THE EXPERT WITNESS: FOUNDATION, PRINCIPLES, APPLICATION AND ETHICS

Gil Sapir, JD, MSc

Forensic Science Partnership Lecture Program
Dennis Hilliard, MS and Jimmie Oxley, PhD
University of Rhode Island
December 9, 2022
Kingston, Rhode Island

Gil I. Sapir, JD, MSc
Forensic Science Consultant & Attorney
PO Box 6950
Chicago, Ill. 60680
(773) 650-1326

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The author acknowledges the contributions of Douglas A. Ridolfi, Buffalo State College, Chemistry Dept, Rm 451, 1300 Elmwood Avenue, Buffalo, NY 14222

ABSTRACT

THE EXPERT WITNESS: FOUNDATION, PRINCIPLES, APPLICATION AND ETHICS

Today almost all scientific or professional disciplines provide scientific or technological evidence in court. This evidence is known as expert evidence. It encompasses both testimonial and non-testimonial evidence, such as demonstrative evidence presented by experts. The testimony offered by specialists is frequently couched in terms of opinions, conclusions, and evaluations, which themselves are not scientifically measurable. Forensic science is used to convict the guilty and protect or exonerate the innocent. It is the most persuasive evidence.

The presentation provides an overview of fundamental concepts, application, principles and ethics pertaining to scientific evidence and expert evidence. It is intended to provide the constructs necessary for understanding the legal aspects of forensic science and being a successful consulting and testimonial witness. The synopsis is applicable to both the novice and experienced occupational expert witness.

Ethics and scientific testimony are inextricably intertwined due to science being neutral and based upon facts. Intellectual honesty is an issue in scientific evidence. An expert witness can effect, affect and infect the evidence. The integrity of scientific evidence can affect the outcome of judicial proceedings. An expert witness's testimony is frequently prejudiced by ideological and personal beliefs. There are no degrees of honesty.

The failure to constructively address credentialing and competency of experts, their qualifications, standardization of analysis and dilemmas of only answering questions asked (ie."don't ask, don't tell" examination) are routinely neglected. Violators of ethical conduct are seldom held accountable for their reprehensible conduct.

Gil Sapir - Biographical Statement

As an attorney and forensic science consultant in Chicago, Illinois, Mr. Sapir's occupation encompasses the preparation and examination of scientific evidence and he testifies on scientific matters in court. His work includes civil litigation and criminal defense representation at both the state and federal levels. He regularly lectures locally and nationally to law schools and attorneys on various topics in forensic sciences, including the role of expert witnesses and the examination and use of scientific evidence in court. Mr. Sapir has published articles and book chapters concerning forensic science and breath alcohol testing, and is a former editorial advisory board member of the DWI Journal Science and Law. He received the Harold A. Feder Award from the American Academy of Forensic Sciences in 2000 for Excellence in Scientific Jurisprudence. As an attorney, he is admitted to practice law before the United States Supreme Court, U.S. District Court of Illinois and in Illinois, Texas, New Mexico and Colorado. Mr. Sapir is a member of the Illinois Capital Trial Bar, a Cook County Circuit Court arbitrator and former assistant public defender. A graduate of IIT/Chicago-Kent College of Law, Mr. Sapir has a master's degree in criminalistics from the University of Illinois-Chicago, a degree in microbiology and biology from Colorado State University, in addition to having studied at Lancaster and Oxford Universities in England. He attended the Clinic for Criminal Defense Attorneys at Northwestern University Law School and the National Criminal Defense College at Mercer Law School. Mr. Sapir’s professional memberships include the American Academy of Forensic Sciences, American Association for Advancement of Science and National Association of Criminal Defense Lawyers.

Gil Sapir, JD, MSc
PO Box 6950, Chicago, Ill. 60680
(773) 650-1326

7/2016

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Introduction

There are no degrees of honesty.

"Forensic science is the application of scientific principles and technological practices to the purposes of justice in the study and resolution of criminal, civil and regulatory issues."

American Academy of Forensic Sciences, 2007 Membership Directory and Bylaws, page v.

Forensic Science - basic definition. The application of known scientific and laboratory techniques to solving crime and resolution of issues.

Forensic science is used to convict the guilty and protect or exonerate the innocent.

"In this age of science we must build legal foundations that are sound in science as well as in law." Justice Stephen Breyer, Reference Manual on Scientific Evidence, 2nd ed., p.4-8 (2000)

Some fields of expertise are totally independent of the law, yet called upon with regularity (e.g. physicians, accountants, statisticians, epidemiologists, psychologists) while others exist solely to provide expert evidence for litigation (eg. forensic scientists). The differences between these fields provide differing opinions and perspectives of ethics in their field and work settings. (Modern Scientific Evidence: The Law and Science of Expert Testimony, David L. Faigman, David H. Kaye, Michael J. Saks, Joseph Sanders, Edward K. Cheng, vol.1, p.154, 2006-2007 Ed., Thomson/West 2006)

While some expert witnesses belong to professions that have an established code of ethics (accountants, psychologists, physicians), many experts come from professions that are not self-governing with a uniform code of conduct (software developers, musicians, zoologists). Even where professional associations have established ethical guidelines for conducting

investigations, forming opinions and writing reports, very few explain how the ethical boundaries imposed on judges and lawyers may bear on the performance of their role in the legal system regardless of whether they are employed as a retained forensic expert for one of the parties or as a court-appointed expert. Expert Witnesses: Ethics and Professionalism, 12 Geo. J. Legal Ethics 465, 466, fn.56 (Spring 1999); Kenneth C. v. Delonda R., 10 Misc.3d 1070(A), 814 N.Y.S.2d 562 (Table) N.Y.Fam.Ct., 2006.

It is relatively easy to convict an innocent person. Practically, once an innocent person is convicted, it is virtually impossible to get out of prison. Radley Balko and Tucker Carrington, The Cadaver King and The Country Dentist, p.ix,(Foreward by John Grisham) Public Affairs, NY, NY (2018)

Sect.1 Reasons For Increased Use Of Scientific Evidence

A. Advances in scientific technology

B. Increased value of physical evidence

C. Increased crime rate

D. United States Supreme Court decisions enhancing rights of people, therefore greater reliance on scientific evidence and investigative techniques.

Sect.2 Why Question Laboratory Test Results / Expert Witness Opinion

Forensic Science is a tool of the adversarial justice system, not a product of the scientific community.

A vast majority of cases are decided by forensic science.

When scientific testimony is offered, the proponent must prove the testimony is produced by valid, scientific techniques and that the process or system produced an accurate result.

Imwinkelried, Exculpatory Evidence, sect. 6-4, Michie Co., c.1990

The introduction of the laboratory test into evidence is merely a means to an end.

A. Integrity & Truth

"The right to search for truth implies also a duty; one must not conceal any part of what one has recognized to be true." Albert Einstein (1879-1955)

"The ultimate mission of the system upon which we rely to protect the liberty of the accused as well as the welfare of society is to ascertain the factual truth." Commonwealth of Northern Mariana Islands v. Bowie, 243 F3d 1109, 114 (9th Cir. 2001)

B. Accountability

- to society and scientific community

C. Aura of Mythical Infallibility

1. The reliability of scientific evidence is premised on its applicable theory and technique, with proper application of that scientific process to a specific occasion. P. Giannelli & E. Imwinkelried, Scientific Evidence, 3rd ed., 1-1, Lexis, c.1999

2. If the technique is either inappropriate or improperly applied, the results will be subject to charges of unreliability. P. Giannelli & E. Imwinkelried, Scientific Evidence, 3rd ed., 1-1, Lexis, c.1999

3. Specimens can be misplaced or misidentified, flaws can exist in the equipment used for the tests, and laboratory technicians can make mistakes in testing. Despite the procedures employed to safeguard the validity of drug testing, test results cannot be accepted uncritically as evidence. United States v. Van Horn, 26 M.J. 434, 439 (1988)

D. Penalty enhancement

1. Evidence strongly associated defendant to crime, less chance of plea bargain.

2. Laboratory reports generally lead to higher rates and terms of incarceration after defendant's prior conviction record.

Peterson & Leggett, The Evolution of Forensic Science: Progress amid the Pitfalls, 36 Stetson L.Rev., 621, 633-634 (2007)

E. Effect of Science and Technology

- historically profound and governing effect on society,(computers, electronics, disease, medicine etc.).

F. Truth Seeking Procedure Through Use of Facts

G. Medieval Confrontation

"For the two centuries past, the policy of the Anglo-American system of evidence has been to regard the necessity of testing by cross examination, the 'truth' for direct examination as a essential portion of the trial. Not even the abuses, the misunderstandings, and the puerilities which are so often found associated with cross examination have availed to nullify its value. It may be that in more than one sense, it takes the place in our system which torture occupied in the medieval system of the civilians. Nevertheless, it is beyond a doubt the greatest legal engine ever invented for the discovery of the truth." 5 Wigmore, Evidence, sect. 1367 (Chadborn Rev. 1794); L. Pozner and R. Dodd, Cross-Examination: Science and Techniques, 2nd ed.,p.1-3, LexisNexis / Matthew Binder, San Francisco, CA., 2004

H. Constitutional Confrontation

1. Our adversary system of justice encourages the accused to question the testimony of a witness, to "confront witnesses against him." U.S. Constitution, Amendment VI.

2. Scientific developments, societal sophistication and court decisions have elevated the obligation of counsel to litigate forensic science evidence. Brandon L. Garrett, "The Constitutional Regulation of Forensic Evidence," *Wash. & Lee L. Rev.*, 73 (2016):1147; Natalie Arvizu and Gil Sapir, "Constitutional Requirement To Litigate Scientific Evidence," *Forensic Magazine*, 14, no.3(2017):14

3. Litigator vs Trial Attorney

a) Difference between a litigator and trial attorney.

b) The lawyer may be a litigator but not a trial attorney.

c) Litigator engages in motion practice encompassing civil matters and legal action that may entail filing lawsuits and presenting preliminary matters in court. The lawsuits are usually settled before trial.

d) Trial attorney's practice specializes in trials

(bench and jury) most often in the criminal justice system and actually litigates the case to completion or verdict.

Ted Vosk and Gil Sapir, Metrology, Jury Voir Dire and Scientific Evidence in Litigation, IEEE Instrumentation & Measurement Magazine vol.24, no.1, p.10,12 Feb. 2021

3. The Sixth Amendment and Due Process Clause (5th and 14th Amendments) are emerging as sources of regulation to increase the reliability and validity of such evidence, while reducing flawed forensics, revealing wrongful convictions, publicizing crime laboratory scandals and exposing forms of "junk science" or "pseudo-science" (e.g. bite mark impressions, comparative bullet lead analysis, hair morphology evidence, voice print identification and Abel Assessment/Penile Plethysmograph). Junk science usually consists of flawed, unreliable, exaggerated, and sometimes fabricated testimony. Gil Sapir, Legal Aspects of Forensic Science, ch. 1, in "Forensic Science Handbook," vol.I, p.22-23, 3rd ed, R. Saferstein & A. Hall, ed., CRC Press Publ., c.2020

I. Must Prove Innocence Until Financially Ruined

"The essence of science is to ask an impertinent question, and you are on your way to a pertinent answer." Jacob Bronowski

Sect.3 Standards of Proof

A. Reasonable suspicion

1. Police officer reasonable articular facts for a stop.

B. Probable cause

1.Facts and circumstances that would lead ordinary person to believe.

C. Preponderance of the Evidence: Civil Cases

1. Greater weight and degree of credible evidence admitted in the case.

a) more probable/likely that not.
b) 51%

D. Clear & Convincing: Civil Cases

1. Child custody and involuntary commitment -- clearly convinced.

a) a firm belief or conviction as to the truth of the allegations sought to be established.

2. How much proof is required to have the state take your child away from you (considerable, a lot) - take children from parents.

3. 75-80%

E. Beyond a Reasonable Doubt: Criminal Cases

Commission of crime must be proved beyond a reasonable doubt, not based upon speculation, conjecture, ambiguities or maybes. Vachon v. New Hampshire, 414 US 4788, 94 S.Ct. 664, 38 L.Ed.2d 666 (1974)

1. Doubt can originate from:

a) conflicts in the evidence
b) from the evidence
c) a lack of the evidence

2. Our law permits jurors to believe all that a police officer says is true, all the evidence presented is true, and yet still have a reasonable doubt as to guilt of a person.

3. Requires eliminations of every reasonable doubt.

4. 94-96%

F. Scientific Standards & Guidelines

"Standards provide the foundation against which performance, reliability, and validity can be assessed. Adherence to standards reduces bias, improves consistency, and enhances the validity and reliability of results." Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences, p.201(7-7)

a) No one in legal world is essentially paying attention to standards. Standards people are not consulting attorneys, even though the law will refine it and apply it to forensic science.

Civil attorneys are litigators.
Criminal defense attorneys are trial attorneys.

Sect.4 Intellectual Honesty - Ethics and Morality

Ethics: n. The study of standards of conduct and moral judgement; moral philosophy. Webster's New World Dictionary of the American Language, 2nd College ed., c. 1968, World Pub. Co., NYC

Ethics is the explicit, philosophical reflection on moral beliefs and practices.

Ethics and scientific testimony are inextricably intertwined due to science being neutral and based upon facts. Intellectual honesty is an issue in scientific evidence. An expert witness can effect, affect and infect the evidence. The integrity of scientific evidence can affect the outcome of judicial proceedings. An expert witness's testimony is frequently prejudiced by ideological and personal beliefs.

A. Expert witness testimony is the most persuasive of all witnesses. Justice Blackmun, Daubert v. Merrell Dow Pharmaceuticals Inc., 509 U.S 579, 595 (1993)

1. Important due to proliferating use of experts

2. Special weight accorded by jurors to expert witness testimony.

   a. 70% of judges and attorneys believe jurors give more credibility to expert/scientific evidence than other types of evidence.

   b. 25% of jurors believe case would have been decided differently without forensic evidence.

   c. Jurors normally believe the case would have been decided differently without forensic evidence.

3. General societal norms are apply to forensic scientists without exception. Forensic scientists possess a power advantage over other people in society that must be moderated, restrained and not abused.

B. Scientific misconduct

1. Negligence - erroneous information without intent to defraud.

2. Deliberate dishonesty - premeditated deception including forged or fabricated data, falsified or invented results, plagiarism, piracy, moral turpitude, hoaxes and other malicious acts.

C. Character

1. respect, trustworthiness, responsibility, integrity, fairness, caring, citizenship.

D. Integrity: Cowardice & Courage

Judicial system is primarily used for moral, societal and equal justice. To Kill A Mockingbird, Haper Lee

1. Subtle and flagrant prejudices of judicial systems through social injustice, racial bigotry and systematic legal flaws and abuse - transcends demographics.

2. moral cowardice

- condemning a fundamentally innocent man to death for rape in a racist society

- perjured testimony is presented by the complainant afraid to admit her sexual desires.

- judicial incompetency and timidity prevail by avoiding moral obligations to nullify the jury's verdict.

3. courage & integrity

- accepting appointment to defend an unpopular client and confront social injustice

- defendant's dignified courage telling the truth yet his death sentence

- courage of conviction by recluse protects the lives of children.

P.D. Villarreal, The Courage of Lions and Turtles, Inside Counsel, p.28, April 2014

D. Mistakes - types

1. clerical/administrative (typographical, miscounts, filing, copying etc.)

2. analytical (bad chemicals, equipment, method etc.)

3. analyst (training, incompetence, accident, bias, misfeasance)

4. unexplained (no idea as to root cause)

5. malfeasance (unethical, criminal activity)

"Integrity is like oxygen. The higher you go, the less there is of it." Paul Dickson

Sect.5 Ethics

Ethics has its origins in ancient history, religion, law and social customs to formulate our conduct.

Learned basics of honesty, self-esteem, responsibility and other traits by age of 7.

A. Comprises issues fundamental to practical decision making, considered a branch of philosophy, is closely linked to fields of inquiry and occupied with values.

- Of or relating to moral action, motive or character; duties or conduct; containing precepts of morality. Blacks Law Dictionary, 1968 West Publishing Co.

- The discipline dealing with what is good and bad or right and wrong or with moral duty and obligation; A group of moral principles or set of values; the principles of conduct governing an individual or a profession; standard of behavior. Webster's 3rd International Dictionary, Miriam-Webster Publ., c. 2002

- The discipline concerned with what is morally good and bad, right and wrong. The term is applied to any system or theory of moral values or principles. The New Encyclopedia Britannica, 15th ed., vol.4. Encyclopedia Britannica, c.2005

B. Meaning of Ethics

1. Synonymous with morality.

2. Moral philosophy.

3. Codification and guideline of expected behavior in written media.

4. Derived from mutual agreement.

5. Shared expectations and aspirations.

6. A system of conduct.

7. Principles of honor or morality.

8. Rules or standards.

9. Expected behavior.

C. Fields/Sub-disciplines of Ethics

1. Metaethics: (analytical or critical ethics) It systematically studies questions and concepts relating to the nature of moral concepts and judgements.

2. Normative ethics: (moral philosophy) Establishing standards or norms for conduct and commonly associated general theories on how people should live. A guide to "right" conduct and employs terms as good, bad, right and wrong to express preferences. Theories that judge actions by consequences (telelogical). Another class of theories judges actions by their conformance to some formal rule or principle (deontological). Immanual Kant.

3. Applied ethics: application of normative theories to practical moral problems and ethical implications. (racial and sexual equality, human rights, abortion, euthanasia) Bioethics involves cooperative efforts of medicine, science, law and theologians. (in vitro fertilization, sperm banks, genetic engineering, cloning etc.)

The New Encyclopedia Britannica, 15th ed., vol.4. Encyclopedia Britannica, c. 2005

D. Unique to Disciplines

- Lack of defined uniform agreement.
- Disagreement on definition.
- Contain common elements.
- All strive for good and righteousness.
- All contain values.

"Ethics is a code of values which our choices and actions and determines the purpose and course of our lives."
Ayn Rand (1905-1982)

E. Morals/Morality

1. Morals/Morality

a. Relating to principles or considerations of right and wrong action or good and bad character; expressing or teaching a conception of right behavior; capable of being judged as good or evil or in terms of principles of right and wrong action; based upon inner convictions. Webster's 3rd International Dictionary, Miriam-Webster Publ., c. 2002

b. Modes of conduct which are taught and accepted that integrate principles of right and good.

c. Manner of character, proper behavior.

- authorative code of conduct concerning right and wrong. Morals are created and defined by (government, organization, society, philosophy, religion or individual's conscience).

d. An ideal code of conduct applied to alternatives in particular situations.

e. Synonymous with ethics.

f. Moral principles are generally recognized but not codified in writing and do not have same weight and authority by everyone.

"Art, like morality, consists of drawing a line somewhere."
G.K. Chesterton (1824-1936)

F. Unethical

Any action or conduct which violates professional standards, principles of ethical systems or values.

G. Non-ethical considerations

Strong human motivations predicated upon survival and well-being (health, security, love, wealth, self-esteem etc.) not notions of right or wrong. Used to justify disregarding ethics and strict morality.

- powerful impediments to ethical conduct.

- may cause conflicts of interest.

1. Basis for unethical considerations or conduct:

- retribution or vengeance.

- ambition, anger, bias, disgust, fatigue, fear, hatred, hunger, justice, laziness, lust, pain, prejudice, etc.

- affection, appreciation, comfort, credit, fame, health, love, power, praise, professional advancement, reputation, satisfaction, security, self-esteem shelter, sex, wealth etc.

H. Ethical Dilemma

Situations involving ethical choice of disregarding a powerful non-ethical consideration. (do right and lose a relationship, employment, status etc.) how to solve conflicting situations.

I. Ethical Conflict

When two ethnical principles demand opposite results in the same situation. Requires hierarchy or priority of ethical principles or examination through other ethical systems.

J. Ethical "Amorphic Areas"

Situations not part of existing ethical codes or analysis, if it even entails questions of ethics.

K. Ethical System

A specific formula for distinguishing right from wrong.

Tammy Northrup, Ethics and Forensic Science - W#21, Proceedings, vol. 15, p.38 (2009), American Academy of Forensic Sciences

L. Ethics vs. Morality

Ethics - written codification of specific rules for situations.

1. Morality - a system of determining right from wrong established through a recognized authority (government, organization, religion, society etc.)

M. Ethics is not Empirical (black or white)

N. Ethics is subjective

- Who makes the determination.
- What is moral, right, wrong and good.
- What values should be adopted.
- Why should these values be adopted.

Peter D. Barnett, Ethics in Forensic Science, chpt.1-3, CRC Publ., Boca Raton, Fla.,c.2001

O. Ethics Training - marginal at best

1. Law license generally requires formal training in ethics.

   - ethics course and National Ethics Examination requirements for licensing.

2. Accounting - required courses

3. Forensic scientists have:

   - little common professional background or training;

   - a university or college background with little, if any, ethics curriculum;

   - have at best, a cursory overview of their employer or department's code of conduct and ethics, if a code even exists;

   - if affiliated with police or governmental agency, code of ethics is generally designed for that agency and not specifically applicable to forensic science.

   Peter D. Barnett, Ethics in Forensic Science, chpt.1-3, CRC Publ., Boca Raton, Fla., c.2001

P. Ethics - Education

1. Not issue of right or wrong.

2. Need education focused on reasoning and decision making.

3. Traditional ethics is recall based

   - Theories, fact patterns, codes of professional conduct

- Workplace Skill development is missing

. Actual ethical dilemmas
. Ethical reasoning
. Recognition of bias
. Belief system
. Theories/principles of justice, privacy, common good related to forensic science practitioner.
. Laboratory practicals
. Falsification of results/evidence

4. Improved education on ethical reasoning and decision making.

Douglas A. Ridolfi, Teaching Ethics in Forensic Science: A Laboratory Approach, Proceedings, American Academy of Forensic Sciences, vol. 24, p.362 (2018)

"Over the past two hundred years the influence of intellectuals has grown steadily ...(and) has been a key factor in shaping the modern world. Whether primitive or sophisticated, their moral and ideological innovations were limited by the cannons of external authority and by the inheritance of tradition."

Paul Johnson, Intellectuals: From Marx and Tolstoy to Sartre and Chomsky, p.1, Harper& Row, c.1998

Sect.6 Related Ethical Principles

- Absolutism
- Utilitarianism
- Cognitive dissonance
- Principle of Incompleteness

Peter D. Barnett, Ethics in Forensic Science, chpt.2, CRC Publ., Boca Raton, Fla., c.2001

A. Absolutism

A system of no exception to ethical principles; commonly expressed in opinions concerning abortion, capital punishment, torture and war; Emmanuel Kant proponent of absolutists.

B. Utilitarianism

Accepts existence of ethical conflicts and dilemmas based on question analysis - which act will result in the greatest good for the greatest number of people." Balancing of greater and lesser goods for complex

ethical problems. Too often encounter, "ends justify the means" application without regard for reciprocity and absolutist principles.

C. Cognitive dissonance

Psychological phenomenon occurs when discrepancy between a person's beliefs or values and persuasive information which questions them. The psychological discomfort of conflict must be reduced or removed. The ability to alter values through rationalization thereby changing attitudes of behavior to either making the discrepancy less objectionable or acceptable. (eg. everyone has a price)

D. Principle of Incompleteness

Problems occur outside of established system. Expanding the system causes loss of integrity. All systems are incomplete. Accordingly, no single ethical system exists to encompass all problems, but it does not invalidate the system.

