

# Creating Inclusive Research Cultures in Doctoral Education

3rd UKCGE Conference on Equity, Diversity and  
Inclusion in PG Research  
*Race and Ethnicity in PGR*

02/11/2025

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# Overview

- Snapshot of the research landscape in the UK
- Doctoral candidates' perspectives
- Barriers and challenges
- Recommendations
- Building a new pipeline and ecosystem

# CULTURE

“an **integrated pattern of human behavior** which includes but is not limited to—**thought, communication, languages, beliefs, values, practices, customs, courtesies, rituals, manners of interacting, roles, relationships,** and **expected behaviours** of an ethnic group or social groups whose members are uniquely identifiable by that pattern of human behaviour.” *National Center for Cultural Competence (2001)*

## Figure 21: Words that researchers would use to describe an ideal research culture

Survey, n = 4079-4110 – research community, UK and international.



Ideas for a better future

What Researchers Think About the Culture They Work In | 48

Wellcome (2020). What researchers think about the culture they work in

What is the culture of the doctoral  
academy (graduate school) at your  
Institution?

# Report on the experience of PhD students *PhD Life: The UK student experience* by Bethan Cornell

The author of the report, Bethan Cornell, who is currently studying for a PhD in Physics, said:

Nick Hillman, the Director of HEPI, said:

*Despite PhD students making a valuable contribution to UK research output, there are huge variations in the way they are recruited and funded and the quality of support they receive. This makes it hard regulate their experience and means PhD students' voices can go unheard when things go wrong.'*

*Too often, people taking PhDs are regarded as neither one thing nor the other. They are not seen as students the way undergraduates are and they are not seen as staff the way academics are. Sometimes, PhD students receive excellent support but, too often, they fall through the cracks, making them demoralised and unhappy. When that happens, we all lose because the world desperately needs people who push forward the frontiers of knowledge.*

“The higher up you go, the more male and white-dominated the environment becomes. There’s only one full female professor in my whole institute, and I have genuinely never met a black PI [Principal Investigator] or professor since starting my PhD.”

Rachel Hewitt (2020). New report suggests PhD students work 50% more than undergraduate. HEPI Blog

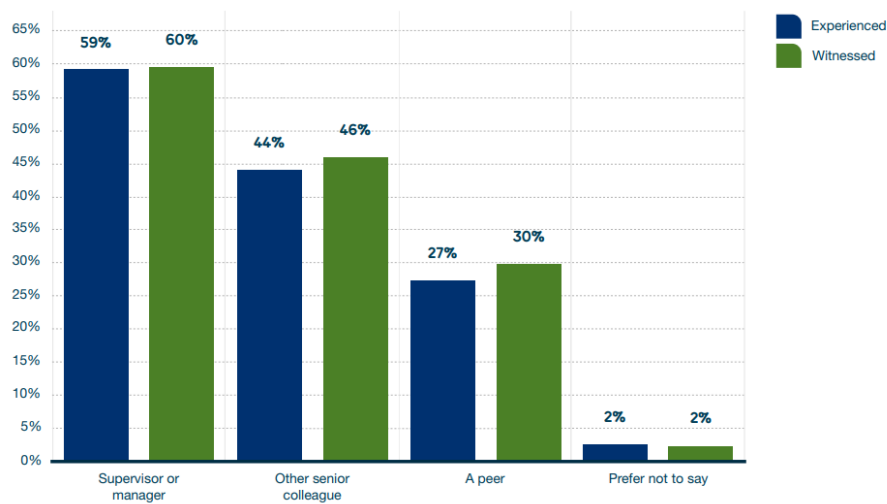
# Experiences of doctoral students...

## Headlines from the Nature PhD careers survey (2019)

- 74% of respondents are satisfied with their decision to pursue a PhD. 71% of respondents are satisfied with their PhD experience
- 19% of respondents have a job alongside their PhD studies. The main driver for this is to help make ends meet (53%).
- **27% of respondents report that they spend 41-50 hours on their PhD programme per week, and 25% report that they spend 51-60 hours.**
- **36% of respondents have sought help for anxiety or depression. 49% of respondents report a long-hours culture at their university.**
- **21% of respondents had experienced discrimination or harassment in their PhD programme. Gender (39%) and racial (33%) discrimination were the most common forms.**
- Funding and work-life balance are key barriers to pursuing an academic research career.
- Only a quarter agree that their programme is preparing them well for a non-research science-related career.

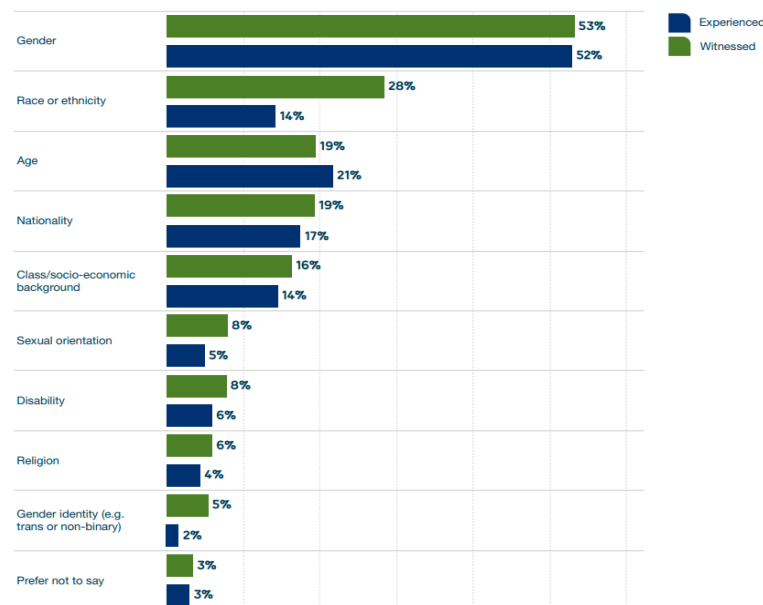
**Figure 12:**  
Perpetrators of bullying or harassment, as witnessed and experienced by researchers

