# Navigating LGBTQ+ discrimination in academia: where do we go from here?

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Lesbian, gay, bisexual, trans and sexually/gender diverse (LGBTQ+) individuals have long been underrepresented in science, technology, engineering and mathematics (STEM) and these environments have often been portrayed as spaces in which personal identity does not matter. However, for LGBTQ+ individuals, this means suppressing their gender identity and expression and remaining closeted at work, creating an uncomfortable work environment, and this can affect their performance and mental health. Multiple reports have been published within the last decade investigating the experiences of LGBTQ+ people in science. These reports all highlight a common observation that, at some point in their time within science, the majority of individuals have experienced discrimination due to their sexual orientation or gender identity. Here, in our opinion piece, we discuss our experiences of being LGBTQ+ in bioscience, the various types of discrimination that LGBTQ+ scientists may face in academia and some of the existing initiatives and campaigns in place to combat this.

#### Introduction

Before we get into the nitty-gritty of this article, we want to make clear that this piece is written from the perspective of two cis gay men and anyone reading this should realize that our experiences are not universal. Everyone within the community has a different journey and we cannot speak about anyone else's experience.

We would also like to define a few terms that will be used throughout the article to help you understand the points that we make, although we would like to stress that, in this area, definitions are contested (Table 1). We use the term LGBTQ+ to refer to anyone who identifies as lesbian, gay, bisexual, trans or intersex, or anyone who is sexually and/or gender diverse. Sexual orientation refers to whom people are attracted to and form romantic or sexual relationships with. This can be to people of the opposite sex or gender (heterosexual), same sex or gender (homosexual), both sexes or genders (bisexual), more than one sex or gender (pansexual) or lack of sexual attraction to any sex or gender (asexual). Gender identity refers to how we subjectively perceive our gender, which may or may not correspond with the sex we are assigned with at birth. Society has created a gender binary, which includes expectations of masculinity and femininity, which is applied to sex, gender identity and gender expression (i.e. the way you express your gender through clothes, hair or makeup). It is important to note that some people do

not identify with this binary (e.g. non-binary individuals) and some people do not identify with some or all aspects of the gender assigned to them. As scientists, we must also recognize that our choice of indicators for biological sex categorizations are unstable (on this topic, we would encourage all to read Professor Anne Fausto-Sterling's "Science Won't Settle Trans Rights"). Transgender (or trans) refers to individuals whose gender identity and/ or gender expression differs from the expectations of the gender they were assigned at birth. Being trans is not associated with a person's sexual orientation. Those who do not identify as trans are described as cisgender. LGBTQ+ discrimination may be based on sexual orientation, gender identity, gender expression or sex characteristics.

Here, we discuss the key challenges facing LGBTQ+ scientists in the academic workplace, types of discrimination that we have experienced, what is being implemented to change the situation and what remains to be done.

#### What does discrimination in bioscience look like? (Karim)

Science, technology, engineering and mathematics (STEM) fields have often been stereotyped as spaces in which identity does not matter and the only markers of success are research outputs. We are routinely told that you are defined by the work you do, and it is almost exclusively this work that gains you academic merit. While this may be

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Table 1. Glossary of key terms	
Term	Definition
Cisgender	Individuals who do not identify as trans
Deadname	The name that trans people no longer use once they transition
Gender identity	How we subjectively perceive our gender which may or may not correspond with the sex assigned to us at birth
Gender-nonconforming/non-binary	People who do not conform to the binary alignment of sex, gender, gender identity and gender expression
Sexual orientation	Whom people are attracted to and form romantic and sexual relationships with
Transgender (or trans)	Individuals whose gender identity and/or gender expression differs from the expectations of the gender they were assigned at birth

partly true, it overlooks the collaborative nature of research and cultural differences in tolerance of the LGBTQ+ community. We will likely come across people who may be less tolerant of LGBTQ+ people. This not only creates a barrier for potential collaboration, but, in some cases, may affect career performance and mental health.

An article that interviewed LGBTQ+ people about their experiences in STEM found that if people could bring their whole selves to the workplace, then not only were they happier but they also performed better. LGBTQ+ colleagues are less visible at senior management levels, suggesting people may feel pressured to remain in the closet in order to progress in their careers. This highlights the need to change attitudes in workplaces, so that more people feel comfortable being out at any stage in their career. Some of my colleagues and friends have said that they frequently receive comments alluding to the "childishness" of LGBTQ+ initiatives and LGBTQ+ awareness is often rejected in professional environments. However, those who dismiss the importance of these initiatives do not realize that it is extremely difficult and exhausting to compartmentalize and separate who you are from the work you do. LGBTQ+ individuals often have to depoliticize and "closet" themselves, while straight peers do not have to worry about the impact that their sexual identity may have on their career.