Tammy Northrup, Ethics and Forensic Science - W#21, Proceedings, vol. 15, p.38 (2009), American Academy of Forensic Sciences

"Nature never deceives us; it is always we who deceive ourselves."
Jean-Jacques Rousseau (1712-1778)

Sect.7 Profession / Professional

A calling requiring specialized knowledge and often long and intense preparation including instruction in skills and methods as well as in the scientific, historical, or scholarly principles underlying such skills and methods maintaining by force of organization concerted opinion, high standards of achievement and conduct, and committing its members to continued study and to a kind of work which has for its prime purpose the rendering of a public service (learned profession). Webster's 3rd International Dictionary, Miriam-Webster Publ., c.2002

A. Elements (profession)

- a calling requiring specialized knowledge

- often long intensive academic preparation;

- a principal calling vocation, or employment;

- the whole body of persons engaged in a calling.

B. Common characteristics

- occupation, vocation or high status career.

- usually long academic training, formal qualifications, membership in a professional or regulatory body.

- systematic knowledge of proficiency

- application of specialized knowledge in a subject, field or science to fee paying clientele.

- regulated admission through examination, competency, licensing authorities and enforcement of their codes of conduct and practice.

C. Values

intrinsic qualities of behavior, thought and character in society which produce desirable results and are emulated by others.

"Values are like fingerprints. Nobody's are the same, but you leave them all over the place." Elvis Presley (1935-1977)

D. Reciprocity

Frequently simplification of complex ethical situations and competing interests.

E. License Required

Traditional professions requiring licensure: medicine, law, accounting, engineer, teaching.

Tammy Northrup, Ethics and Forensic Science - W#21, Proceedings, vol. 15, p.38 (2009), American Academy of Forensic Sciences

Sect.8 Expert Evidence

A. Expert Witness

1. Federal Rules of Evidence

A qualified expert may give his opinion to 1) help the court to understand evidence, or 2) to establish a fact in issue.

2. State Supreme Court Rule - Ill. S.Ct. Rule 201

"An expert is a person who, because of education training or experience, possess knowledge of specialized nature beyond that of the average person on factual matter, to claim or defense in pending litigation and who may be expected to render an opinion within his expertise at trial. He may be an employee of a party, a party or an independent contractor." (Illinois Supreme Court Rule 213, 1996, codified into Illinois Supreme Court Rule 201 b(2)(3))

B. Types of Experts

1. Consulting

Person is retained or specifically employed in anticipation of litigation or preparation of trial, but will not testify. The identity, theories, mental impressions, litigation plans and opinions of a consultant are work product and protected by the attorney client privilege.

2. Testimonial

Person is retained for purposes of testifying at trial. The confidentiality privilege is waived and all materials, notes, reports, and opinions must be produced through applicable discovery proceedings. If an expert relies on work product or hearsay as a basis for their opinion, that material must be disclosed and produced through discovery. Unites States v. Lawson, 653 F.2d 299, 302 (7th Cir. 1981)

3. Court appointed

- impartially provides information directly to the court, which is then disclosed to the parties.

4. Privately retained

- can be consulting or testimonial

C. Attorney Client Privilege (basis/criteria)- elements

- legal advice of any kind is sought;
- from a professional legal advisor in their capacity as such;
- communications relating to that purpose;
- made in confidence;

- by the client;
- are at their insistence is permanently protected;
- from disclosure by the client/delarant or by the legal advisor;
- except if the protection is waived by the client/declarant.

(People v. Adam, 51 Ill.2d 46, 280 NE2d 205, cert. denied 409 US 948 (1972)

1. Confidentiality - Retainer

- Expert hired by plaintiff was disqualified from testifying for defense, and defense counsel was disqualified for hiring plaintiff's former expert;

- Once a retainer has been accepted, returning it cannot erase acceptance of it, the significance of it, or the implications arising from it when expert later accepted a retainer from opposing counsel. Cordy v. Sherwin-Williams Co., et al, 156 F.D.R. 575, 583 (1994)

D. Applicability

"Forensic science is generically applied to a spectrum of expert opinion testimony that spans the sciences, arts and all kinds of skilled professions ... (T)he testimony offered by its specialists is frequently couched in terms of opinions, conclusions and evaluations, which themselves are not scientifically measurable." A. Moenssen, F. Inbau, J. Starrs & C. Henderson, Scientific Evidence in Criminal Cases, 4th ed., p.1, Foundation Press, Mineola, NY, c.1995

E. Application

Attorneys seldom feel comfortable or confident in their ability to obtain, interpret and understand scientific information. Hence, they rely on experts to provide them with scientific material relevant to the case as a basis for expert evidence. V. Miller, and L. Callaghan, A Lawyer's Pathway to Medical and Scientific Information: New Options for Bridging the Gap (Part II), 2 Shepard's Expert and Scientific Evidence Quarterly, 579 (Fall, 1994)

Need expert to explain absence of evidence, alternative theories and control flow of information.

F. If not for jurisprudence, the legal system and its rules of evidence, the consulting and expert witness would not exist.

G. Paradox - must use an attorney

> "Lawyers as a group evidence an appalling degree of scientific illiteracy, which ill equips them to educate and guide the bench in its decisions on admissibility of evidence proffered through expert witnesses." Andre A. Moenssen, Prof. of Law, University of Richmond, Genetic Witness: Forensic Uses of DNA Tests, OTA-BA-438, U.S. Government Printing Office, 1990.

Ozian Option: I can't give you brains, but I can give a diploma. (The Wizard of Oz to the Scarecrow)

Sect.9 Criteria for Expert Witness

A. Knowledge, reputation for honesty, objectivity, personal appearance, dignity, voice, modesty, even temperament, memory for facts without references, communication skills, integrity, trustworthy, and ability to teach and educate.

B. "Communication is about conveying an idea, impression or experience from one person to another. Natural language is used as a means to convey the information. The scientist or engineer usually struggles to find the proper terms, using language and mathematics, to describe the technical concept. Those with the greatest ability in communicating may not always have the best skills with words. Therefore other mediums are used - e.g. art, music, dance." *The Future of Miss Powers*, Lazlo Zalezac, c.2016

C. More than do you have an opinion, what is that opinion

D. Major elements always present in expert witness testimony:

1. Pretrial preparation.

2. Expert's technical expertise or specialized knowledge.

3. Organization of expert's testimony.

4. Expert's ability to educate the fact-finder.

E. Fiction that good attorneys doe not need experts.

- attorney competency cannot replace an expert.

Sect.10 Classification of Expert Witnesses

A. Win At Any Cost Mentality

1. "Sleaz factor"

2. Boy Scout Law is irrelevant

B. Hierarchy for Competency, Ethics & Accountability (aka "Peter Principle")

1. Lay people c. Gil Sapir 2022
common sense and life long experience

2. Technician/Examiner
limited and concentrated training, applies known techniques, works in system & taught in a system. eg. criminalist, investigator, supervisors.

3. Practitioner
material & information analysis and interpretation

4. Specialist
devoted to one kind of study or work with individual characteristics

5. Scientist
conducts original research, published in own field with peers, and advances his field of knowledge

C. Formal vs. Experience based (forensic science)

1. formal - empirical science & error analysis.

2. experience based (firearms, documents, handwriting, fingerprints).

D. Information on experts is from legal community, <u>not</u> experts themselves.

E. Qualified versus competent

1. Obtain background information and history.

2. Current curriculum vitae/resume.

3. Subpoena all information relating to expert's entire background, including but not limited to, education, training, experience, licensing, accreditation, certification, academic teaching or lecturing, publications, training, experience, expert's complete personal file, training records

showing the courses taken, results of all examinations, all certifications, standards required to obtain or receive that certification, all documents showing expert complied with all subsequent post certification requirements, standards, protocols and record keeping.

4. Police record background check (rap sheet) on expert

5. Fees, payments from governmental agencies - use Freedom of Information requests, (FOIA) on federal, state and county offices for monies paid to named expert. (e.g. comptroller, treasurer, prosecuting agency, bursar etc.)

6. List of expert's previous clients

   a) contact them, clarify strengths/weakness, obtain transcripts.
   b) know who, what, when, why, where, how expert previously testified.

7. Professional memberships/associations

   a) membership requirements
   b) grades/levels of membership
   c) current membership status in organization
   d) membership based upon a nominal fee
   e) missing membership in organizations/associations other comparable self-respecting experts would have.

8. Publications

   a) does publication actually exist.

   b) type of publication - peer review journal, textbook, newsletter etc.

   c) actual author
      - acknowledgment section

   d) actual involvement
      - place and order in which person is listed
      - sequential placement on list of acknowledgments, closer to bottom of list means less, if any, actual work.

   e) technical publication is not good faith reasonable compliance.

   f) authors must correct and validate

citations/references or lose credibility - no excuses.

g) issues: ghost authors, honorary authors, authorship inflation, gaming the abstract, purchase authorship, financial conflicts of interest, publication critique and viability

h) publications and citations are the currency of authors

9. Expert's internet web page

a) self-promotion/advertising
b) exaggerations
c) social media

10. Academic degrees/education

a) verify person's enrollment, degrees, transcripts and grades

- contact school's registrar or bursar
- (www.studentclearinghouse.org)

11. Internet search (partial resource list)

- expert witness directories

- general internet research
  google.com
  lycos.com
  AltaVista.com
  excite.com
  lawcrawler.findlaw.com
  dogpile.com

- referral services (name, area of expertise, location)
  hgexperts.com

- databases (library catalog of bibliographic information)
  worldcat.org
  google scholar
  google books

- expert witness sites (locators)
  freereferral.com
  expertlaw.com
  expertpages.com
  expertwitness.com

witness.net (pay site)

hgexperts.com/hg/consultants_expert_witness.asp
seakexperts.com/index/aspx
washlaw.edu/expert

- scientific literature sites (free/inexpensive)
  standford.edu
  pubmedcentral.nih.gov
  ojose.com

- scientific / medical index electronic sources
  SciSearch citation index
  Annual Reviews
  cinahl
  ebsco host
  Psycinfo (psychology)
  medline
  science citation index
  ScienceDirect

- scientific associations (Encyclopedia of Associations)

- universities

- published periodicals & works
  Westlaw, Nexis, findarticles.com, ingentaconnect.com

- transcripts
  idex.com, netcourt.com

- newspapers

- list server lists, bulletin boards & usenet
  alta.com, expert-l (witness.net/html/lsit.htm)

- myspace

- national clearing house (watson@law.stetson.edu)

F. Educational level - crime laboratories *

- Doctorate (PhD) degree: 1%
- Master of Science degree: 3%
- Bachelor of Science degree or less: 96%

Alcohol intoxication and drug recognition experts (DUI & DRE) - police officers conduct laboratory work and teach it at drunk driving programs.

Non-scientist practicing science.

- rely upon equipment, manufacturer and reputation.
- do not intrinsically know and understand science, interpretation and use.

* Michael Saks, What Makes Forensic Scientists Open Or Closed To Change?, Bioinformatics 5th Annual Conference - 2006, The Science of DNA Profiling, August 13, 2006, Dayton, Ohio.

G. Knowledge

1. Limited knowledge may be a blessing. Increase knowledge, then increase vulnerability to cross examination.

2. Increased collaboration and interrelationship between disciplines and outside sources (no longer pure sciences)

- questioned document examiner (inks, paper, biochemistry, printing etc.)

H. Imprimatur

1. The imprimatur of a governmental agency, laboratory, office or title does not automatically make either the results or witness' testimony inherently trustworthy, credible and reliable. Justice Department Investigation of FBI Laboratory: Executive Summary, 61 Crim.L. (BNA) 2017 (April 16, 1997)

The principal findings and recommendations of the Justice Department's report addressed "significant instances of testimonial errors, substandard analytical work, and deficient practices" including policies by the Federal Bureau of Investigation Laboratory. Justice Department Investigation of FBI Laboratory: Executive Summary, 61 Crim.L. (BNA) 2017 (April 16, 1997) "The (517 page Inspector General's) report provided plentiful evidence of pro prosecution bias, false testimony and inadequate forensic work ... No defense lawyer in the country is going to take what the FBI lab says at face value anymore. For years they were trusted on the basis of glossy advertising." Tainting Evidence: Inside the Scandals at the FBI Crime Lab, John F. Kelly and Phillip K. Wearne, p.3-4, The Free Press, NY, NY, c.1998.

2. Not an expert merely because the term is part of their title or job description eg. Special Agent (FBI) or Drug Recognition Expert.

The name "special, "expert" or "inspector" itself gives an instantaneous indica and aura of authority and respect which implies a specific expertise beyond normal employment (law enforcement / police) qualifications to the trier of fact.

3. Drug Recognition Experts

- Advances in academic credentials are generally not accomplished by resolution. A similar situation occurred when The International Association of Chiefs of Police (IACP) used the term "technician" for drug recognition police officer. However, on March 25, 1992, the Technical Advisory panel (to the IACP Highway Safety Advisory Committee) voted to change and use the self-proclaimed term "Drug Recognition Expert" thereafter.; Vanell, What's in a Name?, The DRE (Newsletter), p.2, (Sept/Oct 1990); The DRE (Newsletter), p.10, (March/April 1992) The term "expert" is currently used in the latest training materials. If DREs call themselves experts - it is problematic.

I. Synonyms - Expert Witness

Common derogatory synonyms for expert witnesses include: charlatan, whore, prostitute, commercial witness, hired gun, black knight and courtroom assassin.

The most dangerous lies are those that most resemble the truth. E.C. McKenzie, ed., 14,000 Quips & Quotes for Writers and Speakers, p.521, Greenwich House Publ., NY, c. 1980

Sect.11 Application and Use of Experts (Daubert - Majority)

A. Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993) Daubert focuses on valid scientific methodology and process which the "scientific expert" used to reach their opinion. The latent unanswered question was whether Daubert only apply to experts offering opinions on natural sciences, (chemistry, toxicology, physics, medicine engineering etc.) or whether it applies soft or social science (psychology, document and handwriting analysis etc.) and to other "technical" experts who offer specialized testimony (real estate, values, design defects, standards of care and "state of the art" issues).

B. Federal Rule of Evidence 702

A summary of Federal Rules 702 - 706 is that a qualified expert may give his or her opinion to help the court understand evidence or to establish a fact in issue. States have similar rules.

C. Federal Rule of Civil Procedure 26 (a)(2)(A)),(B),(C)

c. Gil Sapir 2022

a) summary of opinion

-subject matter of testimony
-substance of facts & opinion
-basis for opinion

b) reports

c) record of all previous testimony for last 4 years

d) all publications authored for last 10 years

e) file with court signed expert witness disclosure statement

f) continuing duty exists to provide additional and corrective information. FRCP 26(e)(1)

g) compensation of expert

- party requesting the deposition pays expert a reasonable fee for his/her time

h) must have complete compliance with Rule 26 or expert is barred from testifying, especially regarding reports. Salgaldo v. General Motors Corp., 150 F.3d 735 (7th Cir. 1999); Pride v. BIC Corp., 218 F.3d 566 (6th Cir. 2000); Sherod v. Lingle, 223 F.3d 605 (7th Cir. 2000)

(See, Appendix A - FRCP Rule 26)

D. Reliability test for scientific evidence

Daubert Trilogy: Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993); General Electric v. Joiner, 522 U.S. 136, 141, 118 S.Ct. 512 (1997) and Kumho Tire v. Carmichael, 526 U.S. 137, 119 S.Ct. 1167 (1999).

1. Daubert v. Merrell Dow Pharmaceuticals, Inc. 509 U.S. 579 (1993) The primary procedural rules for scientific and expert evidence in federal courts are governed by statute and substantive law and are codified in Daubert.

a) standards: valid scientific process and methodology

b) guidelines: error rate, peer review, publication, general acceptance, testing and existence of standards

c) essentially - reliability std for admissibility

e) trial court judges are gatekeepers of scientific evidence

Just because subject discipline resembles science, does not mean it is admissible reliable science. (astrology, fingerprints, document examination, handwriting analysis)

2. General Electric Co. v. Joiner, 522 U.S. 136, 138-139, 118 S. Ct. 512, 517 (1997) judges are gatekeepers - determine the admissibility of expert witness testimony absent an abuse of judicial discretion.

3. Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 119 S.Ct. 1167, 1171, 1174 (1999)

a) Reliability requirement applies to all expert opinions (hard, technical and other specialized knowledge), not just scientific ones.

b) Distinction between "scientific knowledge" and "technical" or "other specialized knowledge" is illusory, and without support in the federal rules.

c) Daubert applies to all expert evidence and testimony regardless if it is "scientific" in nature.

- hard: math, chemistry, physics
- soft: psychology, hair, bitemark, firearms identification comparisons etc.
- non-scientific: auto mechanics, dog handlers, document examiners, handwriting analysis, appraisers - those steeped in practicalities of their discipline

See, Moore v. Ashland Chemical Inc., 126 F.3d 679, cert denied119 S.Ct. 1454 (April 19, 1999) compartmentalization of experts into 3 categories

d) trial court not required to hold a "Daubert hearing" every time expert testimony is challenged.

e) Kumho is applicable to both civil and criminal cases.

f) can confront reliability of science (discipline) through motion in liminue and again before a jury. US v. Velasquez, 64 F3d 844 (3rd Cir. 1995)

E. Good science practiced.

(accuracy & reliability of results, underlying process, techniques, standards, controls, methodologies, quality control & assurance etc.)

Valid scientific methodology and process. Daubert v. Merrell Dow Pharmaceuticals Inc., 113 S.Ct. 2786, 125 (1993)

1. Do not imply more that the test can determine, otherwise incompetent or advocates.

2. Pseudo-science

3. Falsibility
-can the result or statement be tested
-pathological science

F. Analytical Procedure Involves Compromise

1. Balance validity of analytic method versus testimonial simplicity. Shellow, The Application of Daubert to the Identification of Drugs, Shepard's Expert and Scientific Evidence Quarterly, p.600, Winter 1995.

2. Goal of scientist is truth; goal of forensic analyst is persuasion. Shellow, The Application of Daubert to the Identification of Drugs, supra, p.602.

3. Frye Test and Junk Science

"Bad data serves as a springboard for spurious inferences with temporal errors being the most familiar result. To the unethical or uniformed mind, a sequence of events can be powerfully suggestive ... an approximation of results without details is 'junk science'." Huber, Galileo's Revenge: Junk Science In The Courtroom, pp. 29, 159, Basic Books, c.1991

When will trial courts let expert witnesses testify (scientific, technical or other specialized knowledge).

The assumption of this issue is juries tend to believe almost anything the professed expert says, so judges should protect impressionable jurors from experts who lack objective credibility.

G. Function of a Forensic Scientist

1. Analyzes physical evidence

2. Provides expert testimony

3. Furnishes training in recognizing, collecting and preserving physical evidence at crime scene

H. Function of a Forensic Scientist

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Truth does not equal justice.

Sect.12 Application and Use of Experts (Frye - Minority)

Frye v. United States, 293 F.1013, 1014 (D.C. Cir. 1923)

Frye focuses on the nature of the opinion through general acceptance and sufficient reliability in the scientific community for admissibility.

Frye Jurisdictions: Calif., Fla., Ill., Md., N.Y. and Penn.

A. Illinois Law - Scientific Evidence & Expert Witnesses

1. Most explicit applications of Frye by Ill. S.Ct.

Donaldson v. Central Illinois Public Service Co., 199 Ill.2d 63 (2002) - unequivocally commands Illinois follow Frye.

In Re Commitment of Simmons, 213 Ill.2d 534 (2004) - expert witness requirements: qualified and relevant to case is in discretion of trial court; and admissibility of scientific evidence subject to

de novo review under Donaldson.

2. Fed. Rule Evid. 702 - not applicable, not followed.

B. Medium through which a party can present their theory of the case to the trier of fact.

1. Requirements to testify - Frye information.

a) is it scientific evidence.

b) is it good/true science (general acceptance in relevant scientific community, not universal acceptance).

- trial court does not make an independent determination of reliability - look to scientific community for acceptance based upon reliability.

c) qualified expert

d) reliable science with explanatory theory

- general acceptance test.
- new or novel if it is original, not something formerly known or used.
- new or novel does not mean general acceptance
- procedure: consensus verus controversy over a particular technique

e) probative value vs. prejudicial effect.

Sect.13 Law of Evidence

A. Evidence: is any matter, verbal or physical, that can be used to support the existence of a factual proposition. It must be relevant and material.

1. "Relevant" is not the same as "useful" evidence.

B. Categories of Evidence

1. Direct Evidence:

a) tends to show the existence of a fact in question.

b) without the intervention of proving any other fact.

c) is it the evidence to be believed without inferences or conclusions from it.

d) depends on the credibility of the witness.

2. Circumstantial evidence:

a) indirect evidence

b) from which inferences or conclusions can be drawn.

c) depends on both

- credibility witness
- inferences from the witness

C. Types of Evidence

1. Testimonial (witness)

a) Premised upon the witness'

- personal knowledge
- relies on their 5 senses

2. Physical (tangible things and parts of the body)

a) perceived as indisputable, scientifically sound

b) most importantly - neutral

c) silent and definitive

d) offers certainty - and certainty equals proof

e) becomes proof through forensic science

f) directly involved with situation or incident (document, weapon, narcotics, drugs, clothing, blood, hair etc.)

g) concept of individualization - firearms, fingerprints, shoe prints, forensic DNA

3. Demonstrative

a) an audio/visual aid

b) designed to assist the trier of fact

c) understanding the witness' testimony

(maps, models, x-rays, diagrams, computer graphics/simulations etc.)

* Demonstrative evidence: use it -- important

- if government objects or court prohibits it;

- can and will use any relevant and material item, even guano (aka chicken shit), Rust v Guinn, 429 NE2d 299 (1981 Ind App Ct).

The value of physical evidence cannot be understated.

"Wherever he steps, whatever he touches, whatever he leaves, even unconsciously, will serve as silent witness against him. Not only his fingerprints or his footprints, but his hair, the fibers from his clothes, the glass he breaks, the tool marks he leaves, the paint he scratches, the blood or semen he deposits or collects, all of these bear mute witness against him. This is evidence that does not forget, it is not confused by the excitement of the moment. It is not absent because human witnesses are. It is factual evidence. Physical cannot be wrong; it cannot perjure itself; it cannot be wholly absent only its interpretation can err. Only human failure to find it, study it and understand it, can diminish its value."

Paul L. Kirk, Crime Investigation, p.4, Interscience Publishers, New York, c. 1953

Sect.14 Jury's Perception of Expert Witness

A. Prejudicial awe or disbelief - impressions/opinions

1. Quincy Standard, CSI

- science v. entertainment
- procedure, but not context of test and appropriateness
- increase public awareness of science

2. Accepting or rejecting testimony

3. Subject matter presentation

4. Condescending demeanor

5. Pedantic arrogance

6. Simplistic ignorance

7. Argumentative

8. Evasive

9. Disdain for academics who lack real world experience and knowledge.

10. Elementary education of subject matter

must know historical perspective, developments, and current methods all through a 10th grade level presentation.

