



STUDENTS AS  
CO-CREATORS

**A Curriculum Design Collaboration**

***Understanding Genetics to Counter  
Racial Discrimination***

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## Inspiration:

As a group of bio-scientists we recognise the dangerous, divisive and widespread misconceptions about genetics being used to support racial discrimination. In undertaking this project, we act to counter these misconceptions.

Our inspiration comes from the very heart of our university. From our united purpose, our collective mission and our combined commitment to equality, diversity and inclusion:

*“We provide grounded, holistic education with wide horizons and opportunities, so that people from every background can realise their true potential, contributing to a richer, happier society.”*

*“We strive to help students from different backgrounds fulfil their potential.”*

*“Diversity, inclusion and equality of opportunity are at the core of how we engage with students, colleagues, applicants, visitors and all our stakeholders. We are fully committed to enabling a supportive and safe learning and working environment which is equitable, diverse and inclusive, is based on mutual respect and trust, and in which harassment and discrimination are neither tolerated nor acceptable.”*

We are driven to improve delivery of teaching ahead of impending revalidation and reaccreditation of our Biomedical Science BSc programs. Our project is, in part, a response to the university-wide drive to decolonise the curriculum and in part fuelled by our firm belief that we are a community of learners, that students and staff are equal stakeholders in our intertwined learning journeys. We are guided and resourced by our collective humanity, and by our rich and diverse lived experiences of race, ethnicity and bioscience.

## Intent:

Development of new learning material aimed at challenging widespread misconceptions about the role of Genetics as a provider of theoretical frameworks underpinning racial discrimination. By exploring relevant scientific literature and expert opinions, the group has sourced, organised and developed disruptive and immersive learning material. This aimed at discrediting unfounded views and, most crucially, imparting correct understanding of Genetics to counter racial discrimination.

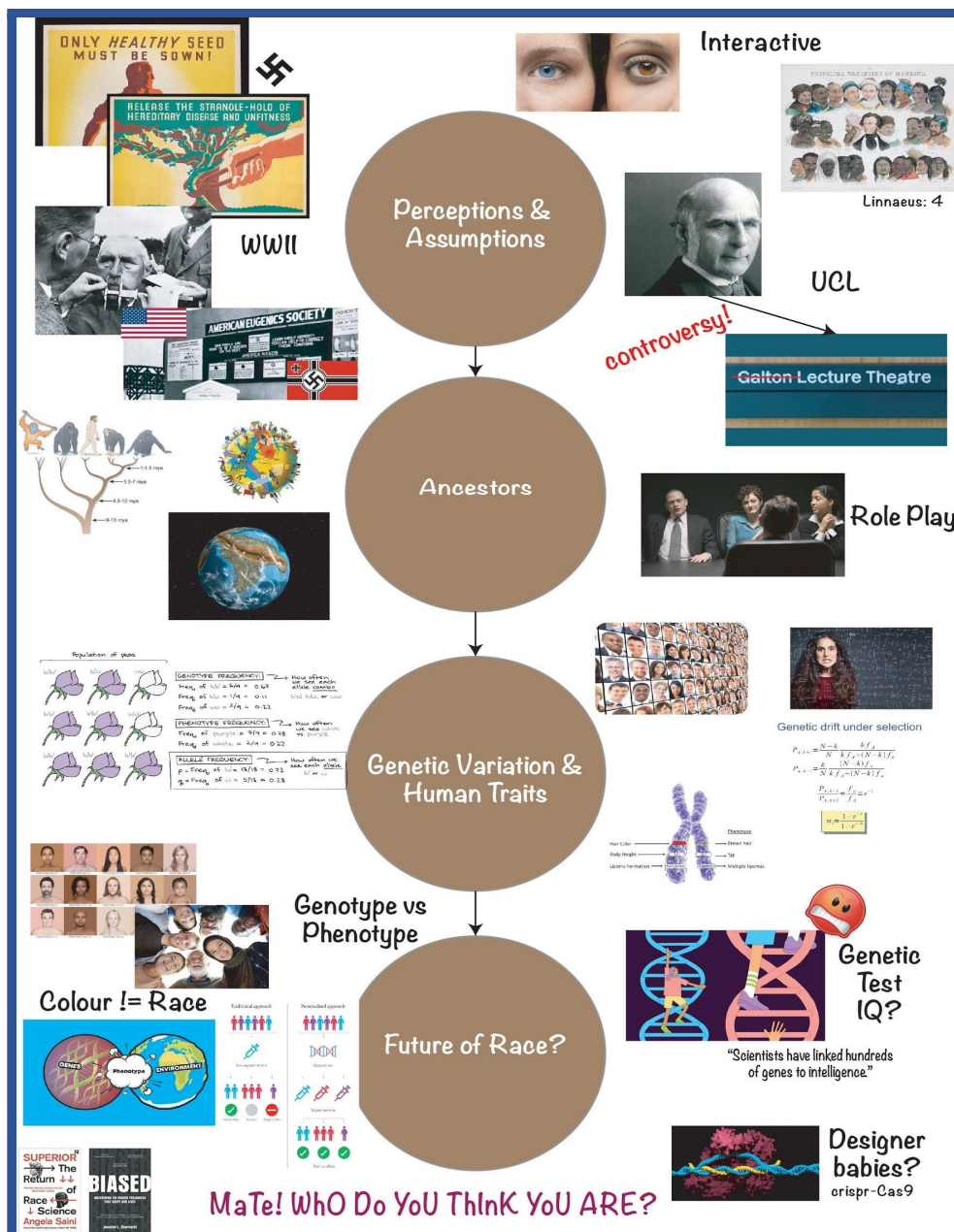
Participants will be drawn into a personal journey of exploration about how they perceive race. Then, during guided activities, they will be encouraged to explore how we use visible phenotypes to categorise people.

