

# DEFENDING TESTING SERVICES

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# Workshop Objectives

- I. Know Your Role**
- II. Explain Your Role**
- III. Be Prepared**

**BASICS:**

**Let's Get on the Same Page**

# What types of testing services?

## ■ Forensic

- Workplace drug testing
- Federally-mandated drug testing
- Professional monitoring
- Crime lab and criminal prosecutions
- Quasi criminal, i.e., family law
- Postmortem

## ■ Non-Forensic

- Clinical toxicology

## ■ In Between

- Insurance Testing
- Pain Management Testing

# Who would want to challenge results?

The list is long...

- Employee subject to discipline
- Pilot or physician subject to license revocation
- Criminal defendant
- Parent in custody hearing
- Patient receiving pain management therapy

# *In what circumstances could a test or result be challenged*

- Workplace drug tests
- Evidence in criminal proceedings
- License enforcement actions
- Child custody proceedings
- In-patient treatment programs
- Unemployment benefits programs
- Professional or amateur athlete testing
- Really no limit to possible scenarios

# *Forensic Testing*

- Forensic testing is defined as a result that is legally defensible.
- To be legally defensible, there must be positive chain of custody between the donor and the specimen tested, the possibility of intentional tampering must be essentially eliminated, and the testing methodology and result must be reliable and scientifically valid.

# *How is forensic testing most commonly challenged*

- Counter evidence
  - Subsequent testing
  - Studies
- Testimony
  - Direct
  - Cross examination



# *Cross Examination*

What is cross-examination?

- Cross examination is defined as the formal interrogation of a witness called by the other party in a court of law to challenge or extend testimony already given.
  - Cross examination often occurs a deposition prior to an actual trial or proceeding.
- The rules of cross-examination allow the questioner to pose “leading” questions, meaning that answers may simply be “yes” or “no.”

# *Cross Examination*

- Cross-examination is considered an interrogation of a “hostile” witness by an opposing party in an adversarial legal proceeding.
  - Direct examination is questioning by a representative seeking to establish or prove the existence of a fact known by the witness, in the case of forensic testing, the result and reliability of such test.

# *Direct Examination*

How is direct examination different?

- Questioning on direct examination, typically an examination of one's own witness, may not be conducted by leading questions .
  - Questions are asked using “what,” “who,” “how,” “why,” “when,” etc.
- It is not uncommon, however, for a forensic toxicologist never to be examined on direct regarding a test or test result.
  - Many reasons for this, e.g., matter settles.

# *Examination Tips*

## Fundamentals

- Business dress
  - You are presenting yourself as a credible witness
- Be prepared
- Be punctual
- If testifying by video, prepare office or other space
  - No dishes in background
- Be polite and confident

# ***DEFENDING YOUR TEST***

**I.**

**You, as a witness, must  
understand  
your ROLE.**

# Understand your role.

What are we doing here?

- In layman's (or attorney's) terms, forensic toxicology is premised on repeatability, reliability, scientific validity, and documentation.
  - A crime lab technician may have a very specific role in testing a sample, or the same technician may be responsible for the handling and testing from start to finish.
  - Commercial testing is intentionally segmented, with many different technicians involved.

# What Do You Mean—*Roles*?

- Effectively defending your test result requires that you, as the witness, understand your role in producing a forensically defensible test results.
  - For example, a crime lab forensic examiner may be asked to provide an opinion on whether a reported concentration is within therapeutic, or even fatal concentrations. A commercial laboratory director, on the other hand, would not opine on an interpretation of a test result.

# *Why Roles matter*

How do roles matter in defending a forensic test result?

- The simple answer is a tenant of all examinations, direct or cross: **Do not guess.**
  - A commercial laboratory accessioner will not know what a laboratory technician did with a specimen or aliquot.
  - A crime lab examiner may not know what a custody officer did with a sample before the laboratory takes possession.
- A witness must clearly and consistently define the limitations of the witness's interaction with the specimen.



# *Who does, what, and why?*

What are the roles at issue?

