in public to a powerful male group without putting my race on trial.

20. I can do well in a challenging situation without being called a credit to my race.

21. I am never asked to speak for all the people of my racial group.

22. I can remain oblivious of the language and customs of persons of color who constitute the world's majority without feeling in my culture any penalty for such oblivion.

23. I can criticize our government and talk about how much I fear its policies and behavior without being seen as a cultural outsider.

24. I can be pretty sure that if I ask to talk to the "person in charge", I will be facing a person of my race.

25. If a traffic cop pulls me over or if the IRS audits my tax return, I can be sure I haven't been singled out because of my race.

26. I can easily buy posters, post-cards, picture books, greeting cards, dolls, toys and children's magazines featuring people of my race.

27. I can go home from most meetings of organizations I belong to feeling somewhat tied in, rather than isolated, out-of-place, outnumbered, unheard, held at a distance or feared.

28. I can be pretty sure that an argument with a colleague of another race is more likely to jeopardize her/his chances for advancement than to jeopardize mine.

29. I can be pretty sure that if I argue for the promotion of a person of another race, or a program centering on race, this is not likely to cost me heavily within my present setting, even if my colleagues disagree with me.

30. If I declare there is a racial issue at hand, or there isn't a racial issue at hand, my race will lend me more credibility for either position than a person of color will have.

31. I can choose to ignore developments in minority writing and minority activist programs, or disparage them, or learn from them, but in any case, I can find ways to be more or less protected from negative consequences of any of these choices.

32. My culture gives me little fear about ignoring the perspectives and powers of people of other races.

33. I am not made acutely aware that my shape, bearing or body odor will be taken as a reflection on my race.

34. I can worry about racism without being seen as self-interested or self-seeking.

35. I can take a job with an affirmative action employer without having my co-workers on the job suspect that I got it because of my race.

36. If my day, week or year is going badly, I need not ask of each negative episode or situation whether it had racial overtones.

37. I can be pretty sure of finding people who would be willing to talk with me and advise me about my next steps, professionally.

38. I can think over many options, social, political, imaginative or professional, without asking whether a person of my race would be accepted or allowed to do what I want to do.

39. I can be late to a meeting without having the lateness reflect on my race.

40. I can choose public accommodation without fearing that people of my race cannot get in or will be mistreated in the places I have chosen.

41. I can be sure that if I need legal or medical help, my race will not work against me.

42. I can arrange my activities so that I will never have to experience feelings of rejection owing to my race.

43. If I have low credibility as a leader I can be sure that my race is not the problem.

44. I can easily find academic courses and institutions which give attention only to people of my race.

45. I can expect figurative language and imagery in all of the arts to testify to experiences of my race.

46. I can chose blemish cover or bandages in "flesh" color and have them more or less match my skin.

47. I can travel alone or with my spouse without expecting embarrassment or hostility in those who deal with us.

48. I have no difficulty finding neighborhoods where people approve of our household.

49. My children are given texts and classes which implicitly support our kind of family unit and do not turn them against my choice of domestic partnership.

50. I will feel welcomed and "normal" in the usual walks of public life, institutional and social.

Dr. Peggy McIntosh's invisible knapsack of white privilege

- Consider axes of identity. Some people are marginalized along multiple axes (for example, an agender person of color).
- Know your areas of privilege
- Do your homework and use the "Gift of Google"
 - Do not expect to be educated by those with less privilege and power than you!!

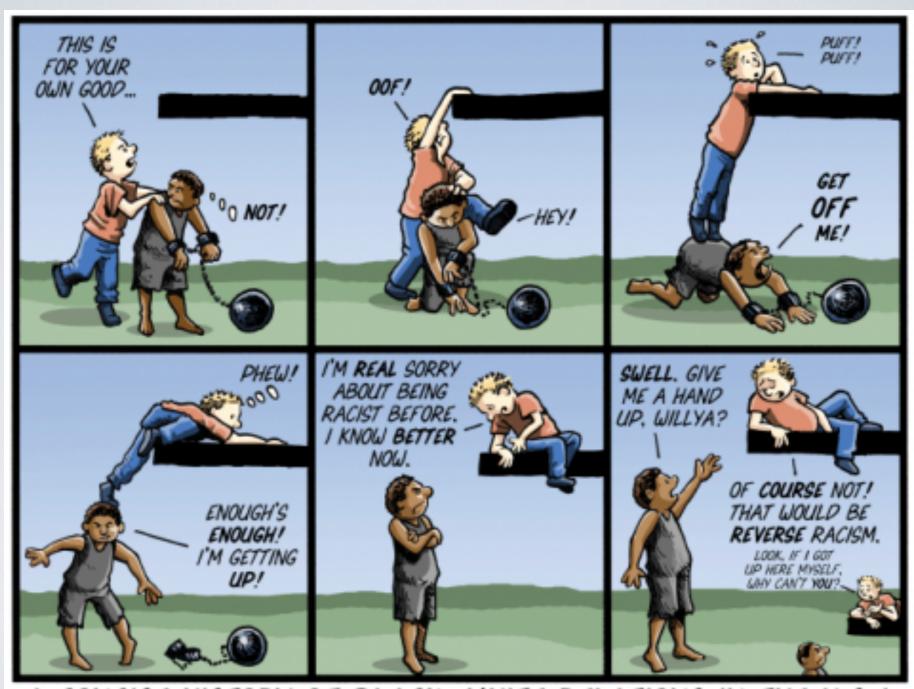
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You can, and should, respond to microaggressions like these when you hear them. Hold others accountable for their words and actions.

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- Use your power to give voice to those who are marginalized



A CONCISE HISTORY OF BLACK-WHITE RELATIONS IN THE U.S.A.

Some things to consider:

- Being marginalized along one axis of your identity does not mean you understand the experience of other marginalized groups
- Intent != impact. You will make mistakes.
 - When that happens, sincerely apologize. Then learn & improve.
- "Our liberation is your liberation"
- Review how you teach. Do certain groups of students thrive or struggle? Interrogate your methods of evaluation

- When you have privilege, use it for good.
- Elevate the voices of the less privileged. Don't answer for them, listen and amplify.
- Work to educate yourself It isn't up to people of color to update your learning on topics.
- Educate YOUR in-group.
- When you screw up, own it, apologize, learn, and improve.
- Review how you teach. Do certain groups of students thrive or struggle? Interrogate your methods of evaluation.

Want to find out more?

Inclusive Astronomy Presentations online:

Links for talks & recommendations: http://vu.edu/ia2015 Slides: http://osf.io/view/ia2015

MIXED GENDER LAB

Here we judge on science done, not by sex, gender, or race.

Failure required, tears optional.

Please don't lick the science.