B. Attire

1. Clean, neat & presentable

2. Comfortable clothing

3. Regional attire - conservative

4. No lapel pins or buttons

C. Body Language

1. Calling of name and approach to witness stand

2. Taking of oath

3. Subliminal communication

video tape expert and yourself during actual direct & cross examination (simulated)

4. Experts must obey the oath to tell the whole truth

5. Posture, diction, voice projection, eye contact, gestures etc.

6. Aura of composure & humility combined with self-confidence & conviction

D. Common Courtesy & Manners

1. Address jurors and court

2. Listen carefully

3. Ask judge for instruction

4. When dismissed from witness stand - say thank you to the judge

E. Credibility - jury instruction

1. read jury instruction to jury on credibility of witnesses and testimony/facts/evidence in the case (Appendix - C)

2. provides basic rules for expert witness testimony

3. informs jury of what to expect

F. Fear in the Courtroom

1. Constant urge to urinate

2. Nervousness, preparation

3. Use of water

"(J)uries are increasingly making determinations on the credibility of a forensic scientist's evidence, not on scientific fact, but how it is presented. Michael A. Peat, Guest Editorial, J. Forensic Sci., vol.42, p.775, 775 (1997).

Sect.15 Attitudinal Problems with Expert Witnesses

A. Always correct/ right all of the time syndrome

B. We have always done it this way syndrome

C. Integrity for growth and change

D. Do not tell them anything or give them anything (stone wall) syndrome

E. Wrongful testimony - Being wrong

Being wrong means a wrongful conviction or wrongful exclusion of a guilty person and damage to an analyst’s reputation. Analysts very seldom admit they are wrong even though they must do so. Life and liberty are at stake.

F. Too many science graduates mistakenly believe experiencing and defending questions from their master thesis and doctoral dissertation enables them to testify and prevail in court.

"An expert knows all the answers - if you ask the right questions."
E.C. McKenzie, ed., 14,000 Quips & Quotes for Writers and Speakers, 1983 Ed., p. 167, Greenwich House Publ., New York

Sect.16 Subpoenas (discovery, background & vetting)

A. subpoena duces tecum for expert witness

1. Subpoena all information relating to expert's entire background, including but not limited to, education, training, experience, licensing, accreditation, certification, academic teaching or lecturing, publications, training, experience, expert's complete personal file, training records showing the courses taken, results of all examinations, all certifications, standards required to obtain or receive that certification, all documents showing expert complied with all subsequent post certification requirements, standards, protocols and record keeping.

2. Request all cases in which the expert was a party or witness in any lawsuit or complaint of any kind (civil, criminal, administrative, judicial, appellate) regardless of final disposition.

3. Production must include full case name, case number, names of all party plaintiff/defendants, location (municipal, county, federal district) names, address and telephone numbers of attorneys for all parties and case's disposition.

Gil Sapir, Legal Aspects of Forensic Science, ch.1, in "Forensic Science Handbook," vol.I, p.18-19, 3rd ed, Richard Saferstein & Adam Hall, ed., CRC Press Publ., c.2020

Sect.17 Freedom of Information Act (FOIA)

A. "Fundamental to our way of life is the belief that when information which properly belongs to the public is systematically withheld by those in power, the people soon become ignorant of their own affairs, distrustful of those who manage them, and - eventually - incapable of determining their own destinies." Richard M. Nixon, March 8, 1972

1. The Freedom of Information Act (FOIA), 5 U.S.C. sect. 522, as amended by Public Law No. 104-231, 110 Stat. 3048, was created pursuant to the fundamental philosophy of the American constitutional form of government, the public policy of the federal government and each state is that all persons are entitled to full and complete information regarding the affairs of government and the official acts and policies of those who represent them as public officials and public employees.

2. Access to governmental information is necessary to enable the people to fulfill their duties of discussing public issues fully and freely, making informed political judgments and monitoring government to ensure that it is being conducted in the public interest.

3. Public bodies exist to aid in the conduct of the people's business and that the people have a right to be informed as to the conduct of their business. The public should not have to rely solely on the representations of public officials that they have acted appropriately.

4. The government must produce all of its records upon a proper request subject to enumerated exceptions and exemptions.

5. FOIA synonyms include, open records act, sunshine law, open field act/law, freedom of information act, public records act, inspection of public records act.

Sect.18 Major Areas of Expert Witness Examination

A. Opinion testimony

B. Fallibility of methodology and result

C. Reproducibility of results

D. Compensation

E. Integrity

F. Opinion

Sect.19 Expert Qualifications, Credentials & Testimony

A. Case law and illustrative examples of debunked experts and scientific testimony.

See, Paul Giannelli, Expert Qualifications & Testimony, Conference on Science and Law, San Diego, April 15, 1999; Paul Gianelli, The Abuse of Scientific Evidence in Criminal Cases: The Need for Independent Crime Laboratories, 4 VA. J. SOC. POL'Y & LAW 439 (1997).

B. Prosecution witnesses (police officers/agents)

1. Most testifying forensic experts are government employees working for the same jurisdiction as the prosecutor.

- various scandals and studies conclude courts cannot rely on forensic scientists to present reliable and unbiased testimony.

- most forensic science testimony is actually "connoisseur testimony" designed as science. Ipse dixit of the expert.

David E. Bernstein, Expert Witnesses, Adversarial Bias, and the (Partial Failure of the Daubert Revolution, 93 Iowa L.Rev. 451, 459, 480, 481 (2008)

2. Most common prosecution witness: police officer or federal agent.

3. Routinely qualified by on-the-job experience and personal observations. (connoisseur testimony)

4. Federal trial court judges routinely admit expert testimony offered by prosecutors in federal criminal cases.

- 92% prosecution experts testify, 33% defense experts testify.

5. Federal appellate court

- admitted at trial: 95% prosecution experts, 8% defense experts.

Joelle Anne Moreno, What Happens When Dirty Harry Becomes an (Expert) Witness for the Prosecution?, 79 Tulane L.Rev.1 (Nov. 2004); Mark Hansen, Dr. Cop on the Stand: Judges Accept Police Officers as Experts Too Quickly, 88 ABA Jorn. 30 (May 2002)

C. Qualified versus competent

1. Board qualified versus board certified. (accountant versus a CPA)

D. Professional Membership/Affiliation

1. Voluntary & Expected

- will be asked: why not a member of any professional society or organization.

E. Purchasing of credentials - Cabbage patches from which some forensic experts spring to life fully formed.

1. "What do you want to be today?" borrowed phrase from Microsoft.

2. Obtaining credentials without messy documentation and examinations.

3. Person is able to use "alphabet soup" initials behind name or organizational name on letterhead stationary.

4. Membership does not explicitly imply licensing, qualifications, abilities and expertise by the organization.

5. Sample organizations offering certification and credentials.

   - American Academy of Certified Consultants and Experts (AACCE), 2750 East Sunshine, Springfield, MO. 65804 (http://www.aacce.org)

   - American Association of Integrative Medicine, 2750 East Sunshine, Springfield, MO. 65804 (http://www.aaimedicine.com/)

   - American Board of Examiners in Crisis Intervention, Association Headquarters, 2750 East Sunshine, Springfield, MO. 65804 (http://www.emotionalfirstaid.com/)

   - American College of Forensic Examiners, 2750 East Sunshine, Springfield, MO. 65804

F. Never take voir dire for granted or witness will not be properly qualified.

See, Appendix B - Expert Witness Voir Dire

Gil Sapir, Qualifying the Expert Witness: A Practical Voir Dire, Forensic Magazine, vol.4, no.1, February/March, 2007, p.30.

Sect.20 Application and Use of Experts

"How these experts' views can be made to correspond with the wishes of the party who calls them is attributable to the unfettered ability of the attorneys who retain them to direct, control and shape their testimony. The system of using party-controlled experts has many shortcomings, chief among them the ability of partisan experts to obfuscate issues ... giving one side an unfair advantage, and the evidentiary stalemate that results when two experts with

diametrically opposed views ... leave the court in little better position than when it started. This model permits parties with greater financial resources to hire not only better experts, but also more experts. When litigants can shop for an expert whose opinion is favorable to their case, "the court hears only those opinions that the parties want it to hear particularly when the opposing party may be financially unable to hire any expert at all. Cross-examination, the technique relied upon to ferret out bias, deficient methodologies or factual inaccuracies in an expert's opinion, depends on the competence of the lawyer asking the questions and will be less piercing if the resources at that attorney's disposal are not comparable." In the Matter of Kenneth C. v. Delondar, 814 NYS2d 562, 10 Misc.3d 1070, 1077(A) 2006

A. Medium through which a party can present their theory of the case to the trier of fact.

1. Requirements to testify

- is it good/true science (accepted in scientific community).

- qualified expert.

- reliable science with explanatory theory.

- probative value vs. prejudicial effect.

- Just because subject discipline resembles science, does not mean it is admissible reliable science. (astrology, fingerprints, document examination, handwriting analysis).

B. Good science practiced

(accuracy & reliability of results, underlying process, techniques, standards, controls, methodologies, quality control & assurance etc.)

Valid scientific methodology and process Daubert vs. Merrell Dow Pharmaceuticals Inc., 509 U.S. 579 (1993)

"(I)n order to qualify as "scientific knowledge," an inference or assertion must be derived by the scientific method." Daubert vs. Merrell Dow Pharmaceuticals Inc., 509 U.S. 579, 590 (1993)

1. Federal Rule of Evidence 702 - "reliability test" for admissibility

Test for admissibility of expert evidence is the "reliability test" derived from Fed. R. Evid. 702. The Rule states, experts may testify if that testimony is "the product of reliable principles and methods," are "reliably applied" to the facts of a case. Judges are suppose to exclude unreliable or unvalidated evidence through expert testimony.

Garrett, Brandon L. and Fabricant, M. Chris, The Myth of the Reliability Test, Fordham Law Review, Vol. 86, at 101, March 18, 2018. Available at SSRN: https://ssrn.com/abstract=3136632 (accessed April 14, 2018)

2. Do not imply more that the test can determine, otherwise incompetent or advocate.

Standardized Field Sobriety Testing and HGN, U.S. v. Eric Horn, 85 F.Supp.2d 530 (D. Maryland 2002)

a. "There is a place in the prosecutor's arsenal for SFST evidence, but it must not be cloaked in the aura of false reliability least the fact finder ... be "blinded by science" or "hit by technology."

b. "SFST does not meet Daubert/Kumho Tire and Rule 702 as admissible direct evidence of intoxication impairment. (A)ny testimony regarding circumstantial evidence of intoxication is technical, not scientific and not admissible."

c. "No factual basis exists to support NHSTA's claims of SFST accuracy."

d. "The proponent of SFSTs cannot use the term "test," standardized clues" or express an opinion that the participant "passed" or "failed" because those terms are not derived from reliable methods or principles."

e. The police officer is "limited to using only their personal opinion that a person was intoxicated or impaired by alcohol based upon personal observations and may not include scientific, technical or specialized information."

3. Pseudo-science

a. HGN - FST is a non-chemical test and cannot be used as a means of ... establishing the relationship of a HGN to a subject's BAC. State of

New Mexico v. James Lasworth, 131 NM 739, 42 P.2d 844 (2001) cert. den. NM 2002.

b. "Picquerism, fictional syndrome of sexual dysfunction or criminal profile in which the perpetrator realizes sexual satisfaction from penetrating a victim by sniper activity or by stab or bite wounds ... the word dubbed picquerism comes from a derivative misspelling of the French verb piquer, which means, among other things, to stick or poke ... and is medically speaking, nonsense ... quackery" Drake v. Portuondo, 553 F.3d 230, 235, fn.1 (2nd Cir., 2009)

4. Falsibility

- can the result or statement be tested
- pathological science

5. Relevant Scientific Community

- implies those with the expertise to critically evaluate the methods and principles that underlie the test or opinion in question.

6. Peer review

- peer review publications based on Daubert must involve critical analysis that can expose any weakness in the methodology or principles underlying the conclusions being reviewed.

- law enforcement publications, governmental publication, including NHTSA, and law review articles are not considered peer review as contemplated by Daubert. U.S. v. Eric Horn, 85 F.Supp.2d 530,556 (D. Maryland 2002)

- Peer review and publication are important components of "good science." After scientists conduct experiments and formulate a scientific theory, they must submit the theory "to the scrutiny of the scientific community" for review. Transformative interrogation for collective decisions and stability of scientific knowledge (diversity of examination and peer review)

Jennifer Laser, "Inconsistent Gatekeeping in Federal Courts: Application of Daubert v. Merrell Dow Pharmaceuticals, Inc. to Nonscientific Expert Testimony," *Loy. LAL Rev.*, 30(1996):1379,1404; David L. Faigman,

Edward Cheng, Jennifer Mnookin, Erin Murphy, Joseph Sanders and Christopher Slobogin, "Ethical Standards of and Concerning Expert Witnesses," in Modern Scientific Evidence: The Law and Science of Expert Testimony, vol.1 (Eaton, Minn.: Thomson/West, 2018-2019), sect. 1.23, 84-87.

- Ideally, the lengthy examination and peer review process is an unbiased, fair assessment of the scientific merit and credibility of a study.

7. Error Rate - Known & Measurement

- Errors in measurement and analysis tend to obscure the truth or mislead the experimenter. The laws of measurement help society understand the errors in measurement, and also detect and remove sources of error. They provide a means for determining objective, unbiased conclusions from data and determine how much data will probably be needed. W.J. Youden, Experimentation and Measurement, pp. 6,7, U.S. Dept. of Commerce, NIST Special Publication 672, (1991); Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 594 (1993). In order to obtain reliable results, sources of error must be identified and either eliminated or minimized. Error or uncertainty may be classified as three major types - random, systematic (procedural) or gross. Hobart H. Willard et al., Instrumental Methods of Analysis, 6th ed., p.861, Wadsworth Publishing Co., Belmont, Calif., 1991.

- US vs Starzecpyzel, 880 F.Supp.1027 (1995) handwriting - art not science, so is difference between astrology and astronomy.

- "Forensic reports, and any courtroom testimony stemming from them, must include clear characterizations of the limitations of the analyses, including measures of uncertainty in reported results and associated estimated probabilities where possible." Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences, p.186 (S-16) (Recommendation 1)

8. Standardized Laboratory Procedures, Accreditation and Proficiency Testing

a. Laboratories

- State, county and city licensing requirements do not require accreditation by independent certifying agencies.

- No mandated uniformity and consistency exists in the practice of good science in laboratories, including those of laboratory procedures, accreditation of laboratory, qualifications of personnel, competency of personnel, and ongoing proficiency testing of laboratory and personnel.

- Evidence is not admissible if do not follow reliable procedures to ensure accurate test results. State v. Schwartz, 447 NW2d 422, 426-27 (Minn. 1989)

b. Professional Organizations

- The International Assoc. of Chemical Testing (IACT) spurned and resolutely refused voluntary compliance for standardization of chemical (breath) testing, including quality assurance and controls through National Institute Standards and Technology (NIST) and American National Standards Institute (ANSI) in 2001.

"Bad data serves as a springboard for spurious inferences with temporal errors being the most familiar result. To the unethical or uniformed mind, a sequence of events can be powerfully suggestive ... an approximation of results without details is 'junk science'." Huber, Galileo's Revenge: Junk Science In The Courtroom, p.29, 159 (1991)

Sect.21 Conflicts of Interest (selected)

A. An implicit bias exists (real or perceived) concerning publicly funded forensic laboratories within prosecutorial or law enforcement agencies.

- 80% of crime laboratories are positioned within law enforcement agencies.

- 80% of crime laboratories are under police control and many will only perform laboratory services for law enforcement agencies.

- Most crime laboratory employees are civilians.

Peterson & Leggett, The Evolution of Forensic Science: Progress amid the Pitfalls, 36 Stetson L.Rev., 621, 629, 652 (2007)

B. Disqualification — Expert/Attorney.

"To be sure, no one would seriously contend that a court should permit a consultant to serve as one party's expert where it is undisputed that the consultant was previously retained as an expert by the adverse party pursuant to the earlier retention. This is a clear case for disqualification ... It is not sufficient simply to disqualify the expert to deter such conduct in the future. Counsel must also understand they are at some risk should they encourage (or fail to discourage) this kind of behavior." Cordy v. Sherwin-Williams Co., et al, 156 F.D.R. 575, 586 (1994)

C. Relevance - The law will presume a relationship of confidence when it is just to do so. Cordy v. Sherwin - Williams Co., et al, 156 F.D.R. 575, 583 (1994)

D. Impartiality - Motive/Interest/Bias

1. Laboratory cannot be paid for convictions.

2. It is unconstitutional to pay laboratories for each successful conviction it generates. Laboratories cannot be trusted if it has a financial incentive to produce a conviction. Tennessee Bureau of Investigation's $250 DUI conviction fee is illegal. State of Tennessee v. Rosemary L. Decosimo, No. E2-17-00696-CCA-R3-CD (Court of Criminal Appeals, Knoxville, Tenn., Feb. 6, 2018);
Labs funded partially or entirely by fees assess to defendants only upon conviction. No conviction means no fee. No fees means less funding. Roger Koppl and Meghan Sacks, "The Criminal Justice System Creates Incentives for False Convictions," Criminal Justice Ethics, 32 no.2 (2013):126, DOI: 10.1080/0731129X.2013.817070

Sect.22 Movant/Prosecutor's Responsibilities and Duty - Expert Witness

A. What is obligation of movant to investigate the expert or expertise?

B. Is it sufficient to accept the expert's asserted claims about their credentials, field of knowledge, opinions, conclusions and application of the field's principles?

C. Is it enough for the movant to accept the popular culture's belief concerning the existence and nature of the expertise?

D. Is it enough or acceptable for the attorney to know the expert is not an expert or the expertise is invalid?

E. Does the movant/sponsoring attorney of the evidence have a duty to the court to find out this information and then report it to the court.

Modern Scientific Evidence: The Law and Science of Expert Testimony, David L. Faigman, David H. Kaye, Michael J. Saks, Joseph Sanders, Edward K. Cheng, vol.1, p.154, 2006-2007 Ed., Thomson/West, c.2006

F. Due diligence standard

- Prosecutor has a duty of due diligence to investigate their witnesses' expertise and credentials. Drake v. Portuondo, 553 F.3d 230, 240 (2nd Cir., 2009)

- Relying on the threat of perjury charges to assume an expert's honesty violates a prosecutor's duty of due diligence to investigate the expert's credentials and proffered testimony.) Drake v. Portuondo, 553 F.3d 230, 240 (2nd Cir., 2009) See, Petitioner-Appellant Brief by Sally Wasserman at p.58

- Prosecutor knew or should have known of expert's false statements and false testimony (perjury) was material to jury's verdict in double murder case, medical quackery - "picquerism." Drake v. Portuondo, 553 F.3d 230, 243-245 (2nd Cir., 2009)

G. The prosecutor has a duty to seek justice, not merely convict.

- The prosecutor is an officer of the court whose duty is to present a forceful and truthful case to the jury, not to win at any cost. See, e.g., Jenkins v. Artuz, 294 F.3d 284, 296 n. 2 (2d Cir.2002) (noting the duty of prosecutors under New York law "to seek justice, not merely to convict"). Shih Wei Su v. Filion, 335 F.3d 119, 126 (2d Cir.2003). Supreme Court holdings have long established that a conviction obtained through use of false evidence, known to be such by representatives of the State, must fall under the Fourteenth Amendment. Napue v. Illinois, 360 U.S. 264, 269 (1959) (emphasis added); see also United States v. Agurs, 427 U.S. 97, 103 (1976); Giglio v. United States, 405 U.S. 150, 153 (1972)."The same result obtains when the State, although

not soliciting false evidence, allows it to go uncorrected when it appears." Napue, 360 U.S. at 269. Drake v. Portuondo, 553 F.3d 230, 240 (2nd Cir., 2009)

Sect.23 Expert Witness Opinions

A. State/Prosecution/Government Witness

1. Cannot be compelled against will to testify as expertise, a proprietary right.

2. Problem is if job description states witness must testify on behalf of prosecution. Inherent motive, interest and bias exists. Gil Sapir, Legal Aspects of Forensic Science, ch. 1, p.5, n.43 in "Forensic Science Handbook," vol.I, 3rd ed, R. Saferstein & A. Hall, CRC Press Publ., c.2020

3. Must not have police officer working in crime laboratory.

B. Opinion - Reasonably Relied Upon Facts, Data or Opinions

1. Admissible evidence can be used to rebutte or challenge reliability of facts, data or opinions reasonably relied upon by expert testifying for opposing party. People v. Robles, 314 Ill.App.3d 931, 733 NE2d 438 (2000)

2. Appropriate expressions/terminology for conclusions

a. Terminology of "might", "could", "possibly," "in terms of probability" remains admissible. Wojcik v. City of Chicago, 299 Ill.App.3d 964, 702 NE2d 303 (1998)

b. Expressions/terminology involving frequency, individualizing statements or probability such as "consistent with," "could have," "highly likely," "very probably," "did come from," "match," "identification" must be supported by empirical data and objective criteria. Brandon L. Garrett and Peter J. Neufeld, "Invalid Forensic Science Testimony and Wrongful Convictions," *Va. L.Rev.*, 95 (2009):1,19; Kelly Servick, "Sizing Up The Evidence," *Science*, (2016):1130-1132.

c. Phrases "reasonable scientific certainty" or "to a reasonable degree of a discipline's certainty" or "practical certainty" are misleading, ambiguous,

idiosyncratic, confusing and must not be used or implied.

d. No basis for certainty exists. Do not known what the "certainty" is, its definition and its application. The meaningless colloquialism was historically created and perpetuated by attorneys without a basis in law or fact.

e. The phrase is a mantra repeated by experts for legal decision makers who similarly have no idea what it means. David L. Faigman, "Evidentiary Incommensurability: A Preliminary Exploration of the Problem of Reasoning from General Scientific Data to Individualized Decision-Making," Brooklyn L. Rev., 75(2010):1115,1134-35; "National Commission on Forensic Science, Recommendations to the Attorney General Regarding Use of the Term "Reasonable Scientific Certainty," March 22, 2016; Peggy Hora, Theodore Stalcup, Brian MacKenzie and David Wallace, editors, Science Bench Book For Judges, The National Judicial College, Reno, Nev. (July 2019): sect.3.10.2, 33,35, sect. 9.1.2, 261-262. http://resources.judges.org/downloads/science-bb.pdf.

3. Weasel Words - Bluffing, Hedging, Obfuscation

a. Hedging opinions with obfuscatory words. Phrases such as "similar to," "could have," "might have," "compatible with," "consistent with," "physical observable characteristics," "instrumental techniques," "various chemical tests and analysis," "similar in all respects tested," "cannot be excluded as a source of..." are noncommittal and nondescript statements designed to infer competency, credibility, and reliability.

b. Reliance on bluffing, hedging, and obfuscation will adversely affect and impugn credibility and communication skills.

c. Obfuscatory words colloquially known as "weasel words."

