DAUBERT OPPORTUNITIES

THE DUTY TO CORRECT & NOTIFY

BRADY/RULE 3.8 ORDER

CONVICTION INTEGRITY

WISCONSIN PUBLIC DEFENDER
CONFERENCE
NOVEMBER 2015

BARRY C. SCHECK
CO-DIRECTOR
INNOCENCE PROJECT
DAUBERT OPPORTUNITIES
“Strengthening Forensic Science in the United States: A Path Forward” (2009)
“With the exception of nuclear DNA analysis... no forensic method has been rigorously shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source.”
“The bottom line is simple: In a number of forensic science disciplines, forensic science professionals have yet to establish either the validity of their approach or the accuracy of their conclusions . . . .”
DISCIPLINES TO ATTACK

✗ PATTERN EVIDENCE
  ➕ TOOLMARKS ON BULLETS
    ✗ “THIS BULLET COMES FROM THIS GUN TO THE EXCLUSION OF ALL GUNS IN THE UNIVERSE AND I HAVE A ZERO RATE
  ➕ FINGERPRINTS
    ✗ THIS LATENT COMES FROM THIS DEFENDANT AND “PRACTICAL IMPOSSIBILITY” FROM ANYONE ELSE
  ➕ BITEMARKS
  ➕ HAIR COMPARISONS

✗ ARSON

✗ DIGITAL
NATIONAL COMMISSION ON FORENSIC SCIENCE

National Institute of Standards and Technology
U.S. Department of Commerce
Legal Resource Committee

July 16, 2014: NIST Names Members of Forensic Science Resource Committees

The Legal Resource Committee provides guidance throughout the OSAC about the legal ramifications of forensic standards under development and provides input on the presentation of forensic science results to the legal system.

Legal Resource Committee roles and responsibilities

Members

- Christopher J. Plourd, Superior Court Judge, State of California, Committee Chair
- Jennifer Friedman, Deputy Public Defender, Los Angeles County
- Christine Funk, General Counsel, Department of Forensic Sciences, Washington, D.C. (local government)
- Lynn Robitaille Garcia, General Counsel, Texas Forensic Science Commission (state government)
- Ted R. Hunt, Chief Trial Attorney and DNA Cold Case Project Director, Jackson County Prosecutor’s Office, Kansas City, MO
- John Kacavas, United States Attorney, U.S. Department of Justice
- David H. Kaye, Professor, Graduate Faculty, Forensic Science Program, Pennsylvania State University
- David A. Moran, Professor of Law, University of Michigan Law School
- Henry R. Reeve, Denver District Attorney’s Office
- Ronald S. Reinstein, Judge and Judicial Consultant, Arizona Supreme Court
- Barry Scheck, Professor, Cardozo School of Law, Yeshiva University; Co-Director, Innocence Project; Commissioner, NY Commission on Forensic Science; Neufeld, Scheck, & Brustin, LLC

http://www.nist.gov/forensics/osac/lrf.cfm
Statisticians Well-Represented on Forensic Science Reform Oversight Body

By Steve Pierson posted Fri, Nov 07, 2014 12:43 PM

NIST this week announced the final appointments to the the Organization of Scientific Area Committees (OSAC), the NIST-administered body to strengthen forensic science through the identification and development of standards and guidelines. OSAC is composed of an oversight board, three resources committees, five committees, 21 subcommittees (see schematic below) and totals several hundred appointments of forensic science practitioners and administrators, researchers, professional association representatives, and industry representatives.

