Using NewsHour Extra Feature Stories

STORY
Congress Passes Anti-Genetic Discrimination Bill, 05/05/08
http://www.pbs.org/newshour/extra/features/us/jan-june08/dna_5-05.html

Estimated Time: One 45-minute class period with possible extension
Student Worksheet (reading comprehension and discussion questions without answers)

PROCEDURE
1. WARM UP
Use initiating questions to introduce the topic and find out how much your students know.

2. MAIN ACTIVITY
Have students read NewsHour Extra's feature story and answer the reading comprehension and discussion questions on the student handout.

3. DISCUSSION
Use discussion questions to encourage students to think about how the issues outlined in the story affect their lives and express and debate different opinions.

INITIATING QUESTIONS
1. What are genes?

2. What can our genetic information tell us about ourselves?

3. What is discrimination? In what ways can people be discriminated against?

READING COMPREHENSION QUESTIONS – **Student Worksheet**
1. What is the Genetic Information Nondiscrimination Act?

ANSWER
The Genetic Information Nondiscrimination Act passed Congress last week and President Bush is expected to sign it into law.

The new law, which is similar to federal law that makes race and gender discrimination illegal, encourages Americans to undergo genetic testing by alleviating the fear that the results could be used against them during hiring or insurance applications.

2. What are genes and how are they related to the Human Genome Project?

ANSWER
Genes are inherited DNA blueprints with instructions for building an organism. Scientists identified all of the tens of thousands of human genes through the government-funded Human Genome Project in 2003. The project was led by the Department of Energy and took 13 years to complete.

3. How does knowing about human genes help treat medical conditions?

ANSWER
Now that scientists have mapped the human genome, they are working to identify specific genes linked to all sorts of medical problems, and develop new therapies and treatments.

"We are in the midst of a deluge of discovery, and a very exciting one, about genetic risk factors for diabetes, for heart disease, for cancer, for asthma, for high blood pressure, all of these conditions that have

been pretty mysterious. And that's going to put us in a position, if we're interested, in finding out our own situation to plan prevention better," Collins said on the NewsHour.

4. Why do many people believe this law is necessary?

ANSWER
Without this new law, people were discouraged from learning about their genetic code because finding a gene linked to a disease might dissuade an employer from hiring them or a health insurer from providing health insurance.

In fact, there are examples from the 1970s of black men denied jobs or health coverage because they had a family history of sickle-cell anemia, according to Scientific American Magazine.

Genetic testing can be more specific than family history about the chances of inheriting a wide range of diseases, making the opportunities for such discrimination much greater.

5. Even with the new law, what are some downsides to genetic testing?

ANSWER
Armed with information about their specific genetic makeup, people may be able to prepare for, prevent or treat diseases. However, such knowledge does not come without a host of tough questions.

Sharon Terry, president of the Genetic Alliance, a group for people with genetic conditions which supported the bill, told the New York Times that Americans will have to deal with complicated genetic discrimination issues as they have had to with race and gender issues.

"Do we as a society start to make decisions like, 'I don't want kids who are going to get arthritis or who aren't going to be great basketball players?' This is only the beginning," she told the Times.

DISCUSSION QUESTIONS (more research might be needed)

1. Congress and the president hope to encourage more people to get genetic testing. Do you think this is a good idea? Why or why not?

2. Talk to your family about health issues that could be inherited. Are there genetic tests for these? What are the pros and cons of getting tested?

3. What kind of scientists worked on the Human Genome Project? What kind of training did they have? Is this work that you'd like to do? What kind of education would you need? Contact a geneticist and find out what career advice they might have.

4. How have books, movies and comic books dealt with genetic mutations? (Think about X-Men, Spiderman, etc.) What issues do these stories raise? In what ways do they reflect scientific reality, if any? How do you determine fact and fiction when it comes to cutting edge scientific and genetic research?

Extension Activity
Have students write a 300-500 word essay on this topic providing clear examples. Send your completed editorial to NewsHour Extra (extra@newshour.org). Exceptional essays might be published on our Web site.