Gil Sapir, Legal Aspects of Forensic Science, ch.1, p.13,15 in "Forensic Science Handbook," vol.I, 3rd

ed, Richard Saferstein & Adam Hall, ed., CRC Press Publ., c. 2020

Might as well use "A definite possibility of a firm maybe" - Hawkeye Pierce - M*A*S*H TV Series

4. Proper for expert to reasonably rely on authoritative literature without either identifying it or disclosing its contents on direct examination. Becht v. Pala, 317 Ill.App.3d 1026, 740 NE2d 1131 (2000)

5. Examination permitted on material reviewed by expert but not relied upon or disregarded or did not use. Leonardi v. Loyola University of Chicago, 168 Ill.2d 83, 658 NE2d 450 (1995); People v. Pasch, 152 Ill.2d 133, 604 NE2d 294 (1992)

6. Cannot testify as summary expert or conduit by relying on information or opinion by other experts without providing additional input. Rock v. Pickleman, 214 Ill.App.3d 368, 574 NE2d 682 (1991) (Rakowski concurring); Kochan v. Owens-Corning Fiberglass Corp., 242 Ill.App.3d 781, 610 NE2d 683 (1993)

7. Cannot summarize literature for purpose of educating trier of fact when expert has not conducted tests and does not know actual test methods and procedures. Mielke v. Condell Memorial Hospital, 124 Ill.App.3d 42, 463 NE2d 216 (1984)

8. Cannot rely solely on self-serving statements of defendant. People v. Britz, 123 Ill.2d 446, 528 NE2d 703 (1988)

9. If an expert relies on work product or hearsay as a basis for their opinion, that material must be disclosed and produced through discovery. United States v. Lawson, 653 F.2d 299, 302 (7th Cir. 1981)

10. An expert cannot base a opinion, even partially, on illegally obtained and inadmissible evidence. Wong

Sun v. U.S., 371 U.S. 471, 484 (1963)

11. When expert testimony is based on mechanical or electronic device, the expert must provide foundation of the method of recording information and proof the device was functioning properly when used. The trial court ensure the admission of scientific evidence, including expert's scientific testimony, is based on a testing device that is both relevant and reliable. People v. Raney, 324 Ill.App.3d 703, 710-11, 756 NE2d 338 (1st Dist. 2001)

12. Expert opinion testimony must be in fact expert opinion, and not merely an opinion given by an expert. People v. Sifunetes, 248 Ill.App.3d 248, 252-53, 618 NE.2d 643, 646 (Ill.App. 1st Dist. 1993)

13. Improper to examine witness on defendant's failure to offer favorable evidence - but permissible examination that defense criticisms of prosecution's expert not based on independent testing by defendant. People v. Oliver, 306 Ill.App.3d 59, 713 NE2d 727 (1999)

14. Questions/Answers beyond expertise. Expert witnesses notoriously stray outside the fields of their expertise. Frequently this is not the expert's fault because lawyers often ask questions on issues beyond the witness's experience. The opposing attorney then fails to object because neither lawyer knows any better. This problem is caused by the appalling scientific illiteracy that exists among the bar and bench. Andre A. Moenssens, Novel Scientific Evidence in Criminal Cases: Some Words of Caution, Journ. of Criminal Law and Criminology, vol. 1, p.1, 7 (Spring 1993); A Crisis in the Forensic Sciences: Real or Imagined?, Scientific Sleuthing Review, vol 21. no.4 p.15 (Winter, 1997); David Faigman, Legal Alchemy: The Use and Misuse of Science and the Law, p.xi-xii, 53-54, 64, W.H. Freeman & Co. NY, NY, c. 1999.

C. Truthful, Impartial & Objective Opinion (retaliation)

1. Retaliation for not testifying properly

- The Ariz. Dept. Public Safety performance report required Moore to "modify your testimony is such a way as to bring it into alignment with the position of the laboratory and other analysts. It was pointed out to you that your opinion ... is contrary to the opinion of the other analysts in the bureau and contrary to the position of the laboratory," the DPS employee performance report stated. Furthermore, "You were advised that testifying about what other agencies in the state do with regards to disclosure or storage of their data is outside of your current qualifications. You are not currently employed by these agencies and are not aware of their current procedures, protocols or policies." As a result of giving truthful testimony they didn't like he was suspended for a matter of months then reassigned and ultimately punished for his actions. Michael C. Moore v. Beth Brandy-Morris, Ariz. Dept. Of Public Safety and et al, U.S. District Court, Dist. Of Arizona, No. 2:18-cv-01019-DLR; Megan Cassidy, Former Forensic Scientist Sues Arizona Department Of Public Safety, alleges retaliation, The Republic, April 4, 2018, https://www.azcentral.com/story/news/local/phoenix/2018/04/04/former-forensic-scientist-sues-arizona-department-public-safety-alleges-retaliation/483927002/

D. Jury Instructions - Expert/Opinion Witness

- Experts are accountable to the jury. A separate jury instruction is given concerning the expert's testimony and credibility (Appendix C - Jury Instructions (Expert/Opinion Witness)). Betty Layne DesPortes, "Jury Instructions on Expert Testimony," Wiley Encyclopedia, Alan Jamieson and Andre Moenssens eds., (Chichester, UK: John Wiley & Sons 2014),1-6.

Sect.24 Reasonable Compensation

1. Pigs get fat, hogs get slaughtered. (Old folk saying)

   "That an expert testifies for money does not necessarily cast doubt on the reliability of his testimony, as few experts appear in court merely as an eleemosynary gesture. But in determining whether proposed expert testimony amounts to good science, we may not ignore the fact that a scientist's normal work place is the laboratory or field, not the courtroom or the lawyer's office." Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311, 1317, (9th Cir. 1995), Also see, Paul C. Giannelli, "Junk Science": The Criminal Cases, Journ. of Criminal Law and Criminology. vol. 1, p.105, 117 (Spring 1993).

2. It is "a settled principle of American law (that) experts should not receive contingent fees." City and County of Denver, Colo. v. Board of Assessment Appeals of State of Colo., 947 P.2d 1373 (Colo. 1997), reh'g denied, (Dec. 2, 1997) "case law on the subject is sparse because this precept has such wide acceptance."

   The underlying basis for the prohibition on contingent compensation for experts is that "an expert witness whose fee is contingent upon the outcome is improperly motivated and can not objectively inform the court on an issue about which the court needs additional instruction."

   "If the expert's payment is contingent on the ultimate outcome of the case, the witness' own interest will become intensified, and the reliability of the testimony and impartiality of the expert's position will be significantly weaken." 947 P.2d at p.1379.

Sect.25 Forensic Science - a discipline

"Adherence to scientific principles is important for concrete reasons: they enable the reliable inference of knowledge from uncertain information exactly the challenge faced by forensic

scientists.” Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences, p.217(4-1)

A. Uniform Characteristics

- requires specialized training and continuing education;
- application of specialized knowledge in a subject, field or science;
- derived from integration of science and law;
- scientific analysis and decisions used to affect society through judicial process;
- profound societal impact;
- credibility of analyst and sphere of forensic science is dependant upon confidence, credibility and competency of performed services.

B. Variable Characteristics

- truthfulness;
- obtain and maintain expertise in the chosen endeavor (eg. expert witness testimony);
- membership in a professional or regulatory body;
- regulated by a professional body
- licensing provisions to determine and regulate individual’s competency and proficiency (examination);
- accreditation and certification

C. Not Forensic Science

- no fee paying clientele (public vs. private institution or laboratory)
- no uniform code of ethics
- no enforcement of ethics
- no licensing provisions
- no licensing authority for individuals
- no accreditation for individuals

Sect.26 Ethical and Behavioral Conduct Violations

A code of ethics is written, monitored and enforced on a peer level. Ethics can be misinterpreted. Need a code of conduct, not ethics. A code of conduct does not teach morality. It is a reminder of expected acceptable behavior and indicator of willing to accept responsibility for appropriate conduct. Unfortunately, the implementation, enforcement and sanctions are negligible.

> The more advanced science, the better chances justice can be achieved in the judicial process. Less than perfect quality evidence affects the administration of justice. Unethical behavior, incompetence and fraudulent testimony continually challenges truth and justice.
>
> > Diana Botluk, The NCSTL: Supporting the Role of Forensic Science in the Administration of Justice, 36 Stetson L.Rev., 609, 611 (2007)

A. Witnesses and laboratory personnel are very seldom prosecuted for ethical and legal violations.

B. Forensic scientists are not licensed professionals (eg. doctor, lawyer, accountant, engineer, architect etc.) and are not held to professional standards nor directly responsible for their conduct (malpractice).

C. No external or internal mandated mechanisms for ethical assurances, behavioral conduct, sanctions and prosecutions.

1. Ethical or behavioral conduct rules are automatically converted to legal or authorative rules when disciplinary procedures are attached to them.

2. Impartiality & integrity
   expert has no pride, no shame, no self-respect, only their integrity.

3. Ethics standards are higher than disciplinary standards; follow ethical standards and will not be sanctioned for disciplinary standards.

a. If even remotely think conduct may wrong, then it is, so do not do it.

b. Absolutism as contrasted to relativism.

D. Prevalent problem with forensic experts are honesty, qualifications, competency, quality of work and neutrality.

1. Forensic scientists must be independent neutral witnesses even if they are employed by the government.

2. The ethical conduct of experts is a serious issue confronting the judicial system.

3. Abuse of scientific evidence by experts focuses on lying about credentials, submitting false laboratory reports, presenting misleading testimony, and presenting biased testimony. P. Giannelli, The Abuse of Scientific Evidence in Criminal Cases: The Need for Independent Crime Laboratories, 4 Virginia Journal of Social Policy & Law 439 (Spring, 1997)

4. Error, overstatement or fraud by expert witnesses can often be exposed by careful examination and independent testing regardless of the scientific evidence being used.

5. Authorative Treatises - denial

a. Inference when an expert witness deliberately denies the existence, authoritativeness, use or reliance of a recognized treatise or publication in their field to restrict or terminate cross examination, that expert witness knowingly embraces perjury. J.M. Shellow, The Application of Daubert to the Identification of Drugs, 2 Shepard's Expert and Scientific Evidence Quarterly 593, 603, fn 20 (Winter, 1995)

b. Refusal to acknowledge as authoritative -- Witness cannot evade cross-examination by avoiding words of "rely" or "authority" or any forms of these words. The requisite reliance/authoritativeness for a treatise can be established without express acknowledgment by that witness relied upon it or is authorative. Freshwater v. Scalded, 86 Ohio St.3d 260, 269, 714 NE2d 891 (1999)

E. Most common violations.

1. Testifying beyond knowledge, competence, qualifications and expertise. People v. McKown, 236 Ill.2d 278 (2010)

2. Selectively ignoring facts, withholding or destruction of evidence.

3. Qualifications beyond expertise.

- Dr. Marcelline Burns not qualified as expert witness on HGN FST testing. She is a psychologist and not versed in medical or physiological disciplines and did not in fact design and conduct scientifically sound studies in the area being offered as an expert witness. State of New Mexico v. James Lasworth, 131 NM 739, 42 P.2d 844 (2001) cert.den. NM 2002

"Dr. Marcelline Burns is the ubiquitous -- and peripatetic -- prosecution expert witness testifying in favor of their accuracy and reliability in a host of state cases. Few, if any courts, have agreed with her that SFSTs are reliable as direct evidence of specific BAC." U.S. v. Eric Horn, 85 F.Supp.2d 530, 535 fn.14 (D. Maryland 2002)

- Dr. Michael West: "Additionally, Dr. West himself has been a controversial character in the field of forensic odontology. On several occasions, Dr. West has been held to have exaggerated the reliability of his disciplines and has proceeded to testify outside the scope of his expertise. See, Stubbs v. State, 845 So.2d

656, 669 (Miss.2003); Brooks v. State, 748 So.2d at 749-50; Brewer v. State, 725 So.2d 106, 126 (Miss.1998). In fact, in 1994, the American Academy of Forensic Science instituted an ethics investigation against Dr. West with regard to testimony he had given during a murder trial here in Mississippi. Ultimately, Dr. West was given the opportunity to resign from the organization before being expelled. Since that time, Dr. West has been allowed to re-enter the organization. During a hearing, Dr. West stated that he has testified seventy-five times. Those seventy-five times break down to forty-one murder trials; thirty-two times as a wound pattern expert; one time as a trace metal expert; three times as an expert regarding gun shot residue; three times as an expert in gunshot reconstruction; three times as a death investigator expert; two times as a County Coroner; six times in child abuse trials; three times as a crime scene investigator;*801 and one time as a blood splatter expert. He also asserts that he has made 600 dental I.D's and 300 bite mark I.D.'s. Of the 100 board certified forensic odontologists in the United States, about 90% of them have testified for the opposite side when Dr. West is called as an expert witness." Howard v. State, 853 So.2d 781, 800-801 (Miss., 2003); Radley Balko and Tucker Carrington, The Cadaver King and The Country Dentist,Public Affairs, NY, NY (2018)

A blistering dissent discussing Dr. Michael West's exaggerated reliability and competence of his professed controversial expertise. Brooks v. State, 748 So.2d 736, 747-750 (Miss 1999) Justice McRae, dissent.

4. False credentials

- Richard D. Walter, a charlatan "prison psychologist" and bogus "profiler" who testified to the fictional medical syndrome of sexual dysfunction "picquerism. Drake v. Portuondo, 553 F.3d 230 (2nd Cir., 2009); Walter was instrumental in obtaining double murder convictions and was never disciplined or prosecuted for perjury.

5. Expert bias

- Fred Zain - In West Virginia, former head serologist of the State Police crime laboratory, Trooper Fred Zain, falsified test results in as many as 134 cases from 1979 to 1989. In re Investigation of the W.Va. State Police Crime Lab., Serology Div., 438 SE2d 501 (W.Va. 1993)

6. Technician issue

- Courts must "differentiate between ability to operate an instrument or perform a test and the ability to make an interpretation drawn from use of the instrument." People v. King, 72 Cal.Rpt. 478, 491 (Cal.App. 1968)

7. False reports

State v. Ruybal, 408 A.2d 1284, 1285 (Me. 1979); State v. DeFronzo, 394 NE2d 1027, 1031 (Ohio C.P. 1978); Gordon v. Thornberg, 790 F.Supp. 374, 375 n.1 (D.R.I. 1992)

8. False publications

- Steven Rubenzer (forensic psychologist) cited a non-existent journal in his peer reviewed article. People v. McKown,236 Ill.2d 278,(2010) - HGN case.

F. Ethical or professional conduct code violations does not affect or influence the perpetrator.

1. Membership in scientific organizations is voluntary.

2. Code of ethics is for prescribed conduct.

3. No viable, realistic sanctions for violations exist other than possible loss of membership in the organization.

"The trouble with being an expert is that you can't turn to anybody else for advice."

E.C. McKenzie, ed., 14,000 Quips & Quotes for Writers and Speakers, 1983 Ed., p. 167, Greenwich House Publ., New York

Sect.27 Code of Ethics vs. Code of Conduct

A. Code of Ethics

1. Code of Ethics - Purpose

a. Code's primary purpose: a standard of behavior and offer guidance and justification for a course of conduct in particular circumstances.

- defines and conveys certain conduct is unethical, therefore if not unethical, it is ethical.
- public benefit
- defines relationships between user and provider of service
- perception of credibility
- provide objective standards and guidance, not prevention or punishment.

b. Code is applicable to:

- professional life.
- relations with the public.
- relations with employers.
- relations with coworkers.

c. Ethical rules and principals are influenced by legal and scientific rules. Variations and conflicting values need to be accommodated.

2. Importance in Forensic Science

- results presented in judicial system
- legal implications
- societal implications

3. Professions Require Code of Ethics - Basis

- creates objective standards
- eliminates subjectivity
- defines fundamentals of the profession
- provides credibility
- designation of the profession

4. Ethical requirements

Competency, truthfulness, integrity, complete candor, thoroughness (doing what required and necessary), relevance, review ability of work (independent) including, preservation of data, material methods and material for review - not just conclusions.

5. Must explain basis for certain conduct being unethical.

- defines relationship between practitioner, scientist and public.

- resolving differences between legal and scientific issues (eg. necessity and limited evidence).

- facilitates resolution is through communication.

6. Forensic sciences not bound by Daubert. Daubert vs. Merrell Dow Pharmaceuticals Inc., 509 U.S. 579, (1993)

- courts control admissibility of science, not how forensic science is practiced or regulated.

- applicable to science - no technical requirements for attorneys or investigators

7. Codes must be continually revised, amended and interpreted to reflect developments and evolution.

8. Code of Ethics - Types

a. Codes of ethics are either general or specific

- American Academy of Forensic Sciences (general) applicable to different forensic professions and supplement existing individual codes of ethics.

. general language with non-specific guideline
. committee determines scope and substance of violations.

- California Association of Criminalists (specific) defines the group and means of self-governance and difficult to revise. Serves as model code for American Board of Criminalistics, Association of Firearms and Toolmark Examiners, regional forensic science organizations.

. detailed language
. specific situations and guidance

Peter D. Barnett, Ethics in Forensic Science, chpt. 3, CRC Publ., Boca Raton, Fla., c.2001

- Governmental agencies usually have own code of ethics.

9. No standardized or generally accepted code of ethics exists in forensic sciences.

B. Functionality and application

1. Regulatory Scheme

- Code of Ethics
- Code of Professional Conduct
- Due Process and Regulatory Procedures (complaint, investigation, hearing, appeal)
- Administrative compliance

2. A code of ethics does not ensure competency, integrity, reliability and honesty. A code of

ethics will not dissuade or prevent deviant conduct which is usually illegal in nature.

3. Rules can only apply to situations for which they are defined.

- Because codes are written sets of rules, any situation of suspected breach of the Code must be able to be described in the language of one or more of the clauses in the Code. If you cannot express the behavior or act in that way then it is not a breach no matter how much you disapprove. Conversely anything that can be so described is a breach no matter how trivial. The degree becomes a factor in deciding how to treat the breach not whether there has been one.

- For the same reason, violations of a code of professional ethics are for the Professional Association to deal with. This contrasts with Government Codes which effectively become laws and industry codes which are management tools. Any workplace implications of a violation must be dealt with through workplace mechanisms.

"Good people do not need laws to tell them to act responsibly, while bad people will find a way around those laws." Plato

C. Violations

Not necessary to act in bad faith or with intent to obstruct or hinder investigation. Results are adequate to violate ethics code and incur sanctions. Look at competency, performance, negligence and misleading statements or misleading information.

How much latitude is allowed for determining existence of ethical violations.

D. Enforceability

Receiving complaints, processing complaints, determination process, hearings, review and appellate

procedures, administrative due process protections, advisory opinions, publication of proceeding's results, sanctions, funding for investigation and resolution of the proceedings. Public notice of determinations and findings.

E. Competency

Understanding competency is more difficult and stringent than being competent.

F. Infrequent Used - reasons.

- Most people are honest.
- Allegations tantamount to moral accusation, therefore immoral person.
- Do not engage is self-policing.
- Do not want to encourage frivolous accusations.
- Avoid discord, rancor and contentiousness which accompany investigations.
- Preservation of organization, members and public image.
- Irrelevance of disciplinary sanctions.

Tammy Northrup, Ethics and Forensic Science - W#21, Proceedings, vol. 15, p.38 (2009), American Academy of Forensic Sciences

G. Code of Ethics - Simplistic Rules or Guide

- Smell test - if smells bad, it is bad.
- If remotely even think it is wrong, it is wrong.
- Golden Rule - do unto others as they would do unto you.
- Do the right thing.
- Do what is right
- Do what is best for your client.
- Never take from your client: do not take their pride, integrity, respect or money.

"If it is not right do not do it; it if is not true do not say it." Marcus Aurelus

Sect.28 Legal vs. Scientific Values - Conflicts

Ethical constraints in litigation when scientific evidence is at issue.

A. Whether jurisprudence's method of obtaining expert evidence facilitates or interfere with the trial's process. (Modern Scientific Evidence: The Law and Science of Expert Testimony, David L. Faigman, David H. Kaye, Michael J. Saks, Joseph Sanders, Edward K. Cheng, 2006-2007 Ed., vol.1, Sect. 3.2, p.153, Thomson/West 2006)

1. A contributing factor to the differing of opinions is due to Daubert and its interpretation of sound and dependable fields of knowledge and the pseudo-sciences or unvalidated sciences. The more common problem occurs from individuals of respected disciplines who fail to maintain appropriate reliable standards for credible information.

B. Legal - most common

- right of confrontation, disclosure, self-incrimination
- proprietary or institutional privilege.

C. Scientific

- rejected data or data not relied upon for conclusion.
- raw data only existing in a computer.
- facts to satisfy all scientific requirements for validity, reliability, accuracy and precision.

D. Experts seeking injunctions against discussion of their ethical problems, SLAPP and anti-SLAPP cases for publishing this information, gag orders etc.

- Strategic Lawsuit Against Public Participation ("SLAPP") is a lawsuit intended to intimidate and silence critics by burdening them with the cost of a legal defense until they abandon their criticism or opposition. Winning the lawsuit is not necessarily the intent of the plaintiff's SLAPP. Plaintiff's goals are to make defendant succumb to fear, intimidation, mounting legal costs or simple exhaustion and abandons the criticism. A SLAPP may also intimidate others from participating in the debate. Wikipedia, March/2009

E. Crime Scene Investigation television shows (e.g. CSI:Las Vegas, CSI:Miami, CSI:NY, Bones)

- stresses ethics in forensic science;
- tramples 4th and 5th amendment rights to solve crimes;
- fictionalizes police procedures;
- exaggerates forensic science technics;
- embellishes scientific techniques;
- entertainment based with Hollywood glaze, sex and violence.

Ethical Truism: If you even remotely think it is wrong, it is.

Sect.29 Ethical Issues

An expert witness can effect, affect and infect the evidence.

"Ethical standards are higher than disciplinary standards; follow ethical standards and will not be sanctioned for disciplinary standards." Anon.

Courts do not control how forensic science is practiced or regulated. Courts control issues of admissibility of evidence.

Experts control knowledge of their field into the legal system, while judges and attorneys control the case and what is made part of the case. The adversary process tends to focus on relevant information to the proponent's (movant's) case and emphasize differences and disagreements within that body of knowledge or the

expert presenting different perspectives for different parties instead of resolution of those differences. It is often these differences that decide the case. (Modern Scientific Evidence: The Law and Science of Expert Testimony, David L. Faigman, David H. Kaye, Michael J. Saks, Joseph Sanders, Edward K. Cheng, 2006-2007 Ed., vol.1, sect. 3.2, p.153, Thomson/West 2006)

A. The integrity of scientific evidence can affect the outcome of judicial proceedings.

B. Important due to proliferating use of experts.

C. Special weight accorded by jurors to expert witness testimony.

1. 70% of judges and attorneys believe jurors give more credibility to expert/scientific evidence than other types of evidence.

2. 25% of jurors believe case would have been decided differently without forensic evidence.

3. Expert witness testimony is most persuasive of all witnesses.

D. Organizational Theories

1. Crime Laboratories Are Part of Law Enforcement.

a) must disconnect crime laboratories from law enforcement agencies.
b) create sovereignty and independence.
c) serve both prosecution and defense equally
d) end the monopoly on services

2. Error and misconduct are normal (inevitable) aspects of human behavior, endemic to any organization.

3. Crave secrecy.

4. Standard Explanation.

a) operator or management error.
b) have crime because have criminals.

E. Moral Distinctions

Not necessary to act in bad faith or with intent to obstruct or hinder investigation. Results are adequate to violate ethics code and incur sanctions. Look at competency, performance, negligence and misleading statements or misleading information.