Recognizing the importance of statistics to bolstering the forensic sciences, statisticians are well represented in OSAC. This summer, Karen Kafadar, Hal Stern, Bruce Weir, and William Guthrie were appointed, respectively the Forensic Science Standards Board, the Physics/Pattern Committee, the Biology/DNA Committee, and the Chemistry/Instrumental Analysis Committee. On November 3, members of most of the subcommittees were announced and the following statisticians were among the appointees:

- Sandy Zabel appointed to the DNA Analysis 2 subcommittee
- Lee Ann Haeck appointed to Wildlife Forensics subcommittee
- Martin Wells appointed to Geologic Materials subcommittee
- Alida Carletti appointed to Materials (Trace) subcommittee
- Max Morris appointed to Firearms/Toolmarks subcommittee
- Chris Saunders appointed to Questioned Documents subcommittee
- Haoran Wang appointed to Bloodstain and Pattern Analysis subcommittee
- Hari Iyer appointed to Friction Ridge subcommittee
- Connie Borrani appointed to Toxicology subcommittee
- Mark Johnson appointed to Fire Scenes and Explosives subcommittee
- James Curran invited as guest to DNA Analysis I subcommittee

Statisticians have also been appointed to other important forensic science panels. In January, Stephen Fienberg was named to the newly established National Committee on Forensic Science (NCFS), a federal committee jointly overseen by NIST and the U.S. Department of Justice. Following her appointment this fall to the Forensic Science Standards Board, Kafadar was named to the NCFS Scientific Inquiry and Research Subcommittee. In October, Stern was appointed to the advisory panel for the AAAS project Forensic Science Assessments: A Quality and Cost Analysis.
TERMS

- Validity, reliability, precision, repeatability, consistency, (“well determined error probabilities” – sensitivity, specificity), PPV, NPV, uncertainties in estimates.

TEST PROCEDURE

- Are analysis, protocols, data interpretation, reporting guidelines, method validation, and sampling adequately addressed?

ESTIMATING UNCERTAINTY

- Does the document provide guidance on estimating uncertainty?
Limitations

- Does the document clearly state any known limitations to either the method itself or the interpretation of the resulting findings and conclusions? Scientific community?

- Is this a generally accepted practice in the relevant forensic community?

- Is this a generally accepted practice in the general scientific community?

- Describe how it represents consensus of opinion of knowledgeable researchers, statisticians, measurement scientists, etc.
Have studies regarding the validation of the test procedure been conducted and results reported?
  + If yes, include references

Is the document fit for purpose?
  + Explain how the document does or does not meet the expectations of the target audience. This audience may include the document user or the consumer of the document results.
PRE-TRIAL CHALLENGES – PATTERN EVIDENCE

- PATTERN EVIDENCE IS STATISTICAL, THEREFORE...

  + WITHOUT BASIC AND APPLIED RESEARCH
  + WITHOUT MEASUREMENT ERROR
  + WITHOUT ERROR RATES
  + WITHOUT DATABASES

...CANNOT PROVIDE VALIDATED AND ACCURATE STATEMENTS ABOUT PROBATIVE VALUE OF PATTERN EVIDENCE ASSOCIATION

OSAC PROCESS, NIST WORKING ON STATISTICAL STATEMENTS FOR FINGERPRINTS AND BALLISTICS
PRE-TRIAL CHALLENGES – PATTERN EVIDENCE

- HUGE ADVANTAGE OVER EARLY POST-NAS CHALLENGES
- CALL STATISTICIANS AS EXPERTS!!!!!!!
- ATTACK ASSOCIATION:
  + IF CANNOT REPRODUCE WHAT ANALYST SAW SO JURY CAN SEE – EVIDENCE EXCLUDED
  + WHAT IS MEASUREMENT ERROR
- PROBATIVE VALUE OF ASSOCIATION
  + “REASONABLE DEGREE OF “FINGERPRINT” OR “BALLISTIC” CERTAINTY
  + NOT UNIQUE, CANNOT EXCLUDE, POOL OF UNKNOWN SIZE
  + RESEARCH UNDERWAY
DUTY TO CORRECT AND INFORM
Forensic Scientists have **DUTY TO CORRECT AND INFORM**

- Appropriately inform affected recipients (either directly or through proper management channels) of all nonconformities or breaches of law or ethical standards that adversely affects a previously issued report or testimony and encourage others to inform all relevant stakeholders, including affected professional and legal parties, victim(s) and defendant(s).