Survey, n = 1804 – research community, UK and international.



**Figure 14:**  
What bullying/harassment/discrimination was related to, as witnessed and experienced by researchers

Survey, n = 2260-2863 – research community, UK and international.



Wellcome (2020). What researchers think about the culture they work in

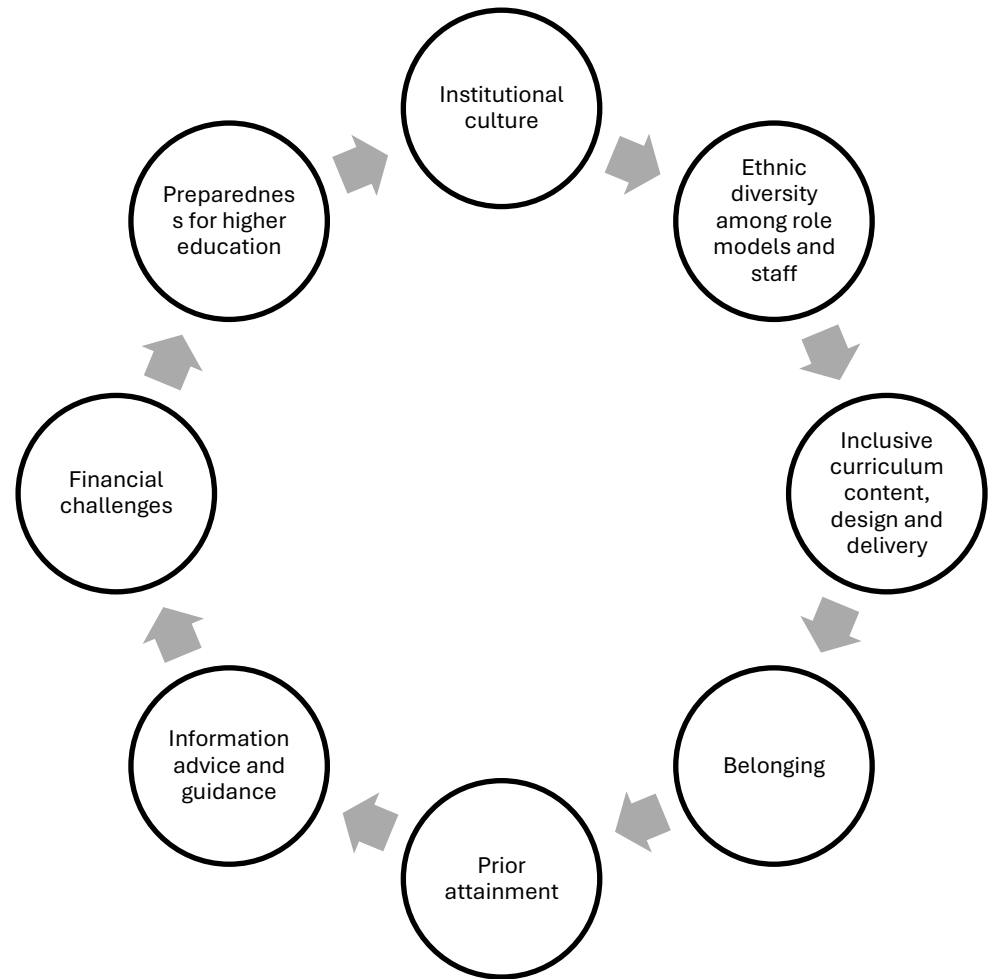
If we address the barriers and challenges at doctoral level would that solve the problem?

# A leaky pipeline and the degree awarding gap are among the major barriers to inclusive doctoral education

**White vs Global Majority - 12.3%, with some gaps of over 20% reported at several universities**

**White vs Black 19.3%. In 10% of universities the awarding gap is over 30%**

(data from UAL ethnicity representation index)



# Leaky HE pipeline

## UK STUDENT/STAFF PIPELINE BY BLACK, ASIAN AND MINORITY ETHNIC/WHITE IDENTITY



UK domiciled students and UK academic staff proportions by Black, Asian and minority ethnic/White identity, 2020/21

**AdvanceHE** Advance HE (2022) Equality in higher education statistical reports - weighted by full person equivalent **#AdvanceHEstats**

Student statistical report 2022

Feature

# HOW UK SCIENCE IS FAILING ON DIVERSITY

Data show that Black scientists' representation dwindles at each stage of academia in the United Kingdom. **By Elizabeth Gibney**

*This article is the first in a Nature series examining data on ethnic or racial diversity in science in different countries.*

In 2018, Robert Mokaya discovered that he was the only Black chemistry professor in the United Kingdom. For a decade, he'd assumed there were others who he hadn't met – until investigations by the UK Royal Society of Chemistry revealed his lonely status. "Somebody said to me, 'You're an endangered species. When you retire, there won't be any,'" he says. "It is a terrible statistic."

