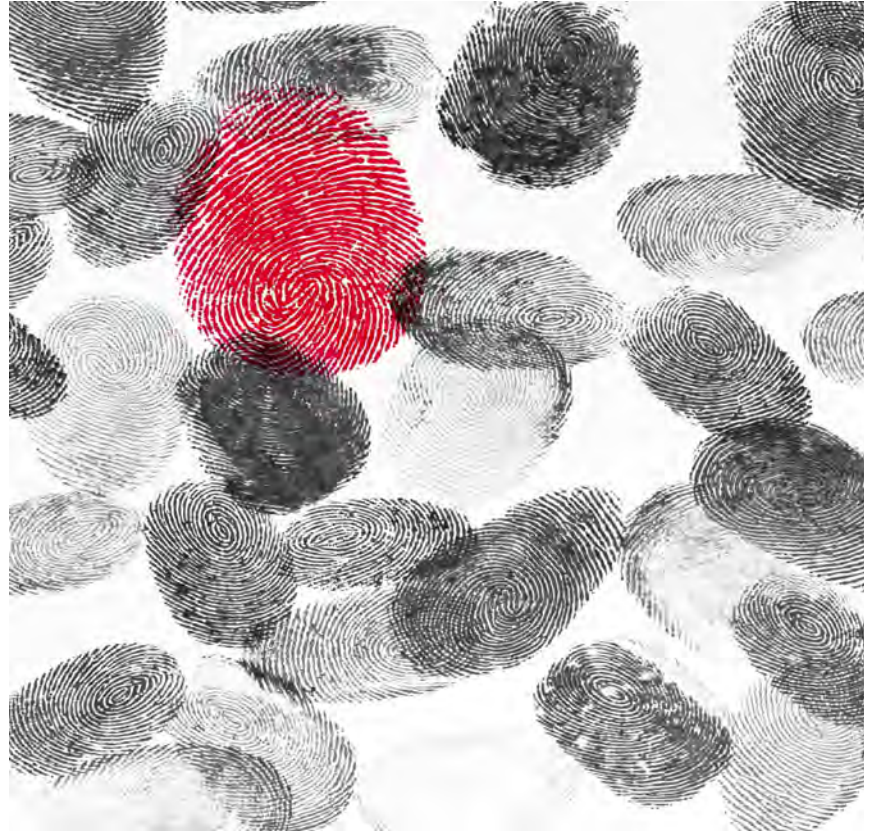


Immersive Forensic Science Education

- From VR Crime Scenes to Virtual Autopsies
 - Dr. Darlene Brothers-Gray & Wendy Velez-Torres
 - Coppin State University



Why Immersive Learning?

- Traditional methods: barriers (cost, logistics, access)
- VR/Simulations = safe, repeatable, hands-on
- Bridges theory with practice + accessibility



Study 1 – Virtual Crime Scenes (2024)

- Undergrad (CRJU486) & Grad (CRJU524)
- Tools: Oculus Quest, 360° videos, Playposit
- Activities: search, photography, sketching, evidence collection



Topics
Photography/Sketching
Crime Scene Search Techniques
Presumptive Tests and Chemical Enhancements
Latent Fingerprint Development
Evidence Collection and Packaging
Physical Evidence/Serological Evidence
Trace Evidence
Firearms and Toolmark Evidence



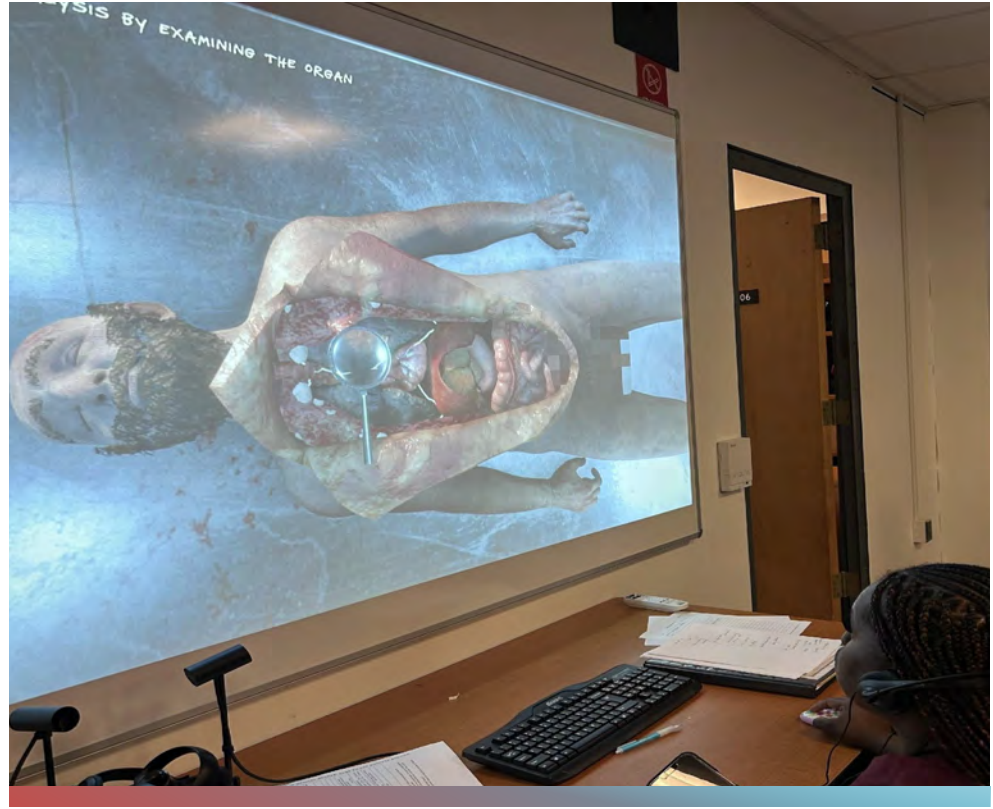
Outcomes – Virtual Crime Scenes

- High engagement & completion rates
 - Strong graduate performance
- Positive external recognition (OLC Innovate 2024)
 - Students gained deeper understanding & confidence



Study 2 – Virtual Autopsy Simulation (2025)

- Graduate course: Death Investigation (CRJU524)
- Tool: Autopsy Simulator (Woodland Games)
- 6-week pilot, 10 students



Goal Scale



Outcomes – Virtual Autopsy

- 90% reported enhanced learning & skill development
- Mastery Report: Analytical Reasoning, Critical Thinking, Quantitative Literacy

Accessibility & Inclusion

- Playposit: captions, transcripts, alternative formats
- Microsoft Forms: screen-reader compatible
 - Alternatives: video walkthroughs, keyboard input
- Aligned with UDL and CSU accessibility standards



THANK YOU

Contact:

dbrothers-gray@coppin.edu

wvelez-torres@coppin.edu

Coppin State University, Baltimore, MD



Virtual Reality in Higher Education



**From Simulation to Capstone:
Implementing Virtual Autopsy Software in
Forensic Science Education**