

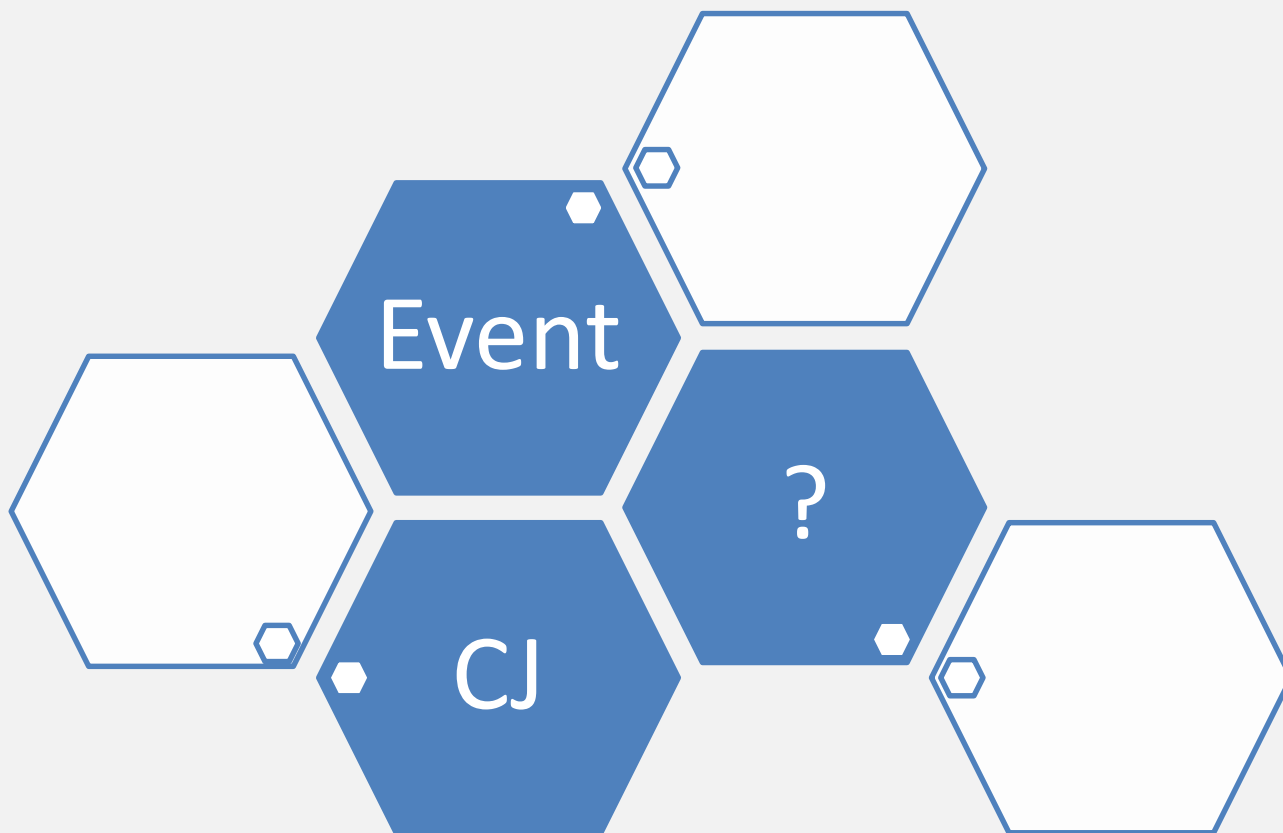
Crime Lab Procedures

MSPD Spring 2019 Training

Linda R. Netzel, Director

Kansas City Police Crime Laboratory

What is the role of the crime lab?

