

The Equator Project

DOWEY, Natasha http://orcid.org/0000-0002-9231-4781, GILES, Sam, JACKSON, Christopher, WILLIAMS, Rebecca, FERNANDO, Ben, LAWRENCE, Anya, RAJI, Munira, BARCLAY, Jenni, BROTHERSON, Louisa, CHILDS, Ethny, HOUGHTON, Jacqueline, KHATWA, Anjana, MILLS, Keely, NEWTON, Alicia, ROCKEY, Francisca, ROGERS, Steven and SOUCH, Catherine

Available from Sheffield Hallam University Research Archive (SHURA) at: https://shura.shu.ac.uk/31087/

This document is the Pre-print

Citation:

DOWEY, Natasha, GILES, Sam, JACKSON, Christopher, WILLIAMS, Rebecca, FERNANDO, Ben, LAWRENCE, Anya, RAJI, Munira, BARCLAY, Jenni, BROTHERSON, Louisa, CHILDS, Ethny, HOUGHTON, Jacqueline, KHATWA, Anjana, MILLS, Keely, NEWTON, Alicia, ROCKEY, Francisca, ROGERS, Steven and SOUCH, Catherine (2022). The Equator Project. [Pre-print] (Unpublished) [Pre-print]

Copyright and re-use policy

See http://shura.shu.ac.uk/information.html

The Equator Project - Full Report

Dr. Natasha Dowey, Sheffield Hallam University - N.Dowey@shu.ac.uk

Dr. Sam Giles, University of Birmingham

Prof. Chris Jackson, University of Manchester

Dr. Rebecca Williams, University of Hull

Dr. Ben Fernando, Sheffield Hallam University

Dr. Anya Lawrence, Sheffield Hallam University

Dr. Munira Raji, Sheffield Hallam University (and Black In Geoscience)

Prof. Jenni Barclay, Aries Doctoral Training Partnership

Louisa Brotherson, University of Liverpool

Dan Ward and Ethny Childs, Institution of Environmental Sciences

Dr. Jacqueline Houghton, Diversity in Geoscience / University of Leeds

Dr. Anjana Khatwa, Equity, Diversity and Inclusion consultant

Dr. Keely Mills, British Geological Survey (Research School Sponsors)

Dr. Alicia Newton, Geological Society of London

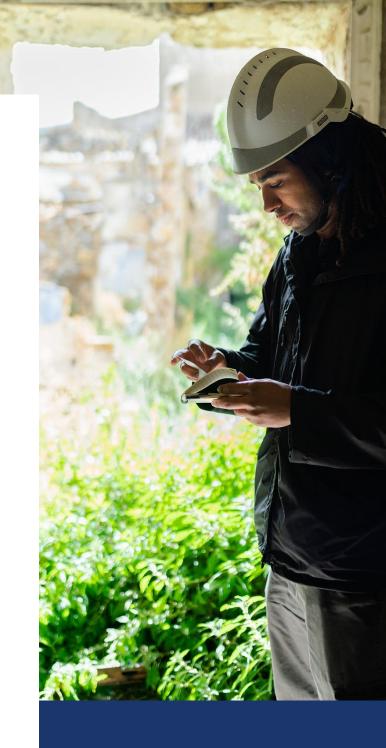
Francisca Rockey, Black Geographers

Dr. Steven Rogers, University of Keele

Dr. Catherine Souch, Royal Geography Society with IBG

This manuscript is a non-peer reviewed pre-print submitted to EarthArXiv. Subsequent versions of this manuscript may have slightly different content.

The Equator Project



DEC 2021 - MAY 2022

Funded by the Natural Environment Research Council Sponsored by the British Geological Survey



Table of Contents

Table of Contents	2
Acknowledgements	3
Authors	4
Positionality and Ethics	5
Executive Summary	6
1. Introduction	8
2. Removing Barriers: Making doctoral application processes more equitable	14
3. Improving Access and Participation: The Equator Research School	29
4. Improving Retention: The Equator Mentoring Network	52
5. Recommendations for Building Successful Interventions	75
Get in Touch – The Equator Team	78
References	79
How to Guides and Appendices	82

Acknowledgements

We are incredibly grateful to all the people who gave their time, energy, support, and insight to the Equator project.

We thank the Steering Committee for their support and patience throughout, particularly Dr. Anjana Khatwa for support with the Theory of Change work, Dr. Keely Mills for arranging BGS sponsorship, and Francisca Rockey and Louisa Brotherson for presenting at the Research School. Thank you to Grantcraft and Lucy Kender for excellent Research School training sessions, to Sarah Cosgriff for bringing brilliant science communication expertise to the School, and to Dr. Melissa Plail and Nature Communications for a comprehensive publishing session. Thank you to The Geological Society of London, the Royal Geographical Society (RGS with IBG) and the Institution of Environmental Sciences, the professional bodies who have supported Equator throughout, and to David Blagden of the RGS (with IBG) for presenting at the Research School.

Many thanks to the Grants, Finance, Legal and Research Support Team at Sheffield Hallam University, particularly Dawn Witherley, Wen Ye, Catherine Wynn, Samm Wharam, Christy Naylor, Fiona Jones and Lyuba Herbert for their support with proposal writing, project finance, expenses, ethics and contracts. We are grateful to the conference and events team at Sheffield Hallam for their logistical support in delivering the Research School, and to staff within the Department of Natural and Built Environment, particularly Dr. Luke Desforges and Dr. Rob Storrar, for support during the project. Thanks also to the research support teams at the partner universities of Manchester, Hull, and Birmingham.

A huge thank you goes to our incredible researchers, Dr. Ben Fernando, Dr. Munira Raji and Dr. Anya Lawrence, who each led one of the three work packages. These promising multidisciplinary researchers are a credit to geoscience, and we are sure they will continue to revolutionise our discipline.

We are also grateful to the research school participants, mentees, mentors and working group members who gave their time, thoughts, feedback and trust to this project; it would not have been possible without you all. Our hope is that the energy you have given will contribute to real change in our discipline and beyond.

- Natasha Dowey, Sam Giles, Chris Jackson and Rebecca Williams

Authors

Project Team and Collaborating Institutions

Dr. Natasha Dowey, Sheffield Hallam University

Dr. Sam Giles, University of Birmingham

Prof. Chris Jackson, University of Manchester

Dr. Rebecca Williams, University of Hull

Dr. Ben Fernando, Sheffield Hallam University

Dr. Anya Lawrence, Sheffield Hallam University

Dr. Munira Raji, Sheffield Hallam University (also representing Black In Geoscience)

Steering Committee and Partner Organisations

Prof. Jenni Barclay, Aries Doctoral Training Partnership

Louisa Brotherson, University of Liverpool

Dan Ward and Ethny Childs, Institution of Environmental Sciences

Dr. Jacqueline Houghton, Diversity in Geoscience / University of Leeds

Dr. Anjana Khatwa, Equity, Diversity and Inclusion consultant

Dr. Keely Mills, British Geological Survey (Research School Sponsors)

Dr. Alicia Newton, Geological Society of London

Francisca Rockey, Black Geographers

Dr. Steven Rogers, University of Keele

Dr. Catherine Souch, Royal Geography Society with IBG































Positionality and Ethics

Equator is a research group working towards Equity, Diversity and Inclusion (EDI) in Geography, Earth and Environmental Science (GEES). This report focuses on the 2021/22 Natural Environment Research Council* (NERC)-funded Equator project, which set out to improve access and participation of Black, Asian and minority ethnic students in GEES research.

Of the seventeen authors of this report, 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 several the authors have Equity, Diversity and Inclusion (EDI) responsibilities in institutions or charities.

This report includes qualitative evaluation of experiences of students and professional geoscientists; the 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 NERC and additional sponsorship from the British Geological Society. The authors would like to note that conducting EDI work needs time and space – to build trust with stakeholder communities before embarking on project work, and to ensure that longitudinal evaluation of interventions and outcomes can take place.

^{*} The UK Government body for environmental science research.

Executive Summary

Geography, Earth and Environmental Science (GEES) research will play a vital role in addressing the grand challenges of the 21st century, contributing to many of the UN sustainable development goals and the global energy transition. However, geoscience knowledge cannot be successfully applied to global problems that impact people from all walks of life unless the discipline itself is equitable.

There is a well-documented racial and ethnic diversity crisis in GEES subjects in the Global North¹ that leads to inequities in who does environmental research. The Equator project set out to increase participation and retention of UK-domiciled Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics. Our goal was to improve equity and diversity in a research area critical to a more sustainable future; not because of a business case, or for diversity as resource- but for social justice.

Equator was a six-month project, funded by the Natural Environment Research Council (NERC), that developed three evidence-based interventions targeting different barriers to racial and ethnic diversity in GEES research. 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. To improve access and participation, a ring-fenced research school for ethnic minority undergraduate, masters and doctoral students was delivered. To increase retention and improve student experience, a targeted mentoring network pairing students with mentors from both industry and academia was created.

Evaluation of interventions took the form of action research with a Theory of Change approach, with surveys used to capture thoughts and reflections in each of the three work packages. This occurred alongside collaborative, self-reflective inquiry within the project team and steering committee. The steering committee included grassroots organisations, higher education institutions, professional bodies and an equity, diversity and inclusion (EDI) consultant.

The Equator doctoral training working group developed recommendations to remove barriers to ethnic minority students applying for and being accepted onto PhD programs. The practical suggestions are designed to be implemented by academics and professional service staff working in doctoral training recruitment, and are broken down

into student-facing, procedural and interview/evaluation categories. Themes covered include pre-application support, data collection and reporting, website materials, and standardisation of application and interview materials.

The Equator Research School and Mentoring Network led to development of a "how to" guide of recommendations for creating successful interventions for improving participation and retention in research. Participants in the Equator Research School and Mentoring Network provided very positive feedback both during and following the interventions. The majority of those involved felt a stronger sense of belonging and inclusion in GEES research and were more likely to consider a research career after taking part. The evaluation process showed unequivocally that the ring-fenced, discipline-specific, fully-funded nature of the interventions was a critical factor in participants applying to be involved.

Equator project recommendations are provided as a graphic guide for educators and university leaders at the end of this report (Appendix 1, to be added Autumn 2022).

1. Introduction

1.1 Rationale

Context

There is markedly lower representation of Black, Asian and minority ethnic† students in postgraduate research (PGR) than in undergraduate (UGR) or taught postgraduate study^{‡2} in the UK, which ultimately leads to very poor representation at senior levels. This disparity is influenced by factors across the educational lifecycle. For example, Black, Asian and minority ethnic students are less likely to be awarded a 1st or 2:1 undergraduate degree than their white counterparts§ and are less likely to attend the high-tariff research institutions that act as feeder universities for PGR study**. These groups are also more likely to lack a sense of belonging in higher education³ and are particularly vulnerable to exiting their undergraduate degree before completion⁴. Evidence shows that this situation is a result of inequitable frameworks and racism that systematically disadvantage students from excluded ethnic backgrounds⁵.

Inequity in Geography, Earth and Environmental Science (GEES) Research

The lack of racial and ethnic diversity in geoscience in the Global North is well-documented. In the USA, the geosciences are "the least diverse of all STEM fields" and the number of geoscience doctoral candidates has stagnated for the past 40 years⁶". In the UK, the picture is no less bleak. Of 44 physical science topics categorised by the Higher Education Statistics Authority⁷, Geography, Earth and Environmental science (GEES)-related topics are amongst the very lowest in terms of ethnic minority representation at undergraduate level^{††}. The picture is typically worse in PGR study. From 2014–2019, on average, representation of ethnic minority students was lower at PGR than UGR for both Earth Science and Physical Geography¹. In 2020–21, ethnic minority

[†] This grouping is used here in line with Higher Education Statistics Agency reporting, but we recognize that it homogenizes different identities and obscures experiences felt by one race or ethnicity

[‡] In 2020–21, 70% of UK domiciled students undertaking full time undergraduate study were White, and 27% were Black, Asian or minority ethnic. 70% of those undertaking full time taught postgraduate study were White, and 25% were Black, Asian or minority ethnic. For postgraduate research, 77% of students were White and just 17% were Black, Asian or minority ethnic. ⁷

[§] In 2020–21, there was a difference of 17.4 percentage points between the proportion of white and black students getting a 1st or 2:1, with the 1st awarding gap growing in recent years³⁷

^{**} In 2020–21, 77.4% of students at high tariff providers were white and 20.8% were Black, Asian or mixed ethnicity; 71.1% of students at low tariff providers were white and 26.6% were Black, Asian or mixed ethnicity. The disparity is greatest for Black students (4.4% in high tariff versus 11.5% in low tariff providers)³⁸.

^{††} CAH identifiers 26-01-01, -02, -04, -05 and -06: average 9.7% representation compared to overall average of 23% across all physical science subjects.

representation in Earth Science was 12% at UGR compared to just 8.7% at PGR⁷; well below government census data that shows 18% of UK 18–24-year-olds identify as Black, Asian or minority ethnic⁸.

The under-representation of ethnic minority students in GEES PGR permeates the highest levels of academia. Across the United Kingdom just 10.8% of professors identify as Black, Asian and minority ethnic, but of the 2,390 staff working in Earth, marine and environmental sciences in 2018/19, only 90 (3.9%) identify within these groups. This is the second lowest figure of all science, engineering and technology disciplines in the UK^{9,10}.

Together with the bigger-picture institutional structural inequities discussed above, a variety of discipline-specific issues disproportionately impact Black, Asian and minority ethnic students in GEES and have been summarised in previous studies^{1,11-13}. They include the legacy of colonialism and resource exploitation, fieldwork accessibility, discriminatory stereotypes and lack of visible role models, hostile environments, and careers perceptions.

What needs to be done and why?

Geoscience knowledge has an essential role to play in equitable and sustainable development, but it cannot be applied without equity among those studying and working in GEES subjects. Addressing racism in geoscience, Dr. Kuheli Dutt commented that the less diverse a field is, the less welcoming it is to minority groups, and "the more prevalent implicit biases become". To be able to address global problems and work with people from all walks of life across all communities, the GEES community must acknowledge and tackle subject–specific structural inequities that have long persisted.

Reform is needed in several areas across the GEES academic pipeline (see Figure 1.1 and references within Dowey et al 2021.¹). Efforts around decolonisation of geoscience, development of more inclusive curricula, and improvements to fieldwork accessibility are currently being worked on in multidisciplinary efforts by GEES scholars elsewhere, some of which involve the Equator team¹⁴-¹8. In the 6-month NERC funded project reported here, efforts were focused on tackling procedures and transparency in GEES doctoral recruitment, and developing and evaluating paid, ring-fenced interventions to improve awareness, perceptions, and sense of belonging in GEES research.



Figure 1.1: Potential actions to improve equity in geoscience. Further rationale and evidence for those tackled during the Equator project is provided within each chapter of this report.

1.2 Goal and Approach

The 6-month Equator project aimed to increase the participation and retention of Black, Asian and minority ethnic PGR students in GEES topics, and to therefore increase racial and ethnic diversity in environmental research.

Student-Led

The discipline–specific approach of Equator was informed by the voices of Black, Asian and minority ethnic students and professionals within GEES. The group has worked with students since summer 2020, co-authoring EDI–focused research and co-designing interventions that respond to identified needs. The Equator Steering Committee, which provided oversight of project activities, includes students/alumni with lived experiences of the challenges being tackled, and representatives of grassroots organisations actively engaged in EDI in geosciences (Black Geographers, Black In Geoscience and Diversity In Geoscience UK).

Collaborative

The project involved collaborative partners across different HEI types, professional bodies (Geological Society of London, Royal Geographical Society-IBG and Institution of

Environmental Sciences), public institutions (British Geological Survey), doctoral training organisations (Panorama, Aura, ARIES, CENTA, SENSE), grassroots organisations and industry. Partners committed time and resources to ensure the success and sustainability of the project outcomes.

Theory of Change

The Equator Theory of Change is that targeted interventions at crucial career stages will quantifiably increase recruitment and retention of GEES researchers from marginalised ethnic backgrounds. A framework was developed together with an equity, diversity and inclusion (EDI) consultant and an international development expert to understand the behavioural changes needed to achieve the project goal, and the interventions needed to drive these changes. Assumptions, risks and mitigations were discussed and considered (see Appendix 2). The project set out to create a community of practice, linking evidence-based interventions that directly engaged with students at crucial career stages.

Evaluation and Monitoring

Action Research with collaborative, self-reflective inquiry was utilised to evaluate the impact of Equator project activities in the UK GEES context, creating transferable insights and resources to share more broadly. Evaluation activities, including qualitative surveys, informal discussion boards, and formal group meetings, were designed to engage with stakeholders and students, inviting their feedback, prompting discussion, and exploring shared experiences. Through data gathered during this monitoring process, outputs and recommendations were developed to raise questions and challenge assumptions that form the foundations of current practice.

1.3 Work Packages and Objectives

The Theory of Change developed short-term desired changes and actions for three distinct interventions, each targeting a different barrier to diversity in NERC-facing GEES research.

(1) **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.

- (2) **To improve access and participation,** a ring-fenced research school for ethnic minority undergraduate, masters and doctoral students was delivered.
- (3) To increase retention and improve student experience, a targeted mentoring network pairing students with mentors from both industry and academia was created.

The specific rationale, evidence base, methodology and findings from each of these work packages is detailed below. Equator project recommendations stemming from the evaluation of these interventions are provided as a graphic guide for educators and university leaders at the end of this report.

Removing Barriers: Making doctoral application processes more equitable



2. Removing Barriers: Making doctoral application processes more equitable

2.1 Summary

This section reports the findings of the Equator Doctoral Training Working Group, which set out to make recruitment into Geography, Earth and Environmental Science (GEES) postgraduate research (PGR) more equitable. The work focussed on identifying and removing barriers to diversity that exist within the UK doctoral training organisation (DTO) framework, through which many GEES doctoral students are funded.

A working group of DTOs was formed to better understand the varying processes involved in the admissions cycle – from expressions of interest through to acceptances of offers. Through group discussions, workshops, and a survey, a set of evidence–based recommendations for admissions processes were devised to improve ethnic minority representation in the postgraduate geoscience student population. Interventions trialled by DTOs without apparent success were also reported to help guide where efforts may be targeted. Recommendations are divided into three categories:

- Student-facing: to attract a more diverse group of applicants, including supporting students at the expression of interest stage and with pre-interview preparation.
- 2. *DTO procedural*: to develop standardised and actively anti-biased recruitment frameworks, and clearer reporting of applicant and (eventual) cohort diversity
- 3. *Interview/evaluation:* to correct imbalances in the evaluation process that introduce bias against applicants from non-traditional backgrounds

The recommended actions span those that can be immediately implemented at the DTO level through to those where guidance and coordination from NERC, UKRI, or host universities is required on a multi-year timescale. Our overarching recommendation is that the frequency and breadth of multi-stakeholder dialogue, from potential applicants through to training grant holders, must be expanded. These recommendations focus on candidates from ethnic minority backgrounds applying to UK GEES research projects, but steps taken to make the PhD application process more equitable are highly likely to benefit those from other/multiple minority groups. This work is transferable to subjects beyond GEES, and to countries beyond the UK.

2.2 Rationale

Data from UK national funding bodies highlights a clear under-representation of students from ethnic minority backgrounds within doctoral programs¹⁹. Without change at this critical juncture, equality of representation across the senior levels of geoscience is impossible. A wide body of mostly grassroots work has illustrated that this under-representation stems from a complex interplay of structural, individual, and cultural factors^{5,13,20}. To achieve justice and equity, long-term structural change is needed across the academic life cycle; however, one area where immediate reform is possible is within graduate admissions processes.

Inequitable processes within doctoral recruitment create barriers to students from underrepresented and marginalized groups applying to, and being accepted for, PhD programs. These barriers were outlined in an open letter to UKRI in 2020 signed by over 100 UK academics²⁰, showcasing the use of criteria based on biased views of excellence²¹, and metrics that reflect access to opportunity rather than ability and potential. For example, metrics such as 'rank in cohort' and undergraduate prizes do not take into account well-documented awarding gaps for ethnic minority students²², whereas asking for research experience does not acknowledge that Black and minority ethnic students are less likely to attend research-focused universities in the UK²³, and may be unable to undertake opportunities such as Master's research due to financial reasons.

Funding bodies have made efforts to be more transparent in their recruitment practices, publishing diversity in funding data¹⁹ and developing guidelines aimed at improving EDI within their doctoral training organisations (DTOs). In December 2021, NERC (the funding council for environmental research) published its "Best Practice Principles in Recruitment and Training at Doctoral Level"^{‡‡24}. This document outlines 20 "minimum" principles for DTOs to have been implemented during the 2021–22 recruitment cycle (already underway at the time the document was published), with reporting on progress due during the 2022–23 cycle.

_

^{‡‡} Other documents relevant to this report include NERC's Responsible Business Statement³⁹ (2020), UKRI's Corporate Plan⁴⁰ (2020) and Funding Diversity Report⁴¹ (2021), and the UK Government's R&D People and Culture Strategy⁴² (2021). Although not discussed further in this document, it is worth noting that EPSRC (UK Engineering and Physical Sciences Research Council) intend to release their equivalent strategy in the summer of 2022. Non-UKRI research councils who already have similar policies in place include the Wellcome Trust⁴³.

The 20 principles are divided into four categories:

- Finding Talent recruitment on the student side, including advertising, project design, and application support
- Shortlisting and Interviews recruitment on the DTO side, including interview structure, procedures for shortlisting and assessing potential
- Nurturing Talent retention, including training and supervision, management
- Monitoring and Reporting including data collection, evaluation, and sustained review.

Equator set out to work with DTOs currently implementing this best practice document, sharing and developing measures beyond the minimum recommendations and creating recommendations that support institutions in ensuring their admissions practices are anti-discriminatory.

2.3 Aims and Objectives

The aim of the Doctoral Training Working Group (as set out in the Equator Theory of Change, see section 1.2) was to make the doctoral application process more equitable. As a short project, it was not expected that this working group would be able to produce a comprehensive list of issues relating to recruitment and retention or an action plan therein; nor would it be possible to liaise with every NERC-funded DTO. Objectives focused on developing and sharing equitable recruitment practices and ensuring greater transparency, as listed below:

- 1. Collate and analyse EDI interventions used in recent recruitment rounds, including:
 - identification of metrics used to assess candidates and potential biases therein
 - evaluation of specific case studies of actions already undertaken, and their transferability
- 2. Co-create and disseminate 'best practice' selection and retention strategies to minimise or mitigate against bias
- 3. Evaluate current demographic data collection practices
- 4. Discuss and share best practice for data collection to ensure greater transparency

The aim of the work was written into the working group terms of reference (Appendix 3), which were agreed to by all participants in advance of the first working group meeting:

"To gather information on current recruitment and retention practices from a selection of NERC-funded doctoral training organisations, and to consider and disseminate best practice relating to efforts to increase the number of racial and ethnic minority doctoral candidates and improve support and retention"

2.4 Methodology

Participants

The following organisations were represented in the working group discussions, following email invites being sent to DTO directors known to the project group. Those denoted with an asterisk are DTOs – centres for doctoral training (CDTs) or doctoral training partnerships (DTPs) – offering PhD projects in the discipline of geosciences/environmental sciences.

- Equator
- AURA CDT* (Universities of Hull, Newcastle, Sheffield, Durham)
- ARIES DTP* (Universities of Plymouth, East Anglia, Essex, and Kent)
- CENTA DTP* (Universities of Birmingham, Leicester, Loughborough, Warwick, Cranfield, and the Open University)
- Panorama DTP* (Universities of Leeds, York, and Hull)
- SENSE CDT* (Universities of Edinburgh and Leeds)
- COMET network
- Oxford DTP*
- Sheffield Hallam University Department of Natural and Built Environment (a post-92 institution with an internal PhD recruitment process)

Several other NERC-funded organisations are involved with the working group partners, including the British Antarctic Survey, the British Geological Survey, the Centre for Ecology and Hydrology and the National Oceanography Centre.

Meetings

The DTO working group met three times, in March, April and May 2022. Meetings took place under Chatham House Rules. The focus of each meeting was broadly as follows:

- Meeting 1: introductions, discussion of terms of reference, definition of project scope
- Meeting 2: presentation and discussion of survey data, brainstorming of potential solutions
- Meeting 3: feedback on report, discussion of options for implementation.

Survey

Between the first and second meetings, each of the 6 DTOs was invited to fill out a short, anonymous survey (see Appendix 4) on their recruitment practices. The survey explored what contextual data was collected by DTOs at various points in the admissions cycle and how it was used. The survey also asked DTOs to identify where they felt the main barriers to attracting and recruiting minority ethnic candidates lay, and investigated their understanding of and attitudes to the relatively recently released NERC Best Principles document. A summary of the survey results is presented below.

2.5 Evaluation

Six (i.e., all) DTOs responded to the anonymous survey. As per the terms of reference, individual responses are not discussed in an identifiable way.

Applicant Characteristic Data Collection

The first section of the survey asked DTOs to identify which protected (as defined in the 2010 Equality Act) and non-protected characteristics they collected. Results are shown in Table 2.1, where 'Collected By' indicates whether all, some, or none of the DTOs collected data in that category.

Similarly, Table 2.2 shows results for those characteristics not considered 'protected' in the 2010 Equality Act. All except two (indicated with an asterisk) of these are non-protected characteristics collected by UCAS (the UK University and College Admission Service) as contextual information in undergraduate applications²⁵.

Table 2.1. Protected characteristic data collection survey results

Protected Characteristic	Collected By
Age	All
Sex	All
Disability	All
Ethnicity/Race	All
Marital Status	Some
Gender Reassignment	Some
Religion/Belief	Some
Sexual Orientation	Some
Pregnancy/Maternity (or Paternity)	None

All data was collected by the DTOs surveyed at the point of application, but the way it was used (and where it was collected) varied significantly. In the case of protected characteristics, these were used by some DTOs to help decide who to shortlist and who to interview. In addition, one DTO offered studentships that were ring-fenced for applicants with a particular characteristic. In the case of non-protected characteristics, these were used by some DTOs to decide who to shortlist and interview.

Table 2.2. Non-protected characteristic data collection survey results

Non-Protected Characteristic	Collected By
Gender Identity	Some
First Generation Status	Some
Care Status	Some
Caring Responsibilities	Some
Postcode (for ACORN/POLAR)	Some
School Type	Some
Free School Meals	Some
Previous UG Institution*	Some
Source of funding for previous degrees*	None

Free-text survey responses that the following actions were being taken by at least one DTO participating in this study:

- offered ring-fenced interviews and additional support for candidates who selfidentified as Black, Asian and minority ethnic
- offered ring-fenced interviews for candidates from low participation postcodes (POLAR4 quintile = 1)
- offered ring-fenced studentships for candidates who self-identified as Black,
 Asian or minority ethnic
- used contextual information regarding socioeconomic status to assist during longlisting and shortlisting
- trialling an approach where demographic information and any identifiable details were withheld until after the application process was complete

Free text responses also revealed that at least one DTO surveyed:

- did not have access to the full demographic picture of their applicants at the assessment stage
- was unable to collect all demographic information requested by NERC due to a
 disconnect between central university admissions teams and the DTO, which is
 spread across multiple universities

Understanding the differences between how protected and non-protected characteristics are used is challenging on the basis of the collected data. It does however indicate that at least one DTO has developed a legal framework for using contextual information in deciding who to admit post-interview, which had previously been identified as a challenge. This should set a positive precent for others to follow.

Advertising

The second section of the survey asked DTOs to identify what methods of advertising they used to reach candidates from as broad a background as possible (see Table 2.3). The results indicate that DTOs are advertising in very similar ways, with no obvious 'gaps' in coverage.

Barriers to Diverse Recruitment

The survey asked DTOs to identify at what point in the admissions process they felt they were struggling to attract or retain a diversity of candidates. All DTOs indicated that they felt this occurred at the point of application, with some indicating that expressions of interest from diverse groups were also lacking. No DTOs identified any other area as

being of concern (i.e., interviews, longlisting, shortlisting, or admission). It should be noted that this question did not ask DTOs whether they had investigated whether any potential biases existed or not in the latter stages of the admissions process.

Table 2.3. Advertising practices used by surveyed DTOs

Method	Used by
Internal Communications	All
External Communications	All
Social Media	All
External Websites	Some
Reaching out to student groups directly	Some
Paid Advertising	Some

When asked what they had identified as barriers to diverse recruitment, DTOs highlighted the following issues (none more commonly than any another):

- Application fees
- Institutional reputation
- Reputation of the field
- Lack of diversity amongst supervisors
- Projects on offer
- Levels of stipend support
- Poor knowledge of what a PhD is and entails
- Poor understanding of what research is and how it can be useful outside of an academic career
- Challenges in gaining traction beyond 'traditional' universities

The NERC Best Practice Principles

In order to evaluate the understanding and effectiveness of implementation of the new NERC Best Practice Principles for Doctoral Recruitment²⁴, the final section of the survey asked DTOs for their attitudes toward and responses to this document.

All DTOs indicated that they had read and were familiar with the document, but opinion was mixed as to whether it offered a significant level of detailed and clear guidance.