- Specially-retained expert witness
- Crime laboratory examiner
- Crime laboratory technician
- Commercial Laboratory Director
- Commercial Laboratory Accessioner
- Commercial Laboratory Technician
- Commercial Laboratory Certifying Scientist

# *Specially-retained expert*

An expert retained to give opinion testimony

- Credentialed expert in forensic toxicology with expertise relevant to testing at issue.
- Often, regularly retained to examine testing and offer expert testimony regarding reliability of methodologies and results.
- In many instances, provides testimony regarding all facets of forensic issues raised by testing.

# *Crime Lab Examiner*

Crime laboratory examiners often take a specimen or sample through testing from “cradle to grave.”

- Examiner has knowledge of testing and methodologies
- Examiner may report opinions as to the effects of drugs or other substances on humans
- Examiner may identify limitations and assumptions of examination.

# *Crime Lab Examiner*

- May testify as to analytical findings regarding presence or absence of drug, metabolite, or other analyte.
- May testify as to any limiting aspect of findings.
- May testify regarding pharmacokinetic or pharmacodynamic effects.
- May offer opinions regarding effects drug or other analytes of subject of testing at time specimen obtained.

# *Crime Lab Technician*

A crime laboratory technician may not be tasked with providing testimony establishing a test result or reliability.

- Technician may only be involved in discrete portions of the testing process
- Technician may not have the education or experience to opine on results as extrapolated to, or consistent with, expected outcomes or conditions.

# *Crime Lab Technician*

Role of technician in testing may often be limited.

- Technician may not be knowledgeable of all testing principles at issue.
- Without being qualified as to general expertise, may be attacked on any testimony outside of personal knowledge, or factual, evidence.
- Would not typically be expected to provide opinions or testimony regarding ultimate contested issues of fact.

# *Commercial Laboratory or Scientific Directors*

Commercial Laboratory and Scientific Directors must have detailed understanding of testing principles and methodologies employed by laboratory and is responsible for ensuring accurate test results and active quality assurance measures.

- “Top down” knowledge of laboratory operations and procedures
- Subject matter expert on all testing performed by laboratory
- Expected, and does, defend results with laboratory documentation package

# *Commercial Laboratory or Scientific Directors*

Laboratory & Scientific Directors regularly provide testimony supporting the laboratory's results, SOPs, and testing methodologies.

- Best suited for testimony regarding laboratory practices
- Expected to explain and defend testing methodologies
- Intimate knowledge of laboratory QC and QA practices
- Does not offer testimony on other testing, except in rebuttal



# *Commercial Laboratory Certifying Scientists*

Certifying Scientists ensure proper forensic documentation for all aspects of negative and non-negative results reported by a laboratory.

- Must have understanding of testing principles for testing reviewed
- QC requirements for screening and confirmatory tests
- Corrective action procedures
- Chain of custody procedures

# *Commercial Laboratory Certifying Scientists*

Certifying Scientists review data and release results after confirming good documentation and QC

- May only have expertise in limited review, i.e., negative CS
- May be well-qualified in many, but not all, testing methodologies
- Must be knowledgeable in QC requirements and procedures, but may not have expertise in QC principles and QA program
- Are not “chain of custody” witnesses, i.e., do not touch a specimen or aliquot itself

# *Commercial laboratory Technician*

Commercial laboratory technicians document chain of custody, prepare, move, handle, place sample aliquots on instruments, and discard aliquots.

- Understand test principles for tests performed
- Understand quality control practices
- Maintain chain of custody
- Detect and report aberrant control results
- Proper remedial measures for results outside of control limits

# *Commercial Laboratory Technician*

- Commercial testing is compartmentalized, and often anonymous
- Technicians will not usually recall interaction with a specific specimen
- Technicians often responsible for only a discrete task or activity in testing process
- Are not versed in all testing principles outside of job duties

# *Confrontation Clause: Melendez-Diaz*

In a 2009 criminal opinion, the Supreme Court ruled that three sworn laboratory certificates of analysis finding that a unknown substance was cocaine were testimony for purposes of the Sixth Amendment's Confrontation clause, and the defendant was therefore entitled to confront the analysts who signed the certificates.

# *Melendez-Diaz*

- ❑ Holding: The affiants reporting the results of the forensic analysis were witnesses and subject to the defendant's right of confrontation in criminal proceedings.
- ❑ Dicta: However, in Footnote 1, the Supreme Court specifically stated that it does not hold that every individual in the chain of custody must appear in person.

