

Education, Research and Race

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- Introduction
- Diversity Dividends
- Education and Race
- Research and Race
- Academic leadership
- Diversity and inclusion at UCL



INTRODUCTION



Molecular Envelope Technology

- **Drug delivery technology to improve therapies and reduce side effects**



Molecular Envelope Technology (MET) – Ophthalmology, Neurology and More



Nasal spray targeting
brain diseases

Envelta™



Non-irritant permeation
enhancer targeting front and
back of the eye ocular diseases

Clinical
development of
OCI34



Intravenous to oral
switch



DIVERSITY DIVIDENDS

Diverse Teams Produce Smart Decisions



Ethnically diverse management teams are more innovative.

Nathan and Lee, *Economic Geography*, 2013, 89: 367, ESRC Funded research

Ethnically diverse juries make better decisions.

Sommers, 2006, *Journal of Personality and Social Psychology*, 90, 597-612

Ethnically diverse teams price stocks more accurately

Levine et al, 2014, *PNAS*, 111, 18524–18529

Public companies with ethnically diverse management teams and boards are more profitable

McKinsey report 2020

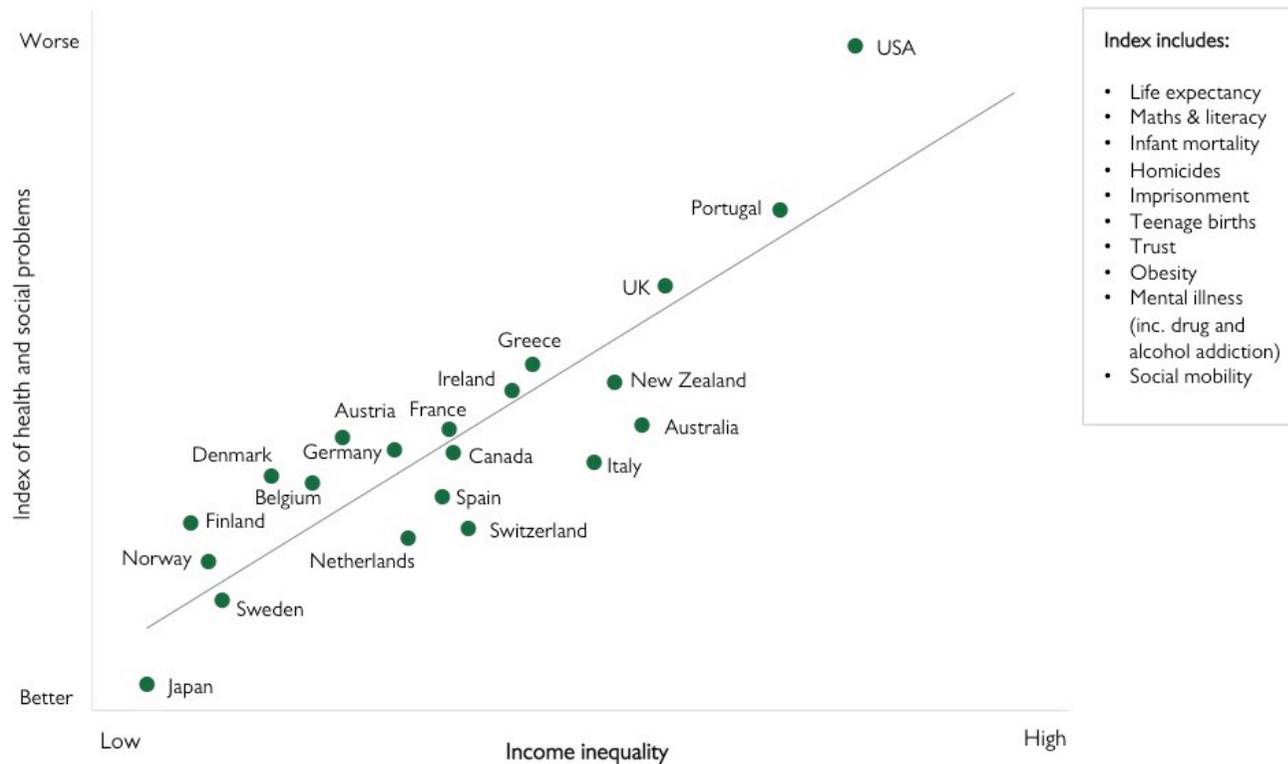
A greater mix of ethnicities and nationalities on publications yields more citations.