Stark figures like these abound at the top echelons of UK academia. UK physics has no Black professors, according to 2020–21 data disclosed to the UK Higher Education Statistics Agency (HESA). Black people make up 4% of the country's working-age population, and 8% of its science undergraduates, yet just 0.6% of its science professors. In all academic fields, just 160 of the United Kingdom's 22,855 professors are Black (among those, just one-quarter are women). And the representation of researchers of Asian, 'mixed or multiple ethnic groups' (as the UK Census and HESA terms it), or 'other' ethnicities also dwindles with seniority, especially in science (see 'Diversity in UK science').

A finer-grained analysis shows that, in particular, people of Black Caribbean, Bangladeshi and Pakistani ethnicities are under-represented (see 'A closer look at ethnicity').

These figures show not only injustice, but also the way UK science is impoverished by losing diversity of thought and experience, says Tamvir Hussain, a materials engineer who, like Mokaya, is at the University of Nottingham.

Data gathered by *Nature* show attrition at almost every stage of the UK academic journey. Those who study these inequities say that responsibility shouldn't be placed on individuals who are struggling to thrive in UK academia. Rather, the system needs to change, with institutions asking what about their

environments and structures is inhospitable for some academics. "They don't need anything other than a fair system," says Mokaya.

### Starting out

There are some positive signs. Undergraduates in the United Kingdom are more diverse than its wider population, across almost all minority ethnic groups. Yet particular science courses struggle to attract students from marginalized ethnicities. More than 8% of degree students in science subjects in 2020–21 were Black, but only 3.4% were in the physical sciences, for instance. Overall, engineering or vocational subjects such as law, business and medicine attract a more diverse range of students (see 'UK undergraduates').



**THE SELECTION PROCESSES NEED TO EVOLVE FROM THE TRADITIONAL, WHITE-CENTRIC PROCEDURES."**

Some of the reasons are financial, says Mahrukh Shameem, a PhD student in immunology at the University of Sheffield, and an advocate for equity, diversity and inclusion. People from minority ethnicities in the United Kingdom are often from disadvantaged socio-economic backgrounds. The trend is not universal, however – a 2020 UK government survey showed, for example, that people from Pakistani and Bangladeshi ethnic groups had the lowest household incomes, whereas people from Indian ethnic groups had the highest income of all groups. This might sway

some students to choose degrees that lead to financially secure jobs, such as engineering or medicine, she says. Cultural factors play a part, too: some students in the UK South Asian community, for instance, might have an expectation they'll be relied on to support their families financially across generations, Shameem adds.

Physics tends to be perceived as a "quest for knowledge" – a luxury, says Mark Richards, a physicist at Imperial College London and member of Imperial As One, the university's race equality advisory group. That's despite physics graduates often securing a range of prosperous jobs, from banking to the public sector, he says.

The pattern perpetuates, says Hussain, when prospective students feel they won't belong on a course because they don't see people like themselves doing it, or because its contents don't reflect their culture or the contributions of people like them. That's something Shameem has felt at first hand: "I haven't met a single Pakistani female principal investigator or lecturer, and I've been in academia for a decade," she says.

### The PhD precipice

The proportion of Black students in postgraduate science drops sharply compared with those at undergraduate level. For instance, just 3.8% of students who started research master's or PhDs in science subjects in 2020–21 were Black, compared with 8.3% of those who started first degrees in those subjects three years earlier (an approximate way to follow cohorts; both statistics refer only to students who lived in the United Kingdom before starting their course). In taught science postgraduate courses, however – those that do not involve research – 8.2% of students are of Black ethnicities. Fewer students of Asian ethnicity also continue to postdoctoral research than could be expected on the basis of undergraduate science populations. In the majority of subjects, the representation of



Comparison of ethnicity breakdown and Black representation for chemistry, biology and physics students and staff at UK universities. Source: 2017/2018 HESA data.

