**A Whale of a Tale:**

**Using BLAST to Identify the Source of Mitochondrial DNA from Whales**

Scenario #3

**Background:**

The American Museum of Natural History has a 94 foot model of a blue whale that hangs from the ceiling in the Irma and Paul Milstein Family Hall of Ocean Life. The model is based on an actual blue whale found in 1925 off the tip of South America. You have just been hired as the curator of the Irma and Paul Milstein Family Hall of Ocean life. You want to include some of the actual bones of a blue whale to allow visitors to see the size of the skeleton and to be able to touch the bones. Unfortunately, in 1925 whale bones were not quite the rarity that they are today, and the bones of many whales were stored together. You need to use molecular techniques and mitochondrial DNA to identify the species of the bones found in the whale vault. You will need to correctly choose the blue whale bones for display (and also correctly sort the minke, fin and humpback whale bones).

**Sources:**

Background information on blue whale on display at AMNH

<http://www.amnh.org/exhibitions/permanent-exhibitions/biodiversity-and-environmental-halls/milstein-hall-of-ocean-life/the-giant-blue-whale-model>

General information on whales from AMNH display that ended in January 2014

<http://www.amnh.org/exhibitions/whales-giants-of-the-deep>

General history of whaling in US

<http://americanhistory.si.edu/onthewater/exhibition/3_7.html>

You Tube Video of whaling in South Pacific in 1920s <https://www.youtube.com/watch?v=J6bXO6WPP44>