Adams, 2013, *Nature* 497, 557–560

Alshebli et al, 2018, <https://arxiv.org/abs/1803.02282>

Inequalities harm populations

Health and social problems are worse in more unequal countries



Ethnicity and UK Academia



75% of UK academic staff are White
16% of UK academic staff are Black, Asian or Minority Ethnic
2% of UK academic staff are Black

82% of UK population are White
18% of the UK population are Black, Asian or Minority Ethnic
4% of UK population are Black

82% of UK professors are White
10% of UK professors are Black, Asian or Minority Ethnic
0.7% of UK professors are Black

47% of UK academics are female
0.2% of UK professors are female and Black

Female ethnic minority academics are less likely to be promoted and less likely to be making the decisions

2021 HESA data
2021 Census data (England and Wales)

EDUCATION AND RACE



Awards and the Education Sector



- **KEY STAGE 2 (10 – 11 years)**
- 80% of Chinese pupils reach the standard
- 75% of Indian pupils reach the standard
- 67% of Black pupils reach the standard
- 67% of White pupils reach the standard

- **A LEVELS (18-19 years)**
- 24% of Chinese pupils achieve 3 As
- 14% of Indian pupils achieve 3As
- 11% of White pupils achieve 3 As
- 5% of Black pupils achieve 3 As

- **DEGREES (21 – 22 years)**
- 79% of White students obtain a good degree (82% in 2021)
- 72% of Chinese students obtain a good degree
- 71% of Indian students obtain a good degree
- 51% of Black students obtain a good degree (65% in 2021)

**An ethnicity award gap exists in the UK
18% at degree level**

- About the TUC
- Economic Issues
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 - Disability Issues
 - Gender Equality
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Black workers with degrees earn a quarter less than white counterparts, finds TUC

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Black workers with degrees earn 23.1% less on average than white workers with degrees, according to new analysis published by the TUC today (Monday).

The analysis of official statistics shows that a black worker with a degree will earn £14.33 an hour, on average. However, a white graduate will typically earn £18.63 an hour – £4.33 more.

The findings reveal that the pay gap between white and black workers is at its widest at degree level. Black workers with A-levels earn 14.3% less on average than their white counterparts. And black people who leave school with GCSEs typically get paid 11.4% less than their white peers.

The pay gap between all black, Asian and minority ethnic (BAME) workers with degrees and white graduates is 10.3% - the equivalent of £1.93 per hour.

The pay gap with white workers for all groups, regardless of their educational attainment, is 5.6% for BAME workers and 12.8% for black workers.

Employees: gross hourly pay

Employees: gross hourly pay

| | White workers | BAME workers | | Black workers | |
|------------------------------------|---------------|--------------|---------|---------------|---------|
| | Pay | Pay | Pay gap | Pay | Pay gap |
| All workers | £13.45 | £12.70 | 5.6% | £11.73 | 12.8% |
| Degree | £18.63 | £16.70 | 10.3% | £14.33 | 23.1% |
| A-levels | £11.53 | £9.55 | 17.1% | £9.88 | 14.3% |
| GCSE (A* - C equivalent) | £10.33 | £8.93 | 13.6% | £9.15 | 11.4% |
| No qualifications | £8.90 | £8.25 | 7.3% | £9.00 | -1.1% |
| Other qualifications | £9.48 | £8.88 | 6.3% | £9.25 | 2.4% |

RESEARCH AND RACE



Funding scientists



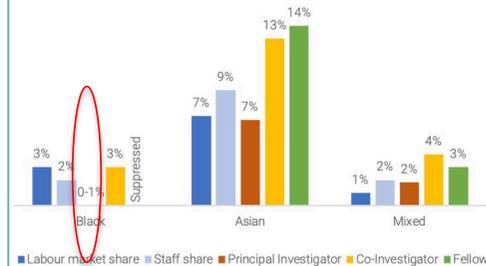
Detailed ethnicity analysis of funding applicants and awardees 2014-15 to 2018-19



3. Within ethnic minorities, the Asian ethnic group forms the largest proportion (two-thirds or more) of applicants and awardees for all three roles for research grants, followed by the Mixed and Black ethnic groups. Figure 2 provides comparisons of ethnic groups share in 2018-19 for each role with staff share and labour market share respectively.

