



Classroom Scenario (Intermediate): The distinctive trait of baldness

SCENARIO

This is a role-playing tool to stimulate learning and spark students' curiosity about the different aspects of genomics. It should promote discussion, rather than provide all the answers – which would be impossible anyway.

Your scenario

A young couple are sitting at a table together, talking. The man surprises the woman by giving her a promise ring.

They have pictures of their families. When she sees her boyfriend's balding brothers, the woman informs him that their relationship is over because unfortunately she cannot stand the idea of him going bald some day.

You set the scene

The teacher and students work together to develop the plot based on the scenario and decide on the tone (humorous, serious, tragic, etc.).

This presentation can be used as a springboard for classroom discussion. You can also make use of the questions and scientific facts on this page.

Thought-Provoking Questions

- What would happen if we discovered a cure for genetic baldness? Would people still be bald? (Right and access to care, economic constraints, environmental conditions, etc.)
- Animals have distinctive traits. Things like length of fur, size of paw and their colour make them unique. Do you have preferences when it comes to a cat or a dog? Will our preferences always stay the same? (There is a vast diversity of life on our planet.)
- Is there such a thing as genetic perfection? (Value scales, discrimination, notions of tolerance)
- Do you think that in the future genetic information will influence the way people choose their life partners? (Perhaps, unconsciously, other people's traits influence our choices.)
- Is it solely a question of aesthetics? Is external appearance really that important? (e.g.: influence of society in general, the media, etc.)

Scientific Facts

Baldness is hereditary 95% of the time and is passed down on the maternal side of the family. Although the responsible gene has been recently discovered, there are other causes for non-hereditary baldness (hormones, illness, stress, some kinds of medication, etc.). Baldness is an example of a sex-linked hereditary condition; it is dominant for males and recessive for females. Dominant means that only one copy of the gene is needed to cause the genetic condition, while recessive means that there must be one copy from the father and one from the mother for the genetic condition to appear.

“Everyone has a right to respect for their dignity and for their rights regardless of their genetic characteristics. That dignity makes it imperative not to reduce individuals to their genetic characteristics and to respect their uniqueness and diversity.”

Article 2, *Universal Declaration on the Human Genome and Human Rights*, adopted at UNESCO's General Conference in 1997.

For more information on genomics, check out our partner's site:

Genome Canada
www.genomecanada.ca

You can find the Universal Declaration on the Human Genome and Human Rights on the United Nations' site
www.unesco.org/ibc/

VISIT nature.ca/genome

PRESENTED NATIONALLY BY:

PRODUCED BY:



GenomeCanada



Canada