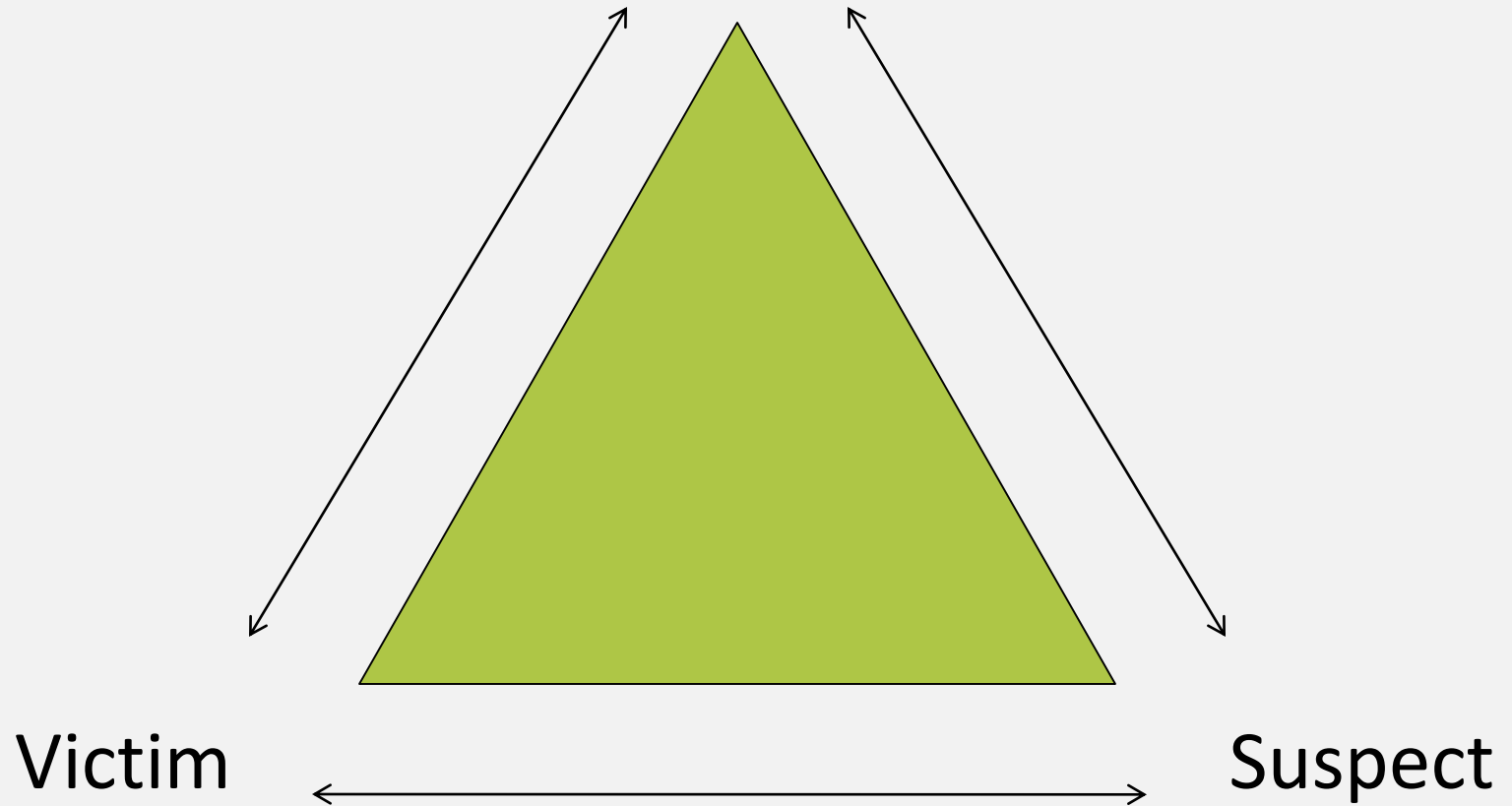


Locard's Exchange Principle

“It is not possible to come in contact with an environment without changing it in some small way, whether by adding to it or taking something away.”