Nonetheless, all DTOs indicated that their organisation had taken on board the principles to some degree, and most indicated that they were making proactive changes to their recruitment processes in the current cycle in response. Free text comments indicated that the practicalities and logistics of implementing these changes remained unclear, as:

- These changes were proposed late in the cycle, making it challenging if not impossible to implement them during the 2021-22 recruitment round; some DTOs had begun recruitment and could not amend their processes
- Many changes will take a year or more to implement
- The limited amount of two-way discussion prior to the announcement of these principles has made the specific requests more challenging to understand and thus implement
- Some of the proposed actions are outside the scope of an individual DTO to change and do not take into account the complexities of administration associated with DTOs, which may recruit across multiple independent institutions. This is particularly true of collection of demographic data, where DTOs have no influence over the design and contents of admissions websites, which furthermore varies between different universities within a DTO
- The resource investment required for implementation remains unclear, with potential sources of funding (e.g., the NERC Flexible Funding) announced separately and with limited scope for collaboration
- The specific actions required under any single item may be interpreted in many different ways, without further guidance ensuring consistency and equity is likely to prove challenging

2.6 Discussion

Time will tell whether the work presented here has met its overall goal of improving equity in doctoral application processes; this will be born out in future demographic data (although we note that many DTOs will need additional support to collect and analyse this data) on successful applications to doctoral study via DTO (and other) funding. However, the work has met immediate objectives of making application processes more transparent (by gathering and sharing best practice information) and of developing more equitable practices (by forming a series of recommendations, which form the main findings of this work and that are contained within the next section).

Here, the main findings of the survey are summarised with additional information from working group meetings where relevant.

There is significant variation in what contextual and non-academic personal data is collected by DTOs, and how it is used in the application process, if at all. Where contextual data is used in admissions, the legal frameworks around how this may be done are under-developed and no common set of principles for ensuring equity exists. However, interest was expressed in sharing these frameworks across DTOs, ideally facilitated by NERC.

DTO advertising appears to be reasonably comprehensive, at least in terms of the number and types of channels used. The main barrier to diverse recruitment appears to be attracting applications. No common, singular reason for this was identified, suggesting a wide-ranging and complex systemic issue (which other elements of the Equator project are seeking to address, see sections 3 and 4).

The NERC Best Practice Principles have been read and taken onboard by DTOs, but questions remain regarding the amount of support required to implement them and how feasible that will be, and exactly what the intended measurable outcomes are under each of the four items.

2.7 Recommendations for Improving Equity in Doctoral Recruitment

The recommendations listed here include those developed during the working group brainstorming session, with additional insights contributed by the Equator team. They are focused on recruitment into doctoral study, rather than retention of students when within doctoral study, as this was identified by most partners as the major barrier to diversifying doctoral student cohorts.

Recommendations are broken down into student-facing, DTO procedural, and interview/evaluation categories. These recommendations will also be published as a standalone How To Guide for educators and leaders, see Appendices (to be added Autumn 2022).

To assist with the implementation of these suggested changes, and acknowledging that DTOs and NERC have limited resources, recommendations have been coded into a suggested action plan:

- *Green:* recommendation to implement before the 2022-2023 phase of active recruitment begins (e.g., before applications open in Autumn 2022)
- Orange: recommendation to implement during the 2022-23 admissions cycle (i.e., between applications opening in Autumn 2022 and offers being accepted in Spring 2023)
- Blue: recommendation to implement within 2-5 years, but likely requiring multiyear coordination and planning

It should be noted that the distribution of the resources needed to achieve these aims is not itself equitable, and hence not all organisations will be able to implement all suggestions within the same timeframe. Additionally, this list is certainly not exhaustive, and some DTOs may have already begun implementing similar but distinct solutions.

Student-Facing Recommendations

#	‡	Recommendation	Justification	Example specification
	1	Pre-application workshops or 'office hours' for interested students (either all students or ringfenced for students from a particular group), conducted virtually	DTOs suggest that candidates from diverse backgrounds are not submitting applications even if interested. Targeted sessions to answer common questions may help address this.	Virtual sessions with DTO Academic Directors and/or academics, akin to mini undergraduate open days. Events may be co-hosted with relevant networks (e.g., Black Students' Network).
	2	Greater use of demographic - specific networks to advertise projects to minority applicants	Data suggest that advertising through 'traditional' channels (websites, social media, etc.) is not effective at encouraging applicants from minoritised backgrounds to apply.	Coordinated partnerships with relevant networks (e.g., Black Geographers) may reach a more diverse range of candidates, and in a more targeted way. Collecting data on where applicants saw the PhD advertisement may also help hone advertising methods to attract diverse applicants.
	3	Standardised webform/email provided for applicant expressions of interest	Many applicants are uncomfortable emailing supervisors prior to application. They may be unsure how to approach them, or what to include in the email.	Template emails provided on the DTO website with relevant headers to be filled in (e.g., applicant's name, current course of study, interests, and short CV).
	4	Arrange pre-interview peer mentoring for minority applicants	Supporting applicants from minoritised backgrounds with advice on presentation and techniques is likely to be useful, given the typically specialised nature of PhD applications	Paid mentorship (e.g., 1hr per self-identified applicant) by PhDs/ Postdocs from similar backgrounds with appropriate training. Emphasise this has no impact on interview scoring.
	5	Greater emphasis on the NERC Research Experience Placement (REP) scheme as a recruiting tool	With their focus on inter- disciplinary, cross-institution work, REPs are an ideal recruitment tool to introduce students to research.	Broad advertising targeted at those with no research knowledge; ring-fenced placements for students from underrepresented groups; guaranteed DTO interviews for REP students.

DTO Procedural Recommendations

#	Recommendation	Justification	Example specification
1	Student assessment of application guidance and website materials	Asking current undergraduates to assess DTO websites and application guidance is likely to highlight areas where further clarification is needed for students with limited prior knowledge of PhDs.	Pay 1-2 penultimate-year undergraduates per year to read through the website as if interested in applying, and report back on anything unclear or confusing.
2	Standardised list of protected characteristics to collect, as well as further contextual information (e.g. UCAS categories)	Significant variation between what data is collected by DTOs (and the institutions within them), makes cross-comparison challenging and suggests some are missing potentially useful items of contextual information.	Development of a standardized form that captures necessary demographic information to be submitted along with application. May be developed by NERC or DTOs.
3	Ringfenced interviews for candidates from underrepresented backgrounds (e.g., ethnic minority candidates, low participation postcodes, disabled applicants).	Existing systemic biases mean that candidates from these backgrounds are less likely to fulfill traditional shortlisting criteria, and there is potential to adjust for this through ring fencing.	Those who meet a minimum standard automatically offered an interview if they meet certain demographic criteria, reduced or no use of 'minimum standards' for interview and greater consideration of awarding gaps.
4	Shared framework for use of contextual data, including in deciding who to interview and other positive action initiatives	There is significant variation between DTOs, and development of framework on an individual basis has clearly been challenging. Potential to make process more equitable across all DTOs.	NERC-mandated, or DTO- agreed, and legally approved guidelines for positive action, clear methodology for balancing and using of data relating to characteristics.
5	Disaggregation of international student numbers from reporting statistics	While important in its own right, the racial/ethnic diversity status of international students recruited by DTOs should be reported separately from home students for consistency and benchmarking.	As per UCAS reporting, record and report data separately on both international and home students.
6	Development of ring-fenced studentships for candidates from underrepresented groups	Addresses a historic and current imbalance in who doctoral research funding is awarded to.	Several projects each year set aside for candidates who belong to an underrepresented group.

Evaluation/Interview Recommendations

#	Recommendation	Justification	Example specification
1	Greater use of behavioral-based interview questions	Questions focussing exclusively on learnt academic content may disadvantage candidates from non-traditional backgrounds, and limit opportunities to demonstrate other relevant transferrable skills or qualities (e.g., resilience).	Greater use of narrative questions when assessing potential (e.g., encouraging the STAR-L format); questions to involve application of knowledge to unseen problems rather than pure 'book learning'; asking candidates to describe past work (academic or non-academic) in terms of competencies.
2	Increased use of holistic evaluation schemes	Traditional assessment criteria, (focussing on class ranking, number of publications, number of internships, etc.) can introduce significant biases due to UG admissions and awarding gaps.	Reconsider of 'minimum academic standards' where possible; greater awareness of awarding gaps for minoritised candidates; eliminate use of simplistic scoring schemes which recognise only traditional academic achievement (e.g., position in cohort, degree class).
3	Reduced emphasis on supervisor selection at application sift stage	Supervisors seeking to maximise the likelihood of gaining a student may also be pressured to select 'traditional' candidates.	Most shortlisting done by an organisational- or DTO-level panel. Where supervisor input required, development of a more objective, transparent, and factual way for this to be presented.
4	Required supervisor reporting of nominating internal/known candidate to interview.	Current system offers significant advantages to internal candidates continuing existing collaborations, disadvantages applicants 'not in the know' or from non-traditional universities.	Mandating clearer declaration of potential conflicts of interest for supervisors proposing their own, current students for short/long listing or interview; discussion of whether different scoring criteria should be applied for applicants not wanting to 'change' projects at doctoral level.
5	Allow supervisors/panels an additional interview nomination for one minority background candidate, 'on risk'	Where supervisors/panels are only allowed to nominate one candidate for interview for a project, there is a significant incentive to pick a candidate with traditional qualifications and skills.	Where a student belongs to one or more groups recognized as underrepresented (e.g., ethnic minority, non-RG university), they may be nominated for interview by the supervisor/panel in addition to their other choice.
6	Use of standardised interview scoring sheets	Should enable tighter controls on any implicit biases on how questions are asked, and responses scored.	Clearer criteria against which to assess responses to each question at interview, and more clearly specified weighting. Can also provide a clearer framework for use of contextual information.
7	Use of standardised CVs	Evidence that some candidates do not understand what is being looked for on a CV, or how to structure and present one.	Either inter- or intra-DTO, to produce a template CV which all candidates are required to use.
8	Make offers conditional on candidates undertaking a paid 'bridging' programme before the formal start of their PhD	May be useful where disadvantaged candidates are thought to have sufficient potential and enthusiasm but lack skill in a particular area (e.g., maths), such that this is not a barrier to admission.	Pre-sessional courses (either inter- or intra-DTO) on relevant topics, where candidates are paid to attend and top-up skills in the relevant identified areas. Multiple courses may be offered: e.g., maths, computing, academic writing, etc.

Improving Access and Participation: The Equator Research School



3. Improving Access and Participation: The Equator Research School

3.1 Summary

The Equator Research School brought together 30 Black, Asian and minority ethnic students in Geography, Earth and Environmental Sciences (GEES) from across the UK for a 5-day residential workshop at Sheffield Hallam University, from 8th April-13th April 2022. The school was funded for 20 participants by the Natural Environmental Research Council (NERC), with funding for an additional 10 places from the British Geological Survey (BGS). The Research School was designed to improve role model visibility, facilitate network-building, create equitable access to training, enhance application success, and strengthen the sense of belonging in GEES postgraduate research (PGR) for participants.

This section summarises the rationale, logistical planning and evaluation methodology for the event, evaluates the outcomes of the School with respect to the Equator project Theory of Change, and provides reflections and recommendations for future events.

The results from the pre- and post-school surveys, together with informal feedback provided in discussions during the school and via participant use of social media during the week, clearly demonstrate a positive attitude change toward GEES PGR and research careers for the Research School participants. The project achieved its immediate objectives, in that participants overwhelmingly agreed that they had improved awareness of GEES research careers, broader networks, increased sense of belonging, and a more favourable opinion of GEES research careers. The evaluation demonstrates that a ring-fenced, fully-funded, discipline-specific Research School for Black, Asian and minority ethnic students can provide a sense of community and belonging, improve perceptions of research, and increase confidence in moving forward in GEES research.

3.2 Rationale

Anecdotal and community-based evidence indicates that ethnic minority students are more likely to feel disconnected from research networks and lack awareness of research opportunities and careers. This disconnect is likely related to many structural and cultural factors (see section 1), such as a lack of exposure to active research in their field – ethnic minority students are less likely than their white counterparts to attend research-intensive, 'high-tariff' universities²³ – and less access to opportunities such as internships and workshops that build confidence in their ability to undertake research.

Past initiatives have demonstrated the power of bringing people from marginalised ethnic backgrounds together to improve access and participation in research. In the UK, the Explorers Conference at the Natural History Museum²⁶ was a free, day-long careers event with workshops and opportunities to hear from role models. The conference received excellent anecdotal feedback from participants and speakers, showing the success of ring-fenced, discipline-specific events. In the USA, work at Lamont-Doherty Earth Observatory has demonstrated that creating immersive, paid opportunities for ethnic minority students to engage in research themes in a mentored environment leads to increased engagement with STEM in higher education²⁷. Work with other minoritised groups, such as the Access Anglesey project for geology students with mental health, learning and/or mobility conditions, has evidenced the value of residential, disciplinespecific events to improve access and inclusion²⁸. Work undertaken by grassroots groups such as <u>Black in Geoscience</u> and <u>Black Geographers</u> has shown the benefits of building networks within ethnic minority student communities. The Equator project set out to build upon this evidence base to develop the first residential, fully paid, disciplinespecific research training and networking event for Black, Asian and minority ethnic students in GEES subjects in the UK.

3.3 Aims and Objectives

The Research School was designed to increase participation and retention of Black, Asian and minority ethnic students in PGR and beyond. This overall goal was broken down into a series of desired changes, or objectives (as detailed in the Equator Theory of Change, see Appendix 2).

- 1. To create a broader network of community for the participants
- 2. To increase the sense of belonging in the GEES academic environment

- 3. To improve awareness of the broad spectrum of GEES research careers
- 4. To improve the perception of GEES research
- 5. To enhance recruitment preparation
- 6. To enhance confidence in academic skills
- 7. To improve confidence in moving forward into GEES Research (PGR/PDRA).

3.4 Methodology

Co-Creation, Logistics and Safety

The school took place in Norfolk Building Level 2, Sheffield Hallam University City Campus, Howard Street, Sheffield, S1 1WB from 8th April–13th April 2022. The school was designed to be 5 days long and residential to ensure an immersive and comprehensive experience.

Consultation and brainstorming sessions with recent and current Black, Asian and minority ethnic students and postdoctoral researchers from the Equator project were important to the successful planning and delivery of the Research School programme and activities. Insights gained from these conversations included creating safe spaces for frank and open conversations, community engagement and skill development, and reducing all costs to participants. The latter included providing computer access, notebooks and pens with no expectations for the participants to bring anything to the Research School. An important element of the school was that participants were compensated for both their time and expenses. Each participant received a £250 bursary and was able to claim travel expenses up to £220 (e.g., bus, train, petrol costs) and subsistence of £25.60/day (£128 total for 5 days).

A religious calendar was consulted as part of preparations. As the research school unavoidably fell over Ramadan (due to the timing of the funding and university term schedules), provisions were in place and well-advertised in advance for applicants. These included Halal and vegan food options, the availability of prayer rooms, and scheduling the day around Ramadan prayer times.

Participant safety was a high priority. Therefore, a Code of Conduct was developed for participants informed by examples such those created for the Geological Society of London conferences²⁹ and the Natural History Museum Explorers Conference³⁰.

Participant Recruitment

Participants were recruited through various means including (1) contacting GEES educators in UK universities asking them to advertise the program to their students; (2) advertising on social media (Twitter and LinkedIn); (3) via the Equator Research Group website; and (4) via the Royal Geographical Society (with IBG) and the Geological Society of London mailing lists and social media.

Participant selection was based on meeting the eligibility criteria (being 18 years or older, a British citizen and self-identifying as Black, Asian or minority ethnic in Geography, Earth and Environmental Sciences – although active study at the time of the school was not a requirement). Overall, the school received 53 applications from British citizens and international students from 20 Universities nationwide (Figure 3.1). After an eligibility check, 38 applicants were entered into a lottery. Selection was carried out using a random number generator app.

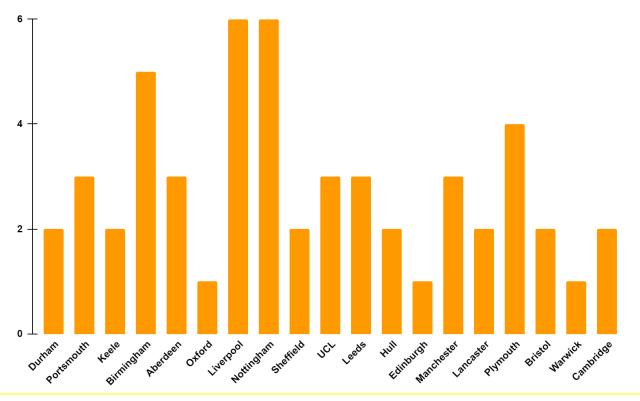


Figure 3.1: Location of applicants to the Equator Research School

Speakers and Trainers Selection

The selection of speakers and trainers for the school was based on the goal of having diverse attendees and visible role models willing to share their lived experiences and connect with the cohorts and the Equator team. Speakers and trainers were paid an agreed fee for their time preparing and delivering the sessions, as well as their travel and accommodation expenses (apart from Dr. Melissa Plail, whose time was gifted by Nature Communications). The three Principal Researchers employed on the Equator project helped facilitate and deliver sessions, and a postgraduate student member of the Equator Steering Committee was also paid a bursary for presenting and mentoring during the research school. The Principal and co-Investigators (PI/CIs) time was already costed into the grant or gifted by their organisation.

Selection of Location and Venue

Aside from being the home institution of the project PI, Sheffield Hallam University in Sheffield was selected based on its UK-central location, proximity to a major train station, city center location and abundant hotel accommodation. In addition, an important consideration in choosing the venue rooms was accessibility, availability of quiet spaces, and space for social interaction.

Designing the Research School Programme

The programme was divided into two streams: (1) PhD students /Postdoctoral and (2) Masters and Undergraduate students. Some sessions were delivered to both streams, with two days of split activities targeted at the different levels. In addition, the opportunity for daily interactions between the streams, the external speakers and the Equator team in and outside the Research School was included. This provided the participants with exposure to a variety of visible role models of diverse backgrounds in GEES in various stages their careers.

Workshop sessions were ordered so that each built on knowledge from the previous session, and included a mix of skills-based, application-based and discussion sessions (Appendix 5). In addition, interactive exercises and hands-on activities promoting critical thinking and inquiry-based learning were incorporated into each session. On the last day, participants presented at a half-day conference that included two highlight speeches by a professor of geoscience and a recent geography graduate working with RGS-IBG. Each participant gave a five-minute oral presentation on their planned, ongoing or completed research.

Evaluation Methodology

All 30 Research School participants were invited to complete two anonymous surveys conducted using Qualtrics software in April 2022 (see Appendix 6). The surveys were administered pre-and post- Research School to assess the participants' attitudes toward GEES subjects and assess the effectiveness of the Research School programme in meeting its goals. All participants were obliged to read a participation information sheet and complete a consent form (Appendix 7) for participation in these surveys. This consent was presented at the start of each survey and was approved by the Sheffield Hallam research ethics approvals process. The findings of this analysis are reported below. Quotes are reported here as written, with full anonymity for respondents.

Informal methods for feedback were also encouraged; an anonymous online Padlet was set up to allow participants to quickly add contributions during the school, a post-it wall was used to scribble ideas on, and a Twitter Hashtag (#EquatorResearchSchool) was created to share experiences on social media.

The Equator project investigators were present at the research school and delivered some workshops. Equator researchers presented at and participated in workshops. The team used participatory science methods, including developing relationships with community members to construct knowledge³¹. The team's observations and reflections of the school form part of the event evaluation. Critical to insider/outsider research is positionality^{32,33}. It is acknowledged that the position of the team as researchers on the project creates a potential disconnect between perceptions of the participants' experiences to the experiences felt by the participants.

Drawing on survey results, informal feedback during the school, and our observations of the event, the success of the research school was evaluated against the Equator Project Theory of Change, focussing on the 'what will change by the end of the project' outcomes.

3.5 Participant Characteristics

Participant Demographics

Twenty-eight participants (n=28) completed the survey before attending the Research School, and twenty-seven participants (n=27) afterwards. Demographic questions were laid out in the format of the UK Government Census.

Most participants (18) were aged 18–24; 6 were 25–34, 3 were 35–44 and 1 was 45–54 (Figure 3.2). Fourteen of the participants identified as female, 13 as male and 1 as non-binary/third gender. One participant had a gender identity that differs from the one they were assigned at birth. Seven participants described their ethnicity as African, 5 as Indian, 3 as Chinese, 2 as another Mixed or Multiple ethnic background, 2 as another Asian background (specified as Malaysia and Hong Kong), 1 as Pakistani, 1 as Bangladeshi, 1 as White and Black Caribbean, 1 as White and Black African, 1 as Black other–mixed, 1 as White and Asian and 3 as other ethnic group (2 Latin Americans and 1 Eastern European). Ten participants were Christian, 9 had no religion, 6 were Muslim, 2 were Sikh, and 1 was Hindu.

The majority (20) of participants identified as heterosexual, 4 identified as bisexual, 1 identified as gay, 1 identified as pansexual, 1 identified as demisexual, and 1 preferred not to say (Figure 3.2). Five participants identified as having a disability or long-term health condition, with 2 impacted by learning, understanding and concentration, 1 by mental health, 1 by asthma, and 1 by other conditions such as mood swings, panic, minor and rare fits, or migraines.

When asked if they were the first generation in their family to engage in higher education (college/undergraduate degree program), 11 of the participants said yes, 15 said no, and 2 were unsure.

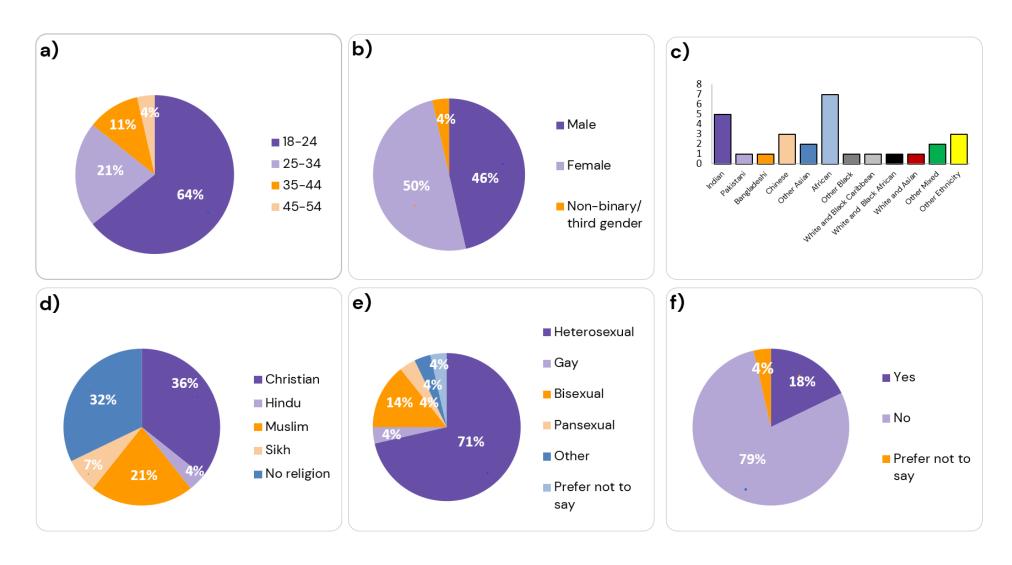


Figure 3.2: Participants demographics based on: a) age; b) gender identity; c) ethnicity; d) religion (note that "Christian" includes C of E, Catholic, Protestant and all other Christian denominations); e) sexuality; f) disability and health conditions.

Participant Academic Background

Most participants were students; 1 identified as a recent graduate. 12 were undertaking their first degrees, 1 was undertaking a second undergraduate degree, 4 were undertaking taught Master's degrees, 2 were on a Master's by Research degree, and 8 were undertaking doctoral research (Figure 3.3).

When asked what area of Geography, Earth and Environmental Sciences their experience aligns with best, 10 of the participants chose Earth Science/Geology, 10 chose Geography, and 8 chose Environmental Science and Studies (Figure 3.3).

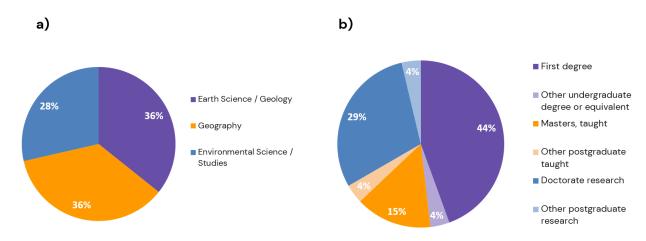


Figure 3.3: Participants a) chosen area of GEES and b) academic background

3.6 Pre-Research School Viewpoints

Participant Attitudes towards the Research School

Before attending the Research School, participants were asked to rate the Research School programme based on how important each workshop would be to them. 80% rated the 'conference and networking' event as extremely important, 70% rated 'geoscience communication and building a public profile' as extremely important, and 50% rated 'journal writing' as very important (Figure 3.4). Additionally, 45% rated 'PhD funding' as extremely important. One participant elaborated on the importance of conferences and networking;

"Conference and networking is the most important for someone like me, who doesn't know anyone at all in this field or even related STEM fields"

- Equator Research School participant Another participant responded that meeting people with more experience for guidance is vital for ensuring the right academic and career choices are made for career progression:

"Meeting others gives others guidance and experience, ensuring the right academic and career choices are made with knowledge and this is quite a big deal and is an obstacle in career and academic progression"

- Equator Research School participant

Participants were asked what they would like to gain from the Research School in the pre-survey. Most of the responses were networking, gaining skills in science communication, grant writing and career guidance (Figure 3.4).

For comparison, in the post-survey, participants were asked to rank the Research School program in order of importance (with 1 being most important/useful) to gauge the differences in their responses after attending these workshops. Of the PhD participants, 57% rated 'networking during icebreaker, lunches and break times' and 'grant writing' as their top 3 and 43% rated 'preparing for academic career' and 'introduction to academic publishing' in their top 3.

"The grant writing and fellowship information was priceless and by far the most valuable- from small grants to fellowship applications and the processes involved, criteria, common pitfalls etc. Everything had a benefit, but for me - the tips around how best to pursue a career in academia and the associated talks- publishing etc were the most beneficial."

- Equator Research School participant

One of the participants also found the program on academic career and grant and fellowship writing to be extremely helpful:

"Lucy's workshop was extremely helpful, and it was great to hear from Becky [Equator CI] about what happens on panels."

- Equator Research School participant

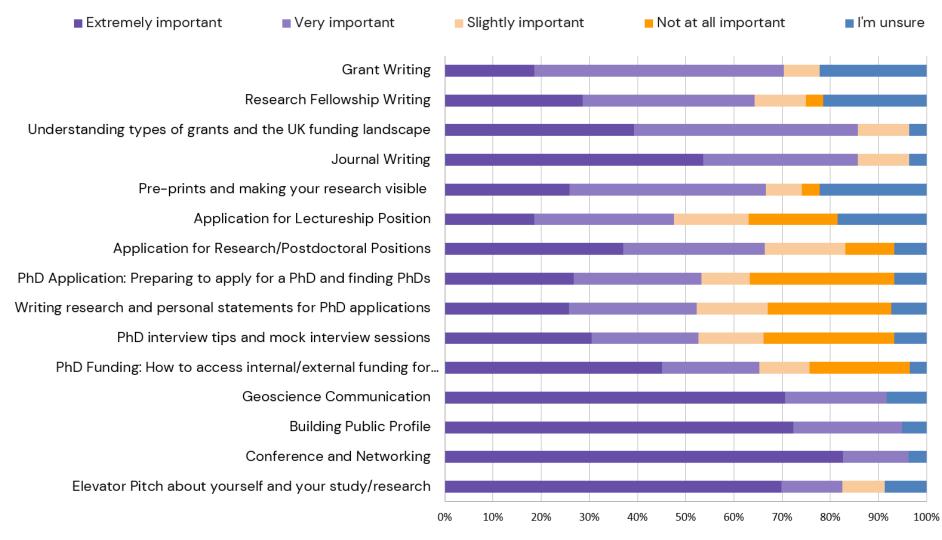


Figure 3.4: How important participants ranked proposed workshops before the research school.

Analysing the results from the Master/undergraduate students stream, 75% rated 'networking during icebreaker, lunches and break times' and 'How to thrive in your PhD and research career' in their top 3 most important workshops. At the same time, 25% rated 'building public profile and online visibility' and 'the value of a PhD- transferable research skills for both industry and academia, 'Giving a great presentation', and 'Research Conference Day Talks' as their top 3 workshops. The spread of favourite workshops suggests that the balance of the programme was right and that there was something valuable in each workshop for most participants.

"Overall I found the whole program really interesting and useful, it has provided an opportunity to participate/exposure to different activities and network with people in the same field but with a similar background which was really refreshing. I also enjoyed talking to the academics as they were willing to share their experiences which was really reassuring and refreshing."

- Equator Research School participant

3.7 Evaluation

In this section, the Research School is evaluated against the Equator Theory of Change (Appendix 2). Participant views are explored by comparing responses before and after attending the School, on themes including networking, career awareness and perceptions, sense of belonging and confidence in GEES research careers. The surveys are anonymised and individual responses to the pre–and post–Research School surveys cannot be tracked; therefore, comparisons are made at an aggregate level. 9 participants attended the PhD Stream, and post–Research School survey responses were received from 7 of them. 21 participants attended the Master/undergraduate stream, and 20 responses were received to the post–Research School survey.