> "All lies, unlike all men, are not created equal. Philosophers from Aristotle to Niebuhr have made moral distinctions among falsehoods, whether "white lies" told for social convenience or to spare feelings, "excuses," that are only half true but that rationalize our own behavior, lies told during a crisis, lies told to liars, paternalistic lies told to protect those we case about, and lies told for the social good - also known as "noble lies." Carl M. Cannon, Untruths and Consequences, The Atlantic January/February 2007, vol. 299, no. 1, 2007, p.56, 58.
>
> The person seems to believe what they are saying, even if what they are saying is not true. This explanation is offered as exculpation, possibly based upon "character motivation." Carl M. Cannon, Untruths and Consequences, The Atlantic January/February 2007, vol. 299, no. 1, 2007, p.56, 65.
>
> - Faith does not trump facts in the judicial system. The law is applied to the facts. But are the facts actually true.
>
> - Even if the person believed something was true when stated, it becomes a lie if the person does not act upon new information, correct themselves when proven wrong or learned of contrary information.
>
> - A willful disregard for the truth, is the moral equivalent of lying.

F. Misleading but literally true statement.

1. Withholding part of the truth or literal accuracy while conveying a false impression.

2. A reply which, although incomplete, misleading, or unresponsive, is literally true or technically accurate is not perjury. Applicable to a statement intentionally misleading, shrewdly evasive thereby conveying false information by implication. John W. Hall, Professional Responsibility in Criminal Defense Practice, sect.25:4, Thompson/West Pub., c.2006

3. Literally accurate testimony is not a basis for subornation of perjury. Drake v. Portuondo, 553 F.3d 230, 243 (2nd Cir., 2009)

a. have you written any articles in your field, - yes. ("written" as opposed to "published") should ask what articles published, date and publisher with full citation to authority, how many published articles and type of publications.

G. Bullshit

- to spin a tale or present information for effect while careless or ignorant of whether it is true; (noun) the product thereof. Harry G. Frankfurt, On Bullshit, Princeton University Press, c.2005; Harry G. Frankfurt, On Truth, p.1-9, Princeton University Press, c.2006

H. Failures by lab technician/analyst/examiner

1. does not know case material.
2. believes detectives or police.
3. did not ask correct questions.

"Relativity applies to physics, not ethics." Albert Einstein

Sect.30 Accountability & Common Concerns (Forensic Scientists/Experts)

A. Expert witness is called in court to provide information addressing issues involving their expertise, not to discuss matters on which they happen to have an opinion - not give inappropriate opinion.

B. Experts cannot express opinions regarding other experts as disparaging, arrogant and unjustified.

C. Opinions cannot be speculative, unsubstantiated, arbitrary or capricious.

D. Cannot use loose or unscientific language, inappropriate expressions – "betting person would conclude."

E. No false or misleading statements.

F. Must maintain objectivity and self-discipline. Cannot become personally involved in a case.

G. Accountability is the obligation to answer for a responsibility conferred. Must explain and justify expert's actions and decisions against objective criteria.

H. Are the comments, findings and decisions balanced, objective and candid.

I. Perspective of independent evidence.

J. Employ an approach which emphasizes thinking objectively. Follow all leads even if to an undetermined outcome. Must be impartial of police, prosecutors and defense – complete transparency. Krane, Ford et al, Sequential Unmasking: A Means of Minimizing Observer Effects in Forensic DNA Interpretation, Jorn. Forensic Sci., July, 2008, vol.33, no.4 p.1006-1007; Krane, Ford et al, Letter to Editor, Jorn. Forensic Sci., March 2009, vol.54, no.2, p.501.

K. Paramount commitment to quality

L. Reports and opinions must:

1. language, words and opinions expressed cannot be susceptible to varied meanings, interpretations and must clearly elucidate the issues at stake.

2. level of confidence or certainty in the opinion is accurately expressed.

3. whether the opinion addresses other explanations for the findings.

4. whether the findings and opinions are in area of controversy within the applicable forensic community.

5. whether part or all of the expert's findings are outside the expert's area of expertise.

6. whether all or part of the findings and opinions are based on second hand information.

7. whether the findings and opinions rely in part or whole on information provided by other experts and non-experts.

8. whether the opinions and findings included facts and reasoning to arrive at that conclusion.

M. Effective communication skills are paramount.

N. If a governmental employee, get job description and agencies's code of ethics and code of conduct. Job description usually requires employee to testify on behalf of prosecution.

O. How much latitude is allowed for determining existence of ethical violations.

P. Differences, if any, between medical ethics and forensic ethics to confidentiality. Salerian v. Maryland State Board of Physicians, 176 Md App. 231 (2007) Are the

lawyer-client privilege being different perhaps than what might be expected of a consulting psychiatrist under medical ethics if the doctor were to discuss matters disclosed in treatment with a family member.

Sect.31 Cognitive and Confirmation Bias

Cognitive and confirmation bias can improperly taint and influence (observer effects)

A. examiner's perception and evaluation of the evidence.

B. judge's admissibility of expert witness testimony.

C. Avoid mental contamination of evidence - natural biases generally defined as:

- *Cognitive bias*: A pattern of deviation in judgement whereby inferences about other people and situations may be drawn from past experiences;

- *Confirmation bias*: The tendency to test hypotheses by looking for confirming evidence rather than potentially conflicting evidence. It usually occurs upon the loss of objectivity. It may also be known as "expectancy bias;"

- *Contextual bias*: the tendency for a consideration to be influenced by background information.

D. Human factors

- Different types of bias (human factors) can influence the outcome of forensic investigations, for example, pattern interpretation, impression evidence, handwriting, voice samples, medicolegal evaluations and assessments.

E. Biases can improperly sway perceptual and cognitive judgements and produce faulty conclusions regardless of intent.

Saul M. Kassin, Itiel E. Dror and Jeff Kukucka, "The

Forensic Confirmation Bias: Problems, Perspective, and Proposed Solutions," Journal of Applied Research in Memory and Cognition, 2(2013):42-52; Michele Tripett, "Errors in Forensics: Cause(s) and Solutions," Journal of Applied Research in Memory and Cognition, 2(2013):63-64; I.E. Dror and D. Charlton, "Why Experts Make Mistakes," J. Forn. Ident., 56(2006):600-616; Dan Simon, In Doubt: *The Psychology of the Criminal Justice Process* (Cambridge, Mass: Harvard University Press, 2012); D. Michael Risinger et al, "The Daubert/Kuhmo Implications of Observer Effects in Forensic Science: Hidden Problems of Expectation and Suggestion," *Cal. Law Rev.*, 90(1)(2002):1-51. (Discussing challenges regarding admissibility of possibly tainted expert evidence by bias.)

Sect.32 Expert Witness Opinions

A. State/Prosecution/Government Witness

1. Declare opponent's witness adverse witness.

2. Cannot be compelled against will to testify as expertise, a proprietary right.

3. Problem is if job description states witness must testify on behalf of prosecution.

B. Opinion - Reasonably Relied Upon Facts, Data or Opinions

1. Admissible evidence can be used to rebutt or challenge reliability of facts, data or opinions reasonably relied upon by expert testifying for opposing party. People v. Robles, 314 Ill.App.3d 931, 733 NE2d 438 (2000)

2. Terminology of "might", "could", "possibly," "in terms of probability" remains admissible. Wojcik v. City of Chicago, 299 Ill.App.3d 964, 702 NE2d 303 (1998)

3. Inconclusive - a term which is not and cannot be defined. Inconclusive is not a result, it is a

   result that is not be disclosed - must state why cannot reach a conclusion.

4. Proper for expert to reasonably rely on authoritative literature without either identifying it or disclosing its contents on direct examination. Becht v. Pala, 317 Ill.App.3d 1026, 740 NE2d 1131 (2000)

5. Examination permitted on material reviewed by expert, but not relied upon or disregarded or did not use. Leonardi v. Loyola University of Chicago, 168 Ill.2d 83, 658 NE2d 450 (1995); People v. Pasch, 152 Ill.2d 133, 604 NE2d 294 (1992)

6. Cannot testify as summary expert or conduit by relying on information or opinion by other experts without providing additional input. Rock v. Pickleman, 214 Ill.App.3d 368, 574 NE2d 682 (1991) (Rakowski concurring); Kochan v. Owens-Corning Fiberglass Corp., 242 Ill.App.3d 781, 610 NE2d 683 (1993)

7. Cannot summarize literature for purpose of educating trier of fact when expert has not conducted tests and does not know actual test methods and procedures. Mielke v. Condell Memorial Hospital, 124 Ill.App.3d 42, 463 NE2d 216 (1984)

8. Cannot rely solely on self-serving statements of defendant. People v. Britz, 123 Ill.2d 446, 528 NE2d 703 (1988)

9. If an expert relies on work product or hearsay as a basis for their opinion, that material must be disclosed and produced through discovery. United States v. Lawson, 653 F.2d 299, 302 (7th Cir. 1981)

10. An expert cannot base a opinion, even partially, on illegally obtained and inadmissible evidence. Wong

Sun v. U.S., 371 U.S. 471, 484 (1963)

11. When expert testimony is based on mechanical or electronic device, the expert must provide foundation of the method of recording information and proof the device was functioning properly when used. The trial court ensure the admission of scientific evidence, including expert's scientific testimony, is based on a testing device that is both relevant and reliable. People v. Raney, 324 Ill.App.3d 703, 710-11, 756 NE2d 338 (1st Dist. 2001)

12. Expert opinion testimony must be in fact expert opinion and not merely an opinion given by an expert. People v. Sifunetes, 248 Ill.App.3d 248, 252-53, 618 NE.2d 643, 646 (Ill.App. 1st Dist. 1993)

13. Improper to examine witness on defendant's failure to offer favorable evidence - but permissible examination that defense criticisms of prosecution's expert not based on independent testing by defendant. People v. Oliver, 306 Ill.App.3d 59, 713 NE2d 727 (1999)

14. Questions/Answers beyond expertise. Expert witnesses notoriously stray outside the fields of their expertise. Frequently this is not the expert's fault because lawyers often ask questions on issues beyond the witness's experience. The opposing attorney then fails to object because neither lawyer knows any better. This problem is caused by the appalling scientific illiteracy that exists among the bar and bench. Andre A. Moenssens, Novel Scientific Evidence in Criminal Cases: Some Words of Caution, Journ. of Criminal Law and Criminology, vol. 1, p.1, 7 (Spring 1993); A Crisis in the Forensic Sciences: Real or Imagined?, Scientific Sleuthing Review, vol 21. no.4 p.15 (Winter, 1997); David Faigman, Legal Alchemy: The Use and Misuse of Science and the Law, p.xi-xii, 53-54, 64, W.H. Freeman & Co., NY, NY, c.1999.

15. Knowledge must connote more than subjective belief or unsupported speculation. Expert testimony on firearms must follow established standards with respect to documentation and peer review. Cannot testify a match exists to an exact statistical certainty. Courts must consider known or potential rate of error of scientific technique, existence and maintenance of standards controlling the technique's operation. Lack of certainty does not render an opinion unreliable. US v. Monteiro, 407 F.Supp.2d 351 (D.Mass. 2006); Adina Schwartz, A Systematic Challenge to the Reliability and

Admissibility of Firearms and Toolmark Identification, 6 Columbia Science & Technology L.Rev. 1 (March 28, 2005)

Experts are among the best malingerers.

Sect.33 Fraud / Lies

"Truth cannot be altered - But testimony can."
Ashleigh Brilliant, 1999

In Daubert v. Merrel Dow Pharm. Inc., the Court when discussing the tenets of good science did not (specifically) address the dishonest and unethical forensic expert who participates in evidence shaping and how it can affect the outcome of judicial proceedings.

A. Test Results. All too often the laboratory states a conclusion, then gets data so support it after being challenged, thereby supplying facts post hoc.

B. Ethics and scientific testimony are inextricably intertwined, because science is neutral and based upon facts.

C. Impartiality of forensic science is used to convict the guilty and protect or exonerate the innocent.

D. A code of ethics does not ensure competency, integrity, reliability and honesty. A code of ethics will not

dissuade or prevent deviant conduct which is usually illegal in nature.

E. Frequently ideological and personal beliefs prejudice an expert witness's testimony.

1. Experts prevaricate for reasons other people do: pathology, politeness, paternalism, convenience, shame, self-promotion, insecurity, ego, narcissism, and even, on occasion, to further a noble goal." Carl M. Cannon, Untruths and Consequences, The Atlantic Jan./Feb. 2007, vol. 299, no. 1, 2007, p.56, 58.

a. Biographical lie - tends to represent braggarts or fabricators derived from a job description which seems to demand some alteration with one's pedigree or accomplishments as a way to achieve recognition or acceptance. supra, p.59

b. Most common compliant against expert witnesses is giving false educational credentials, including claiming credit for non-accredited academic courses. (Modern Scientific Evidence: The Law and Science of Expert Testimony, David L. Faigman, David H. Kaye, Michael J. Saks, Joseph Sanders, Edward K. Cheng, 2006-2007 Ed., vol.1, p.166, Thomson/West 2006); Gil Sapir, Misrepresenting IACT Credentials, Drinking Driving Law Letter, July 11, 2007, vol.26, no.14, p.197, 200.

2. People or agencies have distorted and fabricated scientific evidence to obtain civil judgements or convict innocent people.

a. Short cuts are taken with facts in order, supposedly, to get at a larger truth." Posterity rewards success, not truth. Consequences matter more than truth. Carl M. Cannon, Untruths and Consequences, The Atlantic Jan./Feb. 2007, vol. 299, no. 1, 2007, p.56, 65. Bring the criminal to justice. Remove the criminal and guilty person's from society. If the expert witness is able to contribute to convictions through their work, then justice has been served from their perspective. The

most dangerous lies an expert witness can tell are apparently those they tell themselves.

3. Experts are expert malingerer's.

a. Unless the expert is a fact witness, their testimony is "opinion" evidence which (basis for their opinion) insulates most of them from sanctions regardless of the difference between the data and their opinion. Since, opinions are neither true or false, they cannot be "lies." If, however, the expert has offered a contrary opinion in a previous proceeding or lecture, then it might be possible to establish the current testimony is a "lie." In reality, the cross examiner may only discredit the expert's opinion, assuming the attorney is diligent enough to acquire this type of information.

4. Evidence shaping (colloquialism)

Defined: selective testing, selective reporting, biased interpretation, overstating the significance of test results, ignoring or withholding results inconsistent with a biased viewpoint, inappropriate collection and testing of evidence and fabrication of data.

Stanley G. Schneider and Kevin D. Ballard, Convincing But Erroneous: The Courtroom Impact of Evidence Shaping, Proceedings of the American Academy of Forensic Sciences, vol. 4, p. 119, Feb. 1998.

- Bias - motivation to arrive at one outcome or another.

- Contextual interpretation by observable effects.

5. Rhetorically a.k.a "juicing the testimony."

Tainting Evidence: Inside the Scandals at the FBI Crime Lab, John F. Kelly and Philip K. Wearne, p.312, The Free Press, NYC, NY, c.1998. (discussing

stretching the truth or even lying on witness stand.)

6. Evidence shaping incorporates:

   a. bias, intellectual dishonesty and fraud by the expert witness. It also involves performances, interpretation and presentation of science deliberately designed to favor a particular viewpoint.

   b. there is little in the way of knowing what is true or actually was true when an expert shades their testimony or lies - there are empirical reasons to wonder. Carl M. Cannon, Untruths and Consequences, The Atlantic Jan./Feb. 2007, vol. 299, no. 1, 2007, p.56, 67.

   - "Texas Sharpshooter Fallacy" - puts bulls eye around bullet hole.

   - graphical statistics - first draw curve, then plot the points.

7. Refusal to acknowledge as authoritative

   a. Witness cannot evade cross-examination by avoiding words of "rely" or "authority" or any forms of these words. The requisite reliance/authoritativeness for a treatise can be established without express acknowledgment by that witness relied upon it or is authorative. Freshwater v. Scalded, 86 Ohio St.3d 260, 269, 714 NE2d 891 (1999)

8. An expert cannot base a opinion, even partially, on illegally obtained and inadmissible evidence. Wong Sun v. U.S., 371 U.S. 471, 484 (1963)

9. Expert opinion testimony must be in fact expert opinion and not merely an opinion given by an expert. People v. Sifunetes, 248 Ill.App.3d 248, 252-53, 618 NE.2d 643, 646 (Ill.App. 1st Dist. 1993)

10. Fallacy
    - an error of logic, a conclusion that does not or cannot follow logically from the data.

11. Bullshit

12. Lies
    - distinctional and intentional

13. Fraud is not self-correcting. There can be a thin line between optimism and delusion.

    Fraud is perpetuated by 1) laboratory managers that defer to a subordinate's intelligence, 2) because the laboratory work conforms to a prevailing view, and 3) financial renumeration. G. , Legal Aspects of Forensic Science, ch. 1, p.8 in "Forensic Science Handbook," vol.I, 3rd, R. Saferstein & A. Hall, ed., CRC Press Publ., c.2020.

14. Problem areas (random)

    a. falsification of credentials

        - resume/curriculum vitae

        - education, experience, training, certification

        - 14% lie / 43% significant inaccuracies in resumes. Lisa Cullen, Getting Wise to Lies, Time Magazine, May 1, 2006, p.59.

        - why people lie about education on cv/resume . societal envy - society is jealous of brain power (professional status - doctor, lawyer, cpa, engineer, expertise etc.)

    b. lack of honesty and integrity - falsification of tests and reports.

        - inadequate or proper supervision
        - lack of whistle blowers on co-workers

"How many times do you get to lie before you are a liar?"
Michael Josephson

c. competency

- testifying beyond area of expertise
. pathologist cannot discuss toxicology findings Pickett v. Brown, 6 Fed.Supp. 81, 85 (1985)

- bad science

- do incompetent people realize they are incompetent.

d. boasting

- first cousin to the white lie is the idle boast - not quite so harmless, but not nefarious, either. Carl M. Cannon, Untruths and Consequences, The Atlantic Jan./Feb.2007, vol. 299, no. 1, 2007, p.56, 59.

e. role of expert

- expert balances validity of analytic method versus testimonial simplicity. J.M. Shellow, The Application of Daubert to the Identification of Drugs, 2 Shepard's Expert and Scientific Evidence Quarterly 593, 600 (Winter, 1995)

f. purpose of test

- purpose of a forensic test is not to identify an item or result, but to convince a jury that the item or result has been identified.

g. goal

- goal of scientist is truth, the goal of forensic analyst is persuasion. J.M. Shellow, The Application of Daubert to the

Identification of Drugs, 2 Shepard's Expert and Scientific Evidence Quarterly 593, 602 (Winter, 1995)

h. testimony

- witnesses should ensure that their opinions are congruent with current scientific standards, and not be manipulated into extending their testimony to support a particular side of a case. Wu, AHB, Minimal Standards for the Performance and Interpretation of Toxicology Tests in Legal Proceedings, J. Forensic Sci., 1999; vol. 44, no.3. pp.516-522 p.521

i. the forensic scientist cannot have an interest in the outcome of the case.

j. if the courts and attorneys were scientifically literate, there might be less temptation for forensic scientists to skim the truth in their testing and testimony.

k. organizational structure of crime laboratories (broad generalities)

- insular, prosecutorial, anti-intellectual
- lack insight
  - . tunnel vision, bias assimilation, impression preservation
- inertia dominates (keep status quo)

l. quality of work - NIJ study of 200 police labs

- 142 labs misidentified a blood sample
- 136 labs failed to determine cow from human hair
- 102 labs failed to match paint chips

m. lack of adequate proficiency testing.

n. assumptions, limitations, inferences

o. forensic disciplines do not police themselves beyond initial certification.

p. resisting the short term gain from a lie.

q. self-deception.
The public, victims and judiciary bristle when confronted with realities of lying experts or law enforcement. Instead of parties responsible for directly correcting the blase optimism of faith in the testimonial oath and the truth seeking process, they either ignore it, falter or fall back on platitudes or rationalize its existence. (for example rouge experts, overworked personnel, mistakes happen, not enough resources to prosecute perjury crimes, mistakes happen etc.) Self-deception is not reversible.

r. credibility gap

s. relying on certification/accreditation of laboratory to bolster credibility of lab, personnel and test results.

t. adaptability & controversy of opinion for service

- The use of expert witnesses has always been controversial. In 1848, Judge Pitt Taylor wrote, "(p)erhaps the testimony which least deserves credit with a jury is that of a skilled witness ...(I)t is often quite surprising to see with what facility, and to what extent, their views can be made to correspond with the wishes and interest of the parties who call them." Samuel R. Gross, Expert Evidence, 1991 Wis. L.Rev. 1113, 114.

u. exaggerated reliability – testimony barred (outside scope of expertise; Dr. Michael West) Howard v. State, 853 So.2d 781, 800-801 (Miss.,2003)

v. not keeping current in relevant fields of scientific expertise with latest technology and scientific information.

"The measure of a man's real character is what he would do if he knew he never would be found out." Thomas Babington Macaulay (1800-1859)

F. Integrity is paramount.

G. Expert witness fraud and ethical violations are not isolated random incidents.

James E. Starrs, A Crisis in the Forensic Sciences: Real or Imagined? Sci. Sleuthing Rev., Winter 1997 at 15; S.G. Schneider and K.D. Ballard, Convincing But Erroneous: The Courtroom Impact of Evidence Shaping, Proceedings of the American Academy of Forensic Sciences, vol. 4, p. 119, February 9, 1998.

J.E. Murray, Conference Proceedings: Science and the Law, 34 Duquesne L.Rew. 795-812 (Summer, 1996); James E. Starrs, Recent Developments in Federal and State Rules Pertaining to Medical and Scientific Expert Testimony, 34 Duquesne L.Rew. 813-847 (Summer, 1996)

Paul C. Giannelli provides an insightful review of prominent incidents regarding egregious abuses of expert witness testimony in forensic science which notably include, serologist Fred Zain, pathologist Dr. Ralph Erdmann, dentist Dr. Michael West ("West Phenomena"), anthropologist Dr. Louise Robbins ("Cinderella Expert"), the Guildford Four and Maguire Seven (Irish Republican Army cases), serologist Timothy Dixon (Gary Dotson DNA case) and other notable cases with abhorrent consequences. P. Giannelli, The Abuse of Scientific Evidence in Criminal Cases: The Need for Independent Crime Laboratories, 4 Virginia Journal of Social Policy & Law 439 (Spring, 1997); Also, see, J.E. Starrs, The Seamy Side of Forensic Science: The Mephitic Stain of Fred Salem Zain, 17 Sci. Sleuthing Rev., 1, 7 (Winter, 1993); J.E. Starrs, Judicial Control Over Scientific Supermen: Fingerprint Experts and Others Who Exceed the

Bounds, Criminal Law Bulletin, vol. 35, no.3, pp. 234-276 (May-June 1999); Andre A. Moenssens, Novel Scientific Evidence in Criminal Cases: Some Words of Caution, Journ. of Criminal Law and Criminology. vol. 1, p.1, 6 (Spring 1993); G. Castelle, Lab Lessons Learned from the 'Fred Zain Affair,' May, 1999, vol.23, No.4, p.12; NACDL Affiliate News, (Joy Gilchrist) Champion, vol.25, no.5, p.13 (2001)

"Justice is too good for some people and not good enough for the rest." Norman Douglas. From, L.J. Peters, Peter's Quotations: Ideas For Our Time, p.294, Bantam Books, New York, NY, 1979

Sect.34 Credentialing Bodies and Laboratory Accreditation

A. Common Agencies/Organizations (informational)

American Association of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB)
College of American Pathologists (CAP)
American Board of Criminalistics (ABC)
National Association of Medical Examiners (NAME)
American Board of Forensic Toxicology (ABFT)
American Board of Forensic Psychiatry (ABFP)
American Board of Forensic Psychiatry and Neurology, certified in Forensic Psychiatry (ABPN-FP)
American Board of Pathology, certified in Forensic Pathology (ABP-FP)
American Board of Forensic Anthropology (ABFA)
American Board of Forensic Document Examiners (ABFDE)
American Board of Forensic Odontology (ABFO)
American Board of Medicolegal Death Investigators (ABMDI)

B. Laboratory accreditation

1. Most laboratories are accredited

- use and rely on federal funding
- federal funds require accreditation

2. 343 crime labs ASCLD accredited

   - most accredited through Legacy, then ISO
   - get certification requirements

3. Accreditation is a progressive step, not panacea

C. Personal Certification

1. Certification establishes a verifiable level of training and experience.

2. Assists in determining person knowledge of subject matter (knows/does not know) from basics to intricacies.

3. Requires continuing education (formal & informal) to stay current.

4. Another way to demonstrate competency in chosen field/endeavor, regardless if proficiency testing is required.

5. Provides self-assurance.

6. Obtain and review training documents, proficiency test/results, reports/evaluations of monitored testimony (peer listing/evaluation by lab), protocols, interpretation guidelines etc.)