# Achieving research career success a bleak vision for some

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## NEWS

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Science & Environment

### Royal Society of Chemistry report says racism 'pervasive'

© 16 March 2022



**Of the 575 chemistry professors in the UK, just one is black.**

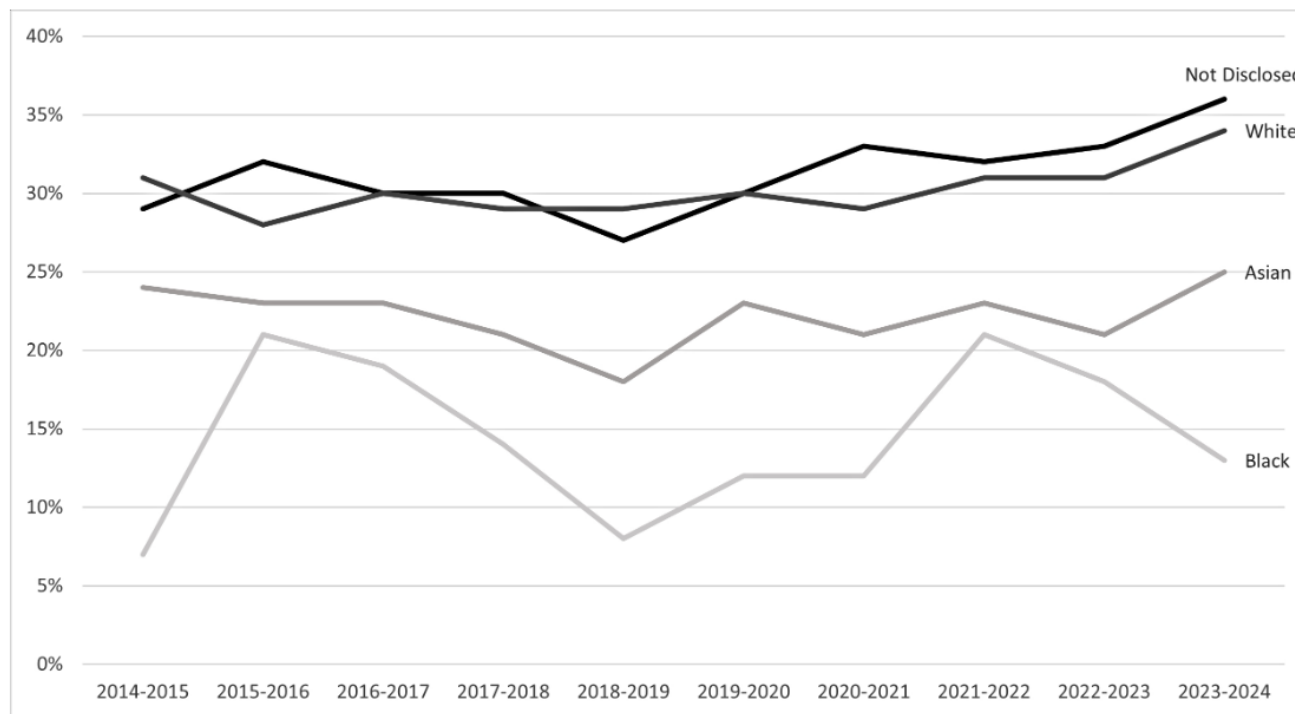
In the 15 years Robert Mokaya has been a professor at Nottingham university, he has had all his applications for funding for research projects turned down by Britain's main chemistry funding body, now called the UK Research and Innovation agency.

"That is not typical for a professor," he tells me phlegmatically.

"I have had research papers published which I would have expected would have enabled me to obtain funding to do follow-up research.

# Who is funded to do research?

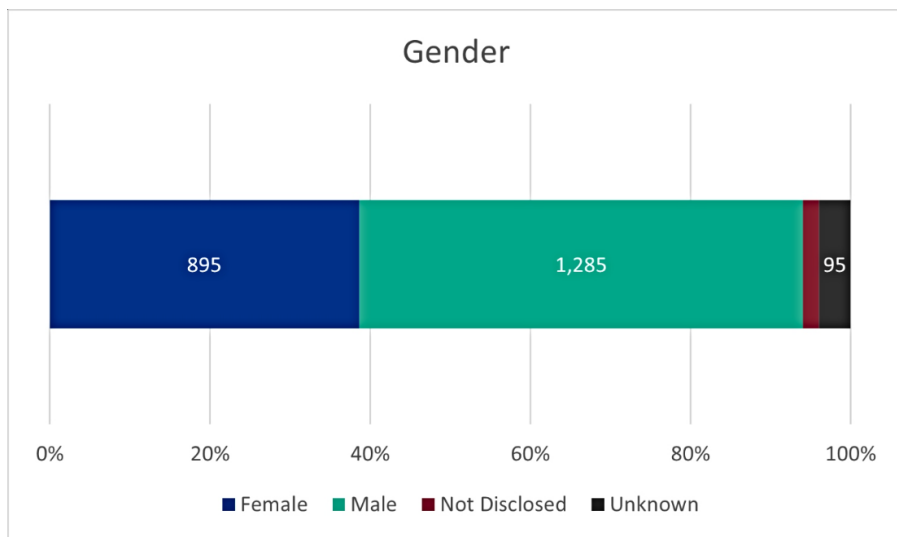
Figure 7: UKRI award rate by ethnicity for principal investigators (Not Disclosed, White, Asian and Black only), 2014 to 2015 to 2023 to 2024



Description of figure 7: A line chart which shows the award rate for Not Disclosed and White ethnicities is higher than Asian and Black ethnicities since 2014 to 2015. Source: UKRI diversity data.

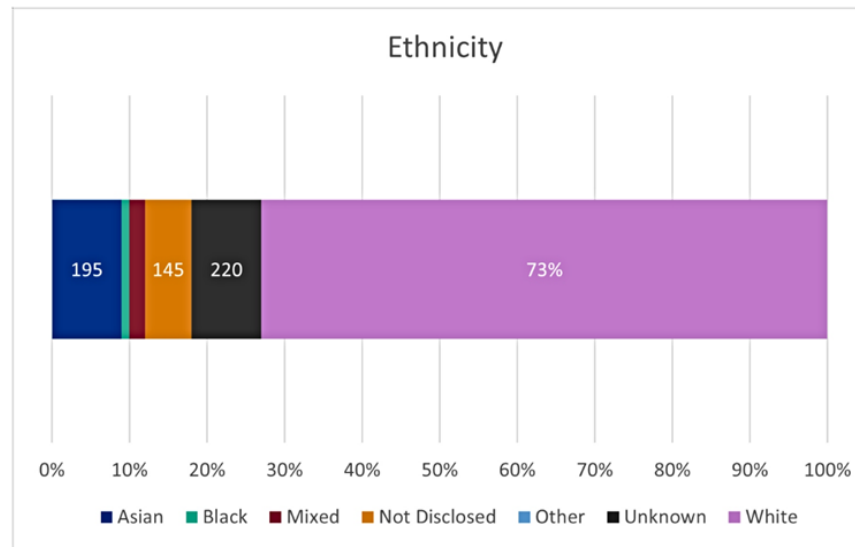
# Who gets to decide on funding?