Facilitation of Broader Networks

One of the goals of the Research School was to facilitate a broader community network and create a safe networking space for participants. In the pre-survey, when asked what barriers were holding back the participants from a research career, participants mentioned lack of guidance/support network, lack of minority ethnic role models, lack of representation in GEES, lack of finance, and knowledge of the sectors, skill development and uncertainties in career paths.

"A barrier holding me back from this career path at present is my lack of knowledge of the paths I can take as well as uncertainty regarding future prospects"

- Equator Research School participant

"The lack of representation of people who look like me in research"

- Equator Research School participant

The participants quickly became a close-knit cohort, in part facilitated by the ice breaker but predominantly (and spontaneously) during registration. After each day, the participants met for dinner and walks in the countryside (prompted initially by one of the Equator researchers) and started Linkedln and WhatsApp groups. The Equator team noticed some positive changes in attitudes in terms of the broader network and felt there was a very positive atmosphere throughout. One participant reported:

"We are all keeping in touch on WhatsApp and have created a LinkedIn group, so I am confident that the network will be useful in future. If this were to take place again, I would strongly recommend it to many of my contacts who missed out on a place this time"

- Equator Research School participant

Participants stressed the importance of networking with people from similar ethnic backgrounds, degrees, and research areas at the Research School.

"I found the research school very useful and gained so much exposure to people in the industry with similar background and experience, this is a very important thing and will definitely be helpful/ useful for me in the future and I am sure future participants will feel the same way too".

- Equator Research School participant

Overall, 85% of the participants felt the goal of having a broader network in GEES was accomplished, while 11% somewhat agreed (Figure 3.5).

"Meeting other like-minded geographers and scientists who I can relate to".

- Equator Research School participant

Improved Awareness of GEES Research Careers

In the pre-survey, when asked if the participants planned on applying for a PGR degree following the completion of their undergraduate program, 21% of the participants said yes, 14% said no, and 64% were unsure (Figure 3.6a). However, when asked a similar question in the post-survey, 55% of the participants answered yes to this question, 40% were still unsure, and 5% said no (Figure 3.6b). In the post-survey, the PhD stream were asked if they plan to apply for postdoctorate research positions and fellowships; 42% answered yes, and 57% were unsure.

"I pursue a career in research. Can't thank enough to Equator team and other participants"

- Equator Research School participant

The Master's/Undergraduate streams of participants attended Research awareness workshops including 'how to thrive in your PhD and research career', 'preparing for academic career', 'grant and fellowship writing fundamentals', 'a whistlestop tour of applying for a PhD', 'creating a PhD Application' and 'PhD interviews'. For the PhD stream, the workshops on 'grant and fellowship writing fundamentals' and 'preparing for an academic career' provided guidance on academic careers and introduced the participants to the funding landscape, fellowship funding opportunities, and generating fundable research ideas. One participant said:

"I feel much more equipped to apply for research positions and fellowships"

- Equator Research School participant

One participant described how the school had equipped them with the knowledge of available funding for PhDs and commented on the network it had provided;

"Financial burden of a self-funded PhD programme discouraged me to start that page. Joined the Equator Research School, I knew what funds could be applied. Also, my network in GEES research became broader after meeting school mates from various institutions and different level of studying"

- Equator Research School participant

Overall, most participants indicated they benefited from these workshops, with 92% of the participants agreeing to have improved awareness of GEES research careers.

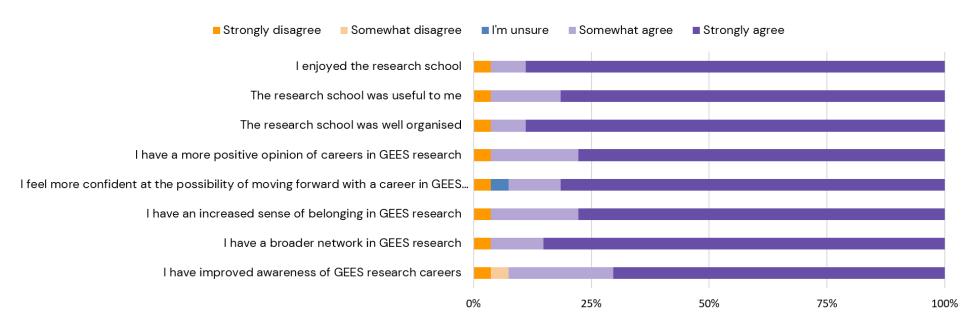


Figure 3.5: Participant responses (n= 27) to post-Research School question exploring project outcomes. [Note, one respondent selected "strongly disagree" to all answers, but this selection is believed to have been in error, given the highly positive nature of their accompanying free text comments and all other answers]

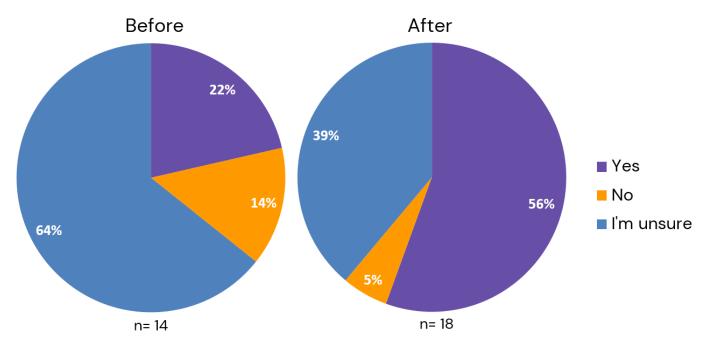


Figure 3.6: Responses to the question 'are you planning to apply to postgraduate research', from surveys before and after the Research School (answered by Undergraduate/Master's stream)

Improved Perceptions of GEES Research

80% of participants strongly agreed that they have a more positive opinion of careers in GEES research (Figure 3.5) following participation in the Research School. When asked if the Research School affected their thoughts on a career in environmental research, 90% said that 'I now feel MORE keen to pursue/continue a career in research (Figure 3.7). One of the participants said, "This opened my eyes to PhD". Other participants further elaborated:

"The School was a great experience for me to learn a bit more about the challenges that ethnic minorities like me have to deal with in GEES subjects and to learn new insight on how to overcome these. It definitely has increased my interest in environmental research/PhD"

- Equator Research School participant

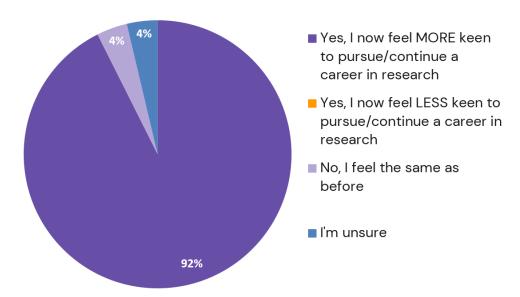


Figure 3.7: Participant responses (n = 27) to question exploring whether the Research School has changed their career aspirations

Enhanced confidence in academic skills

The Equator team noticed increased confidence in the undergraduate students throughout the week, noted in the following qualitative observations. At the start of the week, the undergraduates appeared nervous, particularly about participating in group work and giving oral presentations on the last day. However, they became more vocal during the 'introduction to science communication' workshop as they were encouraged to participate in group work. They were visibly excited to learn and seemed to become more comfortable when working in groups with other participants. During the week, they attended a workshop on 'presentation skills', and played word games together. The Equator team noticed the boost in their confidence when they applied their new skills on the last day of the Research School. Each gave 5 mins presentations on different topics of research interest.

"Before this research school, I didn't have any confidence that I can have a career in GEES or do a PhD, mainly because I am from a minority group and never in my university career met someone doing a PhD or research who was just like me. This research school gave me so much confidence that I am worth it and that I can have a career in GEES research"

- Equator Research School participant

After the research school, when asked if they feel more confident about the possibility of a career in GEES, 81.5% of participants strongly agreed, and 11% somewhat agreed (Figure 3.5), with one respondent exclaiming, "I just feel a lot more confident and supported!" One of the participants felt the scientific writing and grant writing workshops were especially important to them. Another participant said they feel even more confident now at the possibility of a research career in GEES.

"I feel the scientific writing and grant writing workshops were especially important for this"

- Equator Research School participant

"Yes, 100%, this school helped me get my confidence and my motivation/ ambition back to pursue a career in research. Can't thank enough to Equator team and other participants"

- Equator Research School participant

Increased Sense of Belonging

In the pre-survey, participants were asked about the barriers they felt might be holding them back from a research career. Some of the barriers mentioned were the lack of representation and not feeling a sense of belonging in GEES. In the post-survey, 78% of the participants strongly agreed to having an increased sense of belonging in GEES research and 19% somewhat agreed (Figure 3.5).

"I feel a sense of belonging as I have a network of people in the field"
- Equator Research School participant, following participation in the School

Participants were exposed to potential role models from Black, Asian and minority ethnic backgrounds in GEES during the Research School. The team also facilitated a positive environment for interactions between project staff and participants, and incorporated a range of measures to build a collaborative and inclusive environment that contributed to an increased sense of belonging for the participants, e.g., social elements (group lunch/dinners and countryside walks). The participants also created a peer community and developed friendships outside the Research School. Participants said:

"All the organisers were friendly and approachable"
-Equator Research School participant

"it did not feel like a school even though it was run like one. the sessions were fun, very informative and inclusive and lunchtimes especially everyone including the speakers were mingling which made them very normal and approachable".

-Equator Research School participant

It was impressive to see all the participants' commitment, enthusiasm, and energy. All engaged openly and positively with their fellow participants and the Equator team. The fact that the workshops, group work and presentations were not credit bearing, and solely designed to benefit the participants, may have contributed to this atmosphere. The majority had not taken part in similar initiatives previously; when asked if they had participated in ring-fenced initiatives before, only 10% said yes. One participant stated that they had attended a ring-fenced "application procedure for my CDT" and another stated "Natural History Museum Explorer's Project Inaugural conference".

When asked if they would attend future events related to the Equator project, 100% of the respondents said yes. Furthermore, 82% strongly agreed that the Research School was useful for them and 89% strongly agreed that they enjoyed the Research School and that the School was well organised.

Improved Confidence in Moving Forward within GEES Research (PGR/PDRA)

Doctoral students in the PhD participant stream learned new skills during the Research School workshops to apply to their current studies and when moving forward in their research careers. These were gained in workshops including grant and fellowship writing, journal publishing, open science, and 'preparing for an academic career'. One of the participants said:

"I feel like there were some aspects of a research career that were highlighted to me during the research school which really made me think research was the right career for me"

- Equator Research School participant

3.8 Discussion

The results from the pre- and post-school surveys, together with informal feedback provided in discussions during the school and via participant use of social media during the week (see #EquatorResearchSchool hashtag on Twitter), clearly demonstrate a positive attitude change toward GEES PGR and research careers for the participants who attended the Research School. The project achieved the immediate outcomes of the Theory of Change, in that participants overwhelmingly agreed that they had improved awareness of GEES research careers, broader networks, increased sense of belonging, a more favourable opinion of GEES research careers and more confidence about the possibility of moving forward with a career in GEES research.

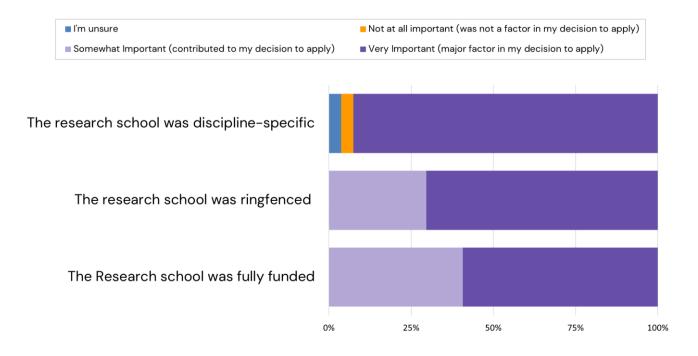


Figure 3.8 Responses of Research School participants to the question "how important was the following to you"?

Important Factors for Success?

The research school was fully funded, ring-fenced for Black, Asian and minority ethnic students, and discipline-specific, based on evidence indicating these as important factors in successful interventions (see Rationale). The Research School evaluation explored the significance of these factors for participants and found them to be very

important (Figure 3.8). The school being fully funded was cited as a 'major factor in my decision to apply' by 59% of participants. The discipline specific and ring-fenced elements of the school were seen as even more important; 93% of participants said that the school being discipline-specific was a major factor in their decision to apply. These findings suggest that the development of ring-fenced, discipline-specific initiatives is crucial in improving access and participation in Geography, Earth and Environmental research careers.



Figure 3.9: The ideas sharing board that became a spot for impromptu feedback

Other essential elements that contributed to the success of the Equator Research School were:

- The input of a diverse project team and steering committee to guide program design and development, including critical partners such as the British Geological Survey and the Royal Geographical Society with IBG.
- Accessible planning and logistics, such as the city central location of the Research School and accessible natural environments that surround Sheffield

- Tailored selection of specialist and expert speakers to create an interactive and inclusive environment. The involvement of a committed project team throughout the week, facilitating workshops and networking sessions, catalyzed engagement and helped build a sense of community for the participants.
- Planning and designing appropriate workshops and activities for the two streams
- Balancing interactive learning with inclusive activities and participant engagement and encouraging participants to share thoughts and ideas with each other (Figure 3.9).

What Could be Improved?

The participants were asked if they thought of any training they would have found useful that was not covered. The most common suggestion was a workshop on career and job applications outside research. In addition, the participants indicated the following recommendations for future Research Schools:

- · Signposting in terms of how to build self-confidence and belief
- More on research careers outside academia, with talks from people in industry
- Writing cover letters and psychometric tests for job applications
- How to choose and find careers/jobs
- Training on how to not get sidelined into EDI research, and how to thrive in your own field despite doing EDI work
- How to go about applying for PhDs, or how to go about searching for PhD opportunities, abroad.
- More on how to use social media to search for opportunities or gain skills relevant to PhD.
- More on approaching potential supervisors and asking questions about the project.

Note-Recommendations developed from the Research School and Mentoring Network aspects of Equator are combined and included in <u>Section 5</u>, and in the how to guides that will be published in Autumn 2022 (see <u>Appendices</u>).

Improving Retention: The Equator Mentoring Network



4. Improving Retention: The Equator Mentoring Network

4.1 Summary

This section summarises and analyses the Equator Mentoring Network, part of the Equator project funded by the Natural Environmental Research Council (NERC). The mentoring network, which took place from January to May 2022, facilitated networking between Black, Asian and minority ethnic student mentees and mentors involved in GEES subject areas. It was a ring-fenced initiative that remunerated participants for their involvement. The overall goal of the mentoring network was to increase retention into postgraduate research (PGR) and improve student experience.

Participants in the network included 10 student mentees from across the spectrum of Geography, Earth and Environmental Science (GEES) subject areas and 20 mentors representing both academic and non-academic professional career pathways within GEES sectors.

Based on feedback from mentees and mentors, through formal pre-, mid- and postmentoring surveys and informal mid-project group meetings, it is evident that the
Mentoring Network achieved its aims (as set out in the Equator Theory of Change).
Feedback demonstrates that the interaction between mentees at an early stage in their
academic careers and mentors with established careers in GEES led to increased sense
of belonging and inclusion, increased likelihood of retention into research, and the
development of a body of experienced mentors to support future students. Equator
mentees cited feelings of empowerment and improved confidence in continuing into
PGR following the project. The majority felt more likely to pursue a career in GEES
research because of participation in the mentoring. All Equator mentors reported
improvements in their personal skills development as a mentor and felt that being part of
Equator Mentor Network had increased their likelihood of being involved in ring-fenced
mentoring schemes in the future.

4.2 Rationale

Black, Asian and minority ethnic students studying GEES subjects in the UK are likely to be isolated in their learning environments. They may be the only students of colour in their department¹ and lack access to visible role models (ethnic minority representation amongst faculty in GEES departments is particularly poor¹⁰).

Grassroots efforts to share experiences and improve sense of belonging such as the Twitter <u>#BlackInThelvory</u> hashtag have highlighted the bias and discrimination faced by students of colour, and demonstrate the importance of connecting students and staff with shared lived experience, to support, encourage and share opportunities to those students who may feel isolated.

Mentorship is recognised to have positive impacts on sense of belonging and outcomes for Black, Asian and minority ethnic students, and mentoring programmes have been developed by universities, professional bodies and charities in recent years. Examples relevant to this work are the Cowrie Scholarship Foundation programme³⁴, which links Black students to mentors with shared lived experience, and the ASPIRE programme³⁵, a multi-institution effort funded by the Office for Students to improve retention into PGR (but which is not discipline-specific). The Fi-Wi Road internship programme³⁶, a collaboration between Black Geographers and the Royal Geographical Society (with IBG), is an example of discipline-specific mentorship embedded into a paid internship scheme. Equator set out to develop the first discipline-specific mentoring scheme for Black, Asian and minority ethnic students in Geography, Earth and Environmental sciences that fully renumerated both mentors and mentees for their time.

4.3 Aims and Objectives

The overall goal of the mentoring network was to increase retention of Black, Asian and minority ethnic students in GEES study and improve student experience. The objectives of the scheme, as set out in the Equator Theory of Change (see Appendix 2), were to:

- 1. Facilitate networking
- 2. Improve sense of belonging and inclusion for Black, Asian and minority ethnic students in the GEES academic environment, and
- 3. Build a body of experienced mentors to support future students within GEES.

4.4 Methodology

Design

The Mentoring Network was designed to be ring-fenced for mentees who identify as Black, Asian and minority ethnic, and studying within/a graduate of a GEES-related subject. To take part, mentors were required to have shared and/or relevant lived experiences and be working in the GEES sector. The network was planned to remunerate both mentees and mentors for their time, to prevent the scheme presenting any barriers to access.

Recruitment and selection

Recruitment was carried out through advertising on the Equator project website and through the dissemination of a Mentoring Network flyer (Appendix 8) across social media platforms and higher education institution contacts. Recruitment copy materials highlighted the discipline–specific nature of the scheme, explicitly stated the time contribution involved in taking part, and stated eligibility requirements (i.e., being over 18 years old, a British citizen and identifying as Black, Asian or minority ethnic in Geography, Earth and Environmental Sciences to be a mentee). The Equator project focuses on the outcomes of UK-domiciled students (as monitored by the Higher Education Statistics Authority), therefore the scheme was not open to international students.

Participant selection took place via email communication, and was carried out on a first-come, first-served basis, subject to eligibility criteria. 10 eligible mentor applicants and 18 eligible mentee applicants who did not make it onto the scheme were added to a reserve list in case mentors or mentees withdrew from the scheme.

Logistics and Pairing

The network was planned to provide each mentee with both an academic and a non-academic mentor for a period of four months (Jan to May 2022), involving at least 3 online mentoring session with each (6 mentor sessions for each mentee in total). After this time, it was up to each pairing to decide whether to continue the mentoring connection beyond the life of the project.

Pairing was conducted by the Equator project team. Participants were asked to provide a brief explanation of why they wished to be involved in the network, and brief details of their subject of study (mentee) and job role (mentor). This information was used to link mentees with one academic and one non-academic mentor.

There are various styles of mentoring (more career/goal orientated, for example, or more focused on personal support). The nature of the Equator Mentoring Network sessions was purposefully left unstructured, to allow each pairing to plan their style of mentoring to work best for them. However, guidance on possible topics for discussion, and ideas for the first session, was provided in the kick-off sessions.

Training, Code of Conduct and Ethics

Before the project started, kick-off meetings were provided, one for the 10 mentees and one for the 20 mentors. These sessions introduced mentoring and what to expect (see Appendix 9). In these sessions the Mentoring Agreement (see Appendix 10), a document that included a code of conduct for the mentoring process, was introduced to participants. This was signed and returned by each mentor pairing.

As well as reading, signing and returning a joint mentoring agreement, all participants were obliged to read a participation information sheet and complete a consent form (see Appendix 7) for participation in project monitoring and evaluation. This consent was presented at the start of each survey conducted during the project and was approved by the Sheffield Hallam research ethics approvals process. It was made clear to participants that they could withdraw from participation at any time, and that participation in all monitoring and evaluation activities was anonymous. It was also made clear that if for any reason a participant was unhappy within their mentor pairing, that this could be reported to the project team and an alternative pairing would be found.

Monitoring and Evaluation Methodology

The mentoring network was evaluated by inviting all participants to take part in qualitative data gathering. Six anonymous Qualtrics surveys (see Appendix 11) were conducted between January and May 2022 to better understand the background of participants and their experiences of the mentoring scheme. The surveys took place at the start, middle and end of the project, with different versions for mentees and mentors. Analysis of the surveys was used to measure attitudes towards mentoring at different stages in the project from different perspectives, and to evaluate the success of the scheme against the Equator Project Theory of Change.

As part of monitoring project progress, and to support participants, two mid-project group meetings (one for mentees, one for mentors) were facilitated online, to allow participants to share experiences so far and voice concerns, if any. Participants were also able to contact the project team at any time to discuss thoughts on the process. These

were productive sessions, particularly for the mentors, allowing those in attendance to share methods and ideas, and to communicate what methods were working best for their pairing so far.

Ten mentees (n=10) and 19 mentors (n=19) completed the survey before taking part in the Mentoring Network. Ten mentees and 20 mentors completed the survey administered at the midway point of the scheme. Eight mentees and 12 mentors completed the post-mentoring survey. It is unclear why this drop off in survey completion occurred— the timing of the final survey, at the end of the academic term, may have meant that email requests and reminders were missed. All surveys conducted were anonymous and results are not presented here in such a way as to identify participants.

4.5 Participant Characteristics

Participant Demographics

Mentees (Figure 4.1) ranged in age from 18 to 44, with the majority falling in the 18–24 category. Four of the mentees identified as male, 5 as female and 1 as gender queer. Ethnicity characteristics were collected using UK 2021 government census categories; four mentees described their ethnicity as Indian, 1 as Chinese, 1 as another Asian background, 2 as African, 1 as Mixed White and Black African and 1 as Mixed White and Asian. Four of the mentees described their nationality as British, 1 as Indian, 1 as Nigerian, 1 as Taiwanese, 1 as Sudanese and 1 as Filipino. Most respondents identified as heterosexual (7), whereas 3 identified as gay, bisexual or queer, respectively. Two of the mentees were Christian, 2 were Hindu, 1 was Muslim, 1 was Sikh and 4 held no religious beliefs. No mentees identified as having a disability or long-term health condition.

The *mentors* (Figure 4.2) ranged in age from 18–54, with approximately two-thirds identifying as female and a third as male. None of the mentor's gender identities differed from the gender they were assigned at birth. 'British' was the most frequently described nationality of the mentors, with other nationalities including Indian, Indonesian, Chinese, Mauritian, Trinbagonian, Zimbabwean and Scottish. 95% of mentors identified as belonging to an ethnic minority. Most mentors identified as heterosexual (70%), 10% identified as gay, lesbian, queer, or pansexual and the remaining 20% as bisexual (Figure 8). The mentees self-described as Christian, Hindu, Muslim, Sikh, agnostic or as having no religious beliefs. The majority of mentors identified as having no known disability or long-term health condition.

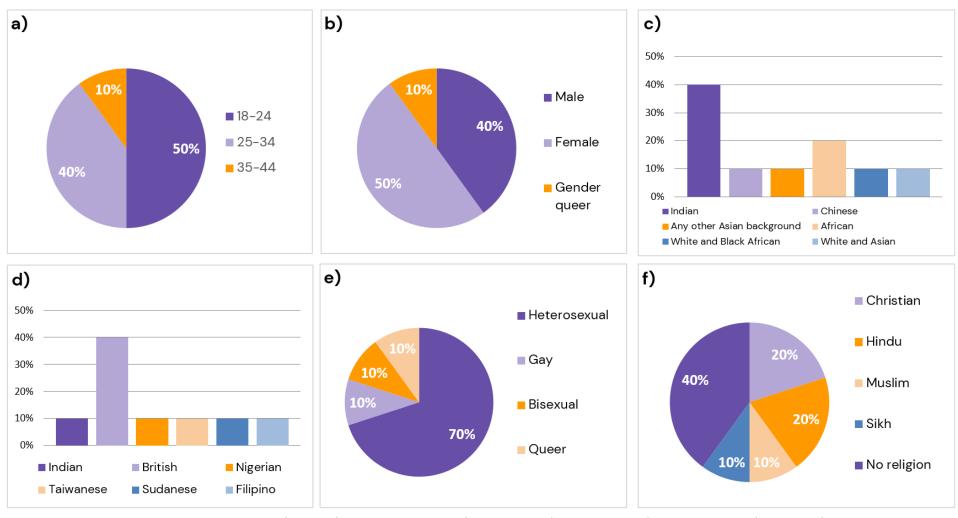


Figure 4.1 Mentee demographics by a) age; b) gender identity; c) ethnicity; d) nationality; e) sexuality and f) religion (where 'Christian' includes C of E, Catholic, Protestant and all other denominations)

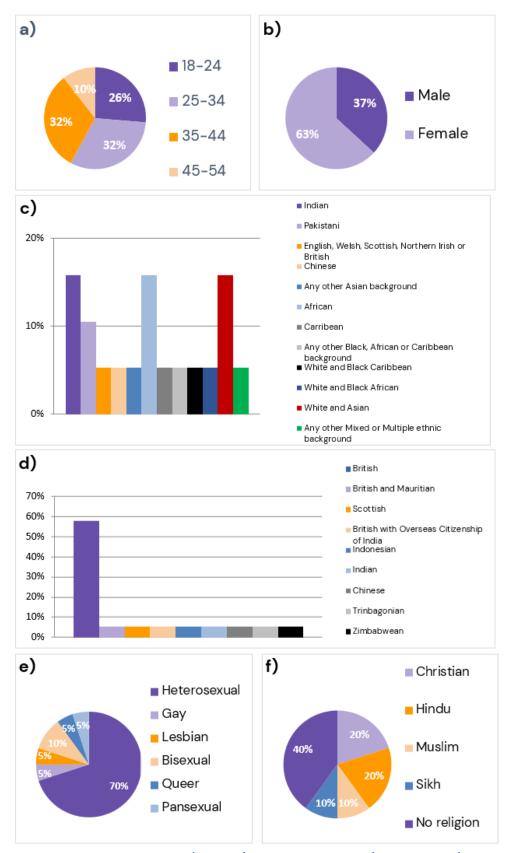


Figure 4.2 Mentor demographics a) age; b) gender identity; c) ethnicity; d) nationality; e) sexuality f) religion ('Christian' includes C of E, Catholic, Protestant and other denominations)

Subject area of focus

Of the *mentees*, 4 were aligned to the Earth Sciences/ Geology, 2 to Geography, and the remaining 4 were interested in Environmental Sciences/ Studies (Figure 4.3). The mentees were predominantly students, with 3 undertaking their first degree, 1 studying another undergraduate degree or equivalent, 1 pursuing a taught Master's degree, 3 undertaking doctorate research and 1 involved in other PGR. The remaining respondent was temporarily away from work or study.

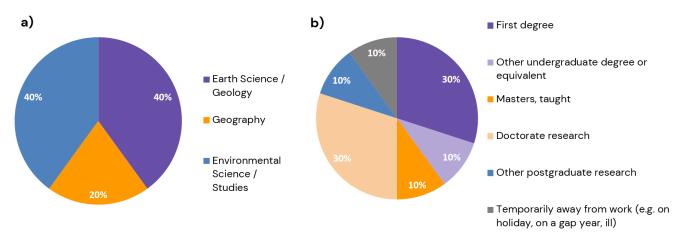


Figure 4.3: Distribution of mentees by a) GEES subject area, and b) mode of study/employment

Ten *mentors* were aligned to the Earth Sciences/ Geology, 5 to Geography and the remaining 5 were interested in Environmental Sciences/ Studies (Figure 4.4a). Mentors held a range of titles/employment roles, with 5 being doctors in their chosen field, 2 describing themselves as scientists, 1 employed as a research fellow, 1 being an assistant/associate lecturer, 4 employed as lecturers, 2 as senior lecturers, and 1 as an associate professor (Reader-level equivalent) (Figure 4.4b). The remaining 5 described their title or employment role as 'other'.

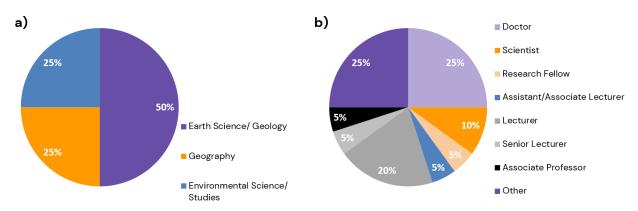


Figure 4.4: Distribution of mentors by a) GEES subject area, and b) job title/employment

4.6 Pre-Mentoring Viewpoints

Previous Mentoring Experience

Half of the *mentees* (5 out of 10 respondents) had taken part in formal and informal mentoring schemes in the past. Most mentees (70%) felt that they knew someone in GEES who could provide them with support or guidance.

40% of the *mentors* had provided formal mentoring before taking part in the Equator Mentoring Network, 40% had not, and the remaining 20% were unsure (Figure 4.5). 70% of mentors had provided mentoring on an informal basis prior to their participation in the Equator mentoring network, whereas 15% had not and 15% remained unsure.

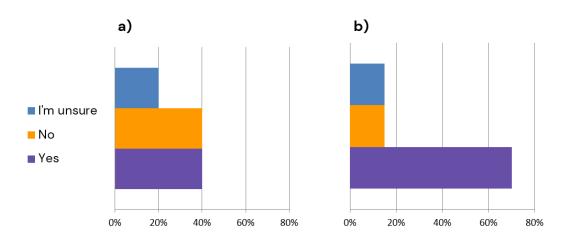


Figure 4.5: Mentors previous experience of a) formal and b) informal mentoring.

