For National Chemistry Week 2016, I decided to travel to the world’s only outdoor forensic anthropology laboratory, known as “The Body Farm” in Knoxville, TN. I was so excited to spend the day with Dr. Bill Bass, a retired professor from the Department of Anthropology at the University of Tennessee.

At the Body Farm, scientists perform experiments on bodies donated for research and education. Dr. Bass explained that here they “examine the effects of various conditions” on the bodies. The observations and results can help them learn the effects on a body from being buried in the ground, left in the trunk of a vehicle, underwater, or even exposed outside to the weather elements. This helps them learn how to determine the length of time since death when bodies are found at crime scenes.

Dr. Bass greeted me while holding a skull in his hand! I could not wait to learn more about his work. He explained that “as a Forensic Anthropologist, my job is to identify human skeletal (bone) remains for federal, state, and local law enforcement agencies.” He told me how important safety is in his job, saying, “While working, I always wear a protective overall, gloves, and safety glasses.”

I was very curious about where Dr. Bass did his work. He told me, “I do most of my work in the field (the crime scene) locating the skeleton and recovering as many of the bones as possible (in an adult human, there are 206). The bones are often scattered by animals. Later I do indoor lab work that involves detailed testing (chemical, anatomical, DNA, etc.). I also do special tests to determine the length of time since death.” Dr. Bass shared that “solving problems” is what he enjoys the most.

I wanted to know more! I asked him to walk me through how he solves problems in his daily work. He explained it like this: “When I find a skeleton, I start by asking whether it belongs to an animal or to a human. If an animal, what kind? If a human, can I determine how long the person has been dead, their age at death, and their sex, race (ancestry), and height? Sometimes I can even tell whether they were left- or right-handed.”

I will never, ever forget my trip to the Body Farm!