



The Equator Project

How to make doctoral recruitment more equitable

Recommendations for educators
and higher education leaders



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British
Geological
Survey



The
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Society

Royal
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Society
with IBG



DiG
Diversity in Geoscience
theiagd.org/dig-uk



BLACK
GEOGRAPHERS

UNIVERSITY OF LEEDS



Keele
UNIVERSITY



ARIES
DOCTORAL TRAINING PARTNERSHIP

What is Equator?

Equator was a six-month project, funded by the Natural Environment Research Council, that developed three evidence-based interventions targeting different barriers to ethnic minority participation and retention in geography, Earth and environmental science (GEES) research.

1

To improve access and participation, a ring-fenced **research school** was delivered for ethnic minority undergraduate, Master's and doctoral students.

2

To increase retention and improve experience, a targeted **mentoring network** paired students with mentors from industry and academia.

3

To remove barriers to access, a **doctoral training working group** was formed to share best practice and develop recommendations to make PhD recruitment more equitable.



This guide reports recommendations from the **doctoral training working group**, and is aimed at those involved in recruitment onto PhD programs.

Why do this work?

The transition from undergraduate study to postgraduate research has been highlighted as a point in the academic pipeline where a disproportionate number of students from ethnic minority backgrounds are lost^{1,2}, due to a range of structural barriers and bias³.

This retention gap is particularly concerning for subjects that have very poor ethnic minority representation at undergraduate level, such as geography, Earth and environmental sciences⁴.

Without change at this critical juncture, equality of representation across the senior levels of research in academia and industry is impossible.

True equity and justice can only be achieved through long-term structural change across the academic life cycle, but one area where immediate reform is possible is within doctoral recruitment processes.

¹Higher Education Statistics Agency

²NERC 2021 Diversity in Funding Report

³Leading Routes 2019 The Broken Pipeline Report

⁴Dowey et al. 2021 Nature Geoscience





Recommendations

The Equator Doctoral Training Working Group developed 19 recommendations to make doctoral recruitment more equitable. They are presented here in three themes:

**Student-
Facing**

Procedural

Evaluation

Recommendations are further categorised by likely time/resource necessary for implementation:

**Short-term
action**

**Mid-term
action**

**Long-term
action (may
need
strategic
planning)**

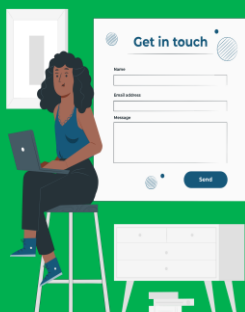
Student-Facing

These recommendations are aimed at attracting a more diverse group of applicants, including supporting students at the expression of interest stage and with pre-interview preparation.



Adverts on demographic specific networks

Standardised webform to express interest



Pre-application workshops for interested students

Pre-interview peer mentoring for minoritised applicants



Greater emphasis on paid Research Experience Placement schemes as a recruiting tool

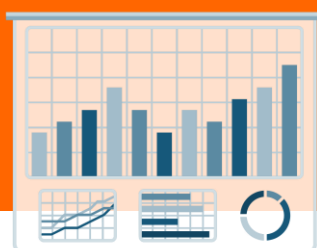
Procedural

These recommendations are aimed at developing standardised and actively anti-biased recruitment frameworks, and clearer reporting of applicant and (eventual) cohort diversity.

Current students
assess adverts and
guidance



Standardised
list of
protected/
contextual data
to collect...



Ring-fenced
interviews
for candidates from
underrepresented
groups

Disaggregation of
international
students from
reporting statistics



...and a shared
framework for how
to use contextual
data, including
positive action
initiatives

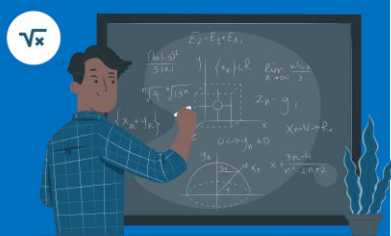
Ring-fenced
studentships for
candidates from
underrepresented
groups



Evaluation

These recommendations are aimed at correcting imbalances in the evaluation process that introduce bias against applicants from underrepresented backgrounds.