Pre-Mentoring Confidence

Prior to starting the Equator mentoring scheme, most *mentees* agreed that in future they were likely to pursue a career in GEES research, with 20% unsure. Most mentees (70%) agreed with the statement: "I feel comfortable discussing my experiences of studying within GEES", with the remainder (30%) unsure. However, there was a large variance in responses in terms of future career paths, sense of belonging, being able to discuss concerns, and accessing support networks within GEES (Figure 4.6). When asked to expand on the responses, the mentees articulated a sense of enjoyment of their chosen subjects and clearly had ambitions to continue their studies, but lacked confidence or were uncertain about future career pathways in GEES research:

[&]quot;I would love to have a career in GEES but I'm not sure how I can get it."

- Equator Mentoring Network Mentee

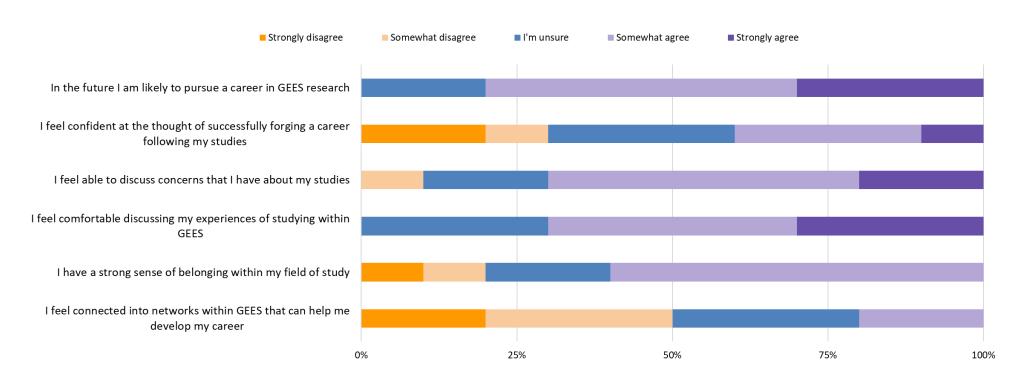


Figure 4.6: Participant responses (n= 10) to pre-Mentoring Network survey exploring pre-mentoring confidence and viewpoints

When asked about present barriers to pursuing PGR in GEES disciplines, the mentees identified a range of challenges including unwelcoming academic climates, difficulties navigating academia, and a lack of support networks within academia:

"I feel like whilst I may have a queer POC support network outside of my degree, I don't feel like there are people in my faculty that understand the struggles that come with having an intersectional identity, especially in a field where POC or queer people aren't typically welcome or accepted."

- Equator Mentoring Network Mentee

"I feel like I don't belong to research society here. I think the problem is the big cultural differences between western and eastern, and it's challenging to make friends with researchers. Another side of this problem might be that the research society is not inclusive."

- Equator Mentoring Network Mentee

Participant Attitudes towards the Mentoring Network

The pre-Mentoring survey sought to understand what participants wanted to get out of participating in Equator.

Mentees were asked to rank a series of possible mentoring outcomes in order of importance to them. The most important outcomes to the mentees were setting and meeting goals/aims, and gaining resources and advice. These were followed by developing a mentoring relationship; confidence-building, and good mentee-mentor communication. Help with achieving a good work-life balance was considered to be the least important outcome of mentoring by the respondents. Eight of the ten mentees expanded on what outcomes of mentoring were most important to them through free-text comments. Comments included themes of careers advice, peer-support, networking opportunities, and personal development:

"Gain advice and support from more experienced individuals, in terms of career guidance, application support and how to make myself stand out."

- Equator Mentoring Network Mentee

"To hear about the experiences and potential struggles BAME colleagues have faced within GEES in the workplace and in academia."

- Equator Mentoring Network Mentee

"Expand my professional network and develop a good professional relationship with my mentors."

- Equator Mentoring Network Mentee

Prior to starting the Equator mentoring scheme, most of the *mentors* felt experienced in a range of mentoring skills, including active listening, giving constructive feedback, identifying and accommodating different communication styles, motivating a mentee, building a mentee's confidence, encouraging a mentee to ask questions, and working effectively with a mentee whose identity was different to their own. However, some mentors (10–20%) felt 'not at all experienced' in certain skills, including setting clear expectations of the mentoring relationship, working with a mentee to set goals, helping a mentee to develop strategies to meet their goals, and helping a mentee to achieve a good work-life balance (Figure 4.6).

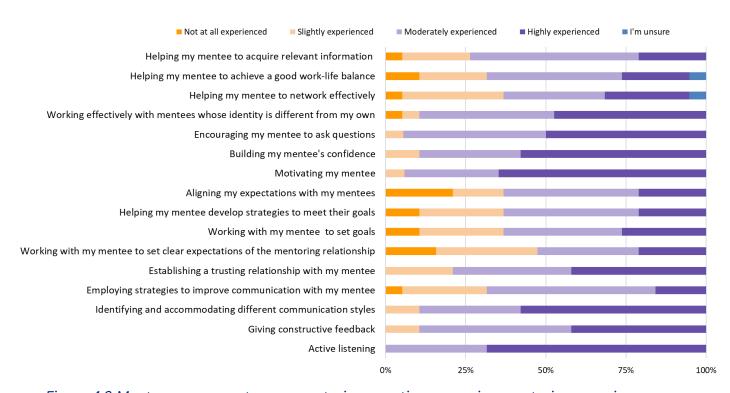


Figure 4.6 Mentor responses to pre-mentoring question assessing mentoring experience.

When asked what they would most like to gain from the Equator Mentoring Network, the *mentors* were unanimous in their desire to offer help and support to their mentees:

"My main motivation for taking part in this programme is to help others who may face similar challenges to myself, pursue a career in geosciences. When I was a student, there was no such mentoring scheme."

- Equator Mentoring Network Mentor

"To help someone in a way I wish I'd been helped earlier in my career."

- Equator Mentoring Network Mentor

Mentors were also hopeful that participation in the mentoring network would contribute to their professional and personal development:

"I take this program as an opportunity for self-reflection and to gain critical skills to improve as a leader."

- Equator Mentoring Network Mentor

"More personally, I would like to try and overcome some of the imposter syndrome I have when operating in academic spaces and gaining more confidence that I do have valid and relevant experience and knowledge of my field."

- Equator Mentoring Network Mentor

4.7 Evaluation

In this section, the Mentoring Network is evaluated by first considering the suitability of the pairings, and then against the Theory of Change project objectives.

Mentor pairings

Mid- and post-mentoring surveys indicate that, overall, mentor pairing worked well. 90% of the *mentees* rated how well-matched they felt with their academic and industry mentors as 7 or higher on a scale of 1 to 10, with 10 being most positive (Figure 4.8). All mentees felt comfortable talking with their mentors, which suggests that the pairings

made were compatible and is an important consideration in building support networks within academic GEES.

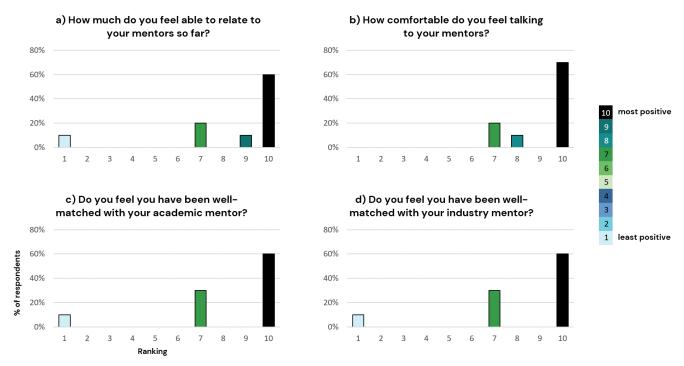


Figure 4.8: Mentee views on their pairing relationships from mid-mentoring survey (ranking experience from 1-10, with 10 most positive)

Mentees' free-text comments from the mid- and post-mentoring surveys suggest that being assigned both an academic and industry mentor, a defining element of the Equator Mentoring Network, was beneficial:

"The most beneficial aspect of the scheme is being able to be matched with someone where you want to be, and gain insight into how to get there. It is difficult to connect to industry professionals on one's own, but through the scheme I have formed a great mentor-mentee relationship with someone who I greatly get along with, yet I may not have met nor had the chance to connect with without the scheme."

- Equator Mentoring Network Mentee

"My favourite aspect has been having an industry mentor and an academic mentor as I have not really considered an alt-academic job as of yet so it has been very very useful to gain that perspective for preparing for future plans."

- Equator Mentoring Network Mentee

Survey data from the *mentors* showed some variation in how well-matched they felt with their mentee, although all mentors rated ease of conversation as 6 or more out of 10 (Figure 4.9).

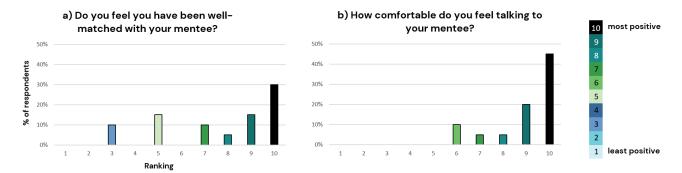


Figure 4.9: Mentor views from mid-mentoring survey

"Equator is very well organised. I enjoy that due to the organisation, it didn't take much of my time. Whereas when I do mentoring as part of my job and volunteer work, it takes tremendously more time to do it in a free-style way. I am planning to build a similar mentoring scheme focusing on my subject, thanks to the great example Equator had set. The matching between me and my mentee is brilliant.

We will carry on doing it.."

- Equator Mentoring Network Mentor

A mentoring onboarding/support session was provided at the start of the project for both mentees and mentors, and an approach was taken to encourage each pairing to develop a style of mentoring that worked for them. However, several mentors commented that additional guidance from the Equator project team or a mentoring "toolkit" would have been useful in helping to structure the initial mentoring sessions.

Improved Sense of Belonging

All 8 mentees who completed the post-mentoring survey agreed that they had a greater sense of belonging within their field of study after being mentored (Figure 4.10). One mentee explained that this was due to understanding that there are "people like me" on this same journey:

"I learnt that there are people like me who have been on the same journey as me, and it was just so reassuring to know that they're willing to help was great too."

- Equator Mentoring Network Mentee The mentors also felt benefits to their sense of belonging by being involved in the Equator community:

"Feeling part of a community of motivated and similarly interested people, of making a difference and being able to help someone like myself but back in an earlier time when I would have loved such support."

- Equator Mentoring Network Mentor

In the post-mentoring survey, all respondents agreed that they now felt more able to discuss concerns. Seven out of 8 respondents felt more comfortable discussing their experiences within GEES. One mentee commented on the importance of shared intersectional characteristics with their mentor:

"I gained a fantastic relationship with my industry mentor, as she has provided a lot of great motivation, guidance, and support, almost being close to a mother or elder sister in a way. I am very grateful for this opportunity to have met her as I would not have had the chance without the EQUATOR network. Especially both being WOC [Women of Colour] I feel that she understands deeply a lot of things that not many people in my current environment do."

- Equator Mentoring Network Mentee

Facilitation of Broader Networks

The Equator Mentoring scheme wanted to allow students to feel more connected to networks within the study, through their mentoring contacts. All mentees who responded agreed that they now feel connected into broader networks in GEES than could help develop their career (Figure 4.10). One mentor commented that being part of the network was also good for the mentors involved:

"Meeting with the other mentors in the scheme has been great, hearing their opinions and perspectives on why they are doing this and what they are gaining from it."

- Equator Mentoring Network Mentor

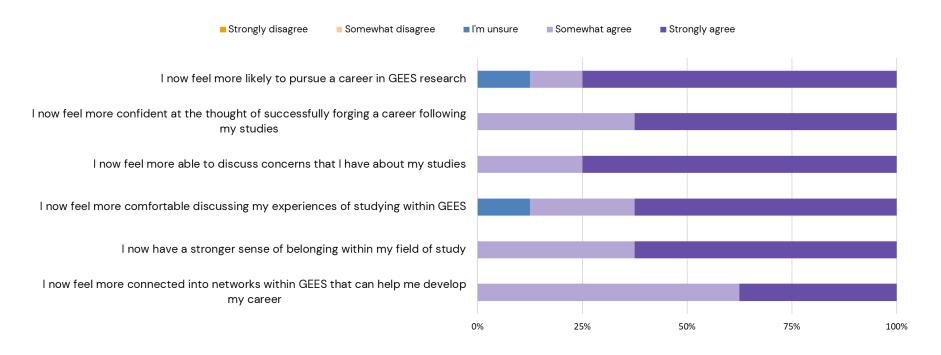


Figure 4.10: Mentee responses (n= 8) to <u>post</u>-Mentoring Network survey exploring project outcomes (percentage breakdown of responses to the question "do you agree with the following statements?")



Figure 4.11: Mentor responses (n= 12) to <u>post</u>-Mentoring Network survey exploring project outcomes (Q: "Has participating in the Equator project benefitted your own personal skills development?)

Creating Experienced Mentors

Many of the mentors on Equator had previous experience of mentoring, and felt confident in their skills before taking part. It is therefore positive to see that even so, of the mentors who responded to the post-mentoring survey, many felt they had gained useful experience during the Equator project (Figure 4.11). The area where skills development was most strong was in helping mentees to develop strategies to meet their goals.

Mentors commented on how the scheme had contributed to their own continued professional development, and to their confidence levels:

"I have re- discovered my hidden skills. As a result I would like to pursue a separate career as a Life Skills Coach/Motivational Speaker/NLP Therapist. My mentee has also suggested that I start a blog so this is also something that I would like to consider. I gained further insight into the challenges that young people face - both internal and external challenges. The programme allowed me to draw on experiences and skills that I have developed over the year to assist my mentee's personal development. The programme has also contributed to my Continuous Professional Development (CPD) which will enhance my professional development."

- Equator Mentoring Network Mentor

"Working with my mentee also allowed me to feel confident. When I was able to provide advice and strategies for my mentee on questions for job interviews, this allowed me to see my growth and this made me feel comfortable with this mentoring project."

- Equator Mentoring Network Mentor

Improved Confidence in Moving into GEES Postgraduate Research.

All mentees who responded felt more confident at successfully moving forward in their studies (Figure 4.10). Free text responses made it clear that the knowledge and skills gained during the sessions had improved their confidence:

"To gain insight about careers, conferences etc that others may already know was brilliant, feels like I'm not behind anymore" - Equator Mentoring Network Mentee

"My mentors shared with me lots of valuable knowledge about interviewing, early careers, and jobs. I also got support with my Master's application that was very helpful in making that period of applying a smoother process."

- Equator Mentoring Network Mentee

Seven of the 8 mentees who responded agreed that they are now more likely to continue into GEES PGR than before being mentored; 6 strongly agreed (1 was unsure):

"As an individual I feel very empowered to undertake postgraduate research."

- Equator Mentoring Network Mentee

"I realised that everything is possible, and I am good enough to be part of the GEES."

- Equator Mentoring Network Mentee

This is a very positive outcome and indicates that mentoring could be an important intervention in increasing applications from students from marginalised backgrounds for PGR degrees.

4.8 Discussion

Feedback collected formally during the surveys and informally during mid-mentoring sessions suggests that the Equator Mentoring Network accomplished its immediate objectives as set out in the Theory of Change. Mentees felt improved confidence, a greater sense of belonging, more connected into networks, better able to discuss concerns, and more likely to move into GEES research following mentoring. The mentees and mentors who completed the post-mentoring survey all indicated that not only would they take part in the scheme again should it run in the future, but also that they would highly recommend it to their peers. 100% of the 12 mentors who responded said that being part of Equator has made them more likely to be involved in ring-fenced mentoring in the future. Of the mentees who responded, all responded positively (rating of 7/10 or higher) when asked to rate their overall experience (Figure 4.12).

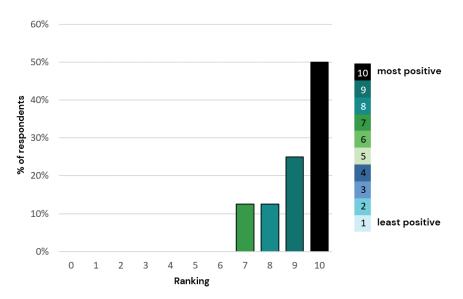


Figure 4.12: Mentee responses to the post-mentoring survey Q "How would you rate your overall experience of mentoring?"

Two of the 10 mentees and 8 of the 20 mentors did not complete the post-mentoring survey. It is unknown whether this drop-in response rate (from 100% completion on the pre-mentoring survey) indicates a lack of engagement in the scheme, a dissatisfaction in the scheme, or simply a lack of time to complete the survey. Because responses were anonymous, the team is unable to explore this further. In future, with more time and in a longitudinal study, the ideal would be to hold in depth focus-group style discussions following mentoring, to better understand the experiences of those involved. Having noted this word of caution, the positive responses of the 80% of mentees who did complete the final survey allows confidence in the success of the scheme overall.

Important Factors for Success?

The discipline-specific, ring-fenced, fully-funded nature of this scheme set it apart from other mentoring programs. But how important were these factors for participants?

All mentees said the ring-fenced nature of the scheme was important to them, with over 85% saying it was a major factor in them applying (Figure 4.12). This speaks to the importance of providing a space for ethnic minority students to build a community amongst those with shared lived experiences. Mentoring can be useful to all students-but unless ring-fenced schemes are designed to tackle EDI, the same old system of barriers are likely to creep in and those who need it most may be further disadvantaged. The discipline-specific nature of the scheme was also very important, again with over

85% of mentees saying it was a major factor for them. 75% of mentees said remuneration was important, with half of those indicating it as 'very important'.

Two thirds of mentor respondents said remuneration was "not at all important" to them. This perhaps reflects that some mentors had employer support for their mentoring time (8 mentors chose not to be remunerated, and one employer contacted Equator to explain that they would cover the time of their mentors on the scheme). However, the fact that 12 mentors accepted remuneration highlights that it should not be assumed that time for outreach and mentoring is provided by all employers. The scheme being ring-fenced was" very important" to 75% of mentors. The discipline-specific nature of the scheme was important to 100% of mentors who responded, with 60% saying it was "very important".

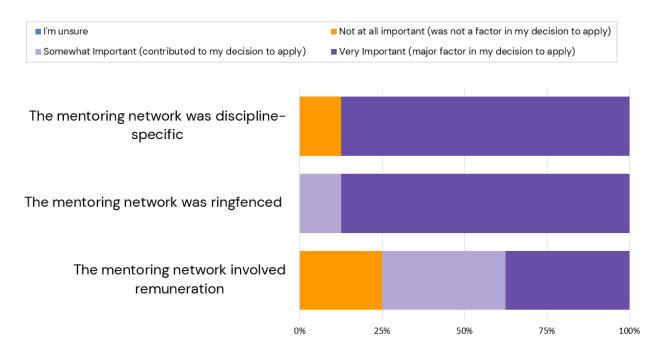


Figure 4.12: Mentee responses to the post-mentoring survey Q "Was it important to you that..."

What Could be Improved?

Mentees and mentors were asked what improvements they would like to see should the project, or similar schemes, run again in the future.

Although overall, pairings seemed to be successful (see section 6.4), some of the freetext mentee responses mentioned mentor selection. In future, in projects with more time allocation, more time could be taken at this stage and more information gathered about participants to help with pairing.

"Matching of one research focussed mentor with research students as there were questions I had around remaining a competitive applicant later in my career that my mentors could not answer because they were not research focussed individuals."

- Equator Mentoring Network Mentee

Some mentors felt that greater assistance from the Equator project team with setting up the first mentoring sessions would have been helpful. In future projects, an initial session with a member of the project team in attendance could be offered, to help facilitate initial discussion.

"Maybe next time encourage mentors to reach out to their mentees first as sometimes mentees can feel intimidated of doubtful and afraid to make the first contact."

- Equator Mentoring Network Mentor

The Mentoring Network was constrained by project time and budget. Suggestions focussed on increased opportunities for interaction between participants. The Equator team agrees that future schemes should provide (and fund) more opportunities for mentoring networks to come together and share experiences:

"There should be personal events like worships, seminars or conferences that will bring mentors and mentees together."

- Equator Mentoring Network Mentee

"Perhaps have an additional workshop meeting with the mentors to share our previous experiences. I think this would be just as helpful to experienced mentors as it would brand new mentors."

- Equator Mentoring Network Mentor

"Opportunities for a group catch-up with all mentors/mentees in person or online."

- Equator Mentoring Network Mentor

5. Recommendations for Building Successful Interventions

This section brings together reflections from the Research School and the Mentoring Network (the action research elements of Equator). These recommendations are written in the understanding that Equator was a short-term project with limited resource and reach. Rather than being a conclusion, the team hope that these suggestions form a starting point for academics and leaders to open conversations and take action to improve equity in research.

Fund it. Ringfence it. Make it discipline-specific.

Equator's evaluation indicates that provision of ring-fenced, fully-funded and discipline-specific opportunities to connect with mentors, develop networks and gain training are an effective method to increase participation and improve inclusion. Such efforts offer accessible and attractive interventions to those from marginalised groups who may otherwise be unable to take part due to financial considerations, caring commitments, or a sense of isolation. Hopefully funding bodies such as UKRI and the Office for Students will continue to provide funding for vital EDI efforts across the academy. Funding can also be sourced through internal university schemes and external organisational sponsorship. The focus of funding should be on ensuring the continued provision of successful, (evidenced) schemes, rather than on a constant drive for novel interventions.

Co-create and collaborate

Conversation and co-creation involving those with lived experiences of the barriers being addressed, within different levels and across different sectors, is crucial in ensuring interventions create meaningful change. This was an important first step during Equator; discussions within the team and steering committee of the steps needed, and the assumptions and risks involved, all led to the development of a Theory of Change.

The right people make all the difference

Any intervention relies on the team, and the broader network of people, that make it happen. Feedback on the Research School demonstrates the importance of involving the right specialist speakers and leaders to be involved in an event, to help build networks that are so important to sense of belonging. The Mentoring Network feedback demonstrated the importance of role models with shared lived experiences.

Accessible, detailed planning

Once the big picture funding is secured, detailed planning is needed to ensure interventions are successful. This may include ensuring that any venues are accessible to those from a range of identities, or that religious calendar timings are considered. It may involve considering whether preparations are in place to ensure all feel supported. Time is needed to ensure participants are informed, and feel prepared, to take part in the intervention.

Create a safe space

By carefully defining codes of conduct, expectations and guidelines up front, participants are given a clear framework within which to engage. Ensure that enough time is given for participants to engage informally with each other, as well as participating in formal elements of the intervention. By involving the right people, informal discussions become important spaces for network-building, discussion, support and idea-sharing.

Give the full picture

Mentees involved in Equator appreciated being given both an academic and industry mentor, and participants at the Research School were very positive at the inclusion of materials on non-academic pathways. By sharing the full spectrum of possibilities in research, it is possible to build greater awareness, improve perceptions, and show futures away from the traditional structures of academia where some students may feel less comfortable.

Be open to feedback - and do something with it

By creating spaces for both formal anonymous feedback, and informal and continuous idea-sharing, participants are empowered and given a voice. Crucial to the process of gathering feedback, however, is the responsibility to then do something with it. During Equator, many participants and contributors were asked to contribute their time, energy and effort. By writing this report, the Equator team hope that this energy will not be in vain and will contribute to change within GEES and beyond. By reflecting on the feedback, it is hoped that future initiatives will learn from and improve upon the work conducted here.

Take time, and take a long view

Improving participation cannot happen with rushed efforts that are not joined up or well thought through. Equator only had six-months funding, and delivery had to be rapid to ensure completion of all elements. Fortunately, the Equator 'community of practice'

(team and steering committee) was already in place to co-create the proposal. But ideally, more time would have allowed the project to have connected with other groups working on similar efforts, and to have engaged in continual knowledge-sharing and deeper forms of critical evaluation (such as focus groups) during the project. Permission was obtained from Equator participants to contact them in the future, but a longer project would allow for a more thorough longitudinal analysis of outcomes.

Get in Touch - The Equator Team



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 Equator project. She is a Royal Society Research Fellow in palaeontology 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 <u>s.giles.1@bham.ac.uk</u>.





Prof. Chris Jackson was co-Investigator on the Equator project while Chair in Sustainable Geoscience at the University of Manchester. Chris is now Director of Sustainable Geoscience at Jacobs. Chris is a champion of increasing diversity in geosciences and promoting geoscience to the public. He is a Founding Trustee of the Cowrie Scholarship Foundation. Contact Chris on chris.jackson@jacobs.com.

Dr. Rebecca Williams was co-investigator on the Equator project. She is Associate Dean for Student Experience (Faculty of Science and Engineering) and Reader (Volcanology) at the University of Hull. Rebecca holds the EDI Portfolio on University Geoscience UK Executive. Contact her on rebecca.williams@hull.ac.uk.





Dr. Ben Fernando was a researcher on the Equator Working Group. He is the Access Fellow at Christ Church College in the University of Oxford and works on the NASA InSight mission to Mars. He led the Oxford Earth Sciences Department "Racial Diversity Audit" in 2020 and serves on the Royal Astronomical Society's Committee on Diversity in Astronomy and Geophysics. Contact Ben 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 transformative emancipatory research on the intersection of different types of identification and accessibility advocacy. As an intersectional individual, Anya is determined to improve EDI in the geosciences and across academia. Contact Anya on <u>a.lawrence.2@bham.ac.uk</u>.





Dr. Munira Raji was a Researcher on the Research School stream of Equator. She is a 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.

References

- 1. Dowey, N. *et al.* A UK perspective on tackling the geoscience racial diversity crisis in the Global North. *Nat Geosci* 14, 256–259 (2021).
- 2. UKRI / Office for Students. Access and success for BAME groups in postgraduate research study. https://www.ukri.org/blog/access-and-success-for-bame-groups-in-postgraduate-research-study/ (2019).
- 3. Mountford-Zimdars, A. et al. Causes of differences in student outcomes. (2015).
- 4. Woodfield, R. *Undergraduate retention and attainment across the disciplines*. (The Higher Education Academy, 2014).
- 5. Leading Routes. *The Broken Pipeline*. https://leadingroutes.org/mdocs-posts/the-broken-pipeline-barriers-to-black-students-accessing-research-council-funding (2019).
- 6. Bernard, R. E. & Cooperdock, E. H. G. No progress on diversity in 40 years. *Nat Geosci* 11, 292–295 (2018).
- 7. Higher Education Statistics Authority. Who's studying in HE? https://www.hesa.ac.uk/data-and-analysis/students/whos-in-he (2022).
- 8. GOV.UK. Population of England and Wales. https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/national-and-regional-populations/population-of-england-and-wales/latest (2011).
- 9. Higher Education Statistics Authority. Higher Education Staff Data. https://www.hesa.ac.uk/data-and-analysis/staff (2019).
- Advance HE. Equality in higher education: statistical report 2019. https://www.advance-he.ac.uk/knowledge-hub/equality-higher-education-statistical-report-2019 (2019).
- 11. Dutt, K. Race and racism in the geosciences. *Nat Geosci* 13, 2–3 (2020).
- 12. Marín-Spiotta, E. *et al.* Hostile climates are barriers to diversifying the geosciences. *Advances in Geosciences* 53, 117–127 (2020).
- 13. Fernando, B. & Antell, G. Recommendations for improving racial equality, diversity, and inclusion in the Department of Earth Sciences, University of Oxford. (2020).
- 14. Yorke, L., Hutchinson, S. & Hurrell, L. Cultivate. https://www.cultivate-project.com/about (2022).
- 15. Greene, S. E. *et al.* Safety and Belonging in the Field: A Checklist for Educators. (2021) doi:10.31223/X53P6H.

- 16. Rogers, S. L., Lau, L., Dowey, N., Sheikh, H. & Williams, R. Geology uprooted!

 Decolonising the curriculum for geologists. *Geoscience Communication* 5, 189–204 (2022).
- 17. UKRI. 'Hidden histories' informing the environmental research sector. https://www.ukri.org/news/hidden-histories-informing-the-environmental-research-sector/ (2022).
- 18. Geocontext. Welcome to GeoContext! https://geo-context.github.io/ (2022).
- 19. UK Research and Innovation. *Diversity Results for UKRI funding data 2014/15 to 2018-19*. https://www.ukri.org/files/about/ukri-diversity-report/ (2020).
- 20. Giles, S. *et al.* Open letter concerning CDT and DTP student recruitment across the UK. https://docs.google.com/document/d/1ElnAKFI7px2DxYv-sAZxVOyTjkm-AE29CzFFnjxw6hg/edit (2020).
- 21. Moore, S., Neylon, C., Paul Eve, M., Paul O'Donnell, D. & Pattinson, D. "Excellence R Us": university research and the fetishisation of excellence. *Palgrave Communications* 2017 3:1 3, 1–13 (2017).
- 22. Advance HE. Ethnicity awarding gaps in UK higher education in 2019/20. https://www.advance-he.ac.uk/knowledge-hub/ethnicity-awarding-gaps-uk-higher-education-201920 (2021).
- 23. GOV.UK. People starting at higher education providers with high, medium and low entry tariffs. https://www.ethnicity-facts-figures.service.gov.uk/education-skills-and-training/higher-education/entrants-at-higher-education-providers-with-high-medium-and-low-entry-tariffs/latest (2022).
- 24. UKRI. NERC Best Practice Principles in Recruitment & Training at Doctoral Level. https://www.ukri.org/wp-content/uploads/2022/03/NERC-010322-BestPracticeRecruitmentAtDoctoralLevel.pdf (2021).
- 25. UCAS. What is contextual admissions? | Undergraduate | UCAS. https://www.ucas.com/connect/blogs/what-contextual-admissions (2020).
- 26. Natural History Museum. Explorers conference 2021. https://www.nhm.ac.uk/our-science/courses-and-students/student-events/explorers-conference-2021.html (2021).
- 27. Dutt, K. Promoting Racial Diversity Through Transparency. *Eos (Washington DC)* 100, (2019).
- 28. Houghton, J. J. *et al.* Access Anglesey 2018: Lessons from an inclusive field course. *Advances in Geosciences* 53, 183–194 (2020).
- 29. The Geological Society of London. The Geological Society Code of Conduct. https://www.geolsoc.org.uk/codeofconduct.