D. Question Areas - Basic: (laboratory/personal)

1. Is accreditation/certification relevant to current work.

2. Requirements to obtain certification.

3. Accreditation of certifying agency or authority.

4. Requirements for continuing education for certification.

5. Who created certification programs - credentials of creators.

6. Is membership is professional associations required to maintain certification.

7. Is certification recognized or approved by other certifying agencies or authorities.

E. Problems Areas - certification

Remember certification of laboratory:

1. Does not prevent mistakes.

2. Is on periodic basis - every 5 years.

3. Does not cover issues during interim period.

4. Applies only to laboratory - not individuals/technicians.

5. Board certified is not board qualified. Either certified or not certified.

** 6. Certification, lack of certification or failing certification does not prevent a crime laboratory from conducting examinations.

7. comprehensive technical review of examiner's work and verification of data.

- "comprehensive" and "technical" not defined (merely report review, examine entire case 2 or 3 times or read all documents, re-examine the evidence - what).

- verification of opinion based conclusion is not defined.

8. clear confirmation
- limitations on methods - never find limitations in a report.

9. laboratory analysts lack requisite training, techniques and resources to reliably examine proficiency test samples.

Peterson & Leggett, The Evolution of Forensic Science: Progress amid the Pitfalls, 36 Stetson L.Rev., 621, 629 (2007)

F. Deficiencies in education - certification

1. Does not teach laboratory personnel forensic science

2. What are people being trained to analyze.

3. What does forensic science curriculum include:

-principles - theory of science, null hypothesis
-principles of forensic science
-technical skills
-ethics
-legal aspects of forensic science
-trial procedure
-philosophy of science

Sect.35 Professional Organizations

A. Membership is voluntary.

- American Academy of Forensic Science, Colorado Springs, Colo.

- American Board of Criminalistics, Wausau, Wisc.

- International Association of Chemical Testers

B. Codes of ethics or behavioral conduct lack uniformity, consistency, definition, consensus and applicability between organizations.

- For example, compare American Academy of Forensic Sciences or National Forensic Center to American Board of Criminalistics or International Association of Chemical Testing.

- Not unreasonable to assume a group can reach a consensuses regarding an acceptable code of conduct, professional or otherwise. Unfortunately, uniformity

does not occur.

C. Loss of membership does not affect employment.

Sect.36 Credibility and Common Sense - Expert Witness

A. Fees

1. Specify dollar amount - no contingencies

2. Arrange for compensation and fees before

consultation, being hired and before beginning any type of work.

B. No guarantees on case outcome

C. Maintain and keep strict well documented records

D. Keep attorney/client informed of everything

E. Work within competence level

F. Do not overstate credentials, resume/curriculum vitae, publications.

G. Professional Affiliations/Membership

Fraudulent claims of professional status and association by an expert witness with an organization that owns a federal registered trademark subjects the infringer to injunctive relief and damages. ABPN v. Johnson-Powell, 123 F.3d 1 (1997)

H. Do not be pressured by peers.

I. Preserve confidentiality.

J. Avoid all conflicts of interest and possible allegations of impropriety.

K. Tell the truth.

L. Disclose in writing scheduling pre-existing commitments, scheduling conflicts, prospective deadlines for production of materials and budgetary conditions.

M. Avoid all conflicts of interest and possible allegations of impropriety. If remotely think a conflict exists, then it does and do not accept the case. Request written list of all actual and potential parties relating in any manner to the case.

N. Work for only one party after being retained. Expert originally hired by plaintiff was disqualified from testifying for defense, and defense counsel was disqualified for hiring plaintiff's former expert. Cordy v. Sherwin-Williams Co., et al,156 F.D.R. 575 (1994)

O. Do not defame or slander anyone, especially other experts parties or witnesses. Keep opinions and comments to yourself.

P. Once a person starts compromising their integrity, it is nearly impossible to reclaim it.

Q. Maintain and preserve your integrity.

Sect.37 Trial Preparation

A. Work product protection

1. Consulting expert

2. Testifying expert

3. Engagement letter

- prepare materials to assist in trial for representation of named client; all your efforts, results, work and material is confidential and work product based upon attorney client privilege.

4. Correspondence

- write work product and date on everything.

- confidentiality is paramount

- information transmitted through non-encrypted electronic mail (e-mail) is neither a privileged nor confidential communication. This privilege extends to expert witnesses engaged by the attorney on behalf of the client. J.W. Hall, E-Mail and Confidentiality, 21 Champion 52 (June, 1997); American Civil Liberties Union v. Reno, 929 F.Supp. 824, 830-838 (E.D.Pa.)(three-judge court)

- all communications must be in traditional and conventional reproducible and verifiable medium -- telephone calls and e-mail does not exist.

5. Discoverable evidence (anything written)
use oral reports & if use at trial, then reduce results to writing.

6. Work product

7. Fees - no contingencies

8. Compensation - expert gets paid

9. Impartiality & integrity
expert has no pride, no shame, no self-respect, only their integrity

10. Ethics standards are higher than disciplinary standards; follow ethical standards and will not be sanctioned for disciplinary standards

B. Discovery - Federal Rule Criminal Procedure 16 (a)(1)(g)

"Perseverance (n): A lowly virtue whereby mediocrity achieves and inglorious success." Ambrose G. Bierce

Sect.38 Expert Witness' Role, Duty and Obligation

A. Attorney interview

1. If not contacted - initiate interview

2. Obtain complete case materials

3. Review qualifications, expertise & work product

4. Discuss problems areas

5. Meet at least twice with attorney, 2 weeks & 2 days before trial

6. If attorney does not follow advice
   - confirm it in writing; letter & memo to file

B. Trial Preparation by Expert Witness

1. Expert

   - review & know all case materials

   -bring all personal notes, memoranda & formal reports

   - curriculum vitae, certifications, license(s)

   - vocabulary list of terminology for ct. reporter

   - demonstrative evidence (show & tell)

   - location of courthouse

   - familiarization with court room, procedure & surroundings, sit in witness chair

   - never be late

   - never talk in elevators, hallways, restrooms or with opposing counsel or jurors

2. Know methodology and procedure

- state of art technology

- literature review

-experience

- maintain current library

3. Reasonable degree of scientific certainty

a) prevents speculations by expert

b) ensured that expert's opinion is one generally accepted within that area of expertise.

Prevents speculation by applying a relevance test to the expert's opinion. Again look to Frye v. United States, 293 F.1013 (D.C. Cir. 1923) or Daubert v. Merell Dow, 509 US 579, 113 S.Ct. 2786 (1993).

- based upon reason and quantity: not quality of isolated points

- opinion testimony - nothing else

- not any scientific certainty: nothing is absolute to all facts

- pursue reasonable doubts: omission, inadequate sampling, human and technological error

4. When does mathematical probability and legal reason coincide

5. Use analogies

a. speak at two levels

- an item can function mechanically, but not operate accurately (clock example)

- single point linear calibration (car tire

balance)

6. Lexicon - destroy/neutralize/enhance it

a. use familiar words, terms, phrases in simple concise and well structured presentation

C. Basis for opinion

1. First hand knowledge

2. Relevant scientific principles without regard to facts in case

3. Use of specialized knowledge and techniques by expert in this case

D. Current knowledge

1. Maintain current library and literature - fertile cross-examination area

"The trouble with being an expert is that you can't turn to anybody else for advice."
E.C. McKenzie, ed., 14,000 Quips & Quotes for Writers and Speakers, p. 167, Greenwich House Publ., New York, c.1980

E. Attorney

1. Educate attorney - (books, articles & materials to facilitate presentation and competency)

- prepare outline of testimony & exhibits

Civil attorneys are litigators.
Criminal defense attorneys are trial attorneys.

Sect.39 Client Preparation

A. 6 Ps - prior preparation prevents piss poor performance

B. Difference between the best and the rest is preparation

C. Know and use own exhibits and documentation.

D. Obtain current curriculum vitae/resume and biographical statement.

E. File curriculum vitae/resume with court - make it part of the common law record.

"Failure to prepare is a preparing to fail." John Wooden

Sect.40 Witness Preparation

c. Gil Sapir 2020

A. Review testimony

B. Exhibits

C. Records, reports, documentation

D. Demonstrative exhibits

E. Entire file

F. Vocabulary list for attorney and stenographer

G. Bring to deposition only material requested in subpoena, at trial, bring everything.

Sect.41 Expert Witness Opinions

A. State/Prosecution/Government Witness

1. Declare opponent's witness adverse witness.

2. Cannot be compelled against will to testify as expertise, a proprietary right.

3. Problem is if job description states witness must testify on behalf of prosecution.

B. Opinion - Reasonably Relied Upon Facts, Data or Opinions

1. Admissible evidence can be used to rebutte or

challenge reliability of facts, data or opinions reasonably relied upon by expert testifying for opposing party. People v. Robles, 314 Ill.App.3d 931, 733 NE2d 438 (2000)

2. Terminology of "might", "could", "possibly," "in terms of probability" remains admissible. Wojcik v. City of Chicago, 299 Ill.App.3d 964, 702 NE2d 303 (1998)

3. Proper for expert to reasonably rely on authoritative literature without either identifying it or disclosing its contents on direct examination. Becht v. Pala, 317 Ill.App.3d 1026, 740 NE2d 1131 (2000)

4. Examination permitted on material reviewed by expert, but not relied upon or disregarded or did not use. Leonardi v. Loyola University of Chicago, 168 Ill.2d 83, 658 NE2d 450 (1995); People v. Pasch, 152 Ill.2d 133, 604 NE2d 294 (1992)

5. Cannot testify as summary expert or conduit by relying on information or opinion by other experts without providing additional input. Rock v. Pickleman, 214 Ill.App.3d 368, 574 NE2d 682 (1991) (Rakowski concurring); Kochan v. Owens-Corning Fiberglass Corp., 242 Ill.App.3d 781, 610 NE2d 683 (1993)

6. Cannot summarize literature for purpose of educating trier of fact when expert has not conducted tests and does not know actual test methods and procedures. Mielke v. Condell Memorial Hospital, 124 Ill.App.3d 42, 463 NE2d 216 (1984)

7. Cannot rely solely on self-serving statements of defendant. People v. Britz, 123 Ill.2d 446, 528 NE2d 703 (1988)

8. If an expert relies on work product or hearsay as a basis for their opinion, that material must be disclosed and produced through discovery. United States v. Lawson, 653 F.2d 299, 302 (7th Cir. 1981)

9. An expert cannot base a opinion, even partially, on illegally obtained and inadmissible evidence. Wong Sun

v. U.S., 371 U.S. 471, 484 (1963)

10. When expert testimony is based on mechanical or electronic device, the expert must provide foundation of the method of recording information and proof the device was functioning properly when used. The trial court ensure the admission of scientific evidence, including expert's scientific testimony, is based on a testing device that is both relevant and reliable. People v. Raney, 324 Ill.App.3d 703, 710-11, 756 NE2d 338 (1st Dist. 2001)

11. Expert opinion testimony must be in fact expert opinion and not merely an opinion given by an expert. People v. Sifunetes, 248 Ill.App.3d 248, 252-53, 618 NE.2d 643, 646 (Ill.App. 1st Dist. 1993)

12. Improper to examine witness on defendant's failure to offer favorable evidence - but permissible examination that defense criticisms of prosecution's expert not based on independent testing by defendant. People v. Oliver, 306 Ill.App.3d 59, 713 NE2d 727 (1999)

13. Questions/Answers beyond expertise. Expert witnesses notoriously stray outside the fields of their expertise. Frequently this is not the expert's fault because lawyers often ask questions on issues beyond the witness's experience. The opposing attorney then fails to object because neither lawyer knows any better. This problem is caused by the appalling scientific illiteracy that exists among the bar and bench. Andre A. Moenssens, Novel Scientific Evidence in Criminal Cases: Some Words of Caution, Journ. of Criminal Law and Criminology, vol. 1, p.1, 7 (Spring 1993); A Crisis in the Forensic Sciences: Real or Imagined?, Scientific Sleuthing Review, vol 21. no.4 p.15 (Winter, 1997); David Faigman, Legal Alchemy: The Use and Misuse of Science and the Law, p.xi-xii, 53-54, 64, W.H. Freeman & Co., NY, NY, c.1999.

Experts are among the best malingerers.

Sect.42 Use Demonstrative Evidence

A. Notice provisions

B. Show & tell prevails

C. Exhibits for all parties

D. Fair and accurate representation

E. Practice & rehearsal with exhibits

F. Handling exhibits

1. Mark and number all exhibits for consistency, continuity and cross referencing.

2. Do not pile evidence up on table in front of you.

3. Keep everything separate.

4. Document catalog and check list.

5. Use notebooks

Sect.43 Expert Witness Demeanor

A. Attire

1. Clean, neat & presentable

- clean finger nails & polished or shined shoes

2. Comfortable clothing

3. Regional attire - conservative

4. No lapel pins or buttons

B. Personal preparation

1. Urinate before testimony

2. No carbonated liquids

3. No caffeine

4. Room temperature water - no ice

5. Take couple of aspirin half hour before testimony

6. Be on time

7. Eat light meal or candy bar before deposition

8. No chewing gum

9. Do not discuss case anywhere except in deposition room

10. Read transcripts before testifying - will be asked about them so be prepared.

11. Sit next to your attorney and near court reporter

Sect.44 Attitudinal Problems with Expert Witnesses / Vulnerability

A. Always correct or right all of the time syndrome

B. We have always done it this way syndrome

C. Integrity for growth and change

D. Do not tell them anything or give them anything (stone wall) syndrome

E. Over developed sense of intelligence and infallibility

Sect.45 Trial Testimony

A. The effective expert witness' testimony is almost always dependant upon:

1. Experience

2. Communication skills (clear, concise, understandable language)

   a. concept of putting finite item in infinite possibilities

   - 26 letter English alphabet - language/literature
   - 12 musical notes, 1 octave - 88 piano keys
   - 4 amino acids - DNA (building blocks t-a, c-g)

3. Educational background and training

4. Scientific validity of tests and results

B. Scope

1. Limit expert to only their field of expertise.

   - pathologist cannot discuss toxicology findings. Pickett v. Brown, 6 Fed.Supp. 81, 85 (1985)

2. Can use and rely on reports by other credible professionals in the same field as a basis for expert's opinion. People v. Anderson, 113 Ill.2d 1, 495 NE2d 485 (1986)

3. Adoption and application of FRE 703, 705. Wilson v. Clark, 84 Ill.2d 186, 417 NE2d 1322 (1981);

4. Do not ask questions to seek information

5. Facts, no conjecture or speculation

6. Objectivity

7. Content

8. Candor & honesty

9. Cogent & concise

10. KISS (keep it simple stupid)

11. Questions: improper, incorrect & inept

- restrict answers to facts personal knowledge

- ask for clarification of questions

- caution on questions that include "absolutely," "positively," "always," and "never"

- compound questions

- generalizations

12. Demonstrative evidence (play show & tell)

13. Use analogies

14. Scientists in the courtroom; lawyers in the laboratory.

15. Difference between truth and justice; as difference between science and law.

C. Objective

Juror must be able articulate expert's opinion and movant's theory or else cannot convey it during deliberations

The more I study, the more I learn. The more I learn, the more I know. The more I know, the more I forget. The more I forget, the less I know. The less I know, the less I forget. The less I forget, the more I remember. So why study? Anon.

Sect.46 Oath

A. Each witness is required to take an oath before providing testimony.

1. Do you promise or affirm to tell the truth, the whole truth, and nothing but the truth?

2. A simple concept with simple purpose - yet it can be so difficult.

B. Standard for integrity.

1. The oath speaks for itself - truth.

a. Not a portion of the truth, not shades of the truth, just the simple truth.

b. It is a clear and definite concept.

Larry S. Pozner and Roger J. Dodd, Cross-Examination: Science and Technique, p. 1, Michie Co., Charlottesville, Va. 1994.

"Subtlety may deceive you; integrity never will." Oliver Cromwell

Sect.47 Voir Dire Testimony - Expert

A. Expert's Voir Dire

1. Creates standard for testimony

2. Discuss qualifications as basis for formulating an opinion

3. Elicit opinion

4. Explain opinion

5. Never stipulate to credentials - unless very good specific achievable reason exists

6. Must be stringent and rigorous to establish credibility.

a. direct, cross & ruling by court regarding qualifications of expert

b. moving party must establish expert's competency and knowledge in profession and field (not experience, education or specialized training) subject to judicial approval, through examination of expert's credentials.

7. Does the prosecution/movant have and use true expert witnesses in routine cases. (eg.DUI/DWI)

8. Employment/services contract

    a. requirements, fees, bias, duty to testify, incentives etc.

9. Job description
   qualifications, motive, interest, bias

10. Actual work: analyzes drugs or actually compares spectral lines. (similar to hand writing analysis and wavy lines with peaks and valleys)

11. Curriculum vitae not biographical statement - puffing.

    a. voir dire can be made to sound impressive, without substance to support qualifications and credentials.

    b. accurate & not overstated curriculum vitae

12. Qualified versus competent

    a. board qualified versus board certified accountant versus a CPA

13. Put resume or curriculum vitae into evidence - even if stipulate to credentials

14. Never take voir dire for granted or witness will not be properly qualified

    See, Appendix B - Expert Witness Voir Dire

Gil Sapir, Qualifying the Expert Witness: A Practical Voir Dire, Forensic Magazine, vol.4, no.1, February/March, 2007, p.30.

Gil Sapir, Legal Aspects of Forensic Science, ch. 1, p.12, 32 in "Forensic Science Handbook," vol.I, 3rd ed, Richard Saferstein & Adam Hall, ed., CRC Press Publ., c.2020

Sect.48 Direct Examination

A. Scope of Testimony - Time to Teach/Educate

1. Facts, no conjecture or speculation

2. Overview of results based upon analysis

3. No leading questions

4. Objectivity

5. Content

6. Candor & honesty

7. Cogent & concise

8. KISS (keep it simple stupid)

9. Questions: improper, incorrect & inept

- restrict answers to facts personal knowledge

- ask for clarification of questions

** - caution on questions that include "absolutely," "positively," "always," and "never"

- compound questions

- generalizations

10. Demonstrative evidence (play show & tell)

11. Use analogies, idioms, metaphors, similes etc.

B. Problem areas

1. Too technical

- skip argots & jargon, except when necessary

2. Narratives

3. Assumptions versus presumptions

4. Overstatements

5. Prejudice & bias

6. Merely state conclusion without citing authoritative basis

7. Testimony implies more than the test can determine & basis for being incompetent or advocate

8. Must end testimony on strong point and high note

C. Understand Terminology/Phraseology of Reports

ASClD/LAB Rule 5.10.1 General - "The results of each test, calibration, or series of tests or calibrations carried out by the laboratory shall be reported accurately, clearly, unambiguously and objectively, and in accordance with any specific instructions in the test or calibration methods."

1. Context and informational bias (Risinger, Saks, Thompson, Rosenthal, The Daubert/Kuhmo Implications of Observer Effects in Forensic Science, 90 Cal. L. Rev. 1, (2002))

2. Key words/phraseology - look to context and environment for problems, cautionary markers.

3. Terms of implication to justify results.

4. Order of uncertainty in wording and conclusions apparent through vague, confusing or "mush" words.

5. Vagueness, ambiguous (as specifically to what?) e.g. similar to, could have, might have, compatible, consistent with, inconclusive etc.

- inconclusive means unsuitable for comparison
- formulas with no derivable numbers

a. if "A" is consistent with "B," then also consistent with "X,Y,Z." must state all items that

are consistent and list the reasons why it is or is not consistent.

b. remove confusing, vague, inconclusive or mush wording - then what is opinion.

c. must state why could not reach a scientifically valid conclusion.

6. Never identical with or identical to anything.

7. Remove extemporaneous terms and necessary to examination - use correct terminology.

8. Read entire document carefully.

9. Do not have to prove intelligence, only communication skills.

"An expert knows all the answers - if you ask the right questions."

E.C. McKenzie, ed., 14,000 Quips & Quotes for Writers and Speakers, p. 167, Greenwich House Publ., New York, c.1983

Sect.49 Cross Examination

Understanding and appreciating effective cross examination involves condor, honesty and technique. It entails preparation and control.

"Cross examination is much more science and application of technique than it is art." L. Pozner and R. Dodd, Cross-Examination: Science and Technique, 2nd ed., p.1-20, LexisNexis, c.2004

Primary objective:

Cross examination is the attorneys primary opportunity to give the jury reasons not to believe the opposing expert's testimony. It focus largely on issues of credibility - should this expert be believed.

Impeachment is directed at the substance of the person's

testimony or confronting the witness' credibility.

A. Questions Always To Ask Expert on Cross Examination

1. Named witness - have mislead or mistaken any fact in your testimony and report that you want to correct at this time.

2. Science is neutral and based upon facts.

3. If a mistake or error exists, your will inform the court and both attorneys of it due to being unbiased.

4. Witness has reviewed and discussed your testimony with attorney before testifying hear today.

5. Is this named method, procedure & instrument Infallible.

B. Problem Responses c. Gil Sapir 2022

1. Failure to not admit limitations - “I DO NOT KNOW.”

2. Vagueness will survive the deposition, but be the demise at trial.

3. Do not know, cannot remember, cannot recall -- cannot cross examine these answers. Expect adverse comments during closing argument.

4. Bastardization of 5th Amendment.

5. Speculation and conjecture.

6. Bias.

7. Consultation with attorney (deposition) after question asked and before answer is usually improper unless privileged.

8. Answer has complete confidence of total ignorance.

"Truth cannot be altered - But testimony can."
Ashleigh Brilliant, 1999

C. Major Areas of Expert Witness Examination

1. Opinion testimony

2. Fallibility of methodology and result

3. Reproducibility of results

4. Compensation

5. Integrity

6. Fees & Compensation

7. Assumptions

- what you see depends on how you look; if only have a hammer, every problem is a nail.

8. Limitations

- must discuss limitations and assumptions or else lay people, judges and juries will fill in the gaps and are less qualified then laboratory people.

- all physical evidence is circumstantial and inferential (assumption + fact = inference)

D. Topics For Cross Examination

1. Reasonable degree of scientific certainty.
witness trying to define it -- get written definition from questioning attorney before answering term.