- **WILL INCLUDE CORRECTION OF OUTDATED, ERRONEOUS SCIENCE**
  - ARSON, CBLA, BITEMARKS, DNA MIXTURE INTERPRETATION

- **CORRECTION OF TESTIMONY BEYOND LIMITS OF SCIENCE**
  - HAIR MICROSCOPY, SEROLOGY CASES

- **CORRECTION OF LAB ERROR**
  - LAB SCANDALS – DRUG MISIDENTIFICATION, DRY LABBING
DUTY TO CORRECT OR MAKE WISCONSIN MORE LIKE TEXAS

- DUTY TO CORRECT AND NOTIFY
- ARSON – NFPA 921 (1992)
  - WILLINGHAM EXECUTION (2004)
  - TEXAS FORENSIC SCIENCE COMMISION FORMED TOOK FIRST COMPLAINT RE ARSON (2004)
  - “DUTY TO CORRECT AND NOTIFY” RECOGNIZED, REPORT ISSUED (2007)
  - TEXAS FIREMARSHALL ARSON REVIEW/IPOT, MULTI-STAKE HOLDER
CBLA FOUND TO BE INACCURATE

In 2004, the National Research Council of the National Academy of Sciences concluded an extensive review of CBLA and challenged its two main premises:

1. Analytically indistinguishable bullets do not necessarily come from the same melt.
   - Though it is accurate to say that indistinguishable bullets likely came from the same source, this testimony is potentially misleading.
   - One source can contain 12,000 to 35 million bullets.
   - Testimony regarding bullets from the same source should also be limited by acknowledging the possibility that two bullets from different sources could also be compositionally indistinguishable.

2. Analytically indistinguishable bullets do not necessarily come from the same box.
   - The available CBLA data does not support any inference that a bullet is likely to have come from a particular box.
   - Once a melt is cut into bullets, the bullets are stored in a variety of ways depending on the manufacturer before ultimately ending up in boxes. A number of compositionally diverse bullets are stored and boxed together. One box can contain a number of different bullet compositions.

Forensic Analysis, Weighing Bullet Lead Evidence, at 6-7; 107
DUTY TO CORRECT - CBLA

- In light of the NRC study, the FBI officially discontinues use of CBLA in 2004.

- A team composed of the Innocence Project, private attorneys, and journalists from 60 Minutes and The Washington Post identified 250 cases in which CBLA testimony was offered.

- In 2007 the FBI accepts duty to correct and notify works in cooperation with multiple stakeholders – DOJ, Innocence Project, NACDL.
A task force worked with the FBI to identify those cases where the introduction of CBLA evidence may have resulted in a wrongful conviction.

- **The task force included:**
  - Members of the Innocence Network
  - Members of the National Association of Criminal Defense Lawyers
  - Winston & Strawn attorneys
After reviewing the CBLA testimony, the FBI sent 1 of 4 Letters:

+ **“Appropriate”**

  “After reviewing the testimony of the FBI’s examiner, it is the opinion of the FBI Laboratory that the examiner properly testified to the results of their examination.”

+ **“Bullet-to-box”**

  “…it is the opinion of the Federal Bureau of Investigation Laboratory that the examiner stated or implied that the evidentiary specimen(s) could be associated to a single box of ammunition. This type of testimony exceeds the limits of science and cannot be supported by the FBI.”

+ **“Overstated significance”**

  “…it is the opinion of the FBI Laboratory that the examiner overstated the significance of the results of the examinations conducted, possibly leading the jury to misunderstand the probative value of the evidence.”

+ **“Lacked context”**

  “…it is the opinion of the FBI Laboratory that the examiner properly testified that the examination revealed that the evidentiary specimen(s) probably came from the same melt of lead. However, the reviewers felt that the examiner did not provide sufficient information to the jury to allow them to understand the number of bullets made from the melt. Without having evidence concerning the approximate number of bullets produced from a single melt, the jury could have misunderstood the probative value of this evidence.”
2009 – National Academy of Sciences Report

- Declares hair microscopy to be “highly unreliable”
  - No statistics re: frequency of particular hair characteristics in population, no uniform standards for declaring a “match”

Kirk Odom

- Convicted in 1982 of rape – exonerated 2012

Santae Tribble

- Convicted in 1979 of murder – exonerated 2012
  - Hair actually came from dog, not human