Heteronormative attitudes prevail in science and academia. Everyone is generally assumed to be straight or cisgender, meaning we have to "come out" to new colleagues each time we meet them or change jobs. This barrier can often make it difficult to come out in the first place. In two independent reports (by the Royal Society of Chemistry and the American Physical Society), approximately 20% of all LGBTQ+ participants said they felt uncomfortable in their departments and this rose to 30% amongst trans individuals and 40% for gender-nonconforming

individuals (Figure 1). In a recent report commissioned by the Wellcome Trust exploring the attitudes of researchers in the workplace, 8% of all participants (LGBTQ+ or not) said that they had experienced discrimination related to sexual orientation, while 5% of all participants experienced discrimination related to gender identity. A quarter of LGBTQ+ respondents said that they would not feel comfortable discussing discrimination relating to sexual orientation or gender identity in their workplace. Unsurprisingly, there was a strong correlation between the degree of "outness" (the number of people you have revealed your sexual orientation or gender identity to) and the comfort level within departments.

In most of my places of work, I have, at some point, experienced some form of discrimination, whether it is in the form of explicit verbal homophobic abuse or as more subtly disguised "microaggressions" (common, brief derogatory and negative verbal and behavioural communications that create a hostile environment for an individual because they are part of a stigmatized group). A report into the LGBT climate by the American Physical Society revealed that nearly 60% of respondents agreed or strongly agreed with the statement that their colleagues have made comments that indicate a lack of awareness of LGBT issues. In addition to this, over 40% of respondents felt that they were expected to "not act too gay" and around 30% felt pressured to stay closeted (Figure 2). Common examples of microaggressions that I have encountered in the workplace include references to "acting gay" and needing to "man up". Such comments reinforce the notion that being straight (and masculine) is the norm and being gay or feminine is deviant, wrong and should be suppressed. At times, it can also feel like you are not being taken seriously because of your gender expression. It is perhaps not shocking that over a third of LGBTQ+ physicists have considered leaving their institution in the past year and 15% of trans people have left

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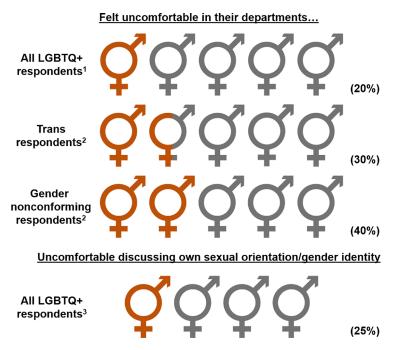


Figure 1. Key findings from the Royal Society of Chemistry, the American Physical Society and the Wellcome Trust on workplace culture and attitudes towards members of the LGBTQ+ community

school due to discrimination and harassment according to the National Transgender Discrimination Survey and the American Physical Society.

There are also more nuanced issues that cis individuals may not be aware of. For example, the careers of trans scientists may be impacted by name changes once they transition (e.g. publications/citations). In a published report, one participant noted that at the university administration level, the inclusion of trans students can be problematic due to the lack of an option to log changes in name, meaning the deadnames of trans students are used instead. Although it could be tempting to draw parallels with people who have gotten married, it is important to recognize that names have a particular importance for trans people as they are one of the central ways in which their gender is expressed. If the wrong name is used to refer to a trans person, this can have the consequences of advertently or inadvertently outing them as a trans person and misgendering them. For example, if a scientist has published papers before they transitioned, the scientist may find it difficult to refer to these publications (which use their deadname), and therefore means that the person will have to come out when referring to these papers or abandon them. While this is also an issue for people who have married, it does not necessarily subject them to discrimination. It is important to note that this is a wider issue in scientific publishing and recruitment processes that could be resolved by allowing blind applications as well as making it easier for researchers to update credentials on their manuscripts. Although there are some workarounds

such as allowing married people to link papers with their birth name to the ones with their married name via open research and contributor ID (ORCID), this would continue to deadname trans scientists.

I have also had to explain and educate co-workers about why facilities like gender-neutral toilets or the use of correct pronouns are so important only to be met with mockery. Frankly, it is exhausting trying to educate non-LGBTQ+ peers about the various issues we may face, and it should not be solely our responsibility.

#### What is being done? (Kirk)

Given that LGBTQ+ individuals are a minority group, it is important to have allies that will stand up for people's freedom of expression and call out discrimination and inappropriate behaviour. The good news is that anyone can be an ally, but I believe genuine allyship should make you feel uncomfortable as it requires you to interrogate the ways in which you may have benefited from structural discrimination and perhaps even contributed to it. Often people believe that they are allies if they simply say they are but do not actively advocate for change. Allyship is not merely a symbolic exercise - it requires you to acknowledge your privilege.