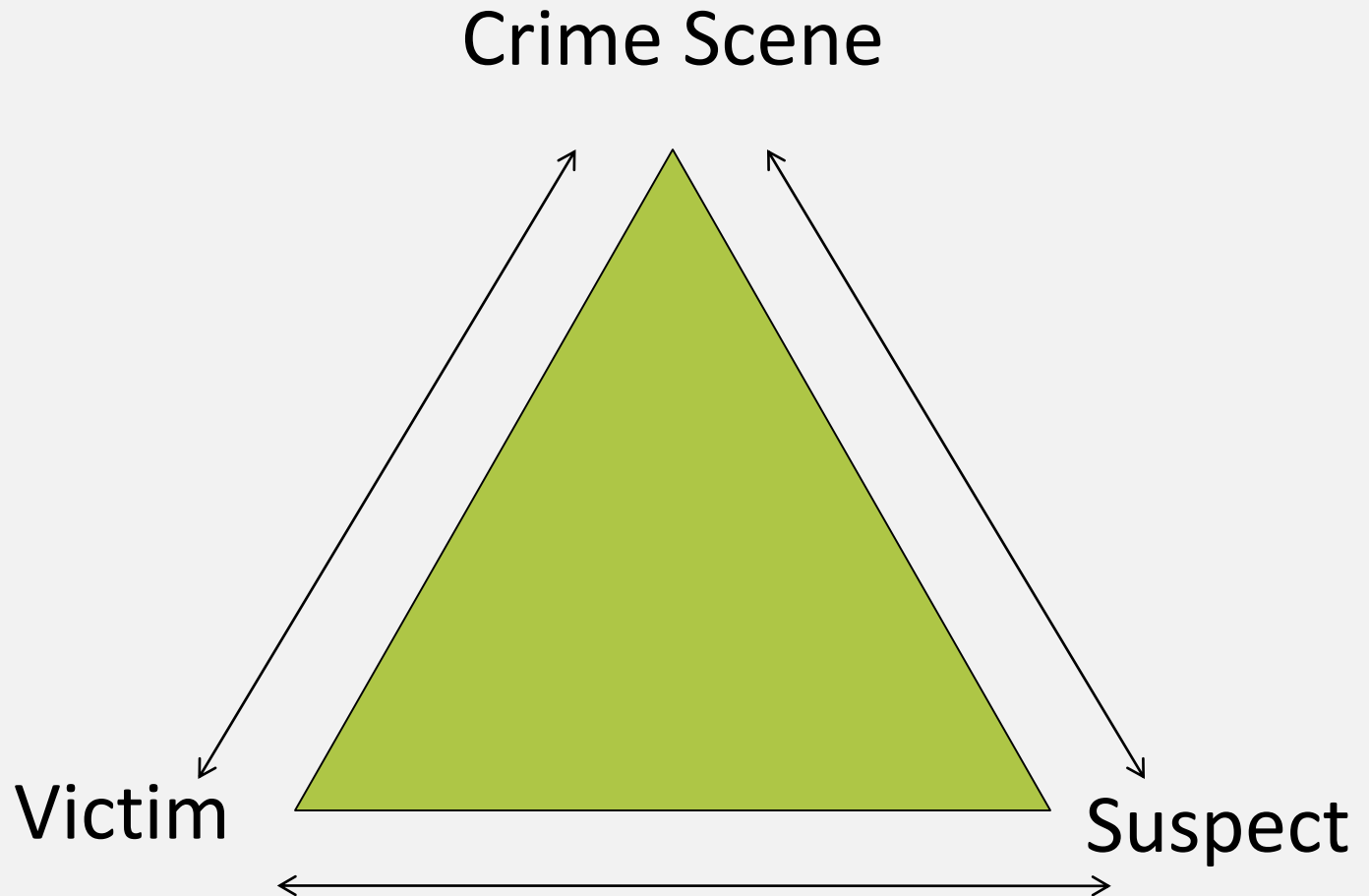
Edmund Locard

Crime Scene



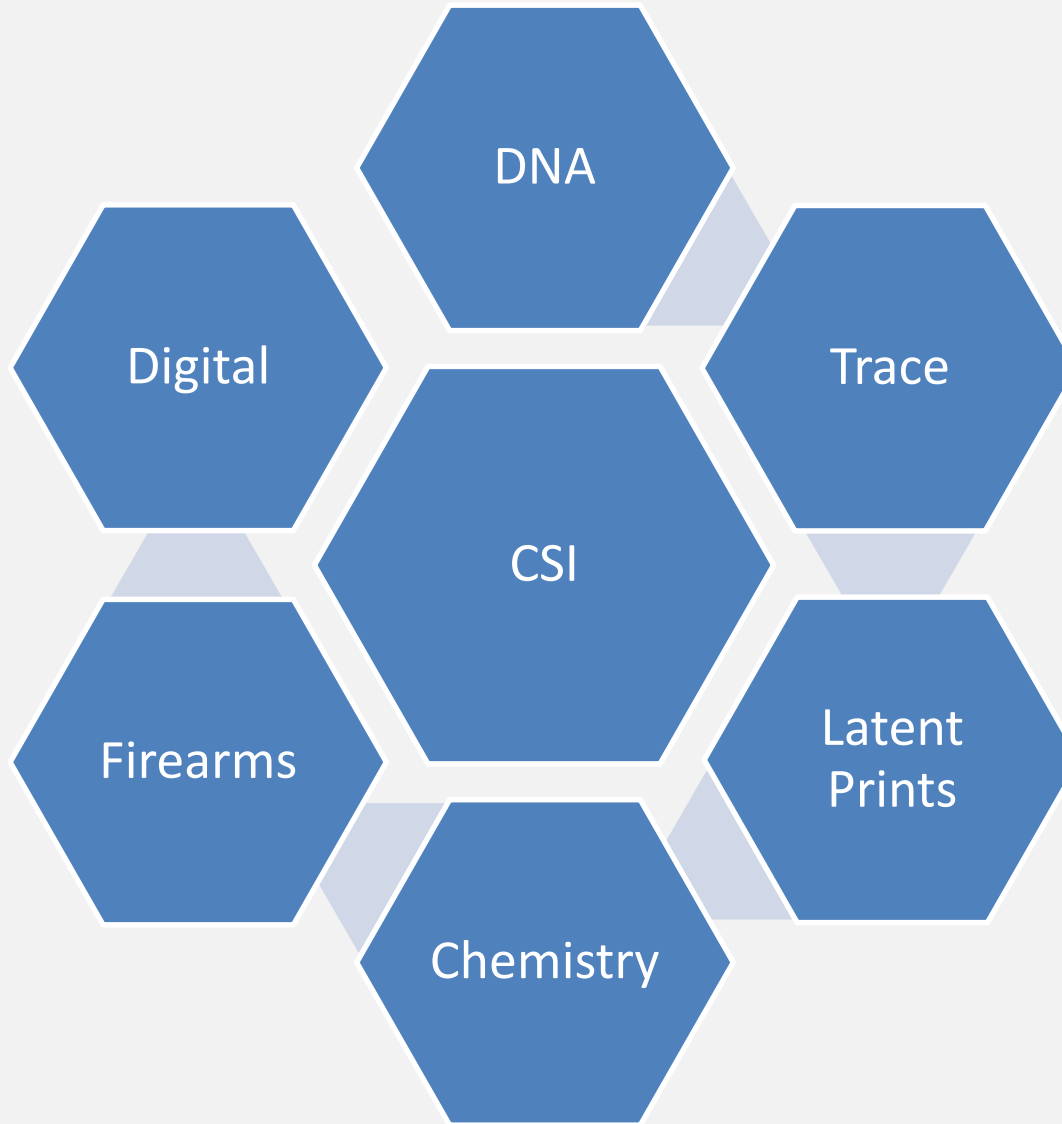
Associative Evidence

- Where?
- When?
- What?
- Who?



Reconstruction

Sequence of events
within a larger event



Quality Assurance Program

“If it isn’t documented, it
didn’t happen.”

Accreditation

- ANAB=Accrediting Body
- International Organization for Standardization (ISO)
- ISO/IEC 17025:2005
 - Organization
 - Document Control
 - Customer Service
 - Personnel Records
 - Supplies and Services
 - Equipment
 - Procedures
 - Evidence Management
 - Case Documentation
 - Reporting Results
 - Quality Case Review
 - Proficiency Testing Program
 - Non conforming testing
 - Corrective actions
 - Preventive actions
 - Quality Audits and Reviews
 - Security



ANSI-ASQ National Accreditation Board

**SCOPE OF ACCREDITATION TO:
ISO/IEC 17025:2005**

**ANAB 17025:2005 Forensic Science Testing Laboratories Accreditation Requirements:2017
FBI Quality Assurance Standards for Forensic Testing Laboratories:2011
FBI Quality Assurance Standards for DNA Databasing Laboratories:2011**

