KHRYSTEN STOLINS#, and MARK FLOOD, Forensic Science Program, Fairmont State University, Fairmont, WV, 26554. **Determination of the better casting material for shoe impression analysis.**

In forensic science there is a need to use casting material to lift shoe impressions from certain areas of the ground for criminal cases. The objective of this experiment was to determine which casting material would give the mold better details of the shoe impression. Nucast180, EnvironMold Liquid Latex mold making rubber, and Shake-N-Cast pouch were utilize during this experiment to determine which one could create a better mold. One of the casting materials consisted of liquid latex and the other two casting material consisted of gypsum. As of now the Shake-N-Cast pouch has produced the better mold of the shoe impression. The Shake-N-Cast pouch was user friendly, the instructions were easy to follow along with, and the hardening process only took a few minutes compared to the others. This experiment was important because crime scene investigators will be able to utilize this information to obtain greater impression details from shoe prints.