

Scientists with intersecting privilege must work towards institutional inclusion

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The enduring lack of diversity, equity and inclusion (DEI) in academia is arguably the biggest challenge facing universities. Progress has been slow and dependent on the efforts of marginalized faculty. We explain why this is a problem, offer potential solutions and ask those with intersecting privilege and power to be the drivers of change.

DEI committees tend to consist of those who have suffered most in the system and have the least power to change it. In our experience, and to our knowledge, these are the people who are often tasked with educating their colleagues about DEI as well as being both the architects and figureheads of change. Although flawed, this model is used by universities around the world. To break this cycle, we have composed this article in the style of a handout, intended to be given to those in the privileged majority who continue to ask under-represented researchers for explanations, answers or patience. We outline the problem and offer potential solutions, big and small.

Let's begin with the name: 'diversity, equity and inclusion'. Diversity includes (but is not limited to) gender, race, sexuality, disability, age, neurodiversity, socioeconomic background and caring responsibilities – and the intersection of these factors¹. Although diversity is a term that most of us are now familiar with, the composition of senior academics and university executives does not yet match the diversity of the societies that they serve. Top positions are mostly held by those with extreme privilege², hereafter referred to as the 'over-represented' group. Changing the people to fit the system, adopting a single-axis framework of diversity, or asking for patience while failing to act – solutions that too many over-represented researchers have traditionally offered – are no longer acceptable. Diversity, in its broadest sense, needs to become part of the governing structure of our universities.

Equity, not equality, is what we should be striving for. Equality is about giving everyone the same opportunities. Equity is about giving people the appropriate resources and opportunities that they need to succeed, which may differ from their colleagues. Only equity acknowledges the pervasive sexism, racism and discrimination that continues to exist in society. Although some claim that equity is a bridge too far for academia, we argue that it is a principle that scientists accept in their everyday lives and should therefore be achievable in our research ecosystem. For example, most scientists will agree that, in the early stages of the COVID-19 pandemic, everyone needed a vaccine, but some people needed it more. Prioritizing our essential workers and those with pre-existing medical conditions was an equitable decision.

Inclusion is based on the philosophy that everyone should be able to be their authentic selves at work; be welcomed and valued as they

are; and be provided equitable opportunities to enable them to do their best³. Although this may seem simple and obvious, we posit that this is the most neglected and misunderstood element of DEI. Moreover, we propose that diversity without inclusion is frivolous at best and harmful at worst. For example, hiring committees typically concentrate their DEI efforts on ensuring that shortlisted candidates span a range of demographics. Although this may – at first – seem to be an admirable goal, the high rate of attrition of diverse, talented academics highlights how this box-ticking exercise falls short and speaks to the lack of inclusion faced by marginalized people when they are hired. Evaluation systems and timelines for tenure and promotion have been formulated by the over-represented and select for characteristics and metrics that help paint themselves in the best light. However, academia does not provide equitable footing for marginalized scientists and extracts a 'minority tax' from the people who are already at a disadvantage, by tasking them with fixing the system that held them back. These activities hamper the research of marginalized faculty members and are not sufficiently considered or valued during evaluations for promotion and tenure. This leads to a vicious cycle of under-representation of marginalized communities in decision-making positions, ensuring that the status quo that benefited the over-represented community is upheld. Unless radical and meaningful changes pertaining to inclusion are introduced and enforced by leadership teams working towards a common DEI vision, marginalized academics will continue to be erased from the system and left to explain to the seemingly bewildered majority how things went so terribly wrong.

The key difference between setting goals for diversity and equity versus setting those for inclusion is that the former are quantifiable – that is, diversity can be 'measured' by counting the proportion of individuals from different marginalized communities, depending on how these communities are defined. Similarly, one could put a number on equity by measuring outcomes – for example, of grant success in proportion to applications from a particular community. However, inclusion is only achieved when people from marginalized communities "feel like they are welcome and belong" in academia. This requires a drastic change of culture and an ambition to improve, rather than conform with, academia.