Figure 16: UKRI grant panel members composition by gender, 2023 to 2024



Description of figure 16: these four stacked bar charts show the highest proportion of panel members are male. Source: UKRI diversity data.

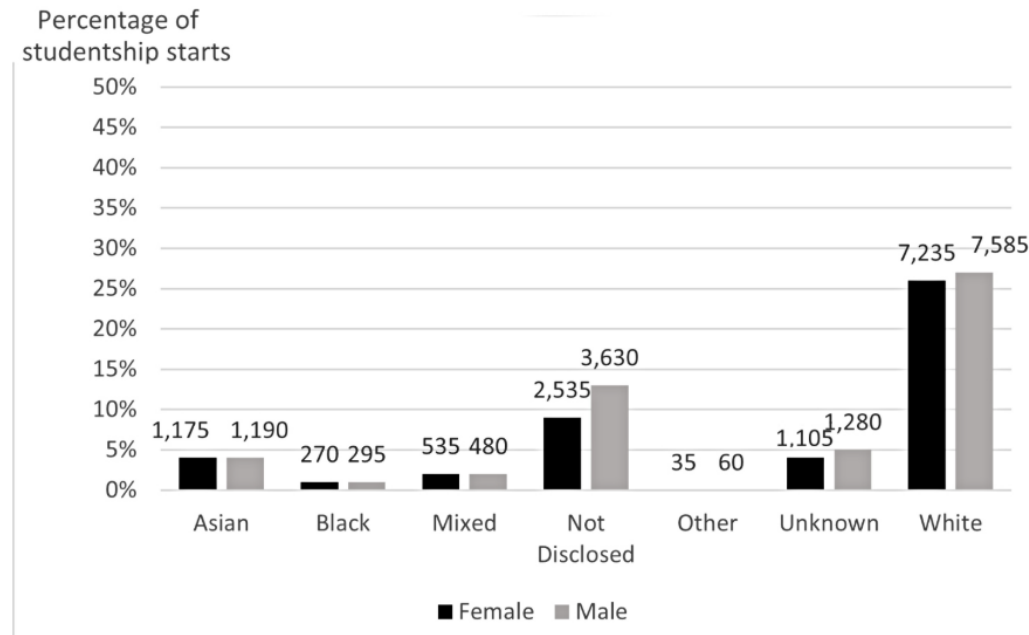
Figure 15: UKRI grant panel members composition by ethnicity, 2023 to 2024



Description of figure 15: these four stacked bar charts show the highest proportion of panel members are White. Source: UKRI diversity data.

# How does this apply to PhD studentships?

Figure 19: percentage of studentship starts by ethnic group and gender, UKRI, five-year cumulative (excluding unknown and non-disclosed gender)



Description of figure 19: This bar chart shows that the largest proportion of students are White males, and that a large proportion of students choose not to disclose their ethnicity. Source: UKRI diversity data.

“PhD students are the engine of scientific discovery, academic research, and university innovation”

## Universities are failing to address racism on campus

Higher education is awash with stirring statements about its commitment to greater diversity. Yet students who face discrimination often do not know where to turn and are seldom impressed by the support they get, discovers Jason Murugesu

October 1, 2020

Jason Murugesu

Twitter: @justsosomeone



Source: Getty

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MEDIA RELEASES

## Universities UK calls for urgent action on racial harassment in higher education

Last updated on Tuesday 6 Sep 2022 at 4:32pm



Universities UK (UUK) has today (Tuesday 24 November 2020) published a new set of recommendations designed to decisively tackle racial harassment as part of efforts to address racial inequality in UK higher education.

The recommendations are the product of an advisory group convened by UUK in October 2019 and come just over a year after the Equality and Human Rights Commission uncovered widespread evidence of racial harassment on university campuses.

The advisory group, chaired by Professor David Richardson, Vice-Chancellor, University of East Anglia,



### Higher education

## UK universities perpetuate institutional racism, report says

UK calls on leaders to improve understanding and awareness of racism among staff and students

**Sally Weale** *Education correspondent*

Mon 23 Nov 2020 19.01 EST



🕒 1 year old

UK universities “perpetuate institutional racism” and vice-chancellors should undergo training to improve racial literacy as part of a sector-wide crackdown, according to a report.