Donald Gates

POST-CONVICTION – HAIR REVIEW

- FBI-DOJ ACCEPT DUTY TO CORRECT & NOTIFY
- WAIVER OF PROCEDURAL BARS BY DOJ
  + FREE DNA TESTS IF HAIR FOUND
- MULTI-STAKEHOLDER TEAM
  + IP, NACDL, FBI, DOJ
- STATE REVIEWS – TEXAS, NY, CONN., MASS.
- MUST DO ONE IN WISCONSIN
The parties define three general error types:

**Error Type 1:** The examiner stated or implied that the evidentiary hair could be associated with a specific individual to the exclusion of all others.

**Error Type 2:** The examiner assigned to the positive association a statistical weight or probability or provided a likelihood that the questioned hair originated from a particular source that could lead the jury to believe that valid statistical weight can be assigned to a microscopic hair association.

**Error Type 3:** The examiner cites the number of cases or hair analyses worked in the lab and the number of samples from different individuals that could not be distinguished from one another as a predictive value to bolster the conclusion that a hair belongs to a specific individual.
Using these criteria on the first 268 transcripts or reports:

- More than 90% of trial transcripts analyzed by FBI contained scientifically erroneous statements.
- 26 of 28 FBI examiners provided testimony that contained statements that exceeded the limits of the science.
- 74 of the 330 wrongful convictions overturned by DNA evidence involved faulty hair evidence.
STATE OF TEXAS VS. STEVEN MARK CHANEY (1987)
Dentist Jim Hales told a jury that there was a “1 to a million” chance that someone other than Chaney made the bite marks.
Article 11.073 Claim Because the Bite Mark Evidence Entirely Discredited

✗ Since 2000, at least 24 people have been wrongfully convicted or indicted on the basis of bite mark evidence – including at least 2 in Texas¹

✗ There is now consensus in the scientific community – however defined – that the bite mark testimony in Mr. Chaney’s case has no scientific basis
  + See National Academy of Science’s 2009 Report on Bite Mark Evidence²
  + Amicus Curiae Brief of Behalf of 38 Leading Scientists³
  + American Board of Forensic Odontology (ABFO) Change in Guidelines⁴
  + Recent, Peer-Reviewed Scientific Research⁵

✗ Today, no reputable scientist, or scientific entity would endorse the testimony used to convict Mr. Chaney

✗ *Dont necessarily need 11.073 statute have Audrey Edmunds Case*
Texas Forensic Science Commission

- REVIEWING BITE MARKS
- LIKELY TO FIND UNRELIABLE AND UNDERTAKE AUDIT
The Scientific Working Group on DNA Analysis Methods (SWGDAM), better known by its acronym of SWGDAM, is a group of approximately 50 scientists representing federal, state, and local forensic DNA laboratories in the United States and Canada. During meetings, which are held twice a year, subcommittees discuss topics of interest to the forensic DNA community and often develop documents to provide direction and guidance for the community. A mixture interpretation subcommittee was formed in January 2007 and worked for several years to provide a guidance document on autosomal short tandem repeat (STR). This document was presented to the full SWGDAM group and received approval in January 2010.

This document provides guidelines for the interpretation of DNA typing results from short tandem repeats (STR) and supersedes the Scientific Working Group on DNA Analysis Methods (SWGDAM) Short Tandem Repeat (STR) Interpretation Guidelines (2000). The revised guidelines are not intended to be applied retroactively. Guidance is provided for forensic casework analyses on the identification and application of thresholds for allele detection and interpretation, and appropriate statistical approaches to the interpretation of autosomal STRs with further guidance on mixture interpretation. Laboratories are encouraged to review their standard operating procedures and validation data in light of these guidelines and to update their procedures as needed. It is anticipated that these guidelines will evolve further as future technologies emerge. Some aspects of these guidelines may be applicable to low level DNA samples. However, this document is not intended to address the interpretation of analytical results from enhanced low template DNA techniques.
DNA MIXTURES