Change may seem daunting, but we offer the following example from our experience: at the Emerging Concepts in Cell and Developmental Biology (ECCDB) meeting, organized by the @NewPICellDev community in 2022, chairs were placed at strategic locations in the large hall where the poster sessions were held. Chairs near posters are not typically available at scientific conferences, where poster sessions can last for several hours. This small act of inclusion ensured that people with disabilities (both visible and invisible), pregnant women, and anyone else who needed it felt welcome and accepted, without having to go out of their way to ask for what are considered 'special accommodations'. Extend this to a departmental setting and consider a newly hired disabled academic, who may have to use one

Comment

Table 1 | Inclusion roadmap

Steps to be taken by institute leaders to create inclusive workplaces	Timeline
Conferences and departmental seminars or meetings:	
<ul style="list-style-type: none"> • Only support and host events with equitable speaker lists. Create a culture of normalcy for such meetings (for example, Merle Pledge or BiasWatchIndia⁹). Facilitate and encourage hybrid meetings. 	Short
<ul style="list-style-type: none"> • Conduct faculty meetings between the hours of 09:00 and 16:00 Monday to Friday. Consider committee membership and roles carefully and develop a culture of inclusion over representation. Alter meeting design to enable all voices and communication styles. Ensure physical and virtual accessibility. 	
Communication:	
<ul style="list-style-type: none"> • Avoid non-inclusive language⁹. It is never appropriate nor accurate to use the term 'diversity hire'. If in doubt with language, test it by flipping it; for example, one would not use the phrase 'homogeny hire'. 	Short
<ul style="list-style-type: none"> • Everyone should be afforded the dignity of full and proper pronunciation of their chosen names. This can be supported by phonetic pronunciation guides — for example, on websites, staff boards or Slack channels. When introducing faculty members, use full and correct professional titles for all staff or do not use them at all. If a person opts to declare their personal pronouns, learn and respect them. 	
<ul style="list-style-type: none"> • Be consistent with distinctions of assertiveness versus aggressiveness. Assertive or direct communication is often viewed positively when used by the over-represented and can be branded as 'aggressive' when used by others. This reinforces a cycle in which under-represented colleagues are frequently required to self-advocate and their self-advocacy is met with unfounded personal criticisms, requiring additional self-advocacy. 	
Workplace design (minor adjustments):	
<ul style="list-style-type: none"> • Place free menstrual products in bathrooms. 	Short
<ul style="list-style-type: none"> • Ensure cafeteria food is appropriately labelled with allergens and common dietary restrictions. 	
<ul style="list-style-type: none"> • Consider gender differences and women's thermal comfort when setting office thermostats. 	
<ul style="list-style-type: none"> • Maintain work-from-home options and flexible work schedules. 	
<ul style="list-style-type: none"> • Take complaints from marginalized communities seriously. 	
Training:	
<ul style="list-style-type: none"> • Invest in meaningful DEI training by qualified consultants. Prioritize inclusive leadership training so that this becomes part of a larger institutional commitment. Consider active bystander training and regular unconscious bias training or discussions for all. 	Medium
<ul style="list-style-type: none"> • Provide advocacy and inclusion training for support staff, centre management and security personnel. Individuals from marginalized communities often receive biased and disproportionate demands on their time. Their requests for administrative assistance are often given lower priority. Marginalized faculty may be profiled and targeted by building security. These actions have a significant and cumulative burden on one's time, mental health and sense of inclusion. 	
Internal grant schemes:	
<ul style="list-style-type: none"> • Ensure internal grant review is equitable. Encourage refresher training on unconscious bias before panel meetings. 	Medium
<ul style="list-style-type: none"> • Review achievements relative-to-opportunity¹⁰. Consider using a relative-to-opportunity spokesperson on panels and create a clear and transparent framework for adjusting for career disruptions. 	
<ul style="list-style-type: none"> • Consider the benefit and strategic value of research diversity funding (such as the NIH Diversity Supplement) over other initiatives (such as near-miss funding). 	
Evaluation and hiring:	
<ul style="list-style-type: none"> • Use quotas. 	Long
<ul style="list-style-type: none"> • Re-evaluate definitions of excellence in academia to value and reward meaningful DEI and mentorship work. 	
<ul style="list-style-type: none"> • Carefully word job advertisements to set clear standards for workplace culture and vision; use inclusive language. 	
<ul style="list-style-type: none"> • Ensure interview questions discriminate between performative allyship and saviour behaviour versus meaningful, long-term DEI commitments. Ask open interview questions (or propose 'dilemma' scenarios¹¹ and ask the applicant to propose and discuss possible solutions). Tailor questions and expectations to leadership level. 	
<ul style="list-style-type: none"> • Consider a refresher on unconscious bias (including in-group bias) before evaluating candidates. This would include encouraging panel members to recognise their own privilege and how this may impact their assessment of others. 	
<ul style="list-style-type: none"> • Include a trained DEI champion from HR in interviews; enable their participation in questions and decisions, and their intervention when inappropriate questions are asked. 	
<ul style="list-style-type: none"> • Collect and analyse data on start-up packages, salary and resource distribution across demographic groups to ensure decisions are equitable. 	
<ul style="list-style-type: none"> • Reconsider the concept or duration of faculty probationary periods; have mechanisms to extend this when needed. 	
<ul style="list-style-type: none"> • Remove basic and essential requirements from negotiation conversations (for example building access for disabled people). Similarly, if basic needs (such as office space, computing or relocation assistance) are standard for any faculty at the same level, they should not form any part of a negotiation package for underrepresented faculty. 	
<ul style="list-style-type: none"> • Conduct regular audits before promotion rounds to ensure academics are employed at the appropriate level. When needed, encourage marginalized faculty to apply for promotion; support and sponsor them throughout the process¹². 	