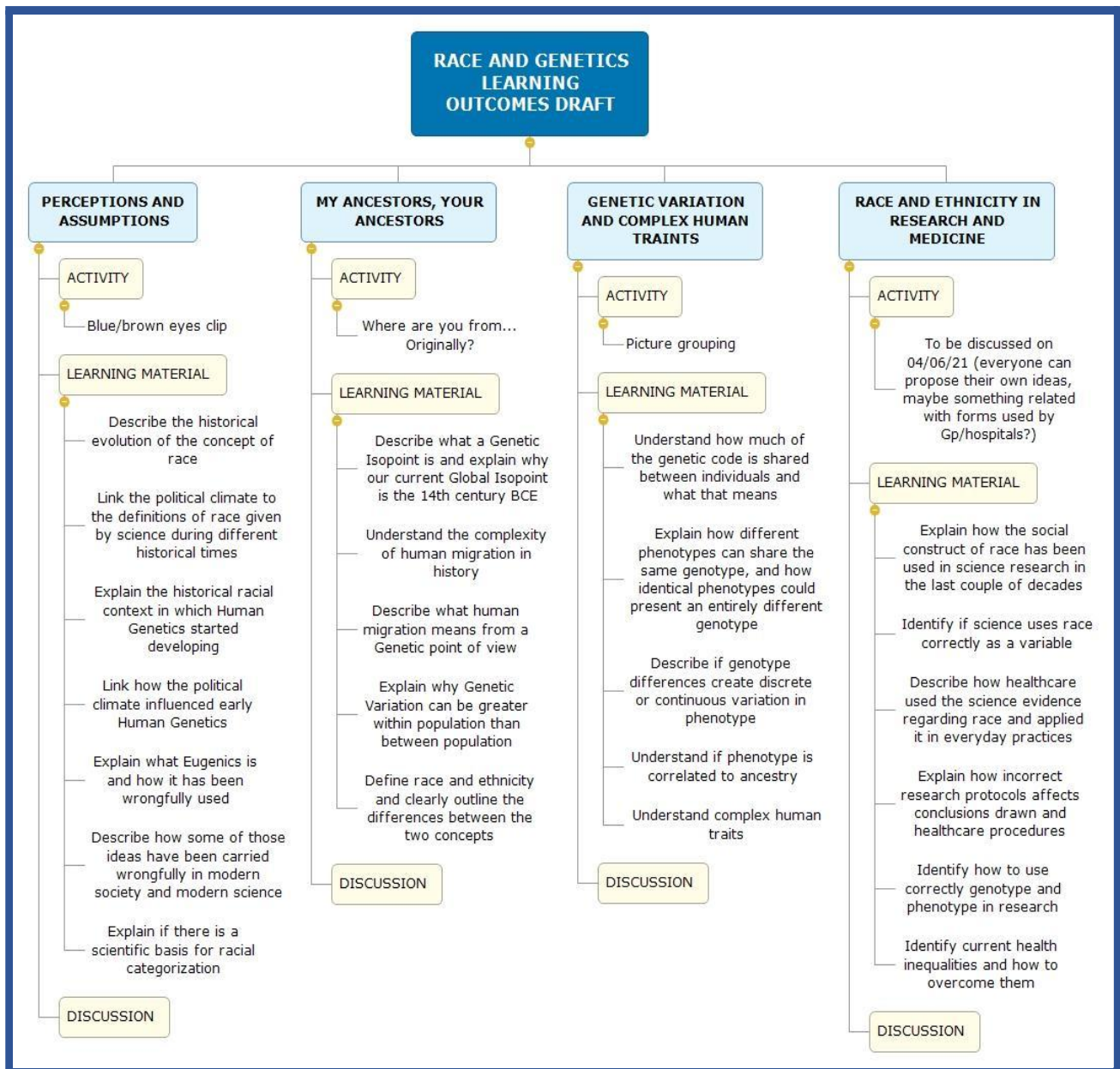
Participants will be taken through conceptual reasoning exercises and provided with mathematical truths proving that racial categorisation is not a valid construct in human genetics. Through the careful presentation of high quality, peer-reviewed published human genetics and genomics data participants will be encouraged to value ethnicity and race in terms of our human sense of identity and recognise them as useful psychosocial tools for the delivery of healthcare and tackling inequalities. Through this opportunity to explore and learn participants will leave the workshop encouraged and empowered to use their new knowledge, skills and confidence to counter racial discrimination.