# *Bullcoming*

In 2011, the U.S. Supreme Court revisited the issue raised in *Melendez-Diaz*. That issue was whether any laboratory technician could testify in criminal proceedings regarding certified test results or whether it had to be the person who originally signed off on the report or certification.

# *Bullcoming*

- ❑ Donald Bullcoming was arrested for a DWI.
- ❑ Principle evidence against him was a forensic lab report containing a testimonial certification by an analyst certifying that Bullcoming's blood-alcohol concentration was above the threshold for an aggravated DWI.
- ❑ At trial, the analyst who signed the certification in the test report was unavailable.
- ❑ The prosecution instead called another analyst who did not participate or observe Bullcoming's test, but was familiar with the lab's testing procedures.



# *Bullcoming*

- ❑ The prosecution sought to introduce the report as a business record. Bullcoming's counsel objected on the grounds that the report was testimony.
- ❑ The trial court overruled this objection and the report was entered into evidence. The jury convicted Bullcoming of aggravated DWI. The Court of Appeals and the New Mexico Supreme Court upheld the conviction.

# *Bullcoming*

- ❑ The U.S. Supreme Court reversed the New Mexico Supreme Court's ruling and remanded the case for further proceedings.
- ❑ The Court held that the accused had the right to confront the analyst who made the testimonial certification in the forensic laboratory report.
- ❑ The Court found that an analyst's certification prepared in connection with a criminal investigation was testimonial and therefore falls under the Confrontation Clause.

# *Bullcoming: Conclusion*

- ❑ The Court was not persuaded by the fact that a certifying analyst would likely not recall a particular test or not make the best witness.
- ❑ It is no longer sufficient for a laboratory director or responsible person to provide testimony in place of a certifying scientist who released a test result, or presumably, the individuals in the chain of custody.

# *DEFENDING YOUR TEST*

**II.**

**Understanding your role**

**STAY IN YOUR LANE**

# Your Job Is To Stay In Your Lane

- As a witness, you can be asked anything
- Depending on your role, you likely should not answer any question
- More times than not, attempting to explain matters unrelated to your own interaction with a specimen or test will de-rail the forensic defensibility of the test

# *Role Playing*

**Specially-retained Expert**

# *Specially-retained Expert*

## **Pitfalls:**

- **Going outside of your expertise**
- **Not understanding the testing principles at issue**
- **Not having a firm grasp of client SOP and laboratory procedures**
- **Not knowing the literature**
- **Lack of preparation**

# *Role Playing*

**Crime Lab Examiner**



# *Crime Lab Examiner*

## **Pitfalls:**

- **Failing to address all facts.**
- **Dismissing other science and or findings without sufficient basis or explanation.**
- **Failing to ensure good forensic practice by all laboratory personnel.**

# *Role Playing*

*Crime Lab Technician*

# *Crime Lab Technician*

## **Pitfalls:**

- **May not be appropriate to testify as to entire testing process.**
- **May not be knowledgeable as to all methodologies used to produce result.**
- **May not be able to speak to specific SOPs used in laboratory.**
- **May be limited to “chain of custody,” or personal knowledge.**

# *Role Playing*

***Commercial Laboratory or Scientific  
Directors***

# *Commercial Laboratory or Scientific Directors*

## **Pitfalls:**

- May be attacked on basis did not perform testing at issue.
- Must rely on knowledge of laboratory methodologies and procedures at issue.
- Limited to review of documents.
  - MUST review all of laboratory's documentation regarding specimen before testifying.
- Offering testimony regarding other testing, or volunteering "expert" opinions in areas outside of actual expertise.

# *Role Playing*

***Commercial Laboratory Certifying  
Scientists***

# *Commercial Laboratory Certifying Scientists*

## **Pitfalls:**

- Limited to actual review performed on specimen in question.
- May not be knowledgeable of all laboratory SOPs or practices.
  - Should be knowledgeable of all SOPs or practices relevant to specimen at issue.
- May have limited knowledge of testing methodologies.
- Would not have performed testing—must rely on review of documents.

# *Role Playing*

*Commercial Laboratory Technician*



# *Commercial Laboratory Technician*

## Pitfalls:

- Knowledge limited to own role in testing or chain of custody.
- Rarely remembers interaction with a single specimen or aliquot.
  - Technician testimony will most often come in explanations of standard practice or procedure.
- Trying to guess an answer or offer explanations on subjects not the responsibility of the technician.

