

MARSHALL UNIVERSITY



FORENSIC SCIENCE CENTER

Advanced DNA Training

Monday *Forensic Science Theory/Instrument Introduction*

- Introductions/Pre-Test
- An Introduction to Forensic DNA Analysis
- How to Extract DNA
- An Introduction to Quantitation Procedures
- **Lunch (Trainee Meet and Greet)**
- The Polymerase Chain Reaction and You
- The Capillary Electrophoresis Primer

Tuesday and Wednesday *Hands-On Instrument Exercises- 3130/7500*

- Applied Biosystems 3130 Instrument Setup
- 3130 Spectral Calibration and Data Collection Exercises
- 7500 Preventative Maintenance
- 7500 Quantifiler[®] Duo and Plexor[®] HY Runs
- **Lunch (Trainee SOP Comparisons)**
- GeneMapper[®] ID Software Setup
- GeneMapper[®] ID Software Algorithms
- Real-Time PCR Data Analysis
- Qiagen BioRobot EZ1 Workstation Demonstration

Thursday *Hands-On GMID Data Analysis*

- Capillary Electrophoresis Artifact Identification
- GeneMapper[®] ID Identifiler[®] Data Analysis
- **Lunch (Trainee Analysis Protocols Discussion)**
- GeneMapper[®] ID PowerPlex[®] 16 Data Analysis
- GeneMapper[®] ID Software Customization

Friday *GMID Review/Course Wrap-up*

- 3130 Plate Record Templates
- Microsoft Excel Macros and You
- Post-Test and Evaluations
- Presentation of Certificates

Justin Godby, DNA Analyst II and Lead PDI Trainer
Marshall University Forensic Science Center
1401 Forensic Science Drive
Huntington, WV 25701-3628
godby3@marshall.edu