- 30. Servaes, J., Jacobson, T. L. & White, S. A. Participatory communication for social change. 286 (1996).
- 31. Bourke, B. Positionality: Reflecting on the Research Process. *The Qualitative Report* 19, 1–9 (2014).
- 32. Rose, G. Situating knowledges: positionality, reflexivities and other tactics. *Prog Hum Geogr* 21, 305–320 (1997).
- 33. Cowrie Scholarship Foundation. Mentors. https://www.cowriescholarshipfoundation.org/mentors.
- 34. Sheffield Hallam University. Projects to improve Black, Asian and minority ethnic students' access to postgraduate research. https://www.shu.ac.uk/news/all-articles/latest-news/ukri-bame-research-funding (2021).
- 35. Black Geographers. Fi Wi Road: Freeing Up Futures for Black British Geographers. https://blackgeographers.us17.list-manage.com/track/click?u=f41808252fad508036b627c9d&id=7b3e066fe9&e=b858311ca9 (2021).
- 36. Office for Students. Gap in degree outcomes (1sts or 2:1s) between white students and black students. (2022).
- 37. GOV.UK. People starting at higher education providers with high, medium and low entry tariffs Ethnicity facts and figures. https://www.ethnicity-facts-figures.service.gov.uk/education-skills-and-training/higher-education/entrants-at-higher-education-providers-with-high-medium-and-low-entry-tariffs/latest (2022).
- 38. UKRI. NERC responsible business statement . https://www.ukri.org/publications/nerc-responsible-business-statement/.
- 39. UKRI. Our corporate plan. https://www.ukri.org/about-us/strategy-plans-and-data/corporate-plan/.
- 40. UKRI UKRI publishes latest diversity data for research funding. https://www.ukri.org/news/ukri-publishes-latest-diversity-data-for-research-funding/.
- 41. UK Government Department for Business, E. and I. S. Research and development (R&D) people and culture strategy .
 https://www.gov.uk/government/publications/research-and-development-rd-people-and-culture-strategy.
- 42. Wellcome Trust. 4 ways that PhD programmes are improving their training culture. https://wellcome.org/news/4-ways-phd-programmes-are-improving-their-training-culture (2019).

How to Guides and Appendices

Appendix 1: How to Guides for Educators and Leaders (to be added in Autumn '22)

These standalone how to guides will summarise key learnings from the Equator Project and cover two themes:

- How to make PhD recruitment more equitable and remove barriers to
 postgraduate research (reporting recommendations developed from the doctoral
 training working group, aimed at those involved in recruitment onto PhD programs)
- 2. How to build successful interventions to improve access and inclusion in postgraduate research (reporting recommendations developed from the research school and mentoring network, aimed at educators, university leaders, and those involved in efforts to broaden participation in STEM research.)

Appendix 2: Theory of Change

Appendix 3: Working Group Terms of Reference

Appendix 4: Working Group Survey

Appendix 5: Research School Programme

Appendix 6: Research School surveys (pre and post)

Appendix 7: Research School/Mentoring Network

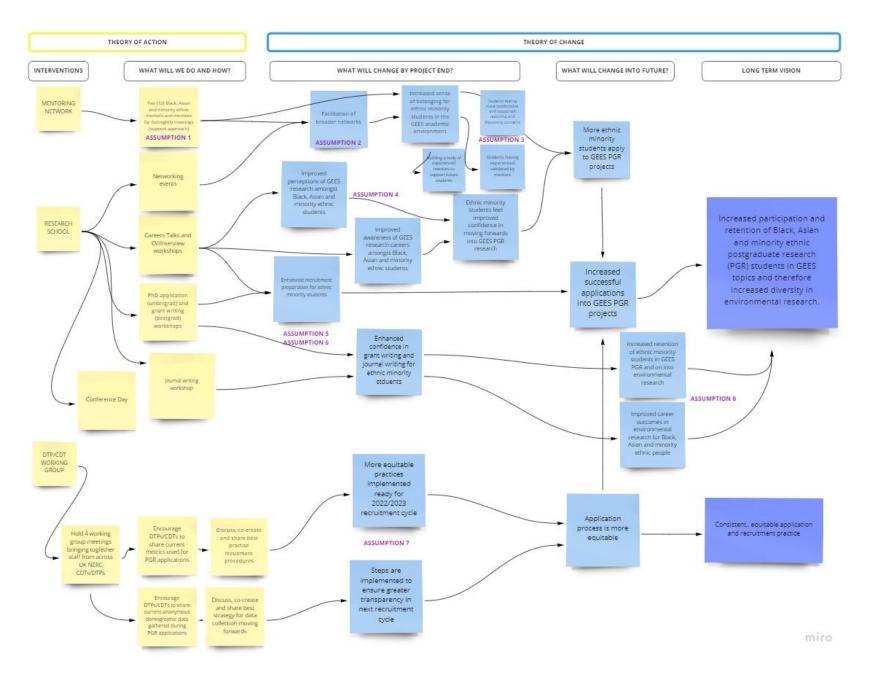
Participation and Consent Forms

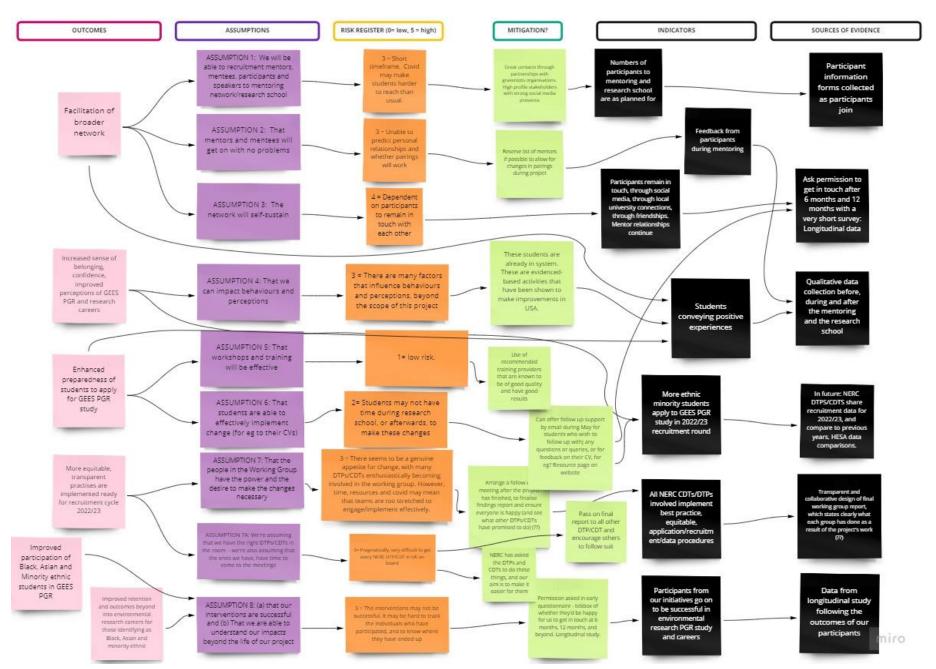
Appendix 8: Recruitment flyers

Appendix 9: Mentoring onboarding slidedeck

Appendix 10: Mentoring contract

Appendix 11: Mentoring Network Survey (pre, mid and post)





EQUATOR-DTP/CDT Working Group

Terms of Reference - draft version 3.0

Lead contact: Dr Benjamin Fernando (benjamin.fernando@chch.ox.ac.uk)

1. Synopsis

This document outlines the proposed terms of reference for the EQUATOR-doctoral training organisation working group on recruitment and retention of doctoral students from racial and ethnic minority backgrounds. The proposed frequency of meetings, nature of data sharing, Code of Conduct, and anticipated outcomes and deliverables are presented and participants are welcome to feed back upon them.

Section A: Purposes

2. Aim

The aim of this working group is to gather information on current recruitment and retention practices from a selection of NERC-funded doctoral training organisations, and to consider and disseminate best practice relating to efforts to increase the number of racial and ethnic minority doctoral candidates and improve support and retention.

3. Scope

As a short-term project, this working group is not expected to be comprehensive. It will not include every NERC-funded doctoral training organisation, nor will it be able to consider every aspect of recruitment and retention. However, this project is expected to:

- Collate and analyse EDI interventions used in recent recruitment rounds, including identifying metrics used to assess candidates and potential biases therein
- Develop selection and retention strategies deliberately designed to minimise or mitigate against racial biases
- Consider specific case study reports of actions already undertaken, and evaluate their transferability
- Disseminate these findings as 'best practice' across the participants, and more widely within the UK doctoral recruitment community.

Section B: Ways and Means

4. Participants

It is expected that participants from the following groups or organisations will participate in this working group:

- The EQUATOR network
- NERC
- The AURA CDT
- The ARIES DTP
- The CENTA DTP
- The Panorama DTP
- The SENSE CDT
- The COMET network
- The Oxford DTP
- SHU Department of Natural and Built Environment

5. Expectations

- Doctoral training organisation partners will be expected to share their current recruitment practices with the EQUATOR team, and data where appropriate - noting that both are shared under the conditions set out in letters of support, this document, and EQUATOR's data protection policies.
- The commitments made by individual doctoral training organisations are outlined in the letter of support. It should be noted that this list is not exhaustive and is not limiting, in that individual doctoral training organisations may choose to share more information than they initially committed to.
- All participants are expected to enter the process with an open mind, with efforts made
 to understand current barriers to fair and equitable recruitment and retention, and to
 seek to share and embed best practice in this and future programs.
- EQUATOR team members are expected to work positively toward the aims outlined above in this document, in accordance with the terms set out here and without prejudice or blame assigned to other participants or partner organisations.

6. Meetings

It is expected that this group will meet several times during the course of the project. Meetings will be conducted according to 'Chatham House rules', where information received in the meeting may be used or communicated to others outside of the meeting in an anonymised manner.

The timeline for the working group's activities are:

Initial introductions and agreement to Terms of Reference and Code of Conduct: to take
place via electronic correspondence in March/April. Participants are requested to share
their current Practice, Policy and Actions document (if applicable); to answer our
anonymised survey on current recruitment and EDI practice and policies; and provide
amy additional information or documentation they think may be of use (e.g. copies of
interview cover/scoring sheets etc). The EQUATOR team will use this to develop a set of

- commitments and a specific action plan, to be shared with participants after the first workshop.
- Meeting 1 (early April): in this workshop participants will work through the new NERC doctoral recruitment principles, and the EQUATOR team will explain the rationale for the NERC principles (for example: why it is so vital to pay interview costs). Participants will also identify areas that need further explanation or clarification. The aim of this workshop, in conjunction with the survey data, is to understand the minimum expectations of NERC and identify areas in which the EQUATOR team can best work with doctoral training organisations to help deliver and go beyond these best practice principles. No longer than 90 minutes.
- Meeting 2 (end of April): wider discussion of what constitutes best practice and what the current standards in the field are, informed by survey data. Emphasis will be placed on providing potential actionable solutions to specific issues raised in the survey, as well as on how to meet and improve upon NERC existing best practice. The outputs of these workshops will be used to create a toolkit-style resource to help participants meet and exceed the NERC best principles document. These will be shared with the DTPs to help shape their own recruitment efforts after the third meeting. No longer than 60 minutes.
- Meeting 3 (mid May): A final action plan, which will form the basis of the EQUATOR end
 of project report on this particular stream, will be shared with all participants. Feedback
 will be solicited in good time before publication, which will occur in the weeks after this
 meeting. No longer than 90 minutes.

7. Relationships between EQUATOR and DTPs/CDTs

This working group will exclusively focus on constructive and collaborative suggestions for how doctoral training organisation recruitment practices might be improved. This will be done in a positive manner - where potential issues with either specific or more generalised recruitment practices are identified, these will be reflected upon in an honest and reasoned way.

8. Survey data

Any survey data collected from doctoral training organisations (for example on current recruitment practices) will be collected through Qualtrics, the software used by Sheffield Hallam University (SHU). This process has received ethical approval as part of the EQUATOR project. A clear data protection and uses statement will be appended to the start of any survey, which will detail exactly how specific information will be used and for how long information will be retained.

Suggested potential questions for the survey are included in a separate document.

9. Other data

It is expected that other data (not relating to the survey) may be communicated to EQUATOR during this project, for example relating to perceptions of attitudes to changing recruitment

processes within an individual doctoral training organisation. This could either be in the form of on-the-record comments made in a meeting, or data shared through other means (for example under the conditions agreed in initial letters of support).

Any such comments will be recorded only under strict Chatham House rules and any individual who wishes to speak 'off the record' during a meeting is welcome to do so by informing the chair of this.

Any data, documents, or information that a DTP/CDT wishes to share with EQUATOR only will be facilitated such that this is not shared with the wider group or made publicly available. Such requests should be made to EQUATOR in advance of the discussion taking place.

Section C: Code of Conduct

10. Terms

All participants will be expected and required to abide by the Geological Society's code of conduct: Geological Society Code of Conduct.

11. Data protection

Any data shared within this working group will be treated as confidential unless explicit consent is given by the EQUATOR network to share it externally (for example, by agreeing to the terms and conditions on the survey). Participants should continue to be aware of GDPR and other relevant regulations, as well as the need to maintain the confidence and integrity of the PGR recruitment process.

EQUATOR Working Group: Building solid ground for racial diversity in Geography, Earth and Environmental Science (GEES) postgraduate research

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a working group to develop and share best practice for equitable, anti-racist postgraduate research recruitment because of your role in a doctoral training organisation, or in the recruitment of PhD students at your institution.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. Point 2 involves a working group to share and develop best practice.

Do I have to take part?

It is up to you to decide if you want to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be invited to attend a total of 3 online meetings with project staff / other doctoral training organisation representatives. You will also be asked to complete this anonymous short survey which seeks to explore current practise across the sector. This survey will not ask you any personal questions- it will be solely based on the recruiting practises of your DTP. It will be anonymous and the data collected will be combined to give an overall picture of the current state of play and what is achievable moving forward.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to direct improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Details of who to contact if you have any concerns or if adverse effects occur after the study are given below.

You should contact the Data Protection Officer if:

- you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

DPO@shu.ac.uk

You should contact the Head of Research Ethics (Professor Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk

Postal address: Sheffield Hallam University, Howard Street, Sheffield S1 1WBT Telephone: 0114 225 5555

Participant Consent Statements

- 1. I have read the ethics Information Sheet for this study (previous text) and the "Equator DTP/CDT Terms of Reference" document (send by email). I have had details of the study explained to me.
- 2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point.

3. I understand that I am free to w reason for my withdrawal or to de treatment by the researcher.					
4. I agree to provide information t	o the researchers ι	ınder the conditions	of confidentiality	set out in the Inform	nation Sheet.
5. I wish to participate in the stud	v under the conditi	ons set out in the Inf	ormation Sheet.		
6. I consent to the information co				numicod (so that I ca	annot bo
identified), to be used for any oth			i study, office affor	iyiiised (so tilat i ca	amot be
Q1: Participant Consent- Please a	ınswer				
I consent to take part in this study					
ction A: Demographic information Q2: The following characteristics		otected' under the 20	110 Equality Act. A	t which stages of th	e application
process do you collect and/or mo	nitor data about th At application	e following character Prior to interview	ristics? At interview	At acceptance	Do not collect
Age					
Sex					
Disability					
Marital status					
Pregnancy/maternity/paternity					
Ethnicity or race					
-			_		
Gender reassignment					
Religion or belief Sexual orientation					
☐ In deciding who to shortlist ☐ In deciding who to offer additional support of the short of th	uirements	ation process			
☐ In deciding who or how to award scho ☐ Do not use this information at all in the					
Other (please specify) Q4: The following characteristics process do you collect and/or mo	are NOT considere	d 'protected' under t e following charactel	he 2010 Equality <i>F</i> ristics (please not	Act. At which stages e that these are bas	of the applicatio
version of the UCAS list)?	At application	Prior to interview	At interview	At acceptance	Do not collect
Gender identity					
First generation/parental education evel					
Care status					
Caring responsibilities					
Postcode/ACORN/POLAR					
Previous undergraduate institution(s)					
Source of funding for UG/Masters') ()			
degree		\sqcup			
School type or pre/post-16 performance					

	At application	Prior to interview	At interview	At acceptance	Do not collect
Free School Meals					
Any others not listed here (please specify)					
//					
Q5: How do you use those non-p give more details in the free-text					
☐ In deciding who to longlist					
In deciding who to shortlist					
In deciding who to interview					
In deciding who to offer places to					
In deciding upon conditional offer red	quirements				
☐ In deciding who or how to award sch	nolarships				
Do not use this information at all in the	he process				
Other (please specify)					
Section B: Advertising to diverse ar	nd non-traditional a	dvertising			
Q6: How, if at all, does your doct	oral training organi	sation centrally (as o	pposed to individu	ual supervisors) adv	ertise?
Internal (within university) communic	cations				
External (outside university) commu	nications				
Social media					
Paid advertising					
Reaching out to student groups direct	ctly				
External websites (e.g. findaphd.con	n)				
Other (please specify)					
Q7: At what stage of the applicat range of applicants?	ion process do you	feel your program m	ost struggles with	attracting and/or re	taining a diverse
At expressions of interest					
At application					
At longlist					
At shortlist					
At calls to interview					
☐ Within the interview					
At acceptance					
Q8: Within your doctoral training identified?	organisation, whic	h barriers to improvi	ng diversity within	your student cohor	t have you
Application fees					
☐ High tuition fees					
☐ Institutional reputation					
Reputation of the field					
Lack of diversity amongst supervisor	rs				
Projects on offer					
Levels of stipend support					
_					
Other (please specify)					

NERC Best Practice Principles

Yes, comprehensively	Q9: Are you familiar with the "NERC Best recruitment practices (published December	Practice Principles in Recruitment & Training at Doctoral Level" guidance on inclusive er 2021)?
No. not really No. not at all Q10: Do you feel that the "NERC Best Practice Principles in Recruitment & Training at Doctoral Level" document provides cleaguidance for the actions that doctoral training organisations are expected to take? Yes, comprehensively Yes, somewhat No. not really No. not at all Q11: Do you feel that your doctoral training organisation has taken on board these principles during the 2021-22 recruitment season? Yes, comprehensively Yes, comprehensively No. not really No. not at all Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, comprehensively Yes, somewhat No. not really No. not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Be Practice Principles document; and if so, what are they?	Yes, comprehensively	
Q10: Do you feel that the "NERC Best Practice Principles in Recruitment & Training at Doctoral Level" document provides cleaguidance for the actions that doctoral training organisations are expected to take? Yes, comprehensively Yes, somewhat No, not really No, not at all Q11: Do you feel that your doctoral training organisation has taken on board these principles during the 2021-22 recruitment season? Yes, comprehensively Yes, somewhat No, not really No, not at all Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, comprehensively Yes, comprehensively No, not at all No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Be Practice Principles document; and if so, what are they?	Yes, somewhat	
Q10: Do you feel that the "NERC Best Practice Principles in Recruitment & Training at Doctoral Level" document provides clear guidance for the actions that doctoral training organisations are expected to take? Yes, comprehensively No, not really No, not at all Q11: Do you feel that your doctoral training organisation has taken on board these principles during the 2021-22 recruitment season? Yes, comprehensively Yes, somewhat No, not really No, not at all Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, comprehensively No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Be Practice Principles document; and if so, what are they?	○ No, not really	
guidance for the actions that doctoral training organisations are expected to take? Yes, comprehensively Yes, somewhat No, not really No, not at all Q11: Do you feel that your doctoral training organisation has taken on board these principles during the 2021-22 recruitment season? Yes, comprehensively Yes, somewhat No, not really No, not at all Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not rea	○ No, not at all	
Yes, somewhat No, not really No, not all Q11: Do you feel that your doctoral training organisation has taken on board these principles during the 2021-22 recruitment season? Yes, comprehensively Yes, somewhat No, not really No, not at all Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not that your doctoral training organisation implements actions that go beyond those suggested in the NERC Be Practice Principles document; and if so, what are they?		
Yes, somewhat No, not really No, not at all Q11: Do you feel that your doctoral training organisation has taken on board these principles during the 2021-22 recruitment season? Yes, comprehensively Yes, somewhat No, not eatily Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Be Practice Principles document; and if so, what are they?	guidance for the actions that doctoral trai	ining organisations are expected to take?
No, not really No, not at all Q11: Do you feel that your doctoral training organisation has taken on board these principles during the 2021-22 recruitment season? Yes, comprehensively No, not really No, not at all Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively No, not really No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Be Practice Principles document; and if so, what are they?	Yes, comprehensively	
Q11: Do you feel that your doctoral training organisation has taken on board these principles during the 2021-22 recruitment season? Yes, comprehensively Yes, somewhat No, not really No, not at all Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Betractice Principles document; and if so, what are they?	Yes, somewhat	
Q11: Do you feel that your doctoral training organisation has taken on board these principles during the 2021-22 recruitment season? Yes, comprehensively Yes, somewhat No, not really Not nectraling in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Betactice Principles document; and if so, what are they?	○ No, not really	
yes, comprehensively yes, somewhat No, not really Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively yes, somewhat No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Be Practice Principles document; and if so, what are they?	○ No, not at all	
Yes, somewhat No, not really Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Betractice Principles document; and if so, what are they?		ng organisation has taken on board these principles during the 2021-22 recruitment
 No, not really No, not at all Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Beteractice Principles document; and if so, what are they? mal comments Q15: Is there anything else about the application process that your DTP/CDT uses that you would like to note or flag, or that you content is the content of the cont	Yes, comprehensively	
No, not at all Not recruiting in next cycle (N/A) Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Beteractice Principles document; and if so, what are they?	Yes, somewhat	
Only 12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Betactice Principles document; and if so, what are they?	○ No, not really	
Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Beteractice Principles document; and if so, what are they?	○ No, not at all	
Q12: Do you plan to change your recruitment practices before the 2022-23 recruitment season to better accommodate these principles? Yes, comprehensively Yes, somewhat No, not really No, not at all Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Beteractice Principles document; and if so, what are they?	Not recruiting in next cycle (N/A)	
Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Beteractice Principles document; and if so, what are they? mal comments Q15: Is there anything else about the application process that your DTP/CDT uses that you would like to note or flag, or that you	Yes, comprehensively Yes, somewhat	
Q13: What clarifications or additional information would help you implement this guidance better? Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Bet Practice Principles document; and if so, what are they? mal comments Q15: Is there anything else about the application process that your DTP/CDT uses that you would like to note or flag, or that you	No, not really	
Q14: Do you feel that your doctoral training organisation implements actions that go beyond those suggested in the NERC Bernardice Principles document; and if so, what are they? nal comments Q15: Is there anything else about the application process that your DTP/CDT uses that you would like to note or flag, or that you	○ No, not at all	
Practice Principles document; and if so, what are they? nal comments Q15: Is there anything else about the application process that your DTP/CDT uses that you would like to note or flag, or that you	Q13: What clarifications or additional info	ormation would help you implement this guidance better?
Q15: Is there anything else about the application process that your DTP/CDT uses that you would like to note or flag, or that yo	Q14: Do you feel that your doctoral trainin Practice Principles document; and if so, w	ng organisation implements actions that go beyond those suggested in the NERC Best what are they?
Q15: Is there anything else about the application process that your DTP/CDT uses that you would like to note or flag, or that yo		
	nal comments	
		lication process that your DTP/CDT uses that you would like to note or flag, or that you

Workshop Schedule for PhD Stream

	Saturday (9th April)	Sunday (10th April)	Monday (11th April)	Tuesday (12th April)	Wednesday (13th April)
			Morning Session		
9 am- 9:3 0am 9:30am-10 am 10am-11 am	Registration Welcome Address Speaker: Dr. Natasha Dowey (Sheffield Hallam University) Icebreaker/Networking Session	Introduction to Science Communication: Speaker: Sarah Cosgriff	Grant and Fellowship Writing Fundamentals for PhDs/Postdoc/ECR Speaker: Lucy Kender (GrantCraft)	Preparing for an Academic Career Speaker: Lucy Kender (GrantCraft)	Research Conference Day Facilitators: Equator Team Highlight Speaker 9:00-9:30: Prof Chris Jackson (University of Manchester)
11am-11:30 am		Break			

11:30-12:45pm	How to thrive in your PhD: first-hand PhD Experiences Speakers: Anya Lawrence (University of Birmingham) and Louisa Brotherson (University of Liverpool) How to thrive in your Research Career: Speakers: Dr Benjamin Fernando (University of Oxford)			Highlight Speaker 11:30-11:45: David Blagden (Royal Geographical Society)
12:45-1:45pm		Break		
			Afternoon Session	
1:45-3:15pm 3;30pm-4:30pm	Introduction to academic publishing Speaker: Dr Melissa Plail (Nature Communications) Pre-prints and making your research visible	Building Public Profile and Online Visibility Speaker: Franscisca Rockey Black Geographers		Closing Remarks 1:45-2:00 Speakers: Dr Munira Raji and Dr Natasha Dowey Networking and Mingling 2:00 - 4:00 pm

	Speaker: Dr Rebecca Wiliams (University of Hull)		
4:30 pm		Closing	

Workshop Schedule for Master/Undergraduate Stream

	Saturday (9th April)	Sunday (10th April)	Monday (11th April)	Tuesday (12th April)	Wednesday (13th April)		
	Morning Session						
9am 9:30am	Registration	Introduction to Science	A whistlestop tour of applying for a	Creating a PhD Application	Research Conference Day		
9:30am-10am	Welcome Address Speaker: Dr Natasha Dowey (Sheffield Hallam University)		Speaker: Dr Sam Giles (University of Birmingham)	Speakers: Dr Sam Giles (University of Birmingham) and Dr Rebecca Williams (University of Hull)	Facilitators: Equator Team Highlight Speaker 9:00-9:30: Prof Chris Jackson (University of		
10am-11 am	Icebreaker/Networki ng				Manchester)		
11am-11:30 am		Brea	ak				

11:30-12:45pm	How to thrive in your PhD: first-hand PhD Experiences Speakers: Anya Lawrence (University of Birmingham) and Louisa Brotherson (University of Liverpool) How to thrive in your Research Career Speakers: Dr Benjamin Fernando (University of Oxford)		The Value of a PhD-transferable research skills for both industry and academia Speaker: Dr. Natasha Dowey (Sheffield Hallam University)	The interview stage Speakers: Dr Chris Jackson (University of Manchester) and Dr Rebecca Williams (University of Hull)	Highlight Speaker 11:30-11:45: David Blagden (Royal Geographical Society)
12:45-1:45pm		Break			
			Afternoon Session	1	
1:45-3:15pm	Introduction to Academic Publishing Speaker: Dr. Melissa Plail (Nature	Building Public Profile and Online Visibility Speaker: Franscica Rockey (Black Geographers)	Building your CV Speaker: Wayne Birthright, (Sheffield Hallam University)	Giving a great presentation Speakers: Dr Natasha Dowey (Sheffield Hallam University)	Closing Remarks 1:45-2:00 Speakers: Dr Munira Raji (University of Hull) and Dr Natasha Dowey (Sheffield

	Communications)				Hallam University) Networking and Mingling 2:00 - 4:00 pm	
3:30pm-4:30pm	Pre-prints and making your research visible Speaker: Dr Rebecca WIlliams (University of Hull)		Practical session to develop own CV	Practical session to develop a conference-style research flash (mini) talk		
4:30 pm	4:30 pm Closing					

Default Question Block

EQUATOR Research School: Building solid ground for racial diversity in Geography, Earth and Environmental Science (GEES) postgraduate research

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a project where you will attend a ring-fenced Research School initiative for Black, Asian and minority ethnic students and researchers. The project will investigate your experiences of attending the Research School, through feedback questionnaires and interviews with the project team. You have been invited to take part because you are an undergraduate or postgraduate student or researcher who may benefit from attending the Research School.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. The first of these strands of research involves a Research School that brings together Black, Asian and minority ethnic GEES students, post-docs, academics, EDI experts, and industry researchers in the provision of workshops, talks, networking and a conference day.

Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be invited to attend the Research School, which will be held at Sheffield Hallam University from 9th-13th April 2022. You will be offered remuneration for your time, travel and expenses. You will be asked to complete feedback questionnaires before, during, and after the Research School experience. The questionnaire will ask questions about protected characteristics, about your research ambitions, about your previous experiences of research themes, and about your thoughts about the initiative. The questionnaires will be completed anonymously, therefore once your questionnaire is submitted it will not be possible for you to withdraw your response.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to directly improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact the research team:

Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Details of who to contact if you have any concerns or if adverse effects occur after the study are given below.

