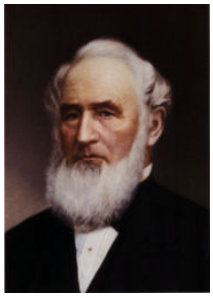
Chem105L
Final Lab Project – CSI Wells

MYSTERY AT WELLS COLLEGE

Yesterday, the exhumed body of the esteemed founder of Wells College, Henry Wells, was found in a classroom in Zabriskie Hall. His body was discovered by Dr. Godert, who teaches a forensic science class at Wells College.

It appears as though the decaying corpse put up a fight as a clump of hair, not belonging to Mr. Wells, was found clenched in his boney grip, supporting the hypothesis that a struggle had occurred. Whoever unceremoniously disposed of the body in Zabriskie left fingerprints on items that were moved when dumping the skeletal remains. Other pieces of evidence may be uncovered as the investigation proceeds. Though the motive remains murky at this point, some disgruntled members of the Wells faculty are suspected of digging up the body to protest moving to the new science building.



Portrait of Henry Wells

In an interesting deviation from a normal investigation, campus safety has asked the forensics class of Dr. Godert to investigate this puzzling problem. After practicing various techniques throughout the semester, they are ready to move on to a "real" forensic investigation.* A press conference will be held in Zabriskie 202 on Tuesday, May 7th at 1:45 to release all the details of the concluded investigation.

*All names, likenesses, motives, and evidence are, of course, completely fictional. This in no way represents the views of the "suspect" faculty of Wells College.

Overview

Who committed this heinous act? You must go to the crime scene (CS) and collect evidence. You will later use this evidence to compare to some samples collected from various suspects. The goal of the project is to identify the culprit and eliminate the other suspects. You should be documenting the collection and analysis of this evidence in a notebook. Upon completion of your investigation, you will hold a "press conference" (otherwise known as a presentation) to unveil your findings.

Requirements

Your final lab project will take three lab periods. Each lab period will be dedicated to completing various tasks and will culminate in a final presentation.

An outline of what should be accomplished in each lab period is given below:

Lab 1: Investigating the CS and collecting and analyzing evidence
- → Sketches and pictures of CS and evidence
- → Collect evidence
- → Analyze evidence

Lab 2: Comparison of CS evidence to suspect samples
- → Look at suspect samples
- → Compare to CS
- → Identify the perpetrator of the crime

Lab 3: Presentation (must be in powerpoint), which should include:
- → Sketches and pictures of the CS and evidence
- → How evidence was collected
- → Comparison of suspect samples to CS evidence
  (show similarities and how you excluded and/or implicated suspects)
- → Conclusions
  (how did it and a recap of evidence used to implicate)
  Your presentation should be at least 15 minutes long.

At the crime scene, you will find pieces of evidence from the perpetrator of the crime. This may include fibers, hair, fingerprints and shoeprints, though not all of these may be found. You should review how to collect these pieces of evidence before you attempt to collect them. Note that the first step should be to photograph the crime scene and/or make sketches. You will be analyzing and visualizing the evidence found at the CS in the first lab period using techniques that we have discussed in class and lab.

During the second lab period, you will be analyzing the suspect samples in order to make comparisons between them and the evidence you found at the crime scene. You will not have access to the suspect samples until the second lab. By making comparisons, you will try and identify the perpetrator of the crime.

In the final lab you will be presenting your findings to the class. You will have to show all of the evidence you collected and the comparisons you made that led you to the culprit. This means that you will have to exclude the other suspects as well. All presentations must be done in Power Point and a copy of the slides must be given to Dr. Godert before you present.

What will I investigate?

Each group was assigned a number during the PCR lab (1-5). Each CS will be given a number (1-5). The number of your group will be the number of the CS that you are investigating. Each CS is different so you CANNOT collaborate with other groups.

Every group member MUST contribute during all of the phases of the project, including the presentation. You should keep track of who does what and the will want you to evaluate how you worked to together as a group.