

# BIOMEDICINE AND RACE

## GLOSSARY TERMS

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**Penn Museum**  
UNIVERSITY of PENNSYLVANIA MUSEUM  
of ARCHAEOLOGY and ANTHROPOLOGY

# EUGENICS

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**Eugenics is the attempt to improve the human species by controlling which individuals can or cannot reproduce.**

**Eugenics has had disastrous social consequences whenever it was applied.**

# DNA

# DNA

**The genetic information contained in cells, the fundamental working units of all organisms.**

# GENE

# GENE

**An arrangement of DNA which produces proteins and acts as the functional unit of heredity.**

ALLELE



# ALLELE

**A particular variant of a gene.**

**For example, some alleles of a certain gene  
might produce lighter pigmentation,**

**while others might produce darker pigmentation.**

**For most human genes, individuals have two alleles (one  
inherited from the mother, and the other from the father)**

# HOMOZYGOUS

# HOMOZYGOUS

**Having two identical copies of the same allele.**

# HETEROZYGOUS

# HETEROZYGOUS

**Having two different copies of the same allele.**

# GENOME

# GENOME

**All of the genetic material of an organism.**

# HEREDITARY



# HEREDITARY

**Inherited; passed down from parent to child.**

**This includes traits like hair or eye color, or particular genes or DNA variants; some diseases are inherited**

# ENVIRONMENT

# ENVIRONMENT

**The non-genetic factors which influence the development of traits and individuals (nutrition, stress).**

**An environment is also the physical area in which individuals live and to which they adapt over time (e.g. UV exposure).**

# EPIGENETICS

# EPIGENETICS

**The turning off and turning on of genes that changes how the genes work, but not the genetic sequence itself.**

**It relates to human diseases such as cancer.**

# MICROBIOME

# MICROBIOME

**The bacteria found all over and in the human body,  
including on the skin and in the gut.**

**They begin accumulating at birth, and are important for  
immunity to infection, digestion, and other functions.**

# ANCESTRY



# ANCESTRY

**A person's family background or genealogy.**

**In genetics, it is often used to describe the particular alleles (or gene variants) that an individual received from each of his or her ancestors.**

**For example, a person with one African parent and one European parent will have "African ancestry" for some genes and "European ancestry" for other genes.**

# RACE

# RACE

**One of the groups into which people can be divided based on certain physical qualities.**

# ETHNICITY

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**An ethnic group or ethnicity is a category of people who identify with each other based on similarities, such as common language, ancestry, social or cultural groups, or national experiences.**

# PHRENOLOGY

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**The study of the size and shape of a person's skull, used to determine a person's character and mental abilities.**

**Phrenology was based on the idea that certain parts of the brain are associated with certain mental traits.**

**Although popular in the early 1800s, today, it is not considered a real science**

# BIAS



# BIAS

**Prejudice; preconceived notions that tend to result  
in unfair treatment.**

# SOCIAL IDENTITY

# **SOCIAL IDENTITY**

**A person's sense of who they are, based on the groups to  
which they belong**

# POLYGENESIS

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**The idea that different races evolved separately from pre-human ancestors.**

# MONOGENESIS

# MONOGENESIS

**The idea that all humans evolved as a single species from the same pre-human ancestors.**

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