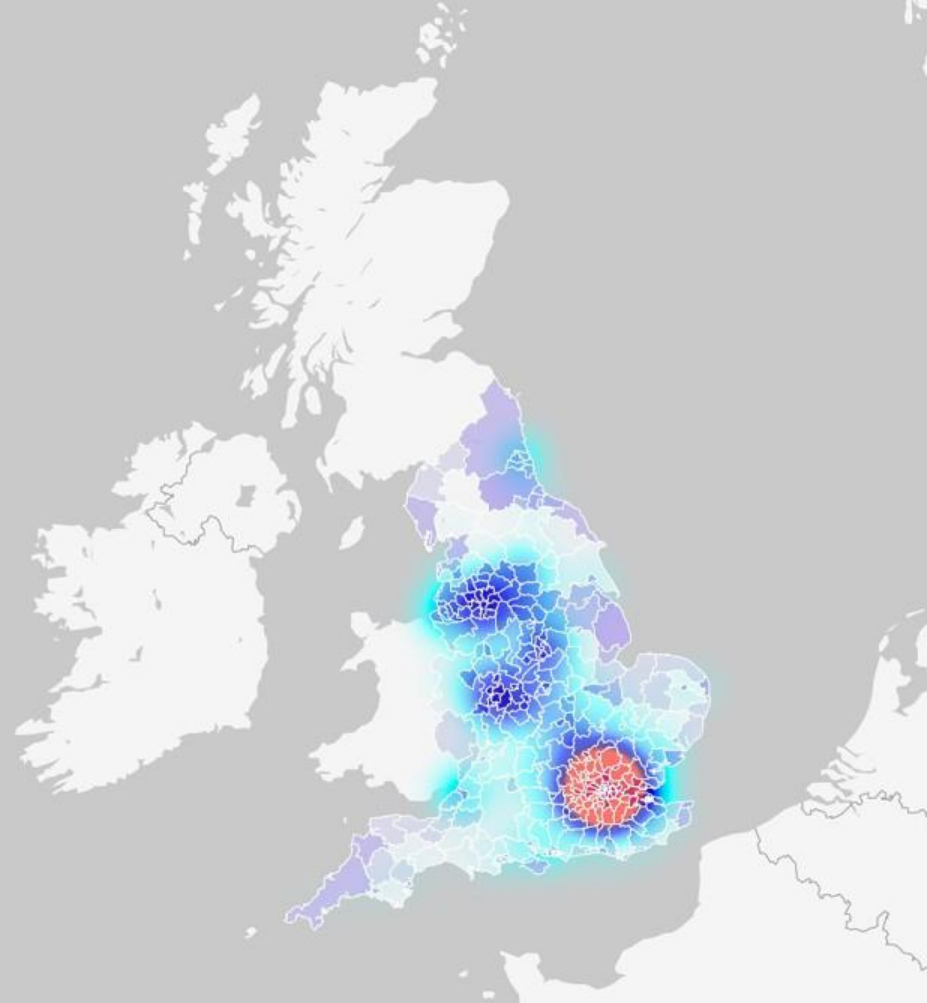
Universities UK (UUK), which represents 140 institutions in England, Scotland, Wales and Northern Ireland, calls on senior leaders to admit

There are wider implications  
beyond research

# Influence on the type of research we do

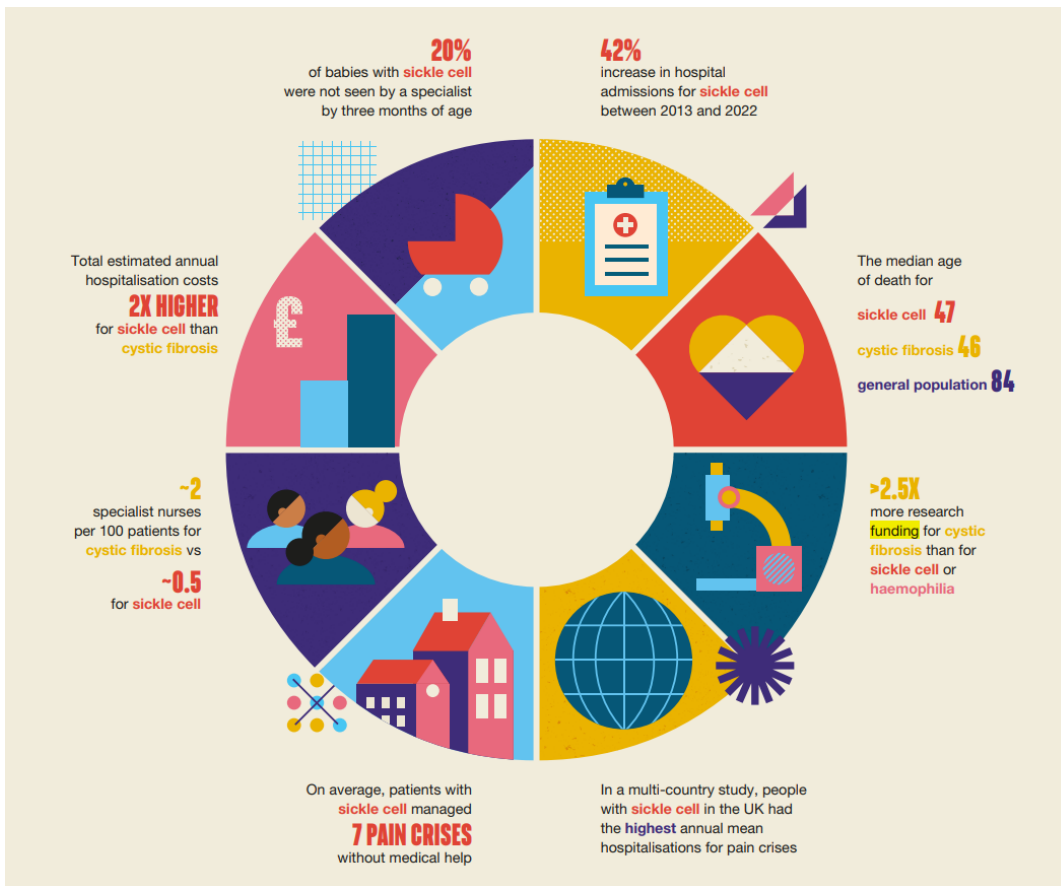
There are more than **15,000** people living with SCD in the UK, and only **5** approved treatments, a comparator genetic condition which has **10,500** patients has **511** approved treatments.