# *DEFENDING YOUR TEST*

**III.**

**Be Prepared For Hostile  
Examination**

# Selecting a Witness

- Who is the best witness to testify?
  - Who is deciding?
- What is the purpose of the testimony?
  - An overview of testing?
  - Is an ultimate opinion going to be asked for?
  - Is personal knowledge, i.e., a “confrontation” sought?
- Is a fact witness, *i.e.*, personal knowledge sought?

# Selecting a Witness

- **Melendez-Diaz**
  - Right to confrontation
  - Examination of all persons in chain of custody
- **Commercial laboratory v. crime lab**
  - Commercial forensic drug testing not designed for individual examination of each person in chain of custody
  - Procedure v. memory
- **Is a specially-retained expert an option?**
  - Experts are better at presenting “whole picture” testimony.

# *Selecting a Witness*

- Explaining the testing process or test result
  - Laboratory Director
  - Crime Lab Examiner
- Persons with Masters or Doctorate background, knowledgeable of all aspects of day-to-day testing

# *Selecting a Witness*

- An action or event explained by person who performed it.
  - Chain of custody witness
  - Laboratory technician
- Chain of custody witnesses, or “event” witness, should not testify on any subject witness did perform

# *Selecting a Witness*

- Chain of custody witnesses
  - Touched the specimen, or specimen aliquot
    - Sample preparation
    - Sample testing
  - Reviewed data prior to final release

# *Witness Preparation*

- **Overview or result witness**
  - **Must never testify without entire data file**
    - **Knowledge of specific test result and QC data vs. laboratory procedure**
    - **Both are true, but latter is not a statement regarding validity and scientific reliability of “these” results**



# *Witness Preparation*

- Chain of custody witnesses
  - Must limit testimony to own specific or discrete role in testing process
  - Must review specific testing and chain of custody documents
  - Must be knowledgeable of all procedures for which witness is responsible

# *Tips for a successful examination*

## NUMBER ONE:

**IT IS OKAY IF YOU DO NOT KNOW.**

- If you do not remember, say so.
- Do not guess if you do not know the answer to a question.

# *Tips for a successful examination*

## NUMBER TWO:

### **BE TRUTHFUL.**

- Acknowledge an error, if one exists.
- Do not attempt to provide more information than you actually have.

# *Tips for a successful examination*

## NUMBER THREE:

### **UNDERSTAND THE QUESTION.**

- **Listen.** Do not assume you understand what is being asked for—many attorneys do not understand forensic testing
- **Look.** If presented with a document—review the document completely and ask for the question to be repeated.

# *Tips for a successful examination*

## NUMBER FOUR:

### **AVOID HUBRIS.**

- Answer only the question asked. Your depth of knowledge is relevant only the testing at issue.
- Do not attempt to be helpful by offering you “guess” is being sought.

# *Tips for a successful examination*

## NUMBER FIVE:

### **IT IS CALLED HOSTILE EXAMINATION FOR A REASON.**

- Address your anxiety before the examination. Be polite.
- On cross-examination, it is the job of “aligned” counsel to obtain your “direct” testimony that explains incomplete cross-examination testimony.

# *Cross Examination Tactics to Defend Against*

- A “yes” or “no” question requires a “yes” or “no” response.
  - The simplest correction here is for “aligned” counsel to clarify the premise of the question.
  - However, an experienced witness can often point out the problem with a question in an answer:

“If one accepts the factual premise of your question, then my answer is “yes,” but those are not the facts as I understand them here.

# *Cross Examination Tactics to Defend Against*

- **Confrontation by expert witness testimony.**
  - Relies upon different testing standards.
  - Relies upon separate testing.
  - Supposed expert has no expertise in forensic standards at issue.



# *Cross Examination Tactics to Defend Against*

- Reliance on inapplicable or non-peer reviewed scientific literature.
  - Study of participants with certain health condition v. general population.
- Reliance on inapplicable laboratory standards.
  - Blood creatinine in blood v. urine.
  - Manufacturing laboratories v. clinical laboratories v. forensic laboratories .

# QUESTIONS