Kansas City Police Department Crime Laboratory

2645 Brooklyn Avenue
Kansas City, Missouri 64127

FORENSIC SCIENCE TESTING

FORENSIC SCIENCE TESTING

Valid to: September 30, 2022

Certificate Number: FT-0044

Discipline: Biology			
Component/Parameter or Characteristic Tested	Test Method	Items Tested	Key Equipment or Technology
Collection	Biological Screening Analytical Procedure Manual	Physical Evidence	Refer to Method
Body Fluid Identification	Biological Screening Analytical Procedure Manual	Blood, Saliva, Semen	Refer to Method
DNA-STR	Flexible Scope ¹	Blood, Saliva, Hair, Teeth, Semen, Epithelial Cells, Tissue	Robotics, Thermal Cycler, Genetic Analyzer, GMIDX Software, STRmix
Relationship Testing	DNA Analytical Procedure Manual	Biological Evidence, DNA Profiles	Popstats software
Individual Characteristic Database	DNA CODIS Manual	DNA Profiles	Combined DNA Index System (CODIS)



Kansas City Police Crime Laboratory

2018 - 17025T - Reassessment

Prepared by Mike Hurley

Data collected on 2018-05-21

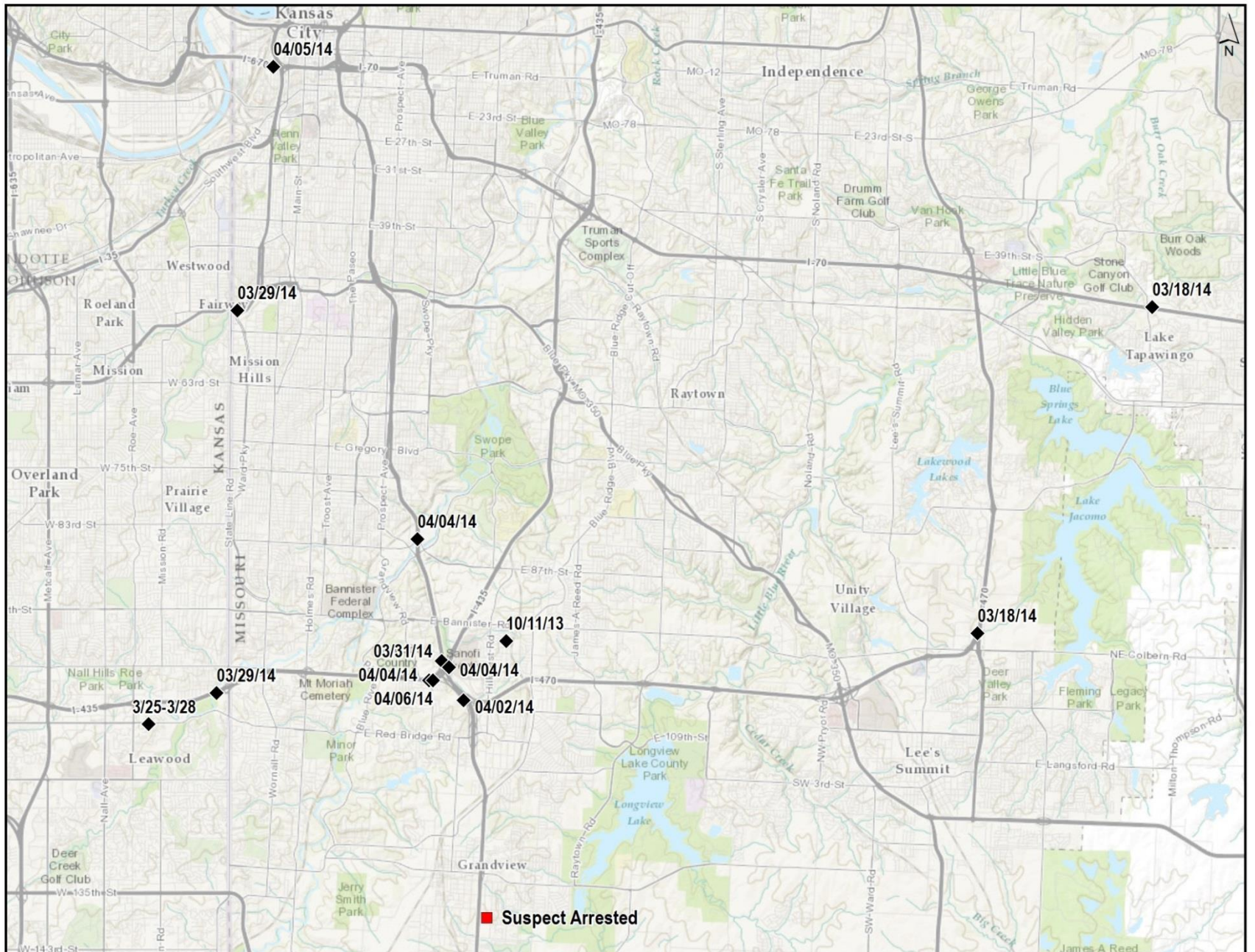
ANSI-ASQ National Accreditation Board

FT-0044

Missouri, United States

Signature

Completed by Mike Hurley on 2018-07-08



Personnel: What can you find out about the person doing this job?

Personnel Records

Training, Qualifications

- College Transcripts
- Training documents
 - Competency
 - Proficiency
- Continuing Education
 - Advanced degree
 - Professional seminars
 - Workshops

Experience

- Casework
- Annual Proficiency Testing
 - Internal
 - External
- Publications
- Testimony Reviews
- Certification

What can you
find out about
the testing/
materials?

Testing Materials:Chemicals/Reagents

- Process Validation
 - Who developed the test?
 - In House
 - Manufactured
 - Experiments
 - Specificity
 - Accuracy
 - Repeatability
 - Sensitivity
 - Identify potential NCTs
- Write Procedure
 - How and when is it used?
 - Quality Control
 - Possible results
 - Documentation
 - Conclusions
 - Reporting
- Train Staff
 - Read validation report
 - Use Procedure
 - Test unknowns

How do I know
what was done on
a case?

Documentation

- What was done?
 - Is there a procedure?
- Who did it?
 - Was this person qualified?
- How was it done?
 - Was the procedure followed?
- Field and Bench notes
- Photographs
- Scans
- Electropherograms