sanius 



**Estimated 376,000 deaths attributed to SCD in 2021**

# Sickle Cell Disease



“In total, between January 2013 and December 2022, there were 19,506, 9,569 and 7,289 individuals with a primary diagnosis of sickle cell, cystic fibrosis, and haemophilia respectively in the NHS Hospital Episode Statistics dataset”

“We calculated the average annual research funding per person for individuals with one of the three conditions considered. This amount was lowest for sickle cell at £184 (95% CI: £172 - £196), compared with £315 (95% CI: £226 - £404) per person with haemophilia and £703 (95% CI: £697 - £709) per person with cystic fibrosis.”

# Graphic summary of recommendations



***Inclusive research*** - “**intentional engagement of diverse voices, communities, perspectives, and experiences throughout the research process. This encompasses not only who conducts the research but also how it is governed, funded, and integrated into broader systems, such as policy and practice.**”

# Building Inclusive Research Cultures

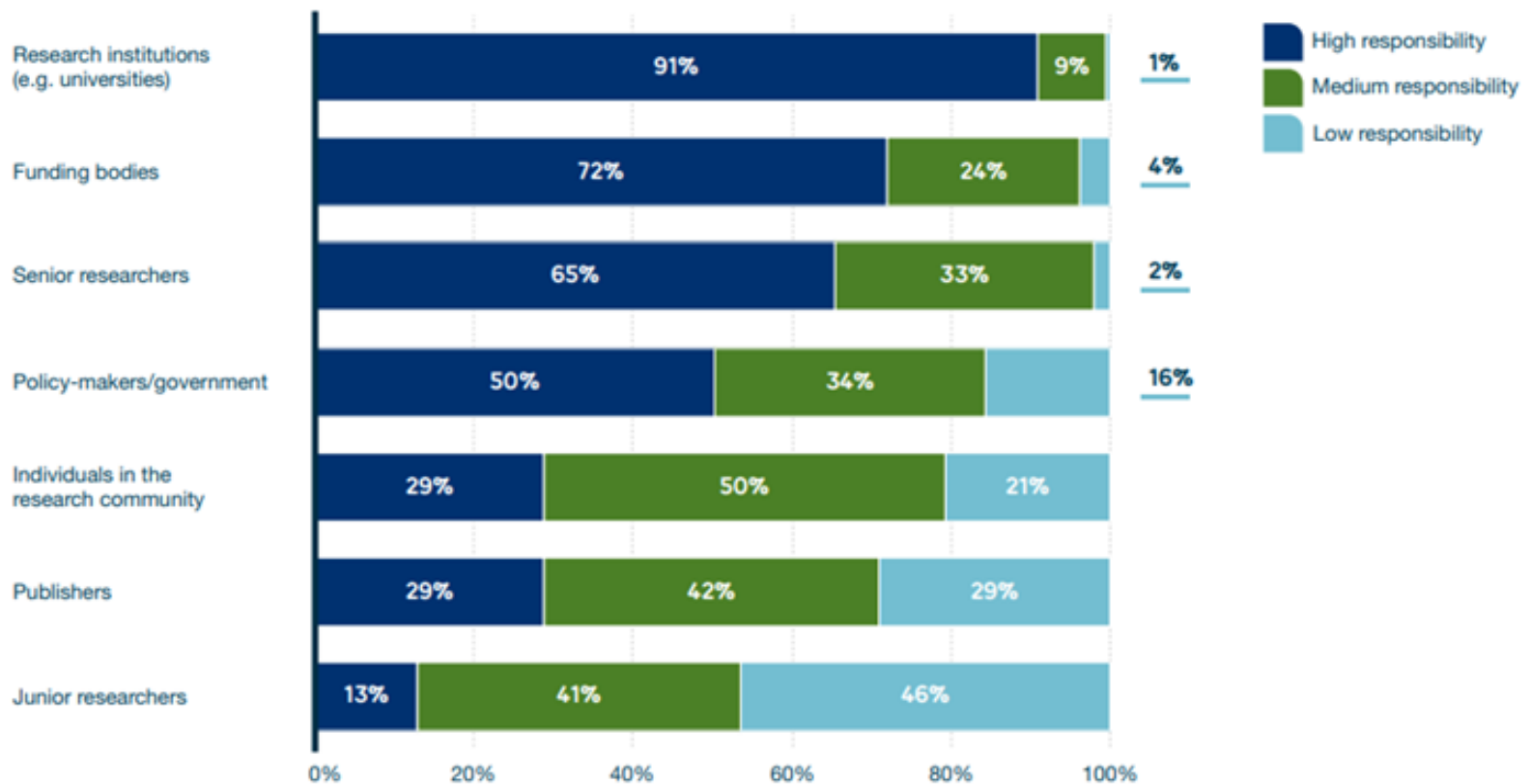


Figure 1. Inclusive Research Dimensions

- Morrow, Vandrevalla and Ross (March 2025). Building inclusive research cultures— How can we rise above EDI cynicism?