Table 1 (continued) | Inclusion roadmap

Steps to be taken by institute leaders to create inclusive workplaces	Timeline
Leadership support:	
<ul style="list-style-type: none"> • Create an executive DEI position (such as Associate Dean DEI) with an operational budget, whose role is considered equal to the equivalent position for teaching and research. They would be responsible for setting departmental DEI targets, which would determine future resource allocation. Accountability must be to the highest level of governance. 	Long
<ul style="list-style-type: none"> • Space and infrastructure must be equitably partitioned without undesired importance placed on seniority. 	
Infrastructure:	
<ul style="list-style-type: none"> • Although open labs and offices have been transformative in ensuring increased collaboration and reducing resource duplication, the lack of personal space in a workplace can be challenging for some (for example, neurodiverse individuals). Consider bookable individual spaces, flexible work arrangements and noise cancelling earphones. 	Long
<ul style="list-style-type: none"> • Provide independent lactation rooms and prayer rooms as well as non-gendered and accessible toilets on all floors. 	
<ul style="list-style-type: none"> • Provide affordable and equitable options for on-site childcare. 	
<ul style="list-style-type: none"> • Offer faculty no-cost relief support (such as a lab manager or research assistant) during periods of parental leave. 	

of their bargaining chips to access their lab or to sit in front of their computer. After negotiating for this basic requirement, they may not be able or inclined to ask for the microscope that they need to do their research.

At the ECCDB meeting, the organizers achieved DEI wins within their sphere of influence. We take the deep-seated position that leaders at universities – where the sphere of influence is substantially larger – must make a similar commitment to educate themselves and drive meaningful change at their workplaces. Although DEI is everyone’s responsibility, our gaze is directed at those who boast leadership qualities or titles in their CVs and job descriptions. Many of the changes that are required have no precedent – this does not make them unachievable. It simply requires our leaders to lead from the front.