## Implementation:

The academics in the group publicised the broad title of the project and issued invitations to level 5 Life Sciences students. Five undergraduate students came forward to join us and we swiftly established a good working relationship. Being unable to meet face-to-face due to the government mandated restrictions in place to combat the spread of COVID-19 we agreed on a schedule of regular video conferencing meetings. We also communicated asynchronously and shared documents using a Microsoft Teams chat. We completed our ethics approval and budget applications for the project. Then began by reading our agreed core text, 'How to argue with a racist' (Rutherford 2020), and by having informal discussions around the topics raised and our own experiences and opinions about how to achieve our aim.

The Co-creator nature of the group was invaluable. The students brought fresh ideas and skills to create, source and present material in engaging and relevant ways and the academics were able to help scaffold the material and to support conciseness outcomes in the production. These initial activities lead us to a broad workshop outline consisting of four conceptual, 'Spheres':





We divided into subgroups and worked together to build and refine the workshop content and also developed a vital sensitivity protocol, presenters' notes, and a set of rich and detailed resources as extra material for any workshop participant who might want to further explore particular elements. We co-opted Graduate Digital Learning Assistant, Louise Usher to analyse our output and support us as we optimised it for digital accessibility.

## Impact:

The outcome of this partnership effort has been the production of a high quality interactive two-hour workshop, complete with supporting material (Sensitivity protocol, Delivery notes, PowerPoint document, Video, Activity guides, Word Documents containing links to further resources) ...

The workshop will be delivered at module level in 2021- 22 with the aim of subsequently proposing it for incorporation into the mainstream Genetics curriculum within UG courses in the Life Sciences. The workshop will reveal the in-depth value of existing elements of learning in Genetics by adding novel perspectives. It will give real-world context to many genetics concepts and will support our movement towards the university's purpose and mission. We will develop entrance and exit activities to gather feedback from and generate measures of impact upon participants. The results of which will be used to refine and further develop the workshop. We are open to the possibility of delivering this workshop as a community engagement activity, but this will require further thought and careful planning.

## Insights:

We have appreciated the tools available to us to facilitate swift asynchronous collaboration on joint documents. We have learned that breaking into small subgroups to share the burden, whilst still communicating with the whole group worked well for this type of project. Excellent communication and collaboration between group members enabled the success of this project. We learned about each other, we discovered talents and skills that we were previously unaware of in our collaborators.

We knew at the start of this collaboration that the correct understanding of genetics had a role to play in countering racial discrimination. However, through working together exploring this idea more fully, we have come to realise that education in this area has the potential for even greater positive impact than we had originally hoped.

## Acknowledgements:

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