IMPROVING DETECTION CAPABILITIES TO HELP SOLVE CRIMES
Nationally-Recognized Forensic Sciences Program Improves Forensic Analysis, Detection and Identification through Research

A CLOSER LOOK
The forensic science programs at Towson University are directed by former Baltimore Crime Laboratory supervisor Mark Profili. Other members of the forensic team include professors Kelly Elkins, Ellen Hondrogiannis and Cynthia Zeller. These faculty members serve dual roles as forensic science instructors and research mentors in Towson’s accredited undergraduate and graduate forensic science programs.

Ongoing TU research includes developing new chemical testing and attribution methods, advanced body fluid analysis, improving DNA recovery, and developing new species differentiation assays for forensic identification. Advanced statistical analysis, including principle component analysis, removes variability in test results interpretation thus significantly reducing false positives and improving the accuracy of the testing. The new methods and assays strive to improve forensic detection and identification capabilities. TU students including women, minorities, and international students who have worked on the projects have conducted a survey of technology for forensic investigations, collected and interpreted biological and chemical test data and volunteers as interns with our partners – skills that will make them highly marketable after graduation. Elkins, Hondrogiannis, Profili and Zeller plan to incorporate the research findings in various curriculum development and community outreach efforts both in and outside the classroom environment.

SERVICES/SOLUTIONS/OUTCOMES
• Student research opportunities
• Improved interpretation capabilities
• Accurate and reliable
• New assays
• Novel law enforcement tools
• Relevant education

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PARTNER ORGANIZATIONS

Maryland State Police – Forensic Sciences Division
http://mdsp.maryland.gov/Organization/Pages/CriminalInvestigationBureau/ForensicSciencesDivision.aspx

Baltimore City Police – Forensic Science and Evidence Management Division
www.baltimorepolice.org

www.towson.edu/fcsm/departments/chemistry/grad/forensic