- The share of all three ethnic minority groups as PIs is below their respective academic market share. The share of PIs from the Asian ethnic group is the only one that equals the labour market share.
- As CIs, the share of all three ethnic minority groups is higher than or equal to the staff and the labour market share.

Figure 2: Awardee share by ethnicity (2018-19)



Sources: Je-S; Annual Population Survey 2018; HESA, academic employment function: Both teaching and research)

- Notes:
1. Proportions for counts between 1 and 4 are suppressed.
 2. There are approximately 10 Principal Investigators from Black ethnic group. Due to rounding, the proportion of Principal Investigators from Black ethnicities appears as 0-1% of Principal Investigators.
 3. Mixed refers to Mixed ethnic group.

4. There are only 60 Fellows in 2018-19 from ethnic minorities although the proportion has increased from 12% in 2014-15 to 18% in 2018-19.

- There are around 45 Fellows from Asian ethnic groups and 10 Fellows from Mixed ethnic groups in 2018-19.
- The proportion of Fellows from Asian and Mixed ethnic groups is higher than the corresponding proportion of academic staff in 2018-19.
- There are fewer than five Fellows from Black ethnic groups in all the years.

Virtually no Black Principal Investigators

Funding scientists

Success rates for ethnic minority applicants = 8%

Success rates for White applicants = 14%

Senior equality and diversity lead

Positive Action where two applications are similarly ranked



- **A diverse group making decisions leads to superior outcomes**
 - A race equality strategy is needed across the whole education sector
 - Schools should be rewarded for eliminating ethnicity award gaps
 - The Office for Students have a target - eliminate the awarding gap between Black and White students by 2024/ 2025
 - Office for Students Access agreements should reward universities that meet the award gap target
 - Annual race equality data should be published by the research and education sector



DIVERSITY AND INCLUSION AT UCL

Activities to promote race equality

- Race Equality Charter application 2015 and 2020
<https://www.advance-he.ac.uk/equality-charters/race-equality-charter/members>
- Annual data sharing roadshow with Faculties and Professional Services Departments: 2018, 2019 and 2020 resulting in public Deans'/ Directors' pledges
<https://www.ucl.ac.uk/equality-diversity-inclusion/equality-areas/race-equality/deans-and-professional-services-directors-race-equality-pledges-2020>
- Candid UCL-wide conversations on race inequality: UCL Town Hall on race resulting in the Race Equality Implementation report
<https://www.ucl.ac.uk/news/2020/jun/town-hall-conversation-about-race-ucl-lived-experience-friday-19-june-2020-10am-12pm>
<https://www.ucl.ac.uk/human-resources/news/2021/jan/race-equality-implementation-group-interim-report>
- Challenge historical links with racism – UCL Eugenics Inquiry
<https://www.ucl.ac.uk/provost/inquiry-history-eugenics-ucl>
- Acknowledge racism – UCL statement on race
<https://www.ucl.ac.uk/equality-diversity-inclusion/equality-areas/race-equality/ucls-statement-race>

Achievements and Impacts



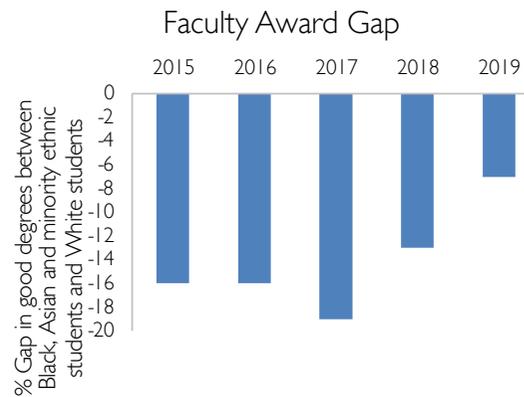
**UCL Sarah Parker Remond Centre for the Study of Race and Racism
Director - Professor Paul Gilroy**