Make offers to high potential conditional on paid “bridging” programme before formal start of PhD



Use holistic evaluation schemes that recognise awarding gaps

Focus on behaviours and potential, not “excellence”



Reduce emphasis on supervisor sift



Mandatory declaration of known/internal candidates



Standardise CVs and scoring sheets

Looking ahead

These recommendations are designed as a potential framework within which efforts to improve equity in postgraduate research can be formulated.

They are not exhaustive. Cohort-based, multi-year, investigations of the effectiveness of different interventions and considerations of intersectionality, coupled with tailored support throughout the PhD itself, are essential.

In the long-term, the development of more graduate access programs that target undergraduate students well in advance of the PhD application process will be critical if we are to reach candidates who would not otherwise consider a research career.



Resources

Visit the Equator website for infographics, links to the report, articles, blogs and a full reading list:
<https://equatorresearchgroup.wordpress.com/equatorresources/>

You can find the full Equator Report on EarthArXiv here:
<https://doi.org/10.31223/X5793T>



Equator Research School 2022 Participants

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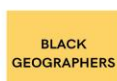
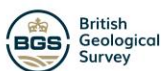
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Positionality and ethics

Of the seventeen authors of this work, seven identify as Black, Asian or minority ethnic. As geoscientists in academia and the public sector, we approach this work from the perspective of concerned geoscientists rather than scholars in equity, diversity and inclusion, although a number of the authors have EDI responsibilities in institutions or charities. The Equator project involved qualitative evaluation of experiences of students and professional geoscientists; this research received ethical approval at Sheffield Hallam University (ER39312553).

The work reported here took place over a short timeframe, with six months of funding from the Natural Environment Research Council and additional sponsorship from the British Geological Society. The authors would like to note that conducting EDI work needs time and space – to develop relationships and to build trust with stakeholder communities before embarking on project work, and to ensure longitudinal evaluation of interventions and outcomes can take place.

Get in touch



Dr. Natasha Dowey was principal investigator on the Equator project. She is Course Lead of Environmental Science and Senior Lecturer in Physical Geography at Sheffield Hallam University. She founded Geoscience for the Future, and is trustee of the charity Geology for Global Development. Contact Natasha on N.Dowey@shu.ac.uk.



Dr. Sam Giles was Co-Investigator on the NERC-funded Equator project. She is a Royal Society Research Fellow at the University of Birmingham and Academic Keeper of the Lapworth Museum. Sam has helped develop resources to make geoscience fieldwork more inclusive and has advocated for better practice in recruitment. Contact Sam on s.giles.1@bham.ac.uk.



Prof. Chris Jackson was co-Investigator on the NERC-funded Equator project. Chris is Director of Sustainable Geoscience at Jacobs. Chris is a champion of increasing diversity in geosciences and highlighting the importance of the subject to the general public. He is a Founding Trustee of the Cowrie Scholarship Foundation. Contact Chris on chris.jackson1@jacobs.com



Dr. Rebecca Williams is an Associate Dean for Student Experience and Associate Professor (Volcanology) at the University of Hull. Rebecca was EDI lead for the Earth Science, Environmental Science and Environmental Studies QAA Subject Benchmark review (2021) and holds the EDI Portfolio on University Geoscience UK. Contact her on rebecca.williams@hull.ac.uk



Dr. Ben Fernando was a researcher on the Working Group stream of Equator. He is now Access Fellow at Christ Church College in the University of Oxford, and works on the NASA InSight mission to Mars. He led Oxford University's Earth Sciences Department "Racial Diversity Audit" in 2020. Contact Ben on benjamin.fernando@chch.ox.ac.uk



Dr. Anya Lawrence was a researcher on the Mentoring stream of Equator. Anya's interests range from structural geology to research on the intersection of different types of identification and accessibility advocacy. As an intersectional individual, Anya is determined to help improve EDI in GEES research. Contact Anya on a.lawrence.2@bham.ac.uk



Dr. Munira Raji was a Researcher on the Research School stream of Equator. She is now Sustainable Geoscience and Natural Capital Research Fellow at the University of Plymouth. Munira co-founded the Black in Geoscience network and is a member of the European Geoscience Union (EGU) Equality Diversity & Inclusion (EDI) Working Group. Contact Munira on munira.raji@plymouth.ac.uk