2. Rationale is:

a) prevent speculations by expert

b) ensured that expert's opinion is one generally accepted within that area of expertise.

- based upon reason and quantity: <u>not</u> quality of isolated points.

3. Reasonable people in your field can differ.

4. Opinion evidence - only opinion and nothing more
other experts in field
reasonable people can disagree

- not any scientific certainty: nothing is absolute to all facts

- pursue reasonable doubts: omission, inadequate sampling, human and technological error

5. Know how to say, I DO NOT KNOW

6. Answer has complete confidence of total ignorance

7. Fees and compensation

8. Bias

- Can examine about witness being a member of a professional expert witness referral agency. Snelson v. Kamm, 319 Ill.App.3d 116, 745 NE2d 128 (2001)

9. Report writing

E. Problem Areas c. Gil Sapir 2020

Either carefully orchestrated vivisection or random blunt trauma mutilation.

1. Expect the unexpected

2. Do not look to counsel for assistance

3. Witnesses' fears

- attorney has same or greater knowledge as witness

- attorney with no knowledge

- attorney does not protect witness

4. Improper impeachment foundation by treatise,

inconsistent statement, transcripts, other cases

5. Motive, bias, prejudices and interest

6. Selective reliance on facts to support own position

7. Lack of brevity.

   - narratives

   - non-responsive

   - yes/no

   - mental stuttering (ah & ahem)

8. Omissions

   - reluctant to admit mistakes & limitations, even though increases image of honesty.

   - will not say, "I do not know"

   - reason for not doing something is important

   - impeachment by treatise
     . current expertise and edition, or else expert will not recognize it as authoritative

   - impeachment by own earlier publications, lectures, interrogatories, deposition etc. (keep all previous transcripts)

   - limited knowledge in area

   - experience

   - factual bias
     did not visit scene, did not test or examine object, second hand knowledged of item or events

   - prior inconsistent statements

   -loss of self-control

provoking negative behavior of witness

- lack of experience

- unavailable relevant facts

- lack of personal knowledge of underlying facts (relies only hypothetical or reports)

- relevant facts unavailable - relies on incomplete data for opinion

- different facts would alter opinion

9. Change hypothetical facts used on direct

10. Reasonable people in your field can differ

11. Opinion evidence - only opinion and nothing more

12. Do not volunteer information - don't ask, don't tell.

13. Hypothetical

- be sure all facts are present before answering.

- change or different hypothetical facts than used on direct.

14. Pattern of past testimony

15. Evasiveness dilutes credibility

"Get your facts first, and then you can distort them as much as you please." Mark Twain, Quoted in Kipling, Sea to Shining Sea, c.1989, Letter 37.

F. Difficult questions c. Gil Sapir 2020

1. Something is possible or could have occurred

2. Anything with speculation

3. Reasonable degree of scientific certainty or

probability or certitude

4. Absoluteness

G. Examination by Treatise or Publication

1. Publication is recognized as authorative in field.

2. Ask to see referenced source or insist on reading the quote being used.

3. Work cannot be out of date or quote taken out of context, otherwise inapplicable or inappropriate.

4. Perjury - Inference when an expert witness deliberately denies the existence, authoritativeness, use or reliance of a recognized treatise or publication in their field to restrict or terminate cross examination, that expert witness knowingly embraces perjury. J.M. Shellow, The Application of Daubert to the Identification of Drugs, 2 Shepard's Expert and Scientific Evidence Quarterly 593, 603, fn 20 (Winter, 1995)

5. Refusal to acknowledge as authoritative -- Witness cannot evade cross-examination by avoiding words of "rely" or "authority" or any forms of these words. The requisite reliance/authoritativeness for a treatise can be established without express acknowledgement by that witness relied upon it or is authorative. Freshwater v. Scalded, 86 Ohio St.3d 260, 269, 714 NE2d 891 (1999)

H. Maintaining Credibility during Examination

General Rules - to avoid appearing less than credible while testifying.

1. Be nervous.

2. Tell the truth.

3. Listen to the question

4. Pause then answer

5. Admit mistakes and problems.

6. If do not know, say so.

7. If do not remember, admit it.

8. Speak to the jury.

9. Continuity of attitude.

10. Just answer the question.

I. Medieval Confrontation

"For the two centuries past, the policy of the Anglo-American system of evidence has been to regard the necessity of testing by cross examination, the 'truth' for direct examination as a essential portion of the trial. Not even the abuses, the misunderstandings, and the puerilities which are so often found associated with cross examination have availed to nullify its value. It may be that in more than one sense, it takes the place in our system which torture occupied in the medieval system of the civilians. Nevertheless, it is beyond a doubt the greatest legal engine ever invented for the discovery of the truth." 5 Wigmore, Evidence, sect. 1367 (Chadborn Rev. 1794); L. Pozner and R. Dodd, Cross-Examination: Science and Techniques, 2/ed., p.1-3, LexisNexus, c.2004

J. Constitutional Confrontation

Our adversary system of justice encourages the accused to question the testimony of a witness, to "confront witnesses against him." U.S. Constitution, Amendment VI.

Sect.50 Fees and Compensation

Examination on compensation is a matter of right. Chicago v. Van Schaach, 330 Ill. 264, 161 NE 486 (1928)

A. Areas

1. Amount of fees

2. Reasonableness of fees.

a. record keeping/accounting.

3. Contract & directives.

4. Paid for time not testimony.

5. Who is paying the fees.

- Examination on previous employment by same party and income from testifying as an expert witness is permissible. Trower v. Jones, 121 Ill.2d 211, 520 NE2d 297 (Ill. 1988)

- Referrals from same attorney. Davis v. Gulf, Moble & Ohio RR, 130 Ill.App.2d 988, 272 NE2d 240 (1971)

- Fee arrangements, prior testimony for same party and financial interest in case outcome. Sears v. Rutishauser, 102 Ill.2d 402, 466 NE2d 210 (1984); Goldern v. Kishwaukee Community Health Services Center, 269 Ill.App.3d 37, 645 NE2d 319 (1994)

6. Frequency of testimony.

- Show person is regularly or frequently employed by litigant as expert witness. Chicago City Railways Co. v. Handy, 208 Ill. 81, 69 NE 917 (1904)

- Number of times expert testified within a period of time and for whom. Wilson v. Chicago Transit Authority, 159 Ill.App.3d 1043, 513 NE2d 443 (1987)

7. Sources of income

- Annual income and frequency of testimony as expert regarding credibility. Tower v. Jones, 121 Ill.2d 211, 520 NE2d 297 (1988); Pruett v. Norfolk & Western Railway Co., 261 Ill.App.3d 29; 632 NE2d 652 (1994)

8. Services contract controls

9. Create and maintain a paper trial - telephone calls do not exist.

10. Pigs get fatter, hogs get slaughtered.

"That an expert testifies for money does not necessarily cast doubt on the reliability of his testimony, as few experts appear in court merely as an eleemosynary gesture. But in determining whether proposed expert testimony amounts to good science, we may not ignore the fact that a scientist's normal work place is the laboratory or field, not the courtroom or the lawyer's office." Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311, 1317, (9th Cir. 1995), Also see, Paul C. Giannelli, "Junk Science": The Criminal Cases, Journ. of Criminal Law and Criminology. vol. 1, p.105, 117 (Spring 1993).

11. Court appointed witness

- Jury should not be told expert witness is court appointed. Morrison v. Picket, 103 Ill.App.3d 643, 432 NE2d 2 (1981)

Sect.51 Answering Techniques

A. Set your own pace - do not be coerced into anything.

B. Digest the question and think first - engage brain before disengaging mouth.

C. If repeatedly ask attorney for assistance, it will be noted on the record for subsequent bias. eg. going off

the record.

D. Answer with an explanation instead of yes/no when possible.

E. Do not volunteer anything

F. Cite verifiable authority

G. Be factual, truthful, concrete

H. Stick to point - no narratives

I. Do not argue

J. Stay composed - do not get upset

K. Breathing techniques - a single breath to calm down

L. Appear deliberate

M. Be courteous

N. Tell the truth

Sect.52 Tricky Questions - Types

A. Leading questions

B. Summarizing testimony

C. Approximations

D. Compound questions

E. Assumptions of fact

F. Absolute terms (never, always etc.)

G. Speculation

H. Precise recall

I. Withheld or unavailable documents used basis for question

J. Inaccurate instructions

K. Use of improper legal work product, documents, pleading etc.

L. Opinion of other expert witnesses in case or community

M. Statistics (lies, dam lies & statistics)

1. Probability

- experts cannot discuss probability

. not a statistician
. no personal knowledge & experience
. relative to what population & sampling
eg. blood groups exhibit same genetic profile, not identical or same blood.

2. Debunked expert or laboratory report

- how many reports, results or opinions go unnoticed and are used as misleading unreliable evidence?

Sect.53 Expert Witness - Charlatan

A. Richard D. Walter (psychologist, Vidocq Society)

- charlatan "prison psychologist" and bogus "profiler" who testified to false credentials and fictional medical syndrome of sexual dysfunction "picquerism. Drake v. Portuondo, 553 F.3d 230, 244-245 (2nd Cir., 2009) Testimony instrumental in obtaining double murder convictions - never disciplined or prosecuted for perjury.

B. Curt Baggett, (handwriting/documents)

- "lacked the credentials, experience, and qualifications to testify" regarding the questioned document.

- long history of being rejected as an expert by numerous courts in many jurisdictions"

- was referred to as a "charlatan."

- background easily discoverable with simple internet or legal database search prior to trial

- has less than stellar credentials as a handwriting expert

- not a competent expert by numerous courts

Roberts v. PNC Bank, 263 So. 3d 119, 120-121 (Fla: Dist. Court of Appeals, 5th Dist. 2018)

Sect.54 Common Actions Against Expert Witnesses

A. Malpractice

B. Fraud

C. Negligent misrepresentation

D. Breach of fiduciary duty

E. Breach of contract

F. Breach of implied covenant of good faith and conduct.

G. Fraudulent concealment

"Justice is too good for some people and not good enough for the rest." Norman Douglas. From, L.J. Peters, Peter's Quotations: Ideas For Our Time, p.294, Bantam Books, New York, NY, 1979

Sect.55 Expert Witness Liability

- Standard of care: reasonably prudent practitioner

- Relevant scientific field

- Malpractice claim similar to a licensed professional - Duty owed to their clients (foreseeable plaintiffs)

- Liable for resulting damages including violations of a person's civil rights. *Armstrong v. Daily*, 786 F.3d 529

(7th Cir. 2015)

- Experts (litigation support professionals) are responsible for the losses they cause. Mattco v. Forge, Inc. v. Arthur Young & Co., 52 Cal.App.4th 820, 834-835 (Ct. App. 1977); Murphy v. AA Mathews, 841 S.W.2d 671, 674 (Mo. 1992)

- Witness immunity does not bar a claim against an expert witness in litigation services. Marrogi v. Howard, 805 So.2d 1118, 1124-1125, 1128 (La. 2002); Andre A. Moenssens, Betty Layne DesPortes, and Stephen D. Benjamin, "Scientific Evidence In Civil And Criminal Cases," sect. 109,31, 7th Ed., (New York: West Academic/Foundation Press, 2017)

- 42 U.S.C. Sect. 1983, gives people the right to sue state government officials and employees who violate their constitutional rights.

Generally, See: Gil Sapir, Legal Aspects of Forensic Science, ch.1, p.9 in "Forensic Science Handbook," vol.I, 3rd ed, Richard Saferstein & Adam Hall, ed., CRC Press Publ., c. 2020

Sect.56 Credibility and Common Sense - Attorney

"Some lawyers establish unquestioned credibility in a lawsuit by a continuous course of admirable professional conduct that leads judges, who are also lawyers, to grant equitable relief for a lapse, an oversight, or a document gone astray. Others, by their conduct, engender in the judge a certain wariness in the exercise of equitable relief." Teller v. Semonis, 263 Ill.App.3d 653, 657; 635 NE2d 572, 574 (1st Dist., 4th Div. 1994)

Larry S. Pozner, Why Do We Do It?, Champion, vol.22, no.8, Sept/Oct. 1998, p.5

A. Attorney is prohibited from:

1. Vouching for credibility/truthfulness of witness. American Bar Association Standards for Criminal Justice, Standard 3-5.8(b)(80) (3rd ed. 1992).

2. Bolstering witness testimony/truthfulness. Berger v. United States, 295 U.S. 78, 88 (1934); United States v.

Mordica, 663 F.2d 1173, 1178-79 (2d Cir. 1981)

3. Prohibition is especially important in summation arguments. United States v. Mordica, 663 F.2d 1173, 1178-79 (2d. Cir. 1981).

4. Engaging activities designed to inhibit the defendant from diligently rebutting a lying prosecution witness. For example, objecting to efforts at impeachment, bolstering testimony in summation, contriving a scheduling crisis it "sharpens the prejudice." Drake v. Portuondo, 553 F.3d 230, 245 (2nd Cir., 2009)

5. Prosecutor is prohibited, in many courts, from asking one witness to comment on another witness's credibility or ask if another witness is lying. Lisa Steele, How May I Commit Misconduct? Let Me Count the Ways, Champion, vol.32, no.7, Sept.2008, p.49,50; See, Barry Tarlow, Some Prosecutors Just Don't Get It: Improper Cross and Vouching, Champion, vol.28, no.10, Dec. 2004, p. 55, 56-57; Barry Tarlow, Can a Prosecutor Ask a Defendant on Cross If a Witness Is Lying?, Champion, vo.26. No.1, Jan/Feb. 2002, p.58

6. Prosecutor cannot misstate facts during questioning, nor may they knowingly use false testimony or fail to correct false testimony. Berger v. United States, 295 US 78 (1935); Giglio v. United States, 405 US 150 (1972), Miller v. Pate, 386 US 1,7 (1967), Napue v. Illinois, 360 US 264 (1959)

B. Lawyer-Scientist

1. Attorneys attempt to distinguish themselves through marketing their accomplishments or specialization.

2. Self-proclaimed moniker of "Lawyer-Scientist" creates and perpetuates improprieties. Issues of competency, validation, and ethical problems are inherent in the use of the term. The appellation incorrectly insinuates scientific competence that is most probably misleading. Attorneys advertising themselves as a "Lawyer-Scientist" invite professional sanctions. Rafel E. Silva and Mary C. McMurray, "Lawyer-Scientist: Issues of Competency, Validation and Ethics," Proc. American Academy of

Forensic Sciences, 23 (2017):832; ABA Model Code of Prof. Resp. (1983), Canon 1, DR 1-102; Canon 2, EC 2-9; DR 2-101; Canon 9 (2010).

C. Prosecutorial Misconduct - Types

- Over charging suspect with offenses

- Withholding or delaying exculpatory evidence

- Deliberately mishandling, mistreating, or destroying evidence

- Permitting witnesses to testify when attorney knows or should know witness is not truthful

- Relying on fraudulent evidence or forensic experts

- Pressuring defense witnesses not to testify

- Overstating strength of the evidence in plea negotiations

- Litigating case through the press and media

- Making statements to media designed to arouse public indignation

- Improper or misleading statements to the jury* (FRE 403 objection)

D. Failing to report prosecutorial misconduct

E. Social media - ethical breach

Internet online communication with represented or unrepresented parties through social media. Social media is a valuable and dangerous tool. (e.g. Facebook, Twitter, Linkedin, YouTube, Instagram)

1. Unauthorized communication

ABA Model Rule of Prof. Conduct 4.2 - Communication with Person Represented by Counsel.
The attorney cannot communicate with person who is

represented by counsel unless authorized to do so. Applies to attorneys and their staff.

a. Discovery - collecting information through restricted social media or networking pages - “friending” (Facebook)

- cannot enlist third person not affiliated with attorney even if use real name.

- violation to with hold true purpose for seeking access.

- avoid communications with represented parties on social media.

- do not send “friend,” “follow” or “connect” to opposing parties to gain access to the parties private social media content.

- viewing publicly accessible social media content is acceptable.

- cannot use any type or form of deception, dishonesty, pretext, false pretenses, alias to conceal attorney’s identity including use of pseudonyms or other people’s accounts to gain access to person’s account and website.

b. Jurors

ABA Standing Committee on Ethics and Professional Responsibility Formal Opinion 466, April 24, 2014, Lawyer Reviewing Jurors’ Internet Presence

- Prohibition applies to internet research (passive/active) on prospective and sitting jurors, including their profile page is considered communicating with a juror.

2. Spoliation / Destruction / Tampering of evidence

ABA Rule 3.4: Fairness to Opposing Party & Counsel (2004)

A lawyer shall not: (a) unlawfully obstruct another party' s access to evidence or unlawfully alter, destroy or conceal a document or other material having potential evidentiary value. A lawyer shall not counsel or assist another person to do any such act;

- client removing or altering information from media account or website.

- attorney prohibited from altering or destroying evidence or assisting others in doing so, or concealing, or obstructing access to evidence or potential evidential value. Cannot "clean up" or "take down" social media content and pages. A duty exists to preserve this information. Allied Concrete Co. v Lester, 76 S.E.2d 699 (Va. 2013)

F. Material errors - attorney representation & notice

1. ABA Model Rule of Professional Conduct 1.4 (April 17, 2018)

Lawyers have a duty to inform current clients of material errors committed by the lawyer during the course of representation. Lawyers do not have to inform former clients of such material errors that may have materially erred in the client's representation. Recognizing that errors occur along a continuum, an error is material if a disinterested lawyer would conclude that it is (a) reasonably likely to harm or prejudice a client; or (b) of such a nature that it would reasonably cause a client to consider terminating the representation even in the absence of harm or prejudice.

Sect.57 Perjury

A. Insulation from Penalty

Because most experts address the core area of their discipline, and offering their opinion based upon "professional" or "scientific" judgement or "experience" (with a predicate of training, knowledge and experience) is safe / insulated from any formal penalty. Accordingly, "It is

virtually impossible to prosecute an expert witness for perjury." (p.212) (especially in the field of medicine) Sears v. Rutishauser, 102 Ill.2d 402, 466 NE2d 210, 212 (1984)

1. Richard D. Walter, a charlatan "prison psychologist" and bogus "profiler" who testified to false credentials and fictional medical syndrome of sexual dysfunction "picquerism. Drake v. Portuondo, 553 F.3d 230, 244-245 (2nd Cir., 2009) Testimony instrumental in obtaining double murder convictions - never disciplined or prosecuted for perjury.

2. Anne Marie Gordon falsely declared and signed under penalty of perjury she faithfully administered her duties, as a predicate to securing admissible evidence at trial. All breath tests conducted with simulator solutions allegedly tested by Ann Marie Gordon were suppressed. City of Seattle v. Roger Kennedy, King County, State of Washington, Case No.496912, Nov. 2007.

- "It is extremely unfortunate that Toxicology Manager Ann Marie Gordon filed false certifications on tests that were conducted by another analyst. The fact that this was done by a high level laboratory employee is repugnant and antithetical to the goals and standards of the entire laboratory system." Forensic Investigations Council Report on the Washington State Toxicology Laboratory and the Washington State Crime Laboratory April 17, 2008, p.10-11.

- Ann Marie Gordon was never disciplined or prosecuted for perjury.

3. Patricia A. Edwards, an Illinois State technician, repeatedly backdated breath alcohol evidential testing records for certification of tests for 7 years. Illinois State Police Investigative Summary, File #050522, March 21, 2005. Edwards plead guilty to one charge of obstructing justice for probation. Court file appears to have been "lost by the court."

4. State of Arizona v. Ricardo Meza, 20 Az 50, 50 P.3d 407 (2002)

- State acted in bad faith.
- State failed to disclose ADAMS records violated discovery.
- Did not record failed calibration checks.
- State knowingly concealed calibration test results.
- Laboratory technicians testified equipment full compliance and operational and accurate.
- Defendant awarded fees and costs of discovery violations and charges dismissed as sanction.

B. Incompetence

Greater protection is afforded experts from civil liability due to the privilege of court testimony. The person may say whatever they like under oath, and private resides are not available to the person who may harmed as result. Unless a court has evidence of dishonesty, the witness' testimony is usually deemed merely incompetent. Incompetence is not a basis for a perjury conviction. As no civil remedy exist for harm done and no basis for criminal sanctions, both civil and criminal proceedings fail. The worst possible case scenario for ethical violations by most experts is a loss of voluntary membership in their professional society. Violating a professional society's Code of Ethics typically will not affect an individual's employment. (Modern Scientific Evidence: The Law and Science of Expert Testimony, David L. Faigman, David H. Kaye, Michael J. Saks, Joseph Sanders, Edward K. Cheng, 2006-2007 Ed., vol.1, sect. 3.2, Thomson/West 2006)

C. Prosecution

The Illinois Supreme Court observed, "It is virtually impossible to prosecute an expert witness for perjury." (especially in the field of medicine) Sears v. Rutishauser, 102 Ill.2d 402, 466 NE2d 210, 212 (1984)

D. Treatise

Inference when an expert witness deliberately denies the existence, authoratativness, use or reliance of a recognized treatise or publication in their field to restrict or terminate cross examination, that expert

witness knowingly embraces perjury. James M. Shellow, The Application of Daubert to the Identification of Drugs, 2 Shepard's Expert and Scientific Evidence Quarterly 593, 603, fn 20 (Winter, 1995)

"When somebodies lies, somebody loses." Stephanie Ericsson

Sect.58 Sanctions

A. Judicial

Sanctions and Remedies for violating rules of evidence, ethical obligations and duties.

1. Contempt of court citations; barring future witness testimony before same judge; striking testimony from record; barring/excluding evidence, recommending prosecution for legal, evidential and ethnical violations; sending copies of public records/transcripts to prosecutors; licensing

   authorities and relevant professional organizations.

2. Disqualification - Expert/Attorney

   Expert originally hired by plaintiff was disqualified from testifying for defense, and defense counsel was disqualified for hiring plaintiff's former expert. Cordy v. Sherwin-Williams Co., et al, 156 F.D.R. 575 (1994)

B. Licensed Professions

(medical, legal, accounting, psychology etc.)

1. Licensees have codes/cannons of responsibility with sanctions for violations.

2. Disciplinary procedures with ramifications for violating codes of conduct, competency, confidentiality and ethics (censure, probation, revocation of license, jeopardize livelihood).

   - Conduct cannot undermine public confidence in integrity of profession.

a. Privilege statutes and must be narrowly construed with legal protection to certain communications and relationships. Patient and wife sued psychiatrist for disclosing confidential information to others during course of forensic medical evaluation concerning espionage. There was no "moral imperative" or community interest exception to duty of psychiatrist to maintain patient's confidences. Cannot violate confidentiality to promote institutional reform and patient did not pose a threat or danger to the public at time of disclosures. Physician was fined $5,000 and had medical license suspended for a minimum of two years. Salerian v. Maryland State Board of Physicians, 176 Md App. 231 (2007); Released to press confidential psychiatric report in highly controversial sex abuse case despite gag order. Sanctioned $10,000 fine, indefinate suspension of medical license and 100 hours community service. Sugarman v. Board of Registration in Medicine, 422 Mass. 328, 662 NE2d 1020 (1996)

- Duty to seek ethics opinion follow cannons of professional responsibility. Whether a counsel's ex parte contact with a court-appointed forensic psychologist is unethical and whether such contact irreparably compromises the court-appointed expert's independence and neutrality. Whether the psychologist should not responded to ex parte inquires. In the Matter of Kenneth C. v. Delondar, 814 NYS2d 562, 10 Misc.3d 1070 (A) 2006

- Ineffective assistance of counsel. Defense attorney fails to offer of proof involving an ethics-related letter from the American Academy of Forensic Sciences affecting expert's credibility and bias, therefore information not evidence. State v. Benn, 130 Wash.App.308, 123 P.3d 484, 486 (2005)

C. Non-licensed professions

1. No sanctions, no viable ramifications and penalties for violating ethics.

2. Nominal Enforcement

- The legal and ethical role of an expert witness defined by law is seldom/rarely enforced. It is highly unlikely an expert witnesses are sanctioned for their misdeeds. Few complaints are brought to the legal or professional authorities, and fewer still result in any consequences to the allegedly offending expert witness.

