

Meet the Gene Machine

Learning objectives

- Gain an appreciation that the field of medical genetics is rapidly advancing
- Gain an awareness that advances in medical genetics raise complex personal, social and ethical questions
- Gain an understanding that human traits can be genetic, environmental or both
- Understand that for a successful debate participants need to observe certain codes of behaviour

Workshop content - students will:

- Be a live audience for a chat show drama
- Discuss the ethics behind genetic testing
- Explore what constitutes genetic and non-genetic traits
- Decide who should have access to sensitive genetic information
- Make an informed decision about whether they would have their own genetic profile read

Curriculum/Syllabi links

Supports OCR, Edexcel and AQA GCSE Science specifications

4 Applications and implications of science

- a. about the use of contemporary scientific and technological developments and their benefits, drawbacks and risks
- b. to consider how and why decisions about science and technology are made, including those that raise ethical issues, and about the social, economic and environmental effects of such decisions

5 Organisms and Health

- c. the ways in which organisms function are related to the genes in their cells
- e. human health is affected by a range of environmental and inherited factors, by the use and misuse of drugs and by medical treatments

Citizenship

2.1 Critical theory and enquiry

- a. question and reflect on different ideas, opinions, assumptions, beliefs and values

2.2 Advocacy and representation

- a. evaluate critically different ideas and viewpoints including those with which they don't necessarily agree
- b. explain their viewpoint, drawing conclusions from what they have learnt through research, discussion and actions, including formal debates and votes

2.3 Taking informed and responsible energy

- b. assess critically the impact of their actions on communities and the wider world, now and in the future, and make recommendations to others for future actions

Picture gallery



Taking the test