You should contact the Data Protection Officer if:

- you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

DPO@shu.ac.uk

You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

<u>ethicssupport@shu.ac.uk</u>

Postal address: Sheffield Hallam University, Howard Street, Sheffield S1 1WBT Telephone: 0114 225 5555

Participant Consent Statements

- 1. I have read the Information Sheet for this study and have had details of the study explained to me.
- 2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point.
- 3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for my withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.
- 4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.
- 5. I wish to participate in the study under the conditions set out in the Information Sheet.
- 6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used for any other research purposes.

Participant Consent- Please	answer
-----------------------------	--------

O I consent to take part in this study

How old are you?

O 18-24

Please tell us about yourself

This survey is anonymous and none of this data will be presented in a way that can identify any of the participants. Note that the format of demographic questions is aligned to that of the UK Government Census.

O 25-34	
35-44	
O 45-54	
O 55-64	
○ 65+	
O Prefer not	to say
How would y	you describe your nationality?
How would y	you describe your ethnicity?
Asian or Asian	British
○ India	ın
O Paki	stani
○ Ban	gladeshi
O Chin	ese
○ Any	other Asian background, please specify:
Black, African,	Caribbean or Black British
○ Afric	an
○ Carr	ibean
○ Any	other Black, African or Caribbean background, please specify:
Mixed or Multip	ole ethnic groups
O Whit	e and Black Caribbean
O Whit	e and Black African
O Whit	e and Asian
○ Any	other Mixed or Multiple ethnic background, please specify:

Do you identify as a disabled person, or have a long-term health condition?

O Yes

○ No

On maternity or paternity leaveDoing another kind of paid work

Unemployed

Other, please specify:

What area of Geography, Earth and Environmental Sciences does your ex © Earth Science / Geology					
Geography					
Environmental Science / Studies					
Are you the first generation in your family to engage in higher education (college/unde	ergraduate	degree pro	ogram)?	
○ Yes					
○ No					
○ I'm unsure					
Do you know someone in Geography, Earth and Environmental Science w	ho has provi	ded you w	ith suppor	t and guida	ance?
○ Yes					
○ No					
○ I'm unsure					
Please rate how useful the following activities would be to you (Note: GEES = Geography, Earth or Environmental Science)					
	Not at all important	Slightly important	I'm unsure	Very important	Extremely important
Grant Writing	0	0	0	0	0
Research Fellowship Writing	0	\bigcirc	\circ	\bigcirc	\bigcirc
Understanding types of grants and the UK funding landscape	0	\circ	\circ	\circ	\bigcirc
Journal Writing (from title, abstract, introduction to conclusion)	0	\bigcirc	\circ	\bigcirc	\bigcirc
Pre-prints and making your research visible during publication process	0	\bigcirc	\circ	\bigcirc	\bigcirc
Application for Lectureship Position	0	\bigcirc	\circ	\circ	\bigcirc
Application for Research/Postdoctoral Positions	0	\circ	\circ	\circ	\circ
PhD Application: Preparing to apply for a PhD and finding PhD projects	0	\circ	\circ	\circ	\circ
Writing research and personal statements for PhD applications	0	\circ	\bigcirc	\circ	\circ
PhD interview tips and mock interview sessions	0	\circ	\bigcirc	\circ	\circ
PhD Funding: How to access internal/external funding for postgraduate research	0	\circ	\circ	\circ	\circ
Geoscience Communication (how to best communicate your research to the public)	0	\bigcirc	\circ	\bigcirc	\circ
Building Public Profile:how to build online social media profile for research and create online visibility	0	\circ	\circ	\circ	\circ
Conference and Networking		\circ	\circ	\circ	\circ
Elevator Pitch about yourself and your study/research		0	0	0	0
If you would like to expand upon or explain any of your answers to the rat	ings above,	please typ	e free text	here:	
Have you ever participated in formal Research training before?					
Yes					
○ No					
○ I'm unsure					
If yes, what research training have you taken part in?					
2 2 2					

Have you ever considered a career in Geography, Earth and Environmental Science Research?	
○ Yes	
○ No	
○ I'm unsure	
At present, what do you feel are the barriers holding you back from a research career (if any)?	
What are your current academic goals/career plans?	
What would you like to gain from the EQUATOR Research School? (free text, an opportunity for you to provide us	with any
additional thoughts you may have)	with any
How did you hear about the Equator project?	
○ Twitter	
○ LinkedIn	
Grassroots organisation (e.g. Black Geographers)	
Internal university communication	
Email from listserv group (e.g. British Sedimentological Research Group)	
O Professional body (e.g. Geological Society)	
Other, please specify:	

EQUATOR Research School: Building solid ground for racial diversity in Geography, Earth and Environmental Science (GEES) postgraduate research

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a project where you will attend a ring-fenced Research School initiative for Black, Asian and minority ethnic students and researchers. The project will investigate your experiences of attending the Research School, through feedback questionnaires and interviews with the project team. You have been invited to take part because you are an undergraduate or postgraduate student or researcher who may benefit from attending the Research School.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. The first of these strands of research involves a Research School that brings together Black, Asian and minority ethnic GEES students, post-docs, academics, EDI experts, and industry researchers in the provision of workshops, talks, networking and a conference day.

Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be invited to attend the Research School, which will be held at Sheffield Hallam University from 9th-13th April 2022. You will be offered remuneration for your time, travel and expenses. You will be asked to complete feedback questionnaires before, during, and after the Research School experience. The questionnaire will ask questions about protected characteristics, about your research ambitions, about your previous experiences of research themes, and about your thoughts about the initiative. The questionnaires will be completed anonymously, therefore once your questionnaire is submitted it will not be possible for you to withdraw your response.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to directly improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact the research team:

Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Details of who to contact if you have any concerns or if adverse effects occur after the study are given below.

You should contact the Data Protection Officer if:

- you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

DPO@shu.ac.uk

You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk

Postal address: Sheffield Hallam University, Howard Street, Sheffield S1 1WBT Telephone: 0114 225 5555

Participant Consent Statements

- 1. I have read the Information Sheet for this study and have had details of the study explained to me.
- 2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point.
- 3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for my withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.
- 4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.
- 5. I wish to participate in the study under the conditions set out in the Information Sheet.
- 6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used for any other research purposes.

Participant Consent- Please answe
O I consent to take part in this study

Please tell us about yourself

This survey is anonymous and none of this data will be presented in a way that can identify any of the participants. Note that the format of demographic questions is aligned to that of the UK Government Census.

Note that the format of demographic questions is alighed to that of the UK Government Census.	
How old are you?	
○ 18-24	
O 25-34	
○ 35-44	
○ 45-54	
○ 55-64	
○ 65 +	
O Prefer not to say	
How would you describe your nationality?	
How would you describe your ethnicity?	
Asian or Asian British	
○ Indian	
O Pakistani	
○ Bangladeshi	
○ Chinese	
Any other Asian background, please specify:	
Black, African, Caribbean or Black British	
African	
○ Carribean	
Any other Black, African or Caribbean background, please specify:	
Mixed or Multiple ethnic groups	
○ White and Black Caribbean	
○ White and Black African	
○ White and Asian	
Any other Mixed or Multiple ethnic background, please specify:	

Other ethnic group
○ Arab
Any other ethnic group, please specify:
Prefer not to say
©
What is your religion, even if you are not currently practising?
○ Buddhist
Ohristian (including C of E, Catholic, Protestant and all other Christian denominations)
○ Hindu
○ Jewish
○ Muslim
Sikh
○ No religion
Other, please specify:
O Prefer not to say
How would you describe your gender identity?
○ Male
○ Female
Non-binary/ third gender
○ Transgender
○ Gender neutral
O Pangender
○ Gender queer
Other, please specify
O Prefer not to say
Is your gender identity the same as the gender you were assigned at birth?
○ Yes
○ No
O Prefer not to say
How would you describe your sexuality?
Heterosexual
○ Gay
Lesbian
Bisexual
Queer
Asexual
O Pansexual
Other, please specify:
O Prefer not to say
Do you identify as a disabled person, or have a long-term health condition?
○ Yes
○ No

How does your disability or condition impact you?
○ Mobility (e.g. example walking or climbing stairs)
○ Visually (e.g. partial sight or blindness)
Hearing (e.g. partial hearing or deafness)
Oexterity (e.g. lifting or carrying objects, using a keyboard)
Mental health
○ Memory
○ Learning, understanding or concentrating
Oscially or in communicating (e.g. autism, ADHD, Tourette's syndrome)
Other, please specify:
Are you a student?
○ Yes
○ No
What level of study are you currently completing?
Undergraduate
○ First degree
○ Foundation degree
Other undergraduate degree or equivalent, please specify:
Postgraduate
○ Masters, taught
Other postgraduate taught, please specify:
O Doctorate research
Other postgraduate research, please specify:
Have you continued in vive for and initiatives hefere?
Have you participated in ringfenced initiatives before?
○ Yes
O No
○ I'm unsure
If yes, feel free to tell us which initiatives you have previously been involved in:
Evaluating your experiences of the Equator Research School
How important was it to you that:

Not at all important (was not a factor in my decision to apply)

 \bigcirc

 \circ

I'm unsure

 \bigcirc

 \bigcirc

The Research school was fully funded

The research school was ringfenced for Black, Asian and Ethnic Minority attendees

Somewhat Important (contributed to my decision to apply)

 \bigcirc

 \bigcirc

Very Important (major factor in my decision to apply)

 \bigcirc

 \bigcirc

O Prefer not to say

	l'm unsure	Not at all important a factor in my dec apply)	ision to (contribu	what Important ted to my decision to apply)	Very Important (major factor in my decision to apply)		
The research school was discipline- specific to Geography, Earth and Environmental Science subjects	0	0		0	0		
Please rank how you feel about the following statements following participation in the Research School (GEES = Geography, Earth and Environmental Science)							
	Strongly disagree	Somewhat disagree	I'm unsure	Somewhat agr	ee Strongly agree		
I have improved awareness of GEES research careers	0	\circ	\circ	\circ	\circ		
I have a broader network in GEES research	0	\circ	\circ	\circ	\circ		
I have an increased sense of belonging in GEES research	0	\circ	\circ	0	\circ		
I feel more confident at the possibility of moving forward with a career in GEES research	0	0	0	0	0		
I have a more positive opinion of careers in GEES research	0	\circ	\circ	0	\circ		
The research school was well organised		\circ	0	\circ	\circ		
The research school was useful to me	0	\circ	\circ	\circ	\circ		
I enjoyed the research school		\circ	\circ	\circ	\circ		
Do you plan to apply for a postgr your undergraduate/taught Maste Yes No I'm unsure		gree (such as a Maste	ers by Research	or PhD) followin	g the completion of		
Has the Equator Research School Yes, I now feel MORE keen to pursu Yes, I now feel LESS keen to pursue	e/continue a career in res	search (feel free to add com	ment below)	earch?			
No, I feel the same as before (feel fre	ee to add comment below	v)					
Did you attend the PhD stream so PhD stream Undergraduate/Masters stream	essions, or the Und	ergraduate/Masters st	ream sessions?				
Please rank the sessions in orde Networking during icebreaker, lunches		they were to you (with	1 being most im	portant/useful)			
How to thrive in your PhD and research career (Anya, Ben, Louisa)							
Introduction to academic publishing (N	Melissa from Nature)						
Pre-prints and making your research visible (Becky)							

Introduction to Science Communication (Sarah Cosgriff)
Building Public Profile and Online Visibility (Francisca)
Grant and Fellowship Writing Fundamentals (Lucy from Grantcraft)
Preparing for an Academic Career (Lucy from Grantcraft)
Research Conference Day - your chance to present and watch your peers present
Research Conference Day Talks (Chris and David)
Please rank the sessions in order of how important they were to you (with 1 being most important/useful)
Networking during icebreaker, lunches and break times
How to thrive in your PhD and research career (Anya, Ben, Louisa)
Introduction to academic publishing (Melissa from Nature)
Pre-prints and making your research visible (Becky)
Introduction to Science Communication (Sarah Cosgriff)
Building Public Profile and Online Visibility (Francisca)
A whistlestop tour of applying for a PhD (Sam)
The Value of a PhD- transferable research skills for both industry and academia (Natasha)
Building your CV (Wayne from SHU employability)
Creating a PhD Application (Sam and Chris)
PhD interviews (Chris and Becky)
Giving a great presentation (Natasha)
Research Conference Day - your chance to present and watch your peers present
Research Conference Day Talks (Chris and David)
f you would like to expand upon or explain any of your answers to your session rankings above, please type free text here:
f the Equator Research School ran again, would you recommend it to a friend?
○ Yes
○ No
O I'm unsure
Can you think of any training you would have found useful that we did not cover?

Feel free to use this	s box to contribute any ad	ditional reflections or	feedback for the Equ	uator team	
			//		
end up? (This resp	the Equator team to reach onse is anonymous. If you ofurther contacted by the	ı tick no, please emai	re as part of a longer I Natasha Dowey n.do	-term study of who wey@shu.ac.uk v	ere Equator Participants vith the following email:
○ Yes					
○ No					
Are you happy for u	us to use anonymised text	t from this survey on	our website, as testin	nonial-style conte	nt to advertise future
○ Yes					
○ No					



PARTICIPANT CONSENT FORM

EQUATOR: Building solid ground for racial diversity in Geography, Earth and Environmental Science (GEES) postgraduate research

Please answer the following questions by ticking the response that applies		
	YES	NO
1. I have read the Information Sheet for this study and have had details of the study explained to me.		
2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point.		
3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for my withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.		
4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.		
5. I wish to participate in the study under the conditions set out in the Information Sheet.		
6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used for any other research purposes.		
Participant's Signature: Date:	_	
Participant's Name (Printed):		
Contact details:		
Researcher's Name (Printed):		
Researcher's Signature:		
Researcher's contact details:		

Participant Consent Form1V1

(Name, address, contact number of investigator)

Please keep your copy of the consent form and the information sheet together.

Questionnaire Participant Information Sheet

EQUATOR Mentoring Network: Building solid ground for racial diversity in Geography, Earth and Environmental Science (GEES) postgraduate research

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of **public tasks that are in the public interest**. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a project where you will become part of a support mentoring network for Black, Asian and minority ethnic staff, students and alumni. You will be either a mentee or mentor, and will meet with your pairing in online mentor meetings once a fortnight for the duration of the project. The project will investigate your experiences of being part of the support mentoring network, through feedback questionnaires and interviews with the project team. You have been asked to take part because you are an undergraduate or postgraduate student, GEES graduate, or staff member who may benefit from being mentored/providing mentorship.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. The latter of these strands of research involves a mentoring network of students, alumni, post-doc, academic and industry mentors.

Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be matched with a mentor/mentee and provided with code of conduct guidelines for the mentoring process. You will be asked to participate in **remote online** mentoring discussions for **six one-hour sessions across 4 months**. You will be offered remuneration for your time. You will be asked to complete feedback questionnaires at the start of, and during, the mentoring process. The questionnaire will ask questions about protected characteristics, about any previous experience of mentoring, about your feelings of belonging/inclusion, and about your experiences of the mentoring project. The questionnaire will be completed anonymously, therefore once your questionnaire is submitted it will not be possible for you to withdraw your response.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future

learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to directly improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact the research team:

Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Details of who to contact if you have any concerns during or after the study are given below.

You should contact the Data Protection Officer if:

- you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk

DPO@shu.ac.uk

Postal address: Sheffield Hallam University, Howard Street, Sheffield S1 1WBT Telephone: 0114 225 5555

Questionnaire Participant Information Sheet

EQUATOR Research School: Building solid ground for racial diversity in Geography, Earth and Environmental Science (GEES) postgraduate research

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of **public tasks that are in the public interest**. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a project where you will attend a ring-fenced Research School initiative for Black, Asian and minority ethnic students and researchers. The project will investigate your experiences of attending the Research School, through feedback questionnaires and interviews with the project team. You have been invited to take part because you are an undergraduate or postgraduate student or researcher who may benefit from attending the Research School.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. The first of these strands of research involves a Research School that brings together Black, Asian and minority ethnic GEES students, post-docs, academics, EDI experts, and industry researchers in the provision of workshops, talks, networking and a conference day.

Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be invited to attend the Research School, which will be held at Sheffield Hallam University from 9th-13th April 2022. You will be offered remuneration for your time, travel and expenses. You will be asked to complete feedback questionnaires before, during, and after the Research School experience. The questionnaire will ask questions about protected characteristics, about your research ambitions, about your previous experiences of research themes, and about your thoughts about the initiative. The questionnaires will be completed anonymously, therefore once your questionnaire is submitted it will not be possible for you to withdraw your response.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future

learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to directly improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact the research team:

Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Details of who to contact if you have any concerns or if adverse effects occur after the study are given below.

You should contact the Data Protection Officer if:

- you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk

DPO@shu.ac.uk

Postal address: Sheffield Hallam University, Howard Street, Sheffield S1 1WBT Telephone: 0114 225 5555

Building solid ground for racial diversity in Geography, Earth and Environmental Science research

Equator Mentoring Network

A ring-fenced scheme for those who identify as Black, Asian, and Minority Ethnic in Geography, Earth and Environmental Sciences.

The network aims to increase participation and retention into postgraduate research, creating a more diverse workforce for the green transition.





Mentees

Will be matched with mentors with relevant lived experience for support to help them achieve their goals.



Mentors

Will share experiences and provide guidance, whilst gaining valuable skills in leadership and communication.



For eligibility criteria and to apply visit our website:



https://equatorresearchgroup.wordpress.com

Research Council



Please apply by 31st January 2022.

Questions? Email us at EquatorResearchGroup@gmail.com

Funded by Supporting partne



British Geological Survey











Welcome session for Mentees

Christopher Jackson Anya Lawrence Natasha Dowey





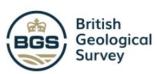








Project partners:

















Partner DTPs/CDTs:













What is the Equator project?



The Equator project aims to improve participation and remove barriers for Black, Asian and Minority Ethnic students in postgraduate Geography, Earth and Environmental Science research:

- improve access and participation through a ring-fenced research school;
- remove barriers to access through advocacy in a cross-discipline working group of doctoral training partnerships, and;
- improve student experience and retention through a ring-fenced mentoring network for ethnic minority students.

What is mentorship?



- Mentorship is a <u>protected relationship</u> in which a more knowledgeable or experienced person <u>guides and</u> <u>nurtures</u> the professional development or growth of another
- It can <u>occur outside the normal management structure</u> <u>and/or institution</u>
- It goes beyond learning specific competencies or tasks
- It is <u>based on trust</u>, i.e., so the mentee can feel secure to seek advice on issues impacting their professional [and personal] success



Source: https://cs.lbl.gov/diversity-equity-and-inclusion/csa-mentoring-program/what-is-mentorship/

What types of mentorship exist?



- Traditional One-on-one
 Mentoring: A mentee and mentor
 are matched, either through a
 program or on their own
- **Distance Mentoring**: A mentoring relationship in which the two parties (or group) are in different locations
- Group Mentoring: A single mentor is matched with a cohort of mentees.



Stephanie Macdonald (Marine Scientist and Conservationist)

What might arise in my mentor discussions?



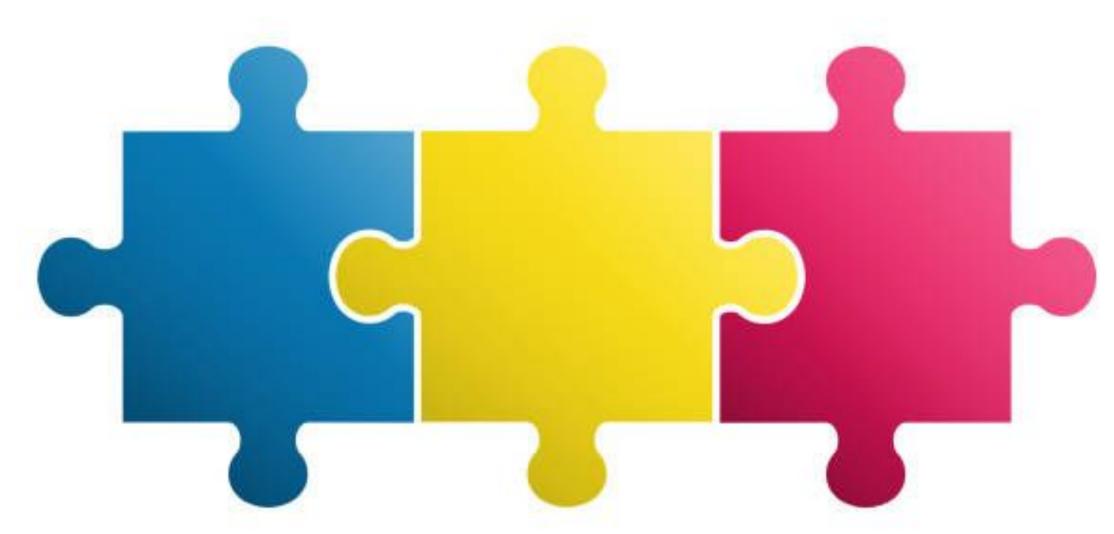
- Cultural exchange
- Navigating institutional structure
- Adjusting to a new position
- Career development
- Scientific and technical development
- Networking
- Leadership development
- Management and supervision
- Work-life balance
- Managing interpersonal relationships at work
- Professional development



http://britgeopeople.blogspot.com/2020/10/a-lack-of-diversity-in-geosciences-by.html

How were mentor-mentee pairings achieved?





each mentee has **TWO** mentors

Mentoring agreement





1. Context...

2. Conduct...

MENTORING AGREEMENT

This Mentoring Agreement should be signed by both Mentor and Mentee please, upon being matched, and then returned to the EQUATOR project team at equatorresearchteam@gmail.com with subject heading "Mentor Agreement" and the senders surname.

3. Confidentiality...

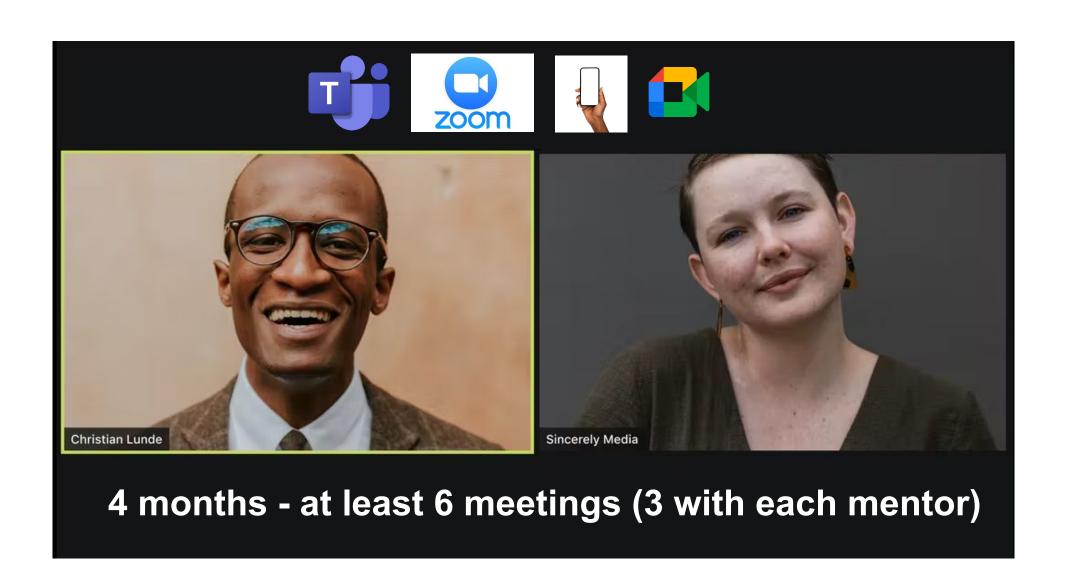
4. Changes...

MENTOR:

I.....("Mentor") understand and agree:

Expectation of hours





Why are we asking you to fill in surveys?



- We are carrying out "action research"- this means we are making an intervention, in the hope of driving change - but we need to monitor whether it is successful, and give you an opportunity for feedback
- We would like you to complete a very brief survey at the start, mid-point, and end of this project:
 - Survey 1: To establish previous experiences in mentoring
 - Survey 2: A very quick check in to ensure all is ok
 - Survey 3: A final survey to understand how the project worked for you.
- These surveys are anonymous, i.e., the data will not be presented in a way that could identify you
- Full information about the surveys, and ethical approval for this research, is provided on the front page of the questionnaires. You will receive the first questionnaire link via email

Remuneration

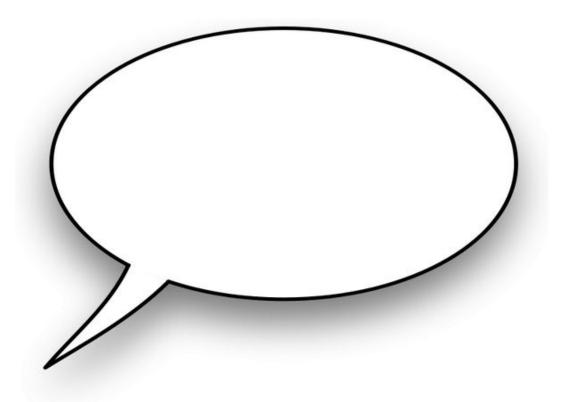


- We ask each mentee to attend at least 6 mentoring sessions (we recommend 3 with each of your mentors). We can offer each mentee a £150 payment in remuneration for taking part in the scheme.
- The remuneration will be made as a one-off payment in May 2022. You will be emailed with a payment claim form by N.Dowey@shu.ac.uk in April- please make sure you reply to this email as soon as possible.



First session ideas - breaking the ice!





- Your personal background (as much as you feel comfortable to reveal)
- What you've studied/what is your career journey? What inspired you to do what you do?
- Do you have any particular goals/targets you would like help with?
- Plan future meeting times, and format that would work best for you (e.g. support mentoring versus aims/goals type mentoring)

What next?



 Following this session, you will receive an email with:

- Link to recording of this webinar
- Mentoring guidance document
- Mentoring agreement document (sign and return)
- Link to pre-mentoring questionnaire (complete before your first session)
- Contact details of your mentee



Thank you for taking part!

Mentorship Programme Onboarding

Christopher Jackson Anya Lawrence Natasha Dowey





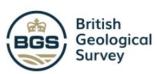








Project partners:

















Partner DTPs/CDTs:













What is the Equator project?



The Equator project aims to improve participation and remove barriers for Black, Asian and Minority Ethnic students in postgraduate Geography, Earth and Environmental Science research:

- improve access and participation through a ring-fenced research school;
- remove barriers to access through advocacy in a cross-discipline working group of doctoral training partnerships, and;
- improve student experience and retention through a ring-fenced mentoring network for ethnic minority students.

What is mentorship?



- Mentorship is a <u>protected relationship</u> in which a more knowledgeable or experienced person <u>guides and</u> <u>nurtures</u> the professional development or growth of another
- It can <u>occur outside the normal management structure</u> <u>and/or institution</u>
- It goes beyond learning specific competencies or tasks
- It is <u>based on trust</u>, i.e., so the mentee can feel secure to seek advice on issues impacting their professional [and personal] success



Source: https://cs.lbl.gov/diversity-equity-and-inclusion/csa-mentoring-program/what-is-mentorship/

What types of mentorship exist?



- Traditional One-on-one
 Mentoring: A mentee and mentor
 are matched, either through a
 program or on their own
- **Distance Mentoring**: A mentoring relationship in which the two parties (or group) are in different locations
- Group Mentoring: A single mentor is matched with a cohort of mentees.



Stephanie Macdonald (Marine Scientist and Conservationist)

Why become a mentor?



- Think about why you volunteered to become a mentor! Everyone's motivation differs...
- By sharing your lived experience and expertise, you can make a real difference to a person's life and the society in which they and you live
- (1) Learn to see things differently; (2) challenge old behaviour; (3) practice being a leader; and (4) change someone's life



https://lovinc.org/category/mentoring-project/



https://www.themuse.com/advice/3-selfish-careerboosting-reasons-you-should-become-a-mentor-toda

How can I mentor?





https://www.istockphoto.com/search/2/image?phrase=holding+hands+circle

 By listening with empathy, sharing experiences, developing insight through reflection, and encouraging the mentee to take action towards the achievement of self-driven goals

 As such the relationship is mentee-driven, with a clear definition of goals and expectations that are mutually agreed with the mentor

Be attentive to the mentee's values and needs;
 the mentee should be respectful of the mentor's time, resources, and experience

What might arise as I mentor?



- Cultural exchange
- Navigating institutional structure
- Adjusting to a new position
- Career development
- Scientific and technical development
- Networking
- Leadership development
- Management and supervision
- Work-life balance
- Managing interpersonal relationships at work
- Professional development



http://britgeopeople.blogspot.com/2020/10/a-lack-of-diversity-in-geosciences-by.html

How does sponsorship and mentorship differ?