In this connection, it is important to recognize the people within the LGBTQ+ community may also be allies. Different members of the LGBTQ+ community may have vastly different experiences. LGBTQ+ identity

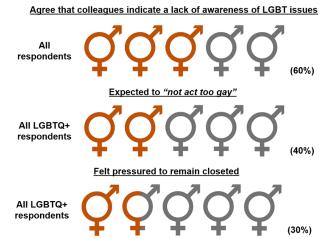


Figure 2. Co-worker attitudes toward LGBTQ+ issues and experiences of LGBTQ+ individuals who responded to the American Physical Society LGBT Climate in Physics report.

is just one way of classifying social oppression, and it may intersect with other forms such as sexism, racism, ableism and classism. We need to remember that issues affecting the LGBTQ+ community generally will affect minorities within the LGBTQ+ community in particular ways, such as women or black and minority ethnic individuals. Further, a trans woman also faces many different struggles from a gay man. Transphobia is on the rise, with a 37% increase in the number of transphobic hate crimes reported between 2016-2017 and 2018-2019 in England and Wales. It is difficult to identify differences in trends within biosciences as published reports only provide a snapshot of the climate and do not provide longitudinal data of trends in discrimination. Such data would be useful for understanding the impacts of various interventions. For those of us who identify as queer in some way or another, it is important that we stand together with others in the LGBTQ+ community, rather than seek divisions. We need to remember that the Stonewall uprising, which helped kickstart the fight for LGBTQ+ rights, was started by individuals who may have identified as gender nonconforming and/or trans (such as people like Marsha P. Johnson).

Over the last decade or so, several charities aiming to increase visibility of LGBTQ+ scientists have been founded, such as Pride in STEM. They are a charitable trust aiming to raise the profile of LGBTQ+ individuals in STEM by hosting regular Out Thinkers events, which provide a platform for LGBTQ+ people to discuss their lived experiences and work. The 500 Queer Scientists campaign was designed to generate networking opportunities and provide LGBTQ+ role models for the next STEM generation. It was this campaign that inspired Karim to start his own Twitter campaign in which he highlighted a different LGBTQ+ scientist every day of the month for LGBTQ+ History Month in 2019.

Outreach and widening participation activities are important ways to raise awareness and support people from underrepresented groups into academic careers. In 2019, Imperial College London became the first university to endorse LGBT STEM Day. This was launched with an outreach event sharing lived experiences and research of LGBTQ+ researchers in a relaxed pub environment. 🛓 Twenty percent of attendees identified as allies, and money was raised for LGBTQ+ charities (Mermaids and Diversity Role Models). Imperial College is bolstering its support for new equality, diversity and inclusion initiatives with a £10,000 seed fund for outreach and widening participation events.

#### What remains to be done?

"Diversity" seems to have become a buzzword used by organizations to create a façade or illusion that they are actively seeking to generate and implement initiatives which aim to address the inequality faced by various minority groups. While we have always tried to advocate for change on campus and have been involved in several campaigns, it often feels like there are a select few individuals holding it together within each department. We often ask ourselves: if we were not part of the university along with our LGBTQ+ colleagues, would there be any pressure for change at all? Some LGBTQ+ scientists struggle to find allies and many also reported feeling isolated at work. We both personally cope with these issues by surrounding ourselves with a queer community outside of our academic lives. However, these friends may not always understand the issues that we face in academia. Conversely, colleagues at work will not always understand the difficulties we face being queer. Increasing LGBTQ+ visibility can, therefore, be an effective way of alleviating some of these issues by creating a community

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on campus. Simple campaigns such as rainbow lanyards as well as regular social events and panel discussions hosted by the Imperial 600 (Imperial College London staff and postgraduate LGBTQ+ network) have helped us surround ourselves with other queer scientists.

There are several other steps that can be taken by academic institutions to create more inclusive work environments. Staff and students should be encouraged to have their pronouns in their email signatures. This can help to stop trans and non-binary individuals from being misgendered and normalizes the checking of pronouns of others before gendering them. Overall, this will help with dismantling heteronormative attitudes in many workplaces. Buddy systems could be set up to pair undergraduates and postgraduates with more senior members of staff who could act as a mentor. This would be particularly valuable for students who would not otherwise feel comfortable discussing their sexual identity as well as the difficulties they may face. Finally, LGBTQ+ awareness training should be encouraged, particularly for staff in management positions, to better equip staff to speak out against homophobia and transphobia.

#### Final thoughts

Perhaps the most frustrating feeling associated with being LGBTQ+ in STEM is that, were it not for our efforts and those of our LGBTQ+ colleagues, very little change would take place. For this reason, it is paramount that everyone does their bit in calling out discrimination and dismantling the heteronormative attitudes present in our workplaces. By promoting inclusivity, we also foster an environment that allows us to be more productive, ultimately resulting in academic excellence.

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