- Texas Forensic Science Commission
- SWGDAM Mixture Guidelines
  - Prospective Only
- Non-starter Legally
- Re-calculation of Mixtures
  - 1 in 10 Million + 1 in 18
  - Inconclusive
PROSECUTORIAL MISCONDUCT

20% of Wrongful Convictions

25 years

Michael Morton
Texas
Getting Life
An Innocent Man's 25-Year Journey from Prison to Peace
Michael Morton
I cost an innocent man 25 years of his life, and I feel terrible. That is why I REFUSE TO RESIGN!
BRADY/ETHICAL RULE ORDER

- MICHAEL MORTON v. TED STEVENS
  - MM: PROSECUTOR GOES TO JAIL – CONTEMPT
  - TS: NO PUNISHMENT
- ORDER IS KEY
- ORDER WILL DETER
- ORDER CAN BE ISSUED BY ANY FEDERAL OR STATE COURT TOMORROW (EXCEPT CALIFORNIA).
BRADY/ETHICAL RULE ORDER (BASED ON 3.8(D))

- STANDING ORDER
  - LOOK IN YOUR FILE
  - LOOK IN {HOMICIDE, DRUG, ETC.) FILE
  - MAKE “TIMELY DISCLOSURE OF ALL INFORMATION THAT TENDS TO NEGATE GUILT OR MITIGATE THE OFFENSE”
  - IF DON’T WANT TO MAKE TIMELY DISCLOSURE SEEK A PROTECTIVE ORDER
  - ONLY DELIBERATE, WILFUL VIOLATIONS PUNISHABLE BY CONTEMPT!
CONVICTION INTEGRITY
CONVICTION INTEGRITY UNITS

“FASHION ACCESSORY” FOR A DA’S OFFICE OR SERIOUS ENTERPRISE?

22 CIU PROCLAIMED

QUATTRONE/IP SURVEY COMING
GOOD UNITS

- BROOKLYN
- DALLAS
- HOUSTON
- FORT WORTH
- SANTA CLARA
- LAKE COUNTY, ILLINOIS
CIU BEST PRACTICES

- DEFENSE/IP INVOLVEMENT
  + OPPORTUNITY TO DISCUSS BAD EVIDENCE
- DISCLOSURE OF DA FILE
- DISCLOSURE OF DEFENSE EVIDENCE OF INNOCENCE/DP VIOLATION
  + NOT ATTORNEY CLIENT COMMUNICATIONS
- AGREEMENTS NOT TO DISCLOSE TO PRESS EXCEPT WITH REASONABLE NOTICE
- JOINT, “INQUISITORIAL” INVESTIGATIONS
THREE POSSIBLE OUTCOMES

- AGREE DP VIOLATION OR INNOCENCE CLAIM SUFFICIENT TO VACATE
  - DOESN’T MEAN AGREEMENT NOT TO RE-TRY

- AGREE NO DP VIOLATION OR INNOCENCE CLAIM

- AGREE TO DISAGREE AND HAVE JUDGE RESOLVE, *BUT WITH A BETTER RECORD*
LIMITS

- ERROR / MISCONDUCT DISTINCTION
- SERIOUS EVIDENCE OR ALLEGATION OF PROSECUTOR MISCONDUCT SHOULD TRIGGER INDEPENDENT INVESTIGATION BY ANOTHER ENTITY
ORGANIZATION

- LARGE OFFICE
  - RELATIONSHIP TO TRAINING, AUDITS & RCAs, STUDY OF NEAR MISSES
  - RE-INVESTIGATION SEPARATE
  - INSULATION & INDEPENDENCE
  - USE OF OUTSIDE ADVISOR, CONSULTANTS, DECISIONMAKERS

- SMALL OFFICES
WHY NOT HAVE CCRC, “INNOCENCE COMMISSIONS,” VARIANTS ON ART. III COURTS?

+ NORTH CAROLINA INNOCENCE INQUIRY COMMISSION

NOT EASY FIT FOR AMERICAN LEGAL CULTURE

LOCUS OF DECISION-MAKING IN PLEA BARGAINING, MANDATORY SENTENCE ERA SHIFTED FROM JUDGES TO PROSECUTORS