- Spectra
- Communications
- Chain of Custody
- Remaining material and Disposition

What can you find
out about this
equipment?

Equipment

- Must be validated or performance checked before use on casework
- Must be performance verified on a pre-determined schedule
 - Must undergo routine maintenance
 - Quality Control checks before use each time
- Records of all maintenance

Reporting Process

- Does the examination involve “verification”
 - If yes, complete prior to drafting report
 - If no, draft report
- Put draft report out for Technical Review/Admin Review
 - Technical must be done by another qualified analyst
 - Admin-grammar, methodology, equipment, disclaimers, etc.
- After reviewer approval, author publishes

Amended Report

- Occurs when a substantive error is found in a previously approved report
 - Error or omission of data
 - Could impact the interpretation and/or conclusions
- Must be approved by Quality Assurance Manager or Director
- Must go through technical review again

Non-conforming testing

- Define what happened
- Determine why it happened
- Is there a simple fix?
- Does the non-conforming testing
 - Have the potential of recurring?
 - Illustrate a pattern?
 - Indicate that lab cannot operate under it's own procedures

Corrective Action

- No simple fix
 - Root Cause Analysis
- Remediate
- Report to ANAB
- Review
- Repeat if necessary
- Root Cause Analysis
 - What were the points of failure
 - Try to get to one root cause but more than one may be a reality
 - Usually a possible root cause leads to the true root cause
 - Documented in Case Record

Preventive Action

Something happened or might
happen

Communication

Will there be a potential impact to future decisions, processes, judicial proceedings?

Discovery

- Case specific records
 - Reports
 - Notes
 - Photographs
 - Raw Data
 - DNA
 - Chemistry-Spectra
 - Communication
 - Chain of Custody

Post-Conviction Relief

- Archived evidence
 - The item itself
 - Child of a parent item
 - Something removed from the actual item
 - Retained in a lab designated “vault”
 - Freezers, dry storage, microscope slide drawers, test fires, old lab files
 - Paper lab files dating back to 1970s at least
 - Latent lift cards from decades back

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THANK YOU AND QUESTIONS