D. Professional Affiliations/Membership

- Fraudulent claims of professional status and association by an expert witness with an organization that owns a federal registered trademark subjects the infringer to injunctive relief and damages. ABPN v. Johnson-Powell, 123 F.3d 1 (1997)

- Consequences of expulsion: not drastic since professional membership is not required nor necessary for livelihood.

- While some organizations have and enforce a code of ethics for their members, particularly with regard to honestly disclosing their credentials, none realistically exist for violating IACT's Code of Ethics and By-laws. The worse possible case scenario for ethical violations by an IACT member is loss of their voluntary membership. Violating IACT's Code of Ethics typically will not affect an individual's employment. Gil Sapir, Misrepresenting IACT Credentials, Drinking Driving Law Letter, July 11, 2007, vol.26, no.14, p.197,199.

D. Perjury

- The Illinois Supreme Court observed, "It is virtually impossible to prosecute an expert witness for perjury." (p.212) (especially in the field of medicine) Sears v. Rutishauser, 102 Ill.2d 402, 466 NE2d 210, 212 (1984)

E. Societal Remedy

- Remedy is public disgrace, humiliation and ostracization through public attention and the media at best.

Legal aphorism - expert witness: “A witness is not an advocate and an advocate is not a witness.” Unknown

Sect.59 National Academy of Science Report - February 17, 2009

Crime laboratory scandals, fraud, unsupported assumptions, invalid methods, high profile errors, exonerations through forensic DNA testing and wrongful convictions through faulty forensic techniques and misleading trial testimony have contributed to a national movement to investigate and reassess the value of different types of scientific evidence.

The courts should not allow unscientific work and testimony regardless of intent. Radley Balko and Tucker Carrington, The Cadaver King and The Country Dentist, p.xxi,(Foreward by John Grisham) Public Affairs (2018)

Edwards and Gatsonis, Strengthening Forensic Science in the United States: A Path Forward, National Academy of Sciences, The National Academy Press, Feb. 2009, ISBN 0-309-1313-6, 254 pages (2009); www.nap.edu/catalog/12589.html; also see, Thomas L. Bohan, President’s Editorial - Strengthening Forensic Science: A Way Station on the Journey to Justice, Journal of Forensic Sciences, January 2010, vol.55, No.1, p.5.

Objectives: Congress called for the creation of an independent forensic science committee at the National Academy of Sciences to: "(1) assess the present and future resource needs of the forensic science community, to include state and local crime labs, medical examiners, and coroners; (2) make recommendations for maximizing the use of forensic technologies and techniques to solve crimes, investigate deaths, and protect the public; (3) identify potential scientific advances that may assist law enforcement in using forensic technologies and techniques to protect the public; (4) make recommendations for programs that will increase the number of qualified forensic scientists and medical examiners available to work in public crime laboratories; (5) disseminate best practices and guidelines concerning the collection and analysis of forensic evidence to help ensure quality and consistency in the use of forensic technologies and techniques to solve crimes, investigate deaths, and protect the public; (6) examine the role of the forensic community in the homeland security mission; (7) examine the interoperability of Automated Fingerprint Information Systems; and (8) examine

additional issues pertaining to forensic science as determined by the Committee. Anne-Marie Mazza, National Academy of Sciences

A. NAS Report's General findings (selected):

- Serious deficiencies in the nation's forensic science system, necessity for major reforms and new research.

- Severe lack of training and of uniform standards and oversight in forensic laboratories. Crime laboratories need major overhaul.

- Crime laboratories must be separate from police and law enforcement to protect against bias.

- Forensic science in criminal cases: government monopoly on courtroom science (state owned, state operated crime laboratories, no competition, no peer review, no accreditation and work directly with the prosecution.)

- "The potential for conflicts of interest between the needs of law enforcement and the broader needs of forensic science are too great."

B. NAS Report's Application (selected):

- Did not make any law or rule changes;

- Do not accept the expert because they say they are an expert - ipse dixit of the expert;

- Report does not state subject examinations and disciplines should be suspended or terminated;

- Report provides policy evaluation not technical evaluation;

- Report provides recommendations, not authorative;

- Will be used to make law and argue cases;

- Attorneys use it to challenge forensic procedures and expert witnesses in court;

- Judges use it to increase scrutiny of admissible certain types of forensic evidence;

- Place limitations on certain types of expert testimony;

- Will effect practice and presentation of non-DNA evidence;

- The NAS represents the scientific community;

- No ethics and science requirements in continuing legal education requirements for attorneys - only improving their knowledge. (Recommendation 10 - Education);

- Report does not discuss ethics for attorneys. Emphasis is on criminal litigation, yet Daubert, General Electric and Kumho Tire are civil cases.

C. Breath/Blood Alcohol & Drug Testing Programs

- Lack of standards and uniformity exist in breath alcohol testing (differences between state programs for calibration, testing, inspections, training requirements, funding etc.)

- Separate breath alcohol testing programs from police and law enforcement.

- Drug recognition expert (DRE) programs lack validating determination of error analysis.

D. Procedural Order - Trace Evidence

- Courts establish practices and protocols for presentation of forensic scientific evidence. Judge Nancy Gertner (U.S. Dist. Ct. Mass.), Procedural Order directing how scientific evidence in criminal cases adopted rules consistent with the NAS Report. (Appendix D - Procedural Order: Trace Evidence No. 1:08-cr-10104NG (D. Mass. Mar. 8, 2010), available at http://tinyurl.com/7pv2jhf.

E. The NAS Report is a broad denunciation of many fields of forensic science commonly thought to be reliable. The

intransigence of the status quo continues to ignore or contest the report.

Sect.60 NSC-CAOD Source Code Resolution - Breath Alcohol Analyzers

The National Safety Council's Committee on Alcohol and Drugs (NSC-CAOD) issued it's Resolution of February 16, 2009 concerning breath alcohol analyzers, which states in part, "software of an evidential breath-alcohol analyzer is not pertinent, required, or useful for examination or evaluation of the analyzer's accuracy, scientific reliability, forensic validity, or other relevant characteristics, or of the trustworthiness and reliability of analysis results produced by the analyzer." Journal of Analytical Toxicology, vol.33, no.5, p.287-290 (June, 2009)

A. Problems and Issues with Resolution

- Resolution's politics ignores practice of good science, technology, ethics and current law.

- Conflicts with National Academy of Sciences' Report of Feb. 18, 2009.

- Resolution is intended to commercially benefit breath alcohol-analyzer manufacturers and affect policy positions on drunk driving.

- Resolution unilaterally declared source code software a nonissue.

- Questioning source code program in DUI proceedings, has exposed various insecurities and fallibilities regarding its asserted performance.

- attempts to limit constitutional and evidentiary standards under the guise of a scientific statement.

- Resolution consists of ethical improprieties, political bias, legal misrepresentations and scientific inconsistencies.

- Prosecutors attempting to perpetrate a fraud upon the court by vouching for Resolution's content, and summarily utilizing

it without questioning its content and reliability due to National Safety Council enactment.

- Resolution should not be given any scientific or legal credence.

Gil Sapir, NSC-CAOD's Source Code Resolution: Ethical Improprieties, Political Bias, Legal Misrepresentations, Scientific "Balderdash," Drinking Driving Law Letter, Jan., 2010, vol.29, no.1, p.1.

Sect.61 President's Council of Advisors on Science and Technology (PCAST)

PCAST is an administrative council charted to advise the President on science and technology.

The President's Council Of Advisors On Science and Technology (PCAST) report on *Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods*, (2016),x. https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf (accessed June 1, 2017)

A. PCAST Report:
"Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods" - September 16, 2016.

1. Issued to strengthen forensic sciences.

2. Condemned endemic problems in forensic science.

3. All forensic techniques should be independently validated before being used in criminal investigations.

4. Recommended training forensic examiners; making forensic laboratories independent of police and prosecutors; and independently validating all forensic techniques before using them in criminal investigations.

5. Several disciplines, including "feature comparison methods" (e.g. complex-source DNA, hair, latent fingerprints, firearms and spent ammunition, tool and

bite marks, shoe prints and tire tracks, and handwriting) were not sufficiently validated - therefore are not admissible at trial

B. DOJ rejected PCAST's recommendations and would not adopt them.

C. On April 23, 2017 PCATs charter expired and the FBI's review policy was suspended.

D. The NAS and PCAST findings are an inconvenience to law enforcement and prosecutors.

1. Scientific standards are determined by the DOJ which is not a scientific body.

E. Proclaiming evidence as "scientific" does not make it so.

F. Scientific validity and reliability are not determined or equated by conviction rate.

G. PCAST recommendations were not implemented by the Department of Justice.

Sect.62 ORGANIZATION OF SCIENTIFIC AREA COMMITTEES FOR FORENSIC SCIENCE (OSAC)

The National Commission on Forensic Science (NCFS) and Organization of Scientific Area Committees for Forensic Science (OSAC) emerged as a result of the 2009 NAS Report.

OSAC Charter & Bylaws, sect. 1.1, Purpose; 1.2, Aims, March 9, 2017, https://www.nist.gov/sites/default/files/documents/2017/03/16/fssb_osac_charter_and_bylaws_v_1.3.pdf (accessed Aug. 25, 2017)

A. OSAC is administered through the National Institute of Science and Technology (NIST)

- OSAC's purpose is to strengthen the nation's use of forensic science through development of technically sound forensic science standards

- OSAC is comprised of the Forensic Science Standards Board, Legal Resource Committee, Quality Infrastructure Committee, Human Factors Committee and five Scientific Area Committees.

- Publishes standards and methods defining minimum requirements, best practices, standardized protocols, and related guidance.

- Does not have statutory or regulatory authority over forensic science service providers to enforce standards on the OSAC Registry.

- OSAC standards may become 1) effective upon adoption by a certifying agency, laboratory, a governmental body or funding bodies, or 2) become highly persuasive through policy or pattern and practice in the scientific and legal community.

B. Incentive exists for crime laboratories to voluntarily adopt OSAC standards as a condition for funding.

Sect.63 Dept. Of Justice - Forensic Science Initiatives

Dept. Of Justice Plans To Advance Forensic Science, Feb. 21, 2018

- Uniform Language for Testimony and Reports for use by Department forensic examiners to provide testimonial consistency and quality assurance;

- Initiation of Department-wide monitoring practices to ensure testimonial consistency and accountability by Department forensic examiners;

- To increase transparency, Department forensic laboratories supporting criminal investigations and prosecutions will begin publicly posting current quality management system documents and summaries of internal validation studies online;

- The re-chartering of the Council of Federal Forensic Laboratory Directors, which will again begin meeting May, 2018. All executive branch agencies with forensic

laboratories and digital analysis entities are invited and encouraged to join

Sect.64 Wrongful Convictions / Exonerations

It is relatively easy to convict an innocent person. Once an innocent person is convicted, it is practically impossible to get out of prison.

A. Wrongful convictions and their executions are not theoretical.

- Violations of scientific integrity and ethics should be taken seriously.

- Effects are profoundly irreversible.

- Resulting tragedies and injustices may be corrected in time.

B. Wrongful convictions in the United States is estimated at 2% to 10%. Applied to a prison population of 2.3 million

then have, 46,000 to 230,000 innocent people incarcerated.

C. Wrongful convictions occur due to: (random order)

- Endemic problems with unregulated scientific evidence persist generating unjustifiable convictions.

- Training and experience for witnesses is not a proxy for valid science by the courts.

- Bad police work; prosecutorial misconduct; false confessions; faulty eyewitness identification; bad lawyering; sleeping judges; and junk science.

- Criminal prosecution’s nonexistent accountability for encouraging convenient use of unconscionable hypocrisies concerning fingerprint comparisons, arson analysis, comparative bullet lead analysis, confirmation bias, DNA unindicted co-ejaculators etc., in pursuit of convictions over equal justice.

John Grisham, Eight Reasons For America's Shameful Number Of Wrongful Convictions, Los Angeles Times, March 11, 2018, http://www.latimes.com/opinion/op-ed/la-oe-grisham-wrongful-convictions-20180311-story.html (accessed March 11, 2018); John Grisham, "Foreword," in "The Cadaver King and the Country Dentist," Radley Balko and Tucker Carrington, (New York, N.Y.: Public Affairs, 2018);

M. Chris Fabricant, "Junk Science and the American Criminal Justice System," Champion, vol.46, no.8, Sept./Oct., 2022, p.53 (Book Review – Gil Sapir)

D. 42 U.S.C. Sect. 1983, gives people the right to sue state government officials and employees who violate their (civil) constitutional rights.

E. Nicholas James McGuffin v. Mark Dannels, Richard Walters, the Vidocq Society, et al, Case No. 6:20-CV-1163-MK, U.S. Dist. Court of Oregon, Eugene Division, Judge Mustafa T. Kasubhai, filed July 20, 2022; First Amended Complaint, Doct. #100, filed Oct. 27, 2021.

1. Suppression, destruction, tampering and fabrication of evidence, including use of junk science.

a. Lab withheld exculpatory forensic DNA

b. The Cold Case Investigators' crafted a false narrative of McGuffin's guilt based on junk science, including a 'statement analysis,' fabricated polygraph results, and other fabricated evidence…." to undermine McGuffin's alibi.

c. Investigators "... deliberately suppressed, tampered with, and/or destroyed relevant and material impeachment evidence that undermined the credibility of key prosecution witnesses, including

evidence of their own misconduct and violations of McGuffin's rights ..."

2. Fabricated psychological profile

a. City of Coquille hired Vidocq Society, an unlicensed private "investigation" firm, and Richard Walter, a "profiler" and employee of Vidocq Society.

b. Walter purportedly fabricated motive, theory and evidence through his deliberate false "profile" to implicate McGuffin in the abduction and murder of Leah Freeman.

c. Vidocq Society allegedly breached its duty to train and supervise Walter by failing to institute policies, practices, and customs that would prohibit the misconduct.

3. A decade later McGuffin was exonerated by DNA evidence (Nov. 2019).

Sect.65 Dicta

Most people generally color the evidence to fit their notions. People whose minds are not disciplined by training tend to notice and remember events that support their view and forget others.

Expert Witness: "Someone whose qualifications we defer to when he seems to confirm our prior judgement, and whose credentials we impugn when he rejects our judgments."

Sidney J. Harris

Observation: "Our research has yielded thousands of examples of expert misinformation, disinformation, misunderstanding, miscalculation, egregious prognostication, boo-boos, and occasional just plain lies. And based on our preliminary findings we can say with some confidence that the experts are wrong without regard to race, creed, color, sex, discipline, specialty, country, culture, or century. They are wrong about facts, they are wrong about the future, they are wrong about date, they are wrong about geography, they are wrong about

the future, they are wrong about the past, and at best they are misleading about the present, not to mention next week."

The Experts Speak, by Cerf & Navasky - Introduction, Pantheon Books, NY, c.1984

"Too much of a good thing can be wonderful." Mae West

"Every great advance in natural knowledge has involved the absolute rejection of authority." Thomas H. Huxley

"I will only stipulate to my client's innocence and only waive the American flag." James D. Doherty

"We cannot solve problems by using the same thinking we used when created them." Albert Einstein

Truth does not equal justice.

"Insanity: Doing the same thing over and over again and expecting different results." Albert Einstein

This article is intended to provide general information; it does not provide legal advice applicable to any specific matter and should not be relied upon for that purpose. Interested parties should review the laws with their legal counsel to determine how they will be affected by the laws.

Freedom Is Only a Word Until It Is Lost!

APPENDIX - A
Fed. Rule. Civil. Pro. - Rule 26. Discovery and Depositions

FEDERAL RULES OF CIVIL PROCEDURE
V. DEPOSITIONS AND DISCOVERY

Rule 26. General Provisions Governing Discovery; Duty of Disclosure

(a) Required Disclosures; Methods to Discover Additional Matter.

(1) Initial Disclosures.
Except to the extent otherwise stipulated or directed by order or local rule, a party shall, without awaiting a discovery request, provide to other parties:

(A) the name and, if known, the address and telephone number of each individual likely to have discoverable information relevant to disputed facts alleged with particularity in the pleadings, identifying the subjects of the information;

(B) a copy of, or a description by category and location of, all documents, data compilations, and tangible things in the possession, custody, or control of the party that are relevant to disputed facts alleged with particularity in the pleadings;</P>

(C) a computation of any category of damages claimed by the disclosing party, making available for inspection and copying as under Rule 34 the documents or other evidentiary material, not privileged or protected from disclosure, on which such computation is based, including materials bearing on the nature and extent of injuries suffered; and

(D) for inspection and copying as under Rule 34 any insurance agreement under which any person carrying on an insurance business may be liable to satisfy part or all of a judgment which may be entered in the action or to indemnify or reimburse for payments made to satisfy the judgment.

Unless otherwise stipulated or directed by the court, these disclosures shall be made at or within 10 days after the meeting of the parties under subdivision (f). A party shall make its initial disclosures based on the information then reasonably available to it and is not excused from making its disclosures

because it has not fully completed its investigation of the case or because it challenges the sufficiency of another party's disclosures or because another party has not made its disclosure.

(2) Disclosure of Expert Testimony.

(A) In addition to the disclosures required by paragraph (1), a party shall disclose to other parties the identity of any person who may be used at trial to present evidence under Rules 702, 703, or 705 of the Federal Rules of Evidence.

(B) Except as otherwise stipulated or directed by the court, this disclosure shall, with respect to a witness who is retained or specially employed to provide expert testimony in the case or whose duties as an employee of the party regularly involve giving expert testimony, be accompanied by a written report prepared and signed by the witness. The report shall contain a complete statement of all opinions to be expressed and the basis and reasons therefor; the data or other information considered by the witness in forming the opinions; any exhibits to be used as a summary of or support for the opinions; the qualifications of the witness, including a list of all publications authored by the witness within the preceding ten years; the compensation to be paid for the study and testimony; and a listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years.

(C) These disclosures shall be made at the times and in the sequence directed by the court. In the absence of other directions from the court or stipulation by the parties, the disclosures shall be made at least 90 days before the trial date or the date the case is to be ready for trial or, if the evidence is intended solely to contradict or rebut evidence on the same subject matter identified by another party under paragraph (2)(B), within 30 days after the disclosure made by the other party. The parties shall supplement these disclosures when required under subdivision (e)(1).

(3) Pretrial Disclosures.

In addition to the disclosures required in the preceding paragraphs, a party shall provide to other parties the following information regarding the evidence that it may present at trial other than solely for impeachment purposes:

(A) the name and, if not previously provided, the address and telephone number of each witness, separately identifying those whom the party expects to present and those whom the party may

call if the need arises;

(B) the designation of those witnesses whose testimony is expected to be presented by means of a deposition and, if not taken stenographically, a transcript of the pertinent portions of the deposition testimony; and

(C) an appropriate identification of each document or other exhibit, including summaries of other evidence, separately identifying those which the party expects to offer and those which the party may offer if the need arises.

Unless otherwise directed by the court, these disclosures shall be made at least 30 days before trial. Within 14 days thereafter, unless a different time is specified by the court, a party may serve and file a list disclosing (i) any objections to the use under Rule 32(a) of a deposition designated by another party under subparagraph (B) and (ii) any objection, together with the grounds therefor, that may be made to the admissibility of materials identified under subparagraph (C). Objections not so disclosed, other than objections under Rules 402 and 403 of the Federal Rules of Evidence, shall be deemed waived unless excused by the court for good cause shown.

(4) Form of Disclosures; Filing.

Unless otherwise directed by order or local rule, all disclosures under paragraphs (1) through (3) shall be made in writing, signed, served, and promptly filed with the court.

(5) Methods to Discover Additional Matter.

Parties may obtain discovery by one or more of the following methods: depositions upon oral examination or written questions; written interrogatories; production of documents or things or permission to enter upon land or other property under Rule 34 or 45(a)(1) (C), for inspection and other purposes; physical and mental examinations; and requests for admission.

(b) Discovery Scope and Limits.

Unless otherwise limited by order of the court in accordance with these rules, the scope of discovery is as follows:

(1) In General.

Parties may obtain discovery regarding any matter, not privileged, which is relevant to the subject matter involved in

the pending action, whether it relates to the claim or defense of the party seeking discovery or to the claim or defense of any other party, including the existence, description, nature, custody, condition, and location of any books, documents, or other tangible things and the identity and location of persons having knowledge of any discoverable matter. The information sought need not be admissible at the trial if the information sought appears reasonably calculated to lead to the discovery of admissible evidence.

APPENDIX B

Voir Dire Questionnaire **

An effective, elementary, practical outline questionnaire for qualifying a person as an expert witness is provided below.

QUALIFYING QUESTIONS FOR THE EXPERT WITNESS
(Sample Expert Witness Voir Dire)

_____

1. Name.
2. Occupation.
3. Place of employment.
4. Present title.
5. Position currently held.
6. Describe briefly the subject matter of your specialty.
7. Specializations within that field.
8. What academic degrees are held and from where and when obtained.
9. Specialized degrees and training.
10. Licensing in field, and in which state(s).
11. Length of time licensed.
12. Length of time practicing in this field.
13. Board certified as a specialist in this field.
14. Length of time certified as a specialist.
15. Positions held since completion of formal education, and length of time in each position.
16. Duties and function of current position.
17. Length of time at current position.
18. Specific employment, duties and experiences (optional).

19. Whether conducted personal examination or testing of (subject matter/person/instrumentality).
20. Number of these tests or examinations conducted by you and when and where were they conducted.
21. Teaching or lecturing by you in your field.
22. When and where were your lecture or teach.
23. Publications by you in this field and titles.
24. Membership in professional societies/associations/ organizations, and special positions in them.
25. Requirements for membership and advancement within each of these organizations.
26. Honors, acknowledgments, and awards received by you in your field.
27. Number of times testimony has been given in court as an expert witness in this field.
28. Availability for consulting to any party, state agencies, law enforcement agencies, defense attorneys.
29. Put curriculum vitae or resume into evidence.
30. Your Honor, pursuant to (applicable rule on expert witness), I am tendering (name) as a qualified expert witness in the field of _____.

** Gil Sapir, Legal Aspects of Forensic Science, ch. 1, in "Forensic Science Handbook," vol.I, p.32, 3rd ed., Richard Saferstein & Adam Hall, editors, CRC Press Publ., c.2020.

APPENDIX - C

Jury Instructions: Expert/Opinion Witness

U.S. Constitution, Amendment VI, "In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the state and district wherein the crime shall have been committed ..."

Expert Witness

State (sample)

You are the sole judges of the believability of the witnesses and the weight to be given the testimony of each of them. In considering the testimony of any witness, you may take into account his ability and opportunity