Inclusion roadmap

We propose some actions that could be undertaken by university leaders to foster inclusive workplaces. We provide this list to our senior colleagues reluctantly, noting that our formal education is in the field of cell and developmental biology – not race, gender or discrimination studies. We speak through the lens of our own experiences (as under-represented scientists sitting on DEI committees at universities in Scandinavia, the UK and Australia), but we also carry with us our own privileges and biases. For this reason, we implore university leaders to first undergo inclusive leadership training led by external consultants with PhDs in this topic, and to undertake inclusion surveys within their department. This work must be ongoing, led from the top and undertaken with the same gravity and tenacity as that which is given to research and teaching portfolios.

Initial upskilling and continued personal development

First and foremost, leaders must learn to recognize their own (often extreme) privilege. Without this, the relentless microaggressions and stereotypes that marginalized researchers meet in their workplace will require their constant reporting, explanation and, ultimately, self-advocacy. It should also be remembered that for many people, such microaggressions come on the back of a lifetime of lived or learned fear of racial, sexual, psychological or domestic violence. They have a phenomenal cumulative effect.

Some senior academics have themselves encountered workplace DEI-related issues and may feel that these experiences ‘make one stronger’, but we argue that imposing these same challenges or

restraints on the next generation through an ill-conceived idea of mentorship is misguided. Indeed, the #blacklivesmatter and #metoo movements in academia are not responses to distant problems caused by a few ‘bad eggs’, but result from persistent and pervasive racism and misogyny perpetrated or left unchecked by a considerable proportion of the over-represented community⁴.

Inclusive actions and timescales

Table 1 highlights small and large changes that could be implemented to create more inclusive workplaces. Small acts (with short timescales) could in theory be undertaken by any institute immediately to move the needle in the right direction, while larger structural reforms (with long timescales) are being worked through. Similar lists exist elsewhere (<https://www.bhallalab.com/equity-reading-list>), and may be useful to consult when developing DEI goals and strategies.

Resource commitment

When it comes to DEI, senior academics may recollect more sexist, racist and discriminatory eras and ask junior faculty for their patience. However, disruption of long-standing biased practices, such as those in the current academic system, will not happen suddenly through inaction of these senior colleagues. Instead, progress requires that the over-represented in positions of power take active, concrete steps to ensure diversity and inclusivity. A lack of earmarked funding is often the first, feeblest and most offensive reason for not investing in DEI. By drawing on a wider pool of talent, DEI creates stronger boardrooms and businesses^{5,6}. It is increasingly a requirement of major funders, and one that can no longer be satisfied by handwaving or performative allyship⁷. A strong financial case can and must be made for DEI.

Concluding remarks

For some, this article may not be easy to read, and it is not intended to be. If marginalized academics are continually asked to educate colleagues and leaders about DEI-related issues, and – by reason of their lived experiences – be tasked with providing solutions to academia’s biggest problem, their voices cannot be dismissed as impassioned or impractical. In this vein, we have plainly communicated the problem and proposed a set of potential solutions. We now ask that our leaders take this on board and do better. The future of the next generation of scientists depends on it!

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Published online: 25 April 2023

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Acknowledgements

We first acknowledge our individual biases and privileges, which undoubtedly influenced this manuscript, and apologise for any oversights or omissions. We thank S. Chalmers, U. McClurg and K. Knudsen for their perspectives, ideas and suggestions, which inspired this piece, and which continue to inspire us. We would also like to extend our thanks to all members of the @NewPICellDev community who attended the ECCDB meeting, where some of the ideas that form the basis of this manuscript were discussed. F.M.D. is funded by the National Health and Medical Research Council of Australia (2003832) and the Novo Nordisk Foundation (NNF20OC009705). S.E. is funded by the Medical Research Council UK (MR/R026610/1). V.A. is funded by EMBL Australia. The ECCDB meeting was supported by the Novo Nordisk Foundation (NNF21OC0072611) and the Company of Biologists (SCG7).

Competing interests

The authors declare no competing interests.