



## Ethics and Genetic Capability

Guide for Curriculum Unit 96.05.05

by Richard R. Macmahon

**OBJECTIVES:** To develop in each student an understanding of the ethical issues surrounding the information emerging from genetic research and the developing concerns for fairness in the use of this new genetic knowledge.

Discussion and examples of the following are presented:

1. Is it fair to raise or lower people's hopes?
2. Is it ethical to change the germ cell line?
3. Are we releasing genes unwittingly into the environment?
4. Are we rushing to judgement before we fully understand the implications of what we have discovered?
5. Are we violating an individual's legal rights as well as their right-to-know and their right to privacy/confidentiality?

**STRATEGIES:** Students will learn by role-playing. The unit consists of four situations in which the students may become involved in determining the outcome of issues which are based on genetics. These four situations are:

1. A suit brought by a couple against a physician because they were not given proper genetic counseling and subsequently had a child with Down's syndrome.
2. A thirty year old person fired from her job because her genetic profile, which showed that she was carrying the gene for Huntington disease, became available to her employer.
3. A young woman is found to be carrying the BRCA 1 gene. Her request for payment for a prophylactic mastectomy is rejected by her insurance company. Shortly after she is fired and her medical insurance is terminated.

4. A proposed law in 2010 requires sterilization of anyone whose IQ score is less than 70.

Backgrounds and additional information are provided to assist in role-playing. Directions are given for setting up situations and some information is given for preparing for roles the students assume.

(Recommended for General Biology/Genetics, grades 9-12; and Genetics Bioengineering, grades 10-12)

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