#### **Science Time**

### Program Content for October 12, 2016

Read the article "There's a limit to very long life, new research study suggests" on page A5 of the Thursday, October 6, 2016 edition of The Seattle Times.

### **Objectives**

• I can analyze how the maximum age of human life was determined by scientists.

### Next Generation Science Standards (NGSS) connection

• *Crosscutting Concepts*: Empirical evidence is required to differentiate between cause and correlation and make claims about specific causes and effects.

# <u>Pre-reading and Vocabulary</u>: Define each term and then use it in a sentence to demonstrate your understanding.

- 1. Longevity
- 2. Travesty
- 3. Mortality

## **Comprehension Questions**

- 1. What is the world record for human age?
- 2. What is the oldest age that Jan Vijg believes humans will reach?
- 3. What are two reasons why life expectancies in many countries risen dramatically?
- 4. Why do some people believe that there is no boundary to how long people can live?
- 5. What is the difference in the average life expectancy of a child born in the United States in 1900 and one born today?
- 6. Which country in the world has the highest average life expectancy?
- 7. What steps did scientists like Vijg take to determine the maximum age of humans?
- 8. What did scientists discover after taking the steps you outlined in the answer to the question above?
- 9. When did the shift toward growth in ever-older populations start slowing?
- 10. What did Vijg and his colleagues find when they examined the International Database on Longevity?
- 11. How is aging described by Vijg?

12. What does Vijg argue as being the best hope for our species in regards to age?

## Prompts and Extensions

- In order for scientists to make the results of their experiment more reliable they will often repeat their experiment or check their results across a variety of different sources of data. This is exactly what the scientists highlighted in the article you just read did. In fact, they did this in at least two (2) different ways. Re-read the article and identify the two examples of how this group of scientists improved the reliability of their results.
- 2. View the <u>article</u> recently published by Jan Vijg and his colleagues that reports their research findings.
- 3. Read this <u>article</u> and watch the associated video about an Italian village that may have found the secret to living a long life.
- 4. Watch this short <u>animated video</u> about the science of aging and this <u>one</u> about how to reverse it.

Science Time is posted to the Web on Wednesdays. Please share this NIE Science Time program with other teachers. To sign-up for the electronic edition for your class, please register

Copyright © 2016 The Seattle Times Company