UCL Eugenics Enquiry

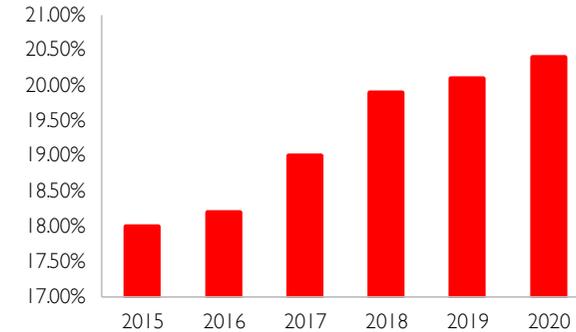


Annual Dean/ Director pledges on race equality

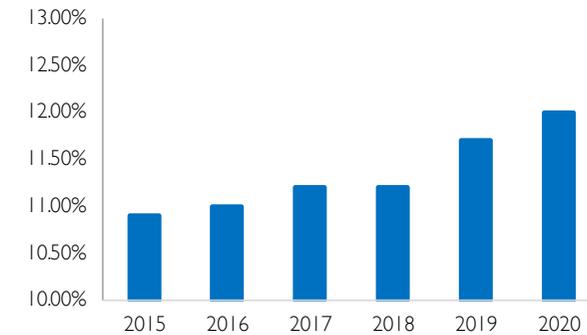


**4 faculties decreased their Award Gap over the last 3 years
New assessment framework in 2020 reduced UCL award gap to 1%.**

% Black, Asian and minority ethnic staff at Grades 7 - 8



% Black, Asian and minority ethnic staff at Grades 9 - 10



Increased numbers of Black, Asian and minority ethnic staff promoted

Physician–patient racial concordance and disparities in birthing mortality for newborns

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Edited by Christopher W. Kuzawa, Northwestern University, Evanston, IL, and approved July 16, 2020 (received for review August 2, 2019)

Recent work has emphasized the benefits of patient–physician concordance on clinical care outcomes for underrepresented minorities, arguing it can ameliorate outgroup biases, boost communication, and increase trust. We explore concordance in a setting where racial disparities are particularly severe: childbirth. In the United States, Black newborns die at three times the rate of White newborns. Results examining 1.8 million hospital births in the state of Florida between 1992 and 2015 suggest that newborn–physician racial concordance is associated with a significant improvement in mortality for Black infants. Results further suggest that these benefits manifest during more challenging births and in hospitals that deliver more Black babies. We find no significant improvement in maternal mortality when birthing mothers share race with their physician.

racial bias | birthing outcomes | concordance | mortality | health care

approaches to address this pressing social issue. Furthermore, to the extent that newborns cannot verbally communicate with their physician, we are able to observe the effects of concordance without trust or communication issues affecting the patient–physician relationship. Inasmuch as prior research has struggled to disentangle the mechanisms behind concordance’s effect (10, 26), the setting allows us to explore concordance in the absence of one invoked mechanism—communication. Thus, if concordance effects manifest, we are able to rule out communication as the exclusive mechanism.

Research posits that racial concordance between a newborn and their physician may mitigate disparities for at least two reasons. First, research suggests concordance is not only salient for adults. Indeed, a growing body of literature explores the question of whether actors exhibit different levels of bias toward both children and adults. Wolf et al. (27), for example, examine whether adults’ spontaneous racial bias toward children differs

After examining 1.8 million hospital births Greenwood found that when Black new-borns are cared for by Black physicians, the mortality penalty they suffer, as compared with White infants, is *halved*. Strikingly, these effects appear to manifest more strongly in more complicated cases, and when hospitals deliver more Black new-borns.

Greenwood et al, 2020, PNAS, 117, 21194