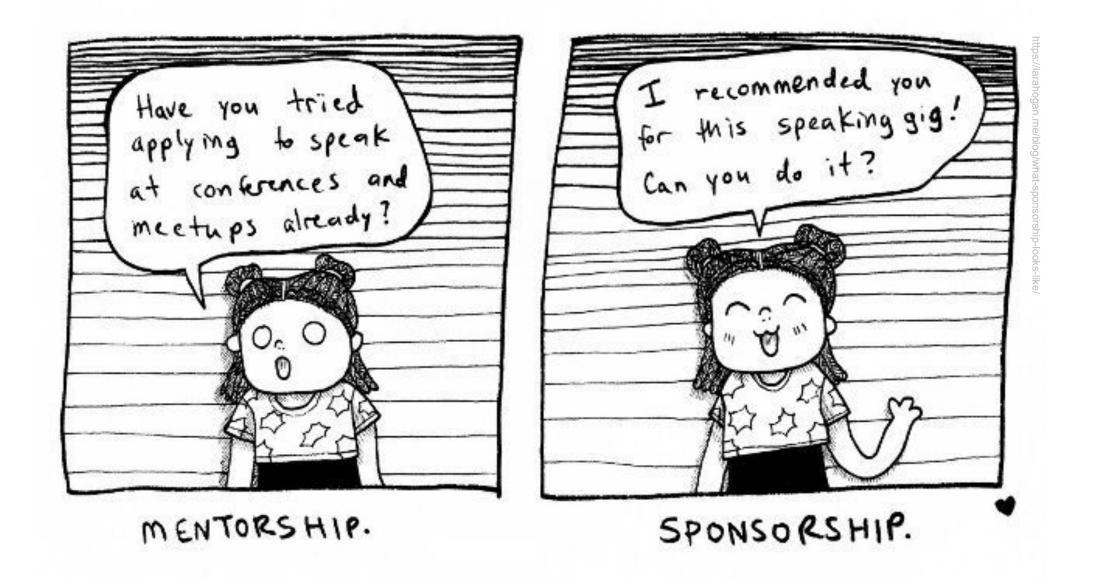
Mentors advise...Sponsors advocate...

Mentors	VS	Sponsors
Mentors have mentees	\rightarrow	Sponsors have protégés.
A mentor could be anyone in a position with experience desired by a mentee who can offer advice and support.	\rightarrow	A sponsor is a senior level staff member invested in a protégé's career success.
Mentors support mentees through formal or informal discussions about how to build skills, qualities and confidence for career advancement	\rightarrow	Sponsors promote protégés directly, using their influence and networks to connect them to high-profile assignments, people, pay increases and promotions.
Mentors help mentee craft a career vision	\rightarrow	Sponsors help drive their protégé's career vision
Mentors give mentees suggestions on how to expand their network	\rightarrow	Sponsors give protégés their active network connections and make new connections for them
Mentors provide feedback to aid a mentee's personal and professional development	\rightarrow	Sponsors are personally vested in the upward movement of their protégé
Mentors offer insight on how a mentee can increase visibility through finding key projects and people	\rightarrow	Sponsors champion their protégés visibility, often using their own platforms and reputation as a medium for exposure.
Mentors passively share the "unwritten" rules" for advancement in their organization with mentees	>	Sponsors actively model behavior and involve protégés in experiences that enable advancement

 $https://inclusion.slac.stanford.edu/sites/inclusion.slac.stanford.edu/files/The_Key_Role_of_a_Sponsorship_for_Diverse_Talent.pdf (a.g., a.g., b.g., b.g.,$

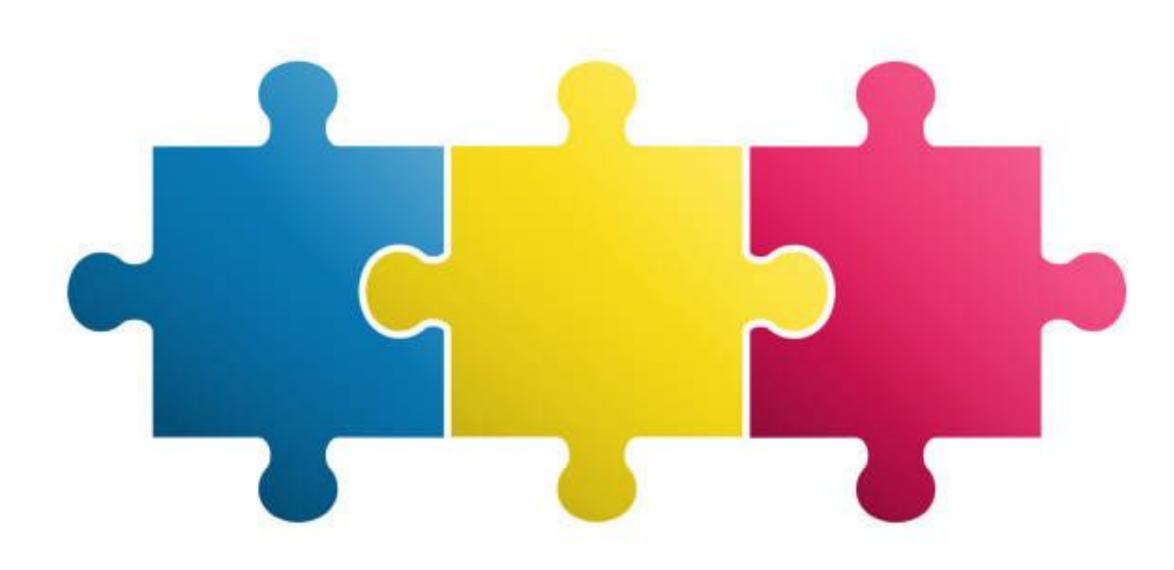
How does sponsorship and mentorship differ?





How were mentor-mentee pairings achieved?





Mentoring agreement





1. Context...

2. Conduct...

MENTORING AGREEMENT

This Mentoring Agreement should be signed by both Mentor and Mentee please, upon being matched, and then returned to the EQUATOR project team at equatorresearchteam@gmail.com with subject heading "Mentor Agreement" and the senders surname.

3. Confidentiality...

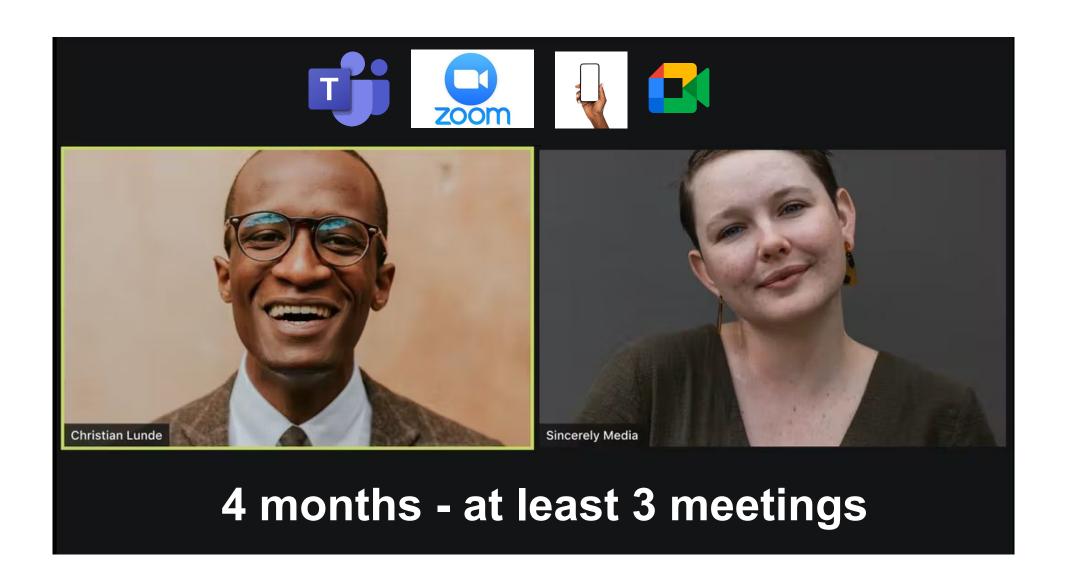
4. Changes...

MENTOR:

I.....("Mentor") understand and agree:

Expectation of hours





Why are we asking you to fill in surveys?



- We are carrying out "action research"- this means we are making an intervention, in the hope of driving change - but we need to monitor whether it is successful, and give you an opportunity for feedback
- We would like you to complete a very brief survey at the start, mid-point, and end of this project:
 - Survey 1: To establish previous experiences in mentoring
 - Survey 2: A very quick check in to ensure all is ok
 - Survey 3: A final survey to understand how the project worked for you.
- These surveys are anonymous, i.e., the data will not be presented in a way that could identify you
- Full information about the surveys, and ethical approval for this research, is provided on the front page of the questionnaires. You will receive the first questionnaire link via email

Remuneration





- We ask each mentor to provide at least three one-hour sessions to their mentee. We can offer each mentor a £75 payment in remuneration for taking part in the scheme.
 - If you would like to be remunerated, please email project lead Natasha Dowey N.Dowey@shu.ac.uk by Friday 4th March. The remuneration will be made as a one-off payment in May 2022.

First session ideas - breaking the ice!



Hello my name is

- Your personal background, N.B. as much as you feel comfortable to reveal
- What you've studied/what is your career journey? What inspired you to what you do?
- Why you want to be a mentor and what you want to get out of the process?

What next?



 Following this session, you will receive an email with:

- Link to recording of this webinar
- Mentoring guidance document
- Mentoring agreement document (sign and return)
- Link to pre-mentoring questionnaire (complete before your first session)
- Contact details of your mentee



Thank you for taking part!



MENTORING AGREEMENT

This Mentoring Agreement should be signed by both Mentor and Mentee please, upon being matched, and then returned to the EQUATOR project team at EquatorResearchGroup@gmail.com with subject heading "Mentor Agreement" and the senders surname. Please note that each mentee will be matched with two mentors; all parties need to read and complete this form.

MENTOR:

_				_
ı	("Mentor")) understand an	id agree:

To provide a reasonable level of relevant guidance, support, and help as appropriate to my Mentee, with the aim of enhancing their professional, academic and personal development, with a particular sensitivity to the projects aims of working towards Justice, Equity, Diversity and Inclusion in Geography, Earth and Environmental Science. To treat my Mentee with respect, without prejudice, and to conduct the affairs of the Mentor-Mentee relationship in a professional manner.

To treat all personal and professional information relating to the Mentee obtained in the course of the Mentor-Mentee relationship as confidential within the EQUATOR mentorship programme. Such information will not be disclosed to a third-party except with the express permission of my Mentee. If, however, anything is disclosed which indicates an obvious risk to the health or safety of participants, or others, then the rule may have to be broken. Such occurrences are extremely rare and individuals usually appreciate that this is necessary.

That support and guidance to be given to my Mentee will be provided regularly, with an initial agreement discussion and at least three further mentoring discussions taking place over the four month-long relationship (the mentee will receive at least six sessions in total from two mentors), at times that are mutually agreed between both parties. Additional contact can be agreed mutually between mentor and mentee if practicable.

That the duration of this agreement is initially for four months, with an option to extend this, beyond the duration of the EQUATOR project, if mutually agreed by mentor and mentee.

That I will attend (or watch the recording of) the EQUATOR Mentor-Mentee 'on-boarding' webinar, during which time the mentoring scheme will be outlined and questions addressed.

That I give consent for the EQUATOR project to share relevant contact details with my Mentee on a confidential basis and only for the purposes of the EQUATOR mentorship programme and on the terms agreed in this agreement.

Recognising that a mentee's needs may change over the course of the four month-long relationship, and that either party involved may not feel the mentoring match is working, the relationship can be brought to an end at any time by contacting the EQUATOR project team at EquatorResearchGroup@gmail.com briefly outlining why the relationship is not working (for example, due to personal dynamics, or if the mentor is behaving in a way that is inappropriate or concerning). A new mentee will be matched ASAP, if possible.

Parties are also expected to adhere to a set of behaviours that avoid bullying and harassment, with the EQUATOR project definitions mirroring that developed by UKRI: <u>Bullying and Harassment Position Statement</u> (see also section 6 here: <u>Grievance, Harassment and Bullying policy</u>).

Signature:	
Date:	
MENTEE:	
I	("Mentee") understand and agree:

To work with my Mentor for the purpose of enhancing my professional, academic and personal development. To treat my Mentor with respect, and without prejudice, and to conduct the affairs of the Mentor-Mentee relationship in a professional manner.

To treat all personal and professional information relating to my Mentor obtained in the course of the Mentor-Mentee relationship as confidential within the EQUATOR project mentoring programme. Such information will not be disclosed to a third-party except with the express permission of my Mentor.

That discussions between my Mentor and I will be held regularly, with at least three mentoring discussions taking place over the four month-long relationship with each of my Equator mentors (I will therefore participate in at least six mentoring sessions in total), and at times that are mutually agreed between both parties. Additional contact can be agreed mutually between mentor and mentee, if practicable.

That the duration of this agreement is initially for four months, with an option to extend this, beyond the duration of the EQUATOR project, if mutually agreed by mentor and mentee.

That I give consent for the EQUATOR project to share relevant contact details with my Mentor on a confidential basis and only for the purposes of the EQUATOR project and solely on the terms agreed in this agreement.

Recognising that a mentee's needs may change over the course of the four month-long relationship, and that either party involved may not feel the mentoring match is working, the relationship can be brought to an end at any time by contacting the EQUATOR project team at EquatorResearchGroup@gmail.com briefly outlining why the relationship is not working (for example, due to personal dynamics, or if the mentor is behaving in a way that is inappropriate or concerning). A new mentor will be matched ASAP, if possible.

Parties are also expected to adhere to the behaviours that avoid bullying and harassment, with the EQUATOR project definitions mirroring that developed by UKRI: <u>Bullying and Harassment Position Statement</u> (see also section 6 here: <u>Grievance, Harassment and Bullying policy</u>).

Signature:	 	
Date:	 	

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a project where you will become part of a support mentoring network for Black, Asian and minority ethnic staff, students and alumni. You will be either a mentee or mentor, and will meet with your pairing in online mentor meetings once a fortnight for the duration of the project. The project will investigate your experiences of being part of the support mentoring network, through feedback questionnaires and interviews with the project team. You have been asked to take part because you are an undergraduate or postgraduate student, GEES graduate, or staff member who may benefit from being mentored/providing mentorship.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. The latter of these strands of research involves a mentoring network of students, alumni, post-doc, academic and industry mentors.

Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be matched with a mentor/mentee and provided with code of conduct guidelines for the mentoring process. You will be asked to participate in remote online mentoring discussions for six one-hour sessions across 4 months. You will be offered remuneration for your time. You will be asked to complete feedback questionnaires at the start of, and during, the mentoring process. The questionnaire will ask questions about protected characteristics, about any previous experience of mentoring, about your feelings of belonging/inclusion, and about your experiences of the mentoring project. The questionnaire will be completed anonymously, therefore once your questionnaire is submitted it will not be possible for you to withdraw your response.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to directly improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact the research team:

Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Details of who to contact if you have any concerns during or after the study are given below.

You should contact the Data Protection Officer if:

- you have a guery about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

DPO@shu.ac.uk

You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk

2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point.
3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for my withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.
4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.
5. I wish to participate in the study under the conditions set out in the Information Sheet.
6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used for any other research purposes.
Participant Consent- Please answer
○ I consent to take part in this study
Please tell us about yourself This survey is anonymous and none of this data will be presented in a way that can identify any of the participants. Note that the format of demographic questions is aligned to that of the UK Government Census.
How old are you?
○ 18-24
O 25-34
○ 35-44
O 45-54
○ 55-64
○ 65+
O Prefer not to say
How would you describe your nationality?
How would you describe your ethnicity?
Asian or Asian British
○ Indian
○ Pakistani
○ Bangladeshi
○ Chinese
O Any other Asian background, please specify:
Black, African, Caribbean or Black British
○ African

Carribean

Mixed or Multiple ethnic groups

Other ethnic group

Arab

White and Black CaribbeanWhite and Black AfricanWhite and Asian

Any other ethnic group, please specify:

 $\bigcirc\,$ Any other Black, African or Caribbean background, please specify:

 \bigcirc Any other Mixed or Multiple ethnic background, please specify:

What is your religion, even if you are not currently practising?
○ Buddhist
O Christian (including C of E, Catholic, Protestant and all other Christian denominations)
○ Hindu
○ Jewish
○ Muslim
○ Sikh
○ No religion
Other, please specify:
O Profes not to say
○ Prefer not to say
How would you describe your gender identity?
○ Male
○ Female
Non-binary/ third gender
○ Transgender
○ Gender neutral
○ Pangender
○ Gender queer
Other, please specify
O Prefer not to say
Is your gender identity the same as the gender you were assigned at birth? Yes No Prefer not to say
YesNoPrefer not to say How would you describe your sexuality?
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual Other, please specify:
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual Other, please specify: Prefer not to say
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual Other, please specify: Prefer not to say Do you identify as a disabled person, or have a long-term health condition?
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual Other, please specify: Prefer not to say Do you identify as a disabled person, or have a long-term health condition? Yes
Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual Other, please specify: Prefer not to say Do you identify as a disabled person, or have a long-term health condition? Yes No

O Prefer not to say

Mobility (e.g. example walking or climbing stairs)

Visually (e.g. partial sight or blindness)					
Dexterity (e.g. lifting or carrying objects, using a keyboard)					
Mental health					
(Memory					
Learning, understanding or concentrating					
Socially or in communicating (e.g. autism, ADHD, Tourette's syndrome)					
Other, please specify:					
Understanding your background and confidence					
Are you a student?					
○ Yes					
○ No					
What level of study are you currently completing?					
Undergraduate					
○ First degree					
O Foundation degree					
Other undergraduate degree or equivalent, please specify:					
Postgraduate					
○ Masters, taught					
Other postgraduate taught, please specify:					
O Doctorate research					
Other postgraduate research, please specify:					
Which best describes your current employment?					
○ Employed					
○ Self-employed or freelance					
Temporarily away from work (e.g. on holiday, on a gap year, ill)					
On maternity or paternity leave					
Oping another kind of paid work					
○ Unemployed					
Other, please specify:					
What area of Geography, Earth and Environmental Sciences does your expe	arionco alid	n with host	2		
	sriciles ang	ii witii best	••		
Captraphy					
Geography Charles Charles					
○ Environmental Science / Studies					
At present (before starting on the Equator Mentoring Network), how much of	lo you agre	e with the f	ollowing sta	atements?	
(Note: GEES = Geography, Earth or Environmental Science)	Strongly	Somewhat		Somewhat	Strongly
	disagree	disagree	I'm unsure	agree	agree

I feel connected into networks within GEES that can help me develop my career

I feel comfortable discussing my experiences of studying within GEES

I have a strong sense of belonging within my field of study

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

0

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

	Strongly disagree	Somewhat disagree	I'm unsure	Somewhat agree	Strongly agree
I feel able to discuss concerns that I have about my studies	0	0	0	0	0
I feel confident at the thought of successfully forging a career following my studies		\circ	\circ	\bigcirc	\bigcirc
In the future I am likely to pursue a career in GEES research		\circ	\bigcirc	\circ	\circ
If you would like to expand upon or explain any of your answers to the rate. At present, what do you feel are the barriers holding you back from postg				nere:	
What is your experience of mentoring? Have you ever participated in a formal mentoring scheme before?					
○ Yes					
○ No					
○ I'm unsure					
Have you ever had an informal mentor before?					
○ Yes					
○ No					
○ I'm unsure					
Do you know someone in Geography, Earth and Environmental Science w	ho has prov	ided you w	th support	and guidar	nce?
○ Yes					
○ No					
○ I'm unsure					
What would you like to gain from the Equator Mentoring Network? Please importance to you (drag and drop to rank)	rank the fol	lowing men	toring outo	comes in or	der of
Relationship: you connect well with your mentor and develop a relationship with clear experience.	ectations				
Goals and aims: your mentor helps you to set goals and develop strategies to meet them					
Confidence: your mentor works with you to develop your confidence and discuss network-	ouilding				
Resources and advice: your mentor points you towards useful resources and information					
Work-life balance: your mentor suggest ways to best manage your time, with a focus on per-	ersonal well beir	ng			
Communication: your mentor listens to you and gives you thoughtful feedback					

Iditional thoughts you may ha	ve)		
			A. A. C.
w did you bear about the Egg	ator project?		
	ator project?		
	ator project?		
) Twitter	ator project?		
Twitter LinkedIn			
Twitter LinkedIn Grassroots organisation (e.g. Black			
Twitter LinkedIn Grassroots organisation (e.g. Black) Internal university communication		o)	
Twitter LinkedIn Grassroots organisation (e.g. Black Internal university communication Email from listsery group (e.g. Briti	Geographers) sh Sedimentological Research Group	o)	
LinkedIn Grassroots organisation (e.g. Black Internal university communication Email from listsery group (e.g. Briti	Geographers) sh Sedimentological Research Group	o)	

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a project where you will become part of a support mentoring network for Black, Asian and minority ethnic staff, students and alumni. You will be either a mentee or mentor, and will meet with your pairing in online mentor meetings once a fortnight for the duration of the project. The project will investigate your experiences of being part of the support mentoring network, through feedback questionnaires and interviews with the project team. You have been asked to take part because you are an undergraduate or postgraduate student, GEES graduate, or staff member who may benefit from being mentored/providing mentorship.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. The latter of these strands of research involves a mentoring network of students, alumni, post-doc, academic and industry mentors.

Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be matched with a mentor/mentee and provided with code of conduct guidelines for the mentoring process. You will be asked to participate in remote online mentoring discussions for six one-hour sessions across 4 months. You will be offered remuneration for your time. You will be asked to complete feedback questionnaires at the start of, and during, the mentoring process. The questionnaire will ask questions about protected characteristics, about any previous experience of mentoring, about your feelings of belonging/inclusion, and about your experiences of the mentoring project. The questionnaire will be completed anonymously, therefore once your questionnaire is submitted it will not be possible for you to withdraw your response.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to directly improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact the research team: Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Troject lead. Di Natasila Dowey N.Dowey@sild.ac.uk

Details of who to contact if you have any concerns during or after the study are given below.

You should contact the Data Protection Officer if:

You should contact the Data Protection Officer if:

- you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

DPO@shu.ac.uk

You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk

1. I have read the Information Sheet for this study and have had details of the study explained to me.	
2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point.	
3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.	ny
4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.	
5. I wish to participate in the study under the conditions set out in the Information Sheet.	
6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used fo any other research purposes.	r
Participant Consent- Please answer	
○ I consent to take part in this study	
Please tell us about yourself This survey is anonymous and none of this data will be presented in a way that can identify any of the participants Note that the format of demographic questions is aligned to that of the UK Government Census.	i=
How old are you?	
○ 18-24	
○ 25-34	
○ 35-44	
○ 45-54	
○ 55-64	
○ 65+	
O Prefer not to say	
How would you describe your nationality?	
How would you describe your ethnicity?	
Asian or Asian British	
○ Indian	
O Pakistani	
○ Bangladeshi	
○ Chinese	
Any other Asian background, please specify:	

Black, African, Caribbean or Black British
African
Carribean
Any other Black, African or Caribbean background, please specify:

Mixed or Multiple ethnic groups
White and Black Caribbean
White and Black African
White and Asian
Any other Mixed or Multiple ethnic background, please specify:

White
English, Welsh, Scottish, Northern Irish or British

○ Irish	
○ Gypsy or Irish Traveller	
○ Roma	
Any other White background, please specify:	
Other ethnic group	
○ Arab	
Any other ethnic group, please specify:	
O Professional Assessment	
Prefer not to say	
What is your religion, even if you are not currently practising?	
Buddhist	
Christian (including C of E, Catholic, Protestant and all other Christian denominations)	
Hindu	
○ Jewish	
○ Muslim	
Sikh Ne religion	
No religion	
Other, please specify:	
Prefer not to say	
<u> </u>	
How would you describe your gender identity?	
○ Male	
○ Female	
Non-binary/ third gender	
○ Transgender	
○ Gender neutral	
O Pangender	
Gender queer	
Other, please specify	
Prefer not to say	
Is your gender identity the same as the gender you were assigned at birth?	
○ Yes	
○ No	
O Prefer not to say	
How would you describe your covuglity?	
How would you describe your sexuality?	
Heterosexual	
○ Gay	
Clesbian	
O Bisexual	
Queer	
○ Asexual	
O Pansexual	
Other, please specify:	
O Prefer not to say	

Do you identify as a disabled person, or have a long-term health condition?	
○ Yes	
○ No	
○ Prefer not to say	
How does your disability or condition impact you?	
○ Mobility (e.g. example walking or climbing stairs)	
○ Visually (e.g. partial sight or blindness)	
Hearing (e.g. partial hearing or deafness)	
Oexterity (e.g. lifting or carrying objects, using a keyboard)	
Mental health	
○ Memory	
Learning, understanding or concentrating	
O Socially or in communicating (e.g. autism, ADHD, Tourette's syndrome)	
Other, please specify:	
What is your level of experience?	
What area of Geography, Earth and Environmental Sciences does your experience align with best?	
Earth Science / Geology	
○ Geography	
Environmental Science / Studies	
What is the highest degree level you have attained?	
What is the highest degree level you have attained?	
Diploma of higher education (DipHE)	
Degree with honours (BA/BSc)	
Master's degree (Ma/MSc)	
O Postgraduate certificate in education (PGCE)	
O Doctorate (PhD/ DPhil)	
Other, please specify:	
Which best describes your current employment?	
○ Employed	
Self-employed or freelance	
O Doing another kind of paid work	
Unemployed	
Other, please specify:	
What is your title? (Please select all that apply)	
☐ Doctor	
_ Administrator	
Scientist	
Associate Scientist	
Research Fellow	

Assistant on Associate Leatures					
Assistant or Associate Lecturer					
Lecturer					
Senior Lecturer					
Associate Professor					
Professor					
Other, please specify:					
What is your experience with mento	oring?				
Have you ever provided formal mentoring before	re?				
○ Yes					
○ No					
○ I'm unsure					
Who did you formally mentor? (Check all that a	ipply)				
School students					
Undergraduate students					
☐ Masters students					
PhD students					
Research fellows					
Other, please specify:					
Have you ever provided informal mentoring bet	fore?				
Have you ever provided informal mentoring bef	fore?				
Have you ever provided informal mentoring before Yes No	fore?				
Have you ever provided informal mentoring bef	fore?				
Have you ever provided informal mentoring before Yes No	fore?				
Have you ever provided informal mentoring before Yes No					
Have you ever provided informal mentoring before Yes No I'm unsure					
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that					
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that					
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students					
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students					
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students Research fellows					
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students					
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students Research fellows					
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students Research fellows Other, please specify:	t apply)				
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students Research fellows	t apply) nentoring skills? Not at all	Slightly	Moderately		
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students Research fellows Other, please specify: How experienced do you feel in the following mentoring before a control of the second students.	nentoring skills? Not at all experienced	experienced	experienced	Highly experienced	I'm unsure
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students Research fellows Other, please specify: How experienced do you feel in the following management of the specific state of the state o	nentoring skills? Not at all experienced	experienced	experienced	0	0
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students Research fellows Other, please specify: How experienced do you feel in the following management of the specific state of the second state of	nentoring skills? Not at all experienced	experienced	experienced	0	
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students Research fellows Other, please specify: How experienced do you feel in the following management of the specific state of the state o	nentoring skills? Not at all experienced	experienced	experienced	0	0
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students Research fellows Other, please specify: How experienced do you feel in the following mentor of the following	nentoring skills? Not at all experienced	experienced	experienced	0	0
Have you ever provided informal mentoring before Yes No I'm unsure Who did you informally mentor? (Check all that School students Undergraduate students Masters students PhD students Research fellows Other, please specify: How experienced do you feel in the following management of the following manag	nentoring skills? Not at all experienced	experienced	experienced	0	0

0 0 0

Working with my mentee to set goals

0 0

lelping my mentee develop strategies to meet their goals	Not at all experienced	Slightly experienced	Moderately experienced	Highly experienced	I'm unsure
, as as as a sep salatogios to most their godis	0	0	0	0	0
ligning my expectations with my mentee's	0	\circ	\circ	\circ	\circ
Notivating my mentee	0	\circ	\circ	\circ	\circ
uilding my mentee's confidence	0	\circ	\circ	\circ	\circ
ncouraging my mentee to ask questions	0	\circ	\circ	\circ	\circ
Vorking effectively with mentees whose identity is ifferent from my own (e.g. age, ethnicity, (dis)abiliity, ender, sexual orientation, class, religion etc.)	0	\circ	0	0	0
lelping my mentee to network effectively		\circ	\circ	\circ	\circ
lelping my mentee to achieve a good work-life balance		\circ	\circ	\circ	\circ
lelping my mentee to acquire relevant information (e.g. unding/ grants, career pathways)	0	0	0	0	0
low did you hear about the Equator project?					
low did you hear about the Equator project? Twitter					
○ Twitter					
○ Twitter○ LinkedIn					
TwitterLinkedInGrassroots organisation (e.g. Black Geographers)	I Research Group)				
 Twitter LinkedIn Grassroots organisation (e.g. Black Geographers) Internal university communication 	I Research Group)				

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a project where you will become part of a support mentoring network for Black, Asian and minority ethnic staff, students and alumni. You will be either a mentee or mentor, and will meet with your pairing in online mentor meetings once a fortnight for the duration of the project. The project will investigate your experiences of being part of the support mentoring network, through feedback questionnaires and interviews with the project team. You have been asked to take part because you are an undergraduate or postgraduate student, GEES graduate, or staff member who may benefit from being mentored/providing mentorship.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. The latter of these strands of research involves a mentoring network of students, alumni, post-doc, academic and industry mentors.

Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be matched with a mentor/mentee and provided with code of conduct guidelines for the mentoring process. You will be asked to participate in remote online mentoring discussions for six one-hour sessions across 4 months. You will be offered remuneration for your time. You will be asked to complete feedback questionnaires at the start of, and during, the mentoring process. The questionnaire will ask questions about protected characteristics, about any previous experience of mentoring, about your feelings of belonging/inclusion, and about your experiences of the mentoring project. The questionnaire will be completed anonymously, therefore once your questionnaire is submitted it will not be possible for you to withdraw your response.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to directly improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact the research team: Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Details of who to contact if you have any concerns during or after the study are given below.

You should contact the Data Protection Officer if:

- · you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

DPO@shu.ac.uk

You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk

Participant Consent Statements

- 1. I have read the Information Sheet for this study and have had details of the study explained to me.
- 2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any
- 3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for my withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.
- 4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.
- 5. I wish to participate in the study under the conditions set out in the Information Sheet.
- 6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used for any other research purposes.

Click to write	e the quest	ion text								
Participant C	onsent- Ple	ease answei								
O I consent to	o take part in t	his study								
How many ti	mos havo v	ou met with	vour mente	o so far?						
Tiow many th	ines nave y	ou met with	your mente	.e 30 iai :						
On a scale of	f 1-10,how \	would you r	ate your exp	erience of t	he EQUATO	R mentoring	g scheme so	far?		
Extremely poor										Extremely good
0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0
On a scale of	f 1-10, how	much do yo	ou feel able t	o relate to y	our mentee	so far?				
Not well at all										Extremely well
0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	\circ
On a scale of	f 1-10, how	comfortable	e do you fee	I talking to y	our mentee	?				
Not comfortable	e at all								Extreme	ely comfortable
0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0
Do you feel y	ou have be	een well-mat	ched with y	our mentee	?					
Not at all well-m	natched								Extremely	y well-matched
0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0
Do you feel li	ike your me	entee has be	en working	towards go	als that you	may have e	established i	n your first	meetings?	
○ Yes										
○ No										
O I'm unsure										
Have yet set	inad wawa - ::	andly from the	do voletice -	hin on for?						
Have you gai	meu persor	iany irom th	แอ เซเสนไปที่รี่	iiih 20 igi.						
○ No										
() I'm unsure										
J a										

○ Yes					
○ No					
○ I'm unsure					
Do you have any conce	erns about the EQUAT	OR mentoring sch	neme that you would	like to share or any t	eedback about how we
could improve the sche	eme?				٦
What has been your fa	ourite aspect of the E	EQUATOR mentori	ng scheme so far?		
				/.	

Have you gained professionally from this relationship so far?

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a project where you will become part of a support mentoring network for Black, Asian and minority ethnic staff, students and alumni. You will be either a mentee or mentor, and will meet with your pairing in online mentor meetings once a fortnight for the duration of the project. The project will investigate your experiences of being part of the support mentoring network, through feedback questionnaires and interviews with the project team. You have been asked to take part because you are an undergraduate or postgraduate student, GEES graduate, or staff member who may benefit from being mentored/providing mentorship.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. The latter of these strands of research involves a mentoring network of students, alumni, post-doc, academic and industry mentors.

Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be matched with a mentor/mentee and provided with code of conduct guidelines for the mentoring process. You will be asked to participate in remote online mentoring discussions for six one-hour sessions across 4 months. You will be offered remuneration for your time. You will be asked to complete feedback questionnaires at the start of, and during, the mentoring process. The questionnaire will ask questions about protected characteristics, about any previous experience of mentoring, about your feelings of belonging/inclusion, and about your experiences of the mentoring project. The questionnaire will be completed anonymously, therefore once your questionnaire is submitted it will not be possible for you to withdraw your response.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to directly improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact the research team: Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Details of who to contact if you have any concerns during or after the study are given below.

You should contact the Data Protection Officer if:

- you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

DPO@shu.ac.uk

You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk

Participant Consent Statements

- 1. I have read the Information Sheet for this study and have had details of the study explained to me.
- 2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point.
- 3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for my withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.
- 4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.
- 5. I wish to participate in the study under the conditions set out in the Information Sheet.
- 6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used for any other research purposes.

Participant C			r							
○ I consent	to take part in t	his study								
How many ti	mes have y	ou met with	your mento	ors so far?						
On a scale o	f 1-10,how \	would you r	ate your exp	perience of t	he EQUATO	R mentoring	g scheme so	far?		
Extremely poor	-								Е	Extremely good
0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0
On a scale o	f 1-10, how	much do yo	ou feel able t	to relate to y	our mentors	s so far?				
Not well at all				·						Extremely well
0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0
On a scale o	f 1-10, how	comfortable	e do you fee	l talking to y	our mentor	s?				
Not comfortable	e at all								Extreme	ely comfortable
0	1	2	3	4	5	6	7	8	9	10
\circ	0	0	0	0	0	0	0	0	0	0
Do you feel y	you have be	en well-mat	tched with y	our academ	ic mentor?					
Not at all well-r	natched								Extremely	y well-matched
0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	\circ	0	\circ	0	0	0
Do you feel y	you have be	en well-mat	tched with y	our industry	/ mentor?					
Not at all well-r	natched								Extremely	y well-matched
0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	\circ	0	0	0	0	0
Do you feel I	like you hav	e been wor	king toward	s any goals	that you ma	y have esta	blished in y	our first me	etings?	
○ No										
O I'm unsure)									

	sonally from these relationships so far?
○ Yes	
○ No	
○ I'm unsure	
Have you gained pro	fessionally from these relationships so far?
○ Yes	
○ No	
○ I'm unsure	
could improve the so	
What has been your	favourite aspect of the EQUATOR mentoring scheme so far?

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a project where you will become part of a support mentoring network for Black, Asian and minority ethnic staff, students and alumni. You will be either a mentee or mentor, and will meet with your pairing in online mentor meetings once a fortnight for the duration of the project. The project will investigate your experiences of being part of the support mentoring network, through feedback questionnaires and interviews with the project team. You have been asked to take part because you are an undergraduate or postgraduate student, GEES graduate, or staff member who may benefit from being mentored/providing mentorship.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. The latter of these strands of research involves a mentoring network of students, alumni, post-doc, academic and industry mentors.

Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be matched with a mentor/mentee and provided with code of conduct guidelines for the mentoring process. You will be asked to participate in remote online mentoring discussions for six one-hour sessions across 4 months. You will be offered remuneration for your time. You will be asked to complete feedback questionnaires at the start of, and during, the mentoring process. The questionnaire will ask questions about protected characteristics, about any previous experience of mentoring, about your feelings of belonging/inclusion, and about your experiences of the mentoring project. The questionnaire will be completed anonymously, therefore once your questionnaire is submitted it will not be possible for you to withdraw your response.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to directly improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact the research team: Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Troject lead. Di Natasila Dowey N.Dowey@sild.ac.uk

Details of who to contact if you have any concerns during or after the study are given below.

You should contact the Data Protection Officer if:

You should contact the Data Protection Officer if:

- you have a query about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

DPO@shu.ac.uk

You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk

1. I have read the Information Sheet for this study and have had details of the study explained to me.	
2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point.	
3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.	ny
4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.	
5. I wish to participate in the study under the conditions set out in the Information Sheet.	
6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used fo any other research purposes.	r
Participant Consent- Please answer	
○ I consent to take part in this study	
Please tell us about yourself This survey is anonymous and none of this data will be presented in a way that can identify any of the participants Note that the format of demographic questions is aligned to that of the UK Government Census.	i=
How old are you?	
○ 18-24	
○ 25-34	
○ 35-44	
○ 45-54	
○ 55-64	
○ 65+	
O Prefer not to say	
How would you describe your nationality?	
How would you describe your ethnicity?	
Asian or Asian British	
○ Indian	
O Pakistani	
○ Bangladeshi	
○ Chinese	
Any other Asian background, please specify:	

Black, African, Caribbean or Black British
African
Carribean
Any other Black, African or Caribbean background, please specify:

Mixed or Multiple ethnic groups
White and Black Caribbean
White and Black African
White and Asian
Any other Mixed or Multiple ethnic background, please specify:

White
English, Welsh, Scottish, Northern Irish or British

○ Irish	
○ Gypsy or Irish Traveller	
○ Roma	
Any other White background, please specify:	
Other ethnic group	
○ Arab	
Any other ethnic group, please specify:	
O Professional Assessment	
Prefer not to say	
What is your religion, even if you are not currently practising?	
Buddhist	
Christian (including C of E, Catholic, Protestant and all other Christian denominations)	
Hindu	
○ Jewish	
○ Muslim	
Sikh Ne religion	
No religion	
Other, please specify:	
Prefer not to say	
<u> </u>	
How would you describe your gender identity?	
○ Male	
○ Female	
Non-binary/ third gender	
○ Transgender	
○ Gender neutral	
O Pangender	
Gender queer	
Other, please specify	
Prefer not to say	
Is your gender identity the same as the gender you were assigned at birth?	
○ Yes	
○ No	
O Prefer not to say	
How would you describe your sexuality?	
How would you describe your sexuality?	
Heterosexual	
○ Gay	
Clesbian	
O Bisexual	
Queer	
○ Asexual	
O Pansexual	
Other, please specify:	
O Prefer not to say	

Do you identify as a disabled person, or have a long-term health condition?	
○ Yes	
○ No	
○ Prefer not to say	
How does your disability or condition impact you?	
○ Mobility (e.g. example walking or climbing stairs)	
○ Visually (e.g. partial sight or blindness)	
Hearing (e.g. partial hearing or deafness)	
Oexterity (e.g. lifting or carrying objects, using a keyboard)	
Mental health	
○ Memory	
Learning, understanding or concentrating	
O Socially or in communicating (e.g. autism, ADHD, Tourette's syndrome)	
Other, please specify:	
What is your level of experience?	
What area of Geography, Earth and Environmental Sciences does your experience align with best?	
Earth Science / Geology	
○ Geography	
Environmental Science / Studies	
What is the highest degree level you have attained?	
What is the highest degree level you have attained?	
Diploma of higher education (DipHE)	
Degree with honours (BA/BSc)	
Master's degree (Ma/MSc)	
O Postgraduate certificate in education (PGCE)	
O Doctorate (PhD/ DPhil)	
Other, please specify:	
Which best describes your current employment?	
○ Employed	
Self-employed or freelance	
O Doing another kind of paid work	
Unemployed	
Other, please specify:	
What is your title? (Please select all that apply)	
☐ Doctor	
_ Administrator	
Scientist	
Associate Scientist	
Research Fellow	

	Assistant or Associate Lecturer
	Lecturer
	Senior Lecturer
	Associate Professor
	Professor
	Other, please specify:
Wł	nat is your experience with mentoring?
Hac	l you ever provided formal mentoring before participating in Equator?
\circ	Yes
\circ	No No
0	I'm unsure
Wh	o did you formally mentor? (Check all that apply)
	School students
	Undergraduate students
	Masters students
	PhD students
	Research fellows
	Other, please specify:
0	I you ever provided informal mentoring before participating in Equator? Yes No I'm unsure
0	Yes No
0	Yes No I'm unsure
0	Yes No I'm unsure o did you informally mentor? (Check all that apply)
0	Yes No I'm unsure o did you informally mentor? (Check all that apply) School students
0	Yes No I'm unsure Didid you informally mentor? (Check all that apply) School students Undergraduate students
0	Yes No I'm unsure o did you informally mentor? (Check all that apply) School students Undergraduate students Masters students
0	Yes No I'm unsure O did you informally mentor? (Check all that apply) School students Undergraduate students Masters students PhD students
Who	Yes No I'm unsure o did you informally mentor? (Check all that apply) School students Undergraduate students Masters students PhD students Research fellows
Wh	Yes No I'm unsure o did you informally mentor? (Check all that apply) School students Undergraduate students Masters students PhD students Research fellows Other, please specify: derstanding your Equator mentee/mentor relationship ich of the aspects listed below did you focus on most in sessions with your mentee? (drag and drop to rank, 1 = strongest
Who	Yes No I'm unsure o did you informally mentor? (Check all that apply) School students Undergraduate students Masters students PhD students Research fellows Other, please specify: derstanding your Equator mentee/mentor relationship ich of the aspects listed below did you focus on most in sessions with your mentee? (drag and drop to rank, 1 = strongest
Who	Yes No I'm unsure o did you informally mentor? (Check all that apply) School students Undergraduate students Masters students PhD students Research fellows Other, please specify: derstanding your Equator mentee/mentor relationship sich of the aspects listed below did you focus on most in sessions with your mentee? (drag and drop to rank, 1 = strongest us)
Who	Yes No I'm unsure o did you informally mentor? (Check all that apply) School students Undergraduate students Masters students PhD students Research fellows Other, please specify: derstanding your Equator mentee/mentor relationship ich of the aspects listed below did you focus on most in sessions with your mentee? (drag and drop to rank, 1 = strongest us) Relationship: you connected well and developed a relationship with clear expectations

Communica	tion: you lister	ned to your mer	tee and gave th	oughtful feed	lback					
How comfort	_	u feel talkin	g with your r	nentee?						
O Very comfo										
○ Comfortabl	е									
O I'm unsure										
Not comfor										
O Very uncon	ntortable									
Overall, did y	ou feel abl	e to provide	support to y	our mente	e?					
○ Yes										
○ No										
O I'm unsure										
How many tir	nes did voi	u meet with	vour mentee	during th	e project?					
O 0				ŭ						
O 1										
O 2										
O 3										
○ More than	3									
○ I would have○ The number	re liked to have	e met with my r was just right	nentors more of			entor) enough?				
			-		_	with Equators EQUATOR men		network?		
Extremely poor	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,				9			Extremely good
0	1	2	3	4	5	6	7	8	9	10
\circ	0	0	0	0	0	0	0	0	0	0
Has participa	ting in the	Equator pro	ject benefitte	ed your ov	vn personal	l skills developn	nent as	a mentor?		
					e in level of erience	Gained some experience in this during Equator	area e	Gained a lot of experience in this area during Equator		I'm unsure
Active listening					0	0		\circ		0
Giving constructi					0	0		\circ		\circ
Identifying and a styles	ccommodating	g different comr	nunication		0	\circ		\circ		\circ
Employing strate mentee	gies to improv	e communicati	on with my		0	0		0		0
Establishing a tru	sting relations	ship with my me	entee		0	0		\circ		\circ
Working with my mentoring relatio		t clear expectat	ons of the		0	0		\circ		\circ
Working with my		t goals			0	\circ		\cap		0
Helping my ment		_	t their goals		0	0		0		0
Aligning my expe	ectations with	my mentee's			0	0		\circ		0

Work-life balance: you discussed time management, with a focus on personal well being

		No change in level of experience	Gained some experience in this area during Equator	Gained a lot of experience in this ar during Equator	rea I'm unsure
Motivating my mentee		0	0	0	0
Building my mentee's confidence		0	\circ	\circ	\circ
Encouraging my mentee to ask questions		0	\circ	\circ	\circ
Working effectively with mentees whose id different from my own (e.g. age, ethnicity, (gender, sexual orientation, class, religion e	0	0	0	0	
Helping my mentee to network effectively		0	\circ	\circ	\circ
Helping my mentee to achieve a good wor	0	\circ	\circ	\circ	
Helping my mentee to acquire relevant info funding/ grants, career pathways)	0	0	0	0	
What did you gain from taking pa	rt in the EQUA	FOR Mentoring Netwo	ork? (free text; feel fr	ee to expand on a	answers above)
How important was it to you that: The mentoring network involved	l'm unsu	a factor in i	my decision to (contrib	ewhat Important uted to my decision to apply)	Very Important (major factor in my decision to apply)
remuneration for your time	0		0	0	0
The mentoring network was ringfenced for Black, Asian and Ethnic Minority mentees	0		0		0
The mentoring network was discipline- specific to those in Geography, Earth and Environmental Science	0		0		0
Has being part of Equator made y ○ Yes	ou more likely	to be involved in ring	g-fenced mentoring s	schemes in the fu	ture?
○ No					
O I'm unsure					
If the Equator mentoring network	project ran ag	ain in the future, wou	ıld you recommend it	to a friend?	
○ Yes					
○ No					
O I'm unsure					
What did you enjoy most about b	eing an Equatc	or mentor?			
				//	

If the Equator Mentoring Network ran again, what improvements would you like to see? Feel free to use this box to contribute any additional feedback on your mentoring experience.

emerge? (This resp	the Equator team to co conse is anonymous. If a further contacted by t	f you tick no, please				
○ Yes						
○ No						
Are you happy for u	us to use anonymised (text from this survey	on our website, as	testimonial-style	content to advertis	e future
○ Yes						
○ No						

Legal basis for research

The University undertakes research as part of its function for the community under its legal status. Data protection allows us to use personal data for research with appropriate safeguards in place under the legal basis of public tasks that are in the public interest. A full statement of your rights can be found at https://www.shu.ac.uk/about-this-website/privacy-policy/privacy-notices/privacy-notice-for-research. However, all University research is reviewed to ensure that participants are treated appropriately and their rights respected. This study was approved by UREC with Converis number ER39312553. Further information is available at https://www.shu.ac.uk/research/ethics-integrity-and-practice

Invitation to participate and rationale for selection

You are being invited to take part in a project where you will become part of a support mentoring network for Black, Asian and minority ethnic staff, students and alumni. You will be either a mentee or mentor, and will meet with your pairing in online mentor meetings once a fortnight for the duration of the project. The project will investigate your experiences of being part of the support mentoring network, through feedback questionnaires and interviews with the project team. You have been asked to take part because you are an undergraduate or postgraduate student, GEES graduate, or staff member who may benefit from being mentored/providing mentorship.

Background to the project

There is a well-documented racial diversity crisis in Geography, Earth and Environmental Sciences (GEES) subjects in the Global North, which leads to inequities in who does environmental research. EQUATOR, a Natural Environment Research Council-funded project, aims to increase participation and retention of Black, Asian and minority ethnic postgraduate research (PGR) students in GEES topics and therefore increase diversity in environmental research. The project will link three evidence-based interventions, to (1) improve engagement and participation, (2) remove barriers to access and (3) improve the experience and increase retention of Black, Asian and minority ethnic students in environmental research. The latter of these strands of research involves a mentoring network of students, alumni, post-doc, academic and industry mentors.

Do I have to take part?

It is up to you to decide if you want to take part. A copy of the information provided here is yours to keep, along with the consent form if you do decide to take part. You can still decide to withdraw at any time without giving a reason, or you can decide not to answer a particular question.

What will I be required to do?

If you do take part you will be matched with a mentor/mentee and provided with code of conduct guidelines for the mentoring process. You will be asked to participate in remote online mentoring discussions for six one-hour sessions across 4 months. You will be offered remuneration for your time. You will be asked to complete feedback questionnaires at the start of, and during, the mentoring process. The questionnaire will ask questions about protected characteristics, about any previous experience of mentoring, about your feelings of belonging/inclusion, and about your experiences of the mentoring project. The questionnaire will be completed anonymously, therefore once your questionnaire is submitted it will not be possible for you to withdraw your response.

The anonymous data collected will be stored on password protected Sheffield Hallam University drives which the research team will be able to access for analysis purposes. The raw data will be the responsibility of the project lead, Dr Natasha Dowey, and will be kept after the 6 month study has ended in order to enable the data to be used in other similar studies. The study findings will be used in reports, publications and presentations, and may be used to inform the design of future learning activities. The project team will ensure that no individuals will be able to be identified in any of the outputs of the project. Your engagement in this research has the potential to directly improve student experience and to inform and ensure 'best-practice' in future. If you are interested in the results of the study you can ask to see a summary report by emailing the research team to request this.

If you have any questions, please contact the research team:

Project lead: Dr Natasha Dowey N.Dowey@shu.ac.uk

Details of who to contact if you have any concerns during or after the study are given below.

You should contact the Data Protection Officer if:

- you have a guery about how your data is used by the University
- you would like to report a data security breach (e.g. if you think your personal data has been lost or disclosed inappropriately)
- you would like to complain about how the University has used your personal data

DPO@shu.ac.uk

You should contact the Head of Research Ethics (Dr Mayur Ranchordas) if:

 you have concerns with how the research was undertaken or how you were treated

ethicssupport@shu.ac.uk

2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point.
3. I understand that I am free to withdraw from the study within the time limits outlined in the Information Sheet, without giving a reason for method withdrawal or to decline to answer any particular questions in the study without any consequences to my future treatment by the researcher.
4. I agree to provide information to the researchers under the conditions of confidentiality set out in the Information Sheet.
5. I wish to participate in the study under the conditions set out in the Information Sheet.
6. I consent to the information collected for the purposes of this research study, once anonymised (so that I cannot be identified), to be used for any other research purposes.
Participant Consent- Please answer
○ I consent to take part in this study
Please tell us about yourself This survey is anonymous and none of this data will be presented in a way that can identify any of the participants Note that the format of demographic questions is aligned to that of the UK Government Census.
How old are you?
○ 18-24
O 25-34
○ 35-44
O 45-54
○ 55-64
O 65+
○ Prefer not to say
How would you describe your nationality?
How would you describe your ethnicity?
Asian or Asian British
○ Indian
○ Pakistani
○ Bangladeshi
○ Chinese
Any other Asian background, please specify:
Black, African, Caribbean or Black British
○ African

Carribean

Mixed or Multiple ethnic groups

Other ethnic group

Arab

White and Black CaribbeanWhite and Black AfricanWhite and Asian

 $\bigcirc \ \, {\hbox{Any other ethnic group, please specify:}}$

 $\bigcirc\,$ Any other Black, African or Caribbean background, please specify:

 \bigcirc Any other Mixed or Multiple ethnic background, please specify:

What is your religion, even if you are not currently practising?
○ Buddhist
O Christian (including C of E, Catholic, Protestant and all other Christian denominations)
○ Hindu
○ Jewish
○ Muslim
○ Sikh
○ No religion
Other, please specify:
C Professor to say
O Prefer not to say
How would you describe your gender identity?
○ Male
Female
○ Non-binary/ third gender
○ Transgender
○ Gender neutral
Pangender
○ Gender queer
Other, please specify
O Prefer not to say
Is your gender identity the same as the gender you were assigned at birth? Yes No Prefer not to say
YesNoPrefer not to say How would you describe your sexuality?
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual Other, please specify:
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual Other, please specify: Prefer not to say
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual Other, please specify: Prefer not to say Do you identify as a disabled person, or have a long-term health condition?
 Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual Other, please specify: Prefer not to say Do you identify as a disabled person, or have a long-term health condition? Yes
Yes No Prefer not to say How would you describe your sexuality? Heterosexual Gay Lesbian Bisexual Queer Asexual Pansexual Other, please specify: Prefer not to say Do you identify as a disabled person, or have a long-term health condition? Yes No

O Prefer not to say

Mobility (e.g. example walking or climbing stairs)

○ Visually (e.g. partial sight or blindness)								
O Hearing (e.g. partial hearing or deafness)								
Oexterity (e.g. lifting or carrying objects, using a keyboard)								
○ Mental health								
○ Memory								
Learning, understanding or concentrating								
O Socially or in communicating (e.g. autism, ADHD, Tourette's syndrome)								
Other, please specify:								
Understanding your background								
Are you a student?								
○ Yes								
○ No								
What level of aturbuses vary asymptotic agraphatics 2								
What level of study are you currently completing?								
Undergraduate ○ First degree								
First degree Foundation degree								
Other undergraduate degree or equivalent, please specify:								
Carlor anadigradatio degree of equivalent, pleaded opposity.								
Postgraduate								
○ Masters, taught								
Other postgraduate taught, please specify:								
O Doctorate research								
Other postgraduate research, please specify:								
Which best describes your current employment?								
○ Employed								
○ Self-employed or freelance								
Temporarily away from work (e.g. on holiday, on a gap year, ill)								
On maternity or paternity leave								
○ Doing another kind of paid work								
○ Unemployed								
Other, please specify:								
What area of Geography, Earth and Environmental Sciences does your experience align with best?								
○ Earth Science / Geology								
○ Geography								
Environmental Science / Studies								
Before Equator, had you ever participated in a formal mentoring scheme before?								
○ Yes								
○ No								
○ I'm unsure								

Before Equator, had you ever had an informal mentor before?								
○ Yes								
○ No								
○ I'm unsure								
Understanding your mentor/mentee relationships								
How comfortable did you feel talking with your academic mentor?								
○ Very comfortable								
○ Comfortable								
○ I'm unsure								
○ Not comfortable								
○ Very uncomfortable								
Which of the aspects listed below did you focus on most in sessions with your <i>academic</i> mentor? (drag and drop to rank, 1 = strongest focus)								
Relationship: you connected well with your mentor and developed a relationship with clear expectations								
Goals and aims: your mentor helped you to set goals and develop strategies to meet them								
Confidence: your mentor worked with you to develop your confidence and discuss network-building								
Resources and advice: your mentor pointed you towards useful resources and information								
Work-life balance: your mentor suggested ways to best manage your time, with a focus on personal well being								
Communication: your mentor listened to you and gave you thoughtful feedback								
How comfortable did you feel talking with your <i>industry</i> mentor?								
○ Very comfortable								
Comfortable								
○ I'm unsure ○ Not comfortable								
○ Very uncomfortable								
O very ancomorable								
Which of the aspects listed below did you focus on most in sessions with your <i>industry</i> mentor? (drag and drop to rank, 1 = strongest focus)								
Relationship: you connected well with your mentor and developed a relationship with clear expectations								
Goals and aims: your mentor helped you to set goals and develop strategies to meet them								
Confidence: your mentor worked with you to develop your confidence and discuss network-building								
Resources and advice: your mentor pointed you towards useful resources and information								
Work-life balance: your mentor suggested ways to best manage your time, with a focus on personal well being								
Communication: your mentor listened to you and gave you thoughtful feedback								
Did you learn new things from your mentors?								
○ Yes								
○ No								
O I'm unsure								

How many mentoring	g meetings di	id you have in	total duri	ng the Equator p	roject?					
O 0										
① 1 or 2										
○ 3 or 4										
○ 5 or 6										
○ More than 6										
O more traine										
Man the ween ward		f maatin na 10 is	. 4-4-1 0 .		w) a massach (
Was the recommend				with each mento	r) enougn	ſ				
I would have liked to	have met with m	y mentors more of	ten							
The number of meetings was just right										
I would have preferred to have less mentoring meetings										
○ I'm unsure										
Understanding y	vour over	all experien	ices of	the Equator	Mentori	na Networ	k			
3.						J				
On a scale of 1-10, he	ow would you	u rate your ove	rall expe	rience of the EQ	UATOR me	entoring netwo	ork?			
Extremely poor								Ext	tremely good	
0 1	2	3	4	5	6	7	8	9	10	
0 0	0	\circ	0	0	\circ	0	0	0	0	
How important was it	t to you that:	I								
		l'm unsı	ıre	Not at all importan a factor in my de apply)		Somewhat Imp (contributed to my to apply)	decision	Very Important in my decisio		
The mentoring network inv	olved	0		0		0		0		
The mentoring network was ringfenced for Black, Asian and Ethnic Minority			0		0					
mentees The mentoring network was discipline-specific to those in Geography, Earth and Environmental Science				0 0)			
and Environmental objects										
We saked you some	avections of	the start of the	Fauston	montoring proc	We w	auld lika ta um	dovotond	whatharvay	now fool	
We asked you some more confident in the	ese areas, as	a result of brir							i now leel	
(Note: GEES = Geography,	Earth or Environ	mental Science)			Strongl	y Somewhat		Somewhat	Strongly	
					disagre		I'm unsure		agree	
I now feel more connected	into networks wi	ithin GEES that car	n help me d	evelop my career	0	\circ	\circ	\circ	\circ	
I now have a stronger sens	se of belonging w	vithin my field of stu	udy		0	\circ	\circ	\circ	\circ	
I now feel more comfortable	e discussing my	experiences of stu	dying within	GEES	0	\circ	\circ	\circ	\circ	
I now feel more able to discuss concerns that I have about my studies					0	\circ	\circ	\circ	\circ	
I now feel more confident at the thought of successfully forging a career following my studies					0	0	\circ	\circ	\circ	
I now feel more likely to pursue a career in GEES research						\circ	\bigcirc	0	\circ	
What did you gain fro	om taking pa	rt in the EQUA	TOR Men	torina Network?	(free text)					
					(

the barriers holding	you back from postgra	aduate research (if a	ny)?	igeu on tilis questio	ii. Wilat do you leel ale
If the Equator ment	oring network project r	an again in the futur	e, would you recomm	end it to a friend?	
○ Yes					
○ No					
O I'm unsure					
What did you enjoy	most about being men	ntored?			
				//	
If the Equator Mento any additional feedl	oring Network ran agai back on your mentoring	n, what improvemen g experience.	ts would you like to se	ee? Feel free to use	this box to contribute
end up? (This respond	he Equator team to rea onse is anonymous. If y further contacted by tl	you tick no, please e	future as part of a lonุ mail Natasha Dowey ท	ger-term study of w n.dowey@shu.ac.uk	here Equator Participants with the following email:
○ Yes					
○ No					
Are you happy for u	ıs to use anonymised t	ext from this survey	on our website, as tes	stimonial-style cont	ent to advertise future
○ Yes					
○ No					