



Diagnosing the Silent Killer: A Simulation of the Clinical Detection of Diabetes

According to the International Diabetes Federation (IDF), an estimated 382 million individuals are living with diabetes in 2013, and that number is expected to nearly double by 2035. It is important to effectively diagnose and treat the disease early because increased levels of sugar in the blood causes serious complications if left untreated. Participants distinguish between the two main types of diabetes using urinalysis and ELISA. **Receive a 4GB flashdrive and be entered for a T-shirt drawing.**

Thursday • 8:00 am - 9:30 am • Room 150

Is This Your First Biotechnology Workshop? Welcome to the Basics!

Feeling overwhelmed by all the topics, procedures, and equipment used in the diverse biotechnology field? If so, this workshop is for you! Join us for some hands-on experimentation - you will learn about three biotechnology techniques commonly used in research labs: DNA isolation, PCR, and gel electrophoresis. **Receive a 4GB flashdrive and be entered for a T-shirt drawing. Thursday • 10:00 - 11:30 am • Room 150**

Solving the Case of the Missing Records Using DNA Fingerprinting

Are you ready to perform a cutting-edge classroom forensic experiment? Complete a DNA fingerprinting exercise to determine who stole priceless historical documents from the Historical Society. We will identify the thief by comparing a DNA sample collected by forensic scientists at the crime scene to DNA from different suspects. Your students can solve the crime! **Receive a 4GB flashdrive and be entered for a T-shirt drawing.**

Thursday • 12:00 - 1:30 pm • Room 150

Wait! Were the Chips I Ate Genetically Modified?

It is difficult to determine which products in your grocery store contain genetically modified ingredients because the FDA does not require this information on the label. In this workshop, participants extract DNA from common snack foods like Fritos[™] and soy chips. Using the Polymerase Chain Reaction and agarose gel electrophoresis, we will determine which snacks contain genetically modified ingredients. **Receive a 4GB flashdrive and be entered for a T-shirt drawing. Thursday • 2:00 - 3:30 pm • Room 150**

The Drunken Worms: Exploring Gene Function with C. elegans

Model organisms allow us to study fundamental questions in developmental cellular and neurological functions that may be difficult to study in humans. Join us for an exciting experience exploring alcohol metabolism using *C. elegans* as a model organism. Learn how to grow and feed *C. elegans* and how to test the effects of alcohol on the locomotion of normal and mutant worms.

Receive a 4GB flashdrive and be entered for a T-shirt drawing. Thursday • 4:00 - 5:30 pm • Room 150