## Figure 20: How much responsibility researchers think different groups should have for changing research culture

Survey, n = 4079-4110 – research community, UK and international.



Wellcome (2020). What researchers think about the culture they work in

# Suggestions for Improvement (OfS & Research England Widening Participation PGR workshop)

- Charters and pledges
- Admission policies
- Increasing opportunity to participate in PGR study
- Information advice and guidance (IAG):
- Improved data
- Enhanced supervision
- Positive action
- Increased representation in leadership
- Contextual excellence

The following levers available to the OfS and RE were highlighted:

- Targeted Funding
- Community of practice
- Research assessment
- Regulation

# Inclusion as a strategic institutional priority

UWE Bristol logo, Search icon, Menu icon, About us | Our values, vision and strategy | Equity, diversity and inclusivity

## Equity, diversity and inclusivity

Equity, diversity and inclusivity underpin the University's core values.

Equity, diversity and inclusivity (EDI) underpin our core values. We are working to ensure that our commitment to equality is reflected in the behaviour, values and practices throughout the University. We are actively seeking to promote a culture where discrimination, bullying and harassment of any students or member of staff is unacceptable.



### Anti-racism

Find out what anti-racism is, why it's a priority at UWE Bristol and what steps you can take towards creating anti-racism environments.



### Inclusive culture

We want to ensure the best possible experience for all students and staff.



### Governance and voice

We will ensure that all staff and students have opportunities to influence decision-making about provision affecting their experiences.

## 100 BLACK WOMEN PROFESSORS NOW.

### 100 Black Women Professors NOW

100 Black Women Professors NOW programme aims to increase the number of Black women at every stage of the academic pipeline.



### Inclusive teaching and learning

We want to ensure that our learning programmes are accessible and take into account the different needs of our students and staff.



### Hate incident reporting

Guidance for students, staff, visitors and contractors about reporting bullying, harassment and hate incidents.



### EDI data, research and evaluation

Discover how the University uses equity and diversity data, plus access the latest statistics.



### Technician Commitment

UWE Bristol is one of the proud founding signatories who have pledged to take action to remove the barriers and face the challenges affecting technical staff.



### EDI Champions

Our EDI Champions are passionate members of staff who volunteer to help raise the profile of EDI at UWE Bristol.

An anti-racist institution actively dismantles racism at every level – policy, practice, culture, and leadership – rather than merely being non-racist or passively inclusive. We are committed to identifying, challenging, and eradicating racial inequities to ensure that all racialised groups, particularly those from the Global Majority, have equal access to opportunities, resources, and decision-making power.

Watch this video message from Vice-Chancellor Steve West about our Anti-Racism Strategy:



### COLLECTION

## Inclusive Curriculum and Practice Toolkit

Published 25/07/2025

The toolkit will help embed inclusive practice, and improve our teaching, learning and culture across the University. Colleges and services are drawing on it to shape their Equality Diversity and Inclusivity planning and inclusive practice.



### Awarding gaps Guide

Awarding gaps, measuring differential outcomes when students graduate, are a long-standing issue across higher education. At UWE Bristol, everyone is part of the solution. This guide will share information and point you to resources as well as actions you can take.

Inclusivity is one of UWE Bristol's core values. We have a Strategy 2030 target to enable all students to succeed and to have eliminated all awarding gaps. To achieve this, we are continuing to develop relevant interventions, and are keen to hear from you about what interventions you are trying and which have had impact.

Addressing the pedagogic, cultural and behavioural factors that underlie awarding gaps is everyone's business. Doing so will support our work in every other domain.

### You may also need

#### Inclusive Curriculum and Practice Toolkit

Guide overview

Click on the link above to access the overview of the toolkit with sections on:

- Awarding Gaps
- Supporting our international students
- Talking about race and racism
- Build intercultural understanding and skills in learning spaces
- Managing inclusive learning environments
- Inclusive group work
- Decolonisation and diversification of reading lists
- Decolonising curricula
- Inclusive assessment and feedback
- Equality, Diversity and Inclusivity student data
- Inclusive Training in Practice Resources

It appears the undergraduate students, the doctoral researchers, the academics, the communities and the patients are saying the same thing...

- Improved and targeted funding
- Improved access at all levels
- Better support
- Using data to inform approaches
- Involvement in decision making
- Better policies
- Changing the existing culture
- Eradicating barriers and tackling discriminatory practices etc.

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# Features

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Posters and exhibition



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Belonging and building community



# How to Engage with MLSFF

- Individual participation
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- Institutional participation
- Promotion
- Sponsorship opportunities
  - For future MLSFF events
  - For underrepresented participants
  - Prizes
- Collaboration
- Exhibition opportunities
- Funding proposals for pipeline development



Professor David Mba, Vice Chancellor BCU

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