

Improving the Diversity and Inclusion of LGBTQ+ People in Organic Chemistry By Breaking Down Barriers

Phillip Crook

6/1/21

DEI Moments

Why Improve LGBTQ+ Representation?

- Similar to a person's race or gender, sexual orientation does not have a significant impact on their direct ability to do chemistry.
- Like with other minorities, members of the LGBTQ+ community are overwhelmingly underrepresented in organic chemistry
- Improving the diversity of various races, cultures, religions, genders, and sexual orientations leads to a diversity of thinking
 - Resulting in a more innovative, collaborative, and exciting field of science

The Importance of Discussing Sexual Orientation

- In a magazine article by Eric Stewart, he interviews members of the LGBTQ+ and how their sexual orientation has affected their career in STEM fields
 - Most talk about how they don't feel comfortable talking about their personal lives around their colleagues and how they are continuously on edge trying not to discuss it.
 - This is also difficult for people in academia because they fear knowledge of their orientation might affect the peer review process and tenure promotions

<https://inchemistry.acs.org/careers/looking-through-the-lens-of-lgbtq-chemists.html>

Importance Continued

- Talking about sexual orientations is often thought of as taboo in STEM promoting a “don’t ask, don’t tell” mentality
 - This just forces LGBTQ+ members to perpetuate a heteronormative performance that makes people around them feel more comfortable while alienating them more.
- In a paper by Stephanie Knezz she discusses how she tells her undergraduate class that she is pansexual on the first day of every semester.
 - She discusses how this seemingly small addition to her introductory slides has made a profound impact on all the students in her classes, not just the LGBTQ+ students.
 - As a group that supports a highly collaborative environment, feeling comfortable talking about our personal lives should be encouraged

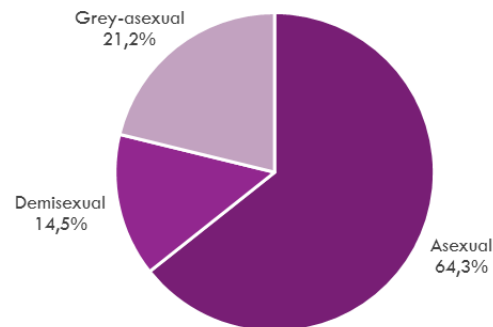
A Discussion of Asexuality

- Even within the LGBTQ+ community, asexuality is not commonly discussed
- This is partly due to a preconceived notion that asexuality is incredibly uncommon.
- A recent survey showed that asexuality accounts for about 1% of the general population.
 - The US has a population of 328 million people, so 1% of that would be 3.28 million people

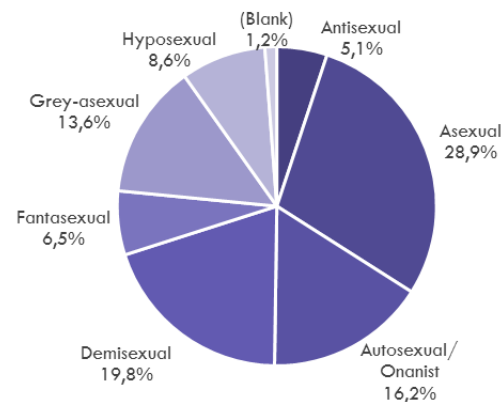
What is Asexuality

ASEXUAL SPECTRUM IDENTITY

AVEN Community Census 2014

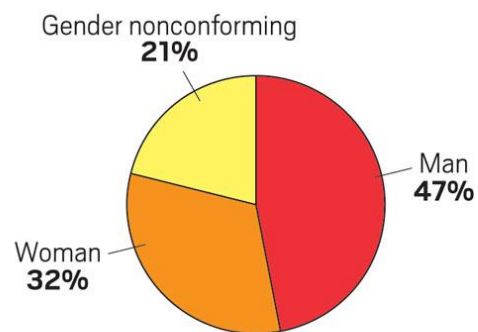


AVENes Survey 2014

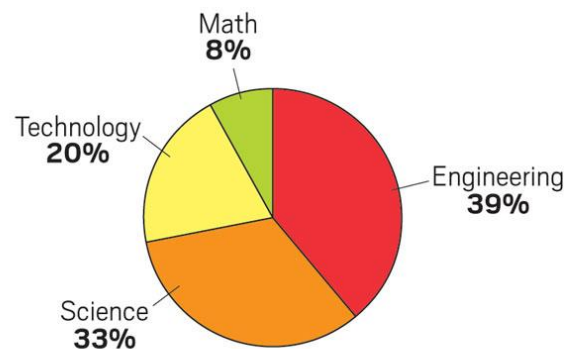


- Asexuality is generally defined as an experience of not being sexually attracted to other people.
- Like other sexual orientations, asexuality exists on a spectrum

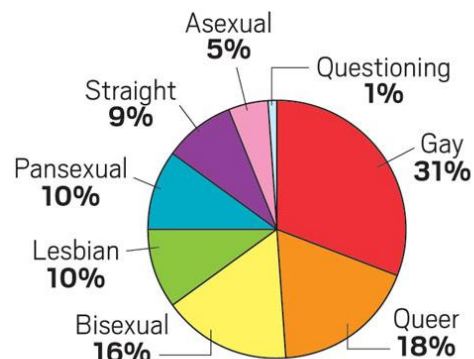
Reference to Asexuality in Organic Chemistry



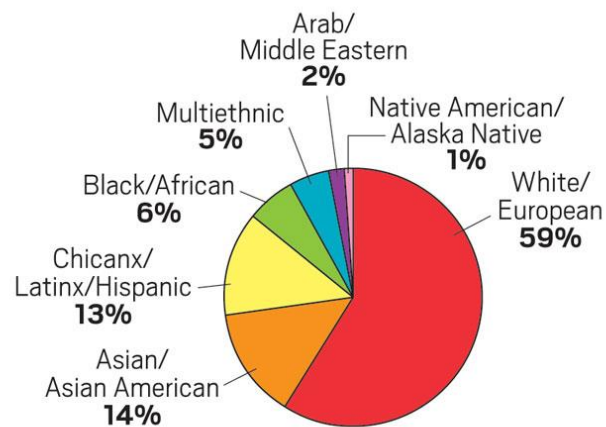
Gender identity



Field



Sexual orientation



Race/ethnicity

- C&EN magazine article about the 2018 Out in STEM conference survey
- Only 700 people
- Surprisingly high number
- Could not find one mention of a chemist that identified as asexual

What Can We do to Improve Diversity

- I think that the best way to improve diversity in the lab, and in the department, is to increase the diversity of applicants to the graduate program.
 - The easiest way to do this is through funding sources targeted toward underrepresented students in STEM
- Hendrix college IRIS (Increasing Retention and Inclusion in STEM) program
 - Provided information of summer research programs and stipends for underrepresented students in the sciences to do summer research
 - 3 out of 5 people in my undergrad lab were funded through this program
- I would be willing to reach out to the professors that worked on this grant at Hendrix to ask them about it.

Retaining LGBTQ+ Students in STEM

- LGBTQ+ students are 7% less likely stay in STEM, and that number jumps to 14% once they have had a research experience
 - Funding specifically for underrepresented students would show support for LGBTQ+ students and possibly improve retention in the field
- This could apply to both incoming first year graduate students, and undergraduate students wanted to do summer research, which would ultimately help the lab if funding for some of the summer students comes from a source that will also improve diversity in the department.

Conclusions

- Building a more diverse and equitable lab environment starts with open discussion about aspects of our identity that make us different.
 - Having these discussions will also result in a more productive, and collaborative, workplace where people don't spend as much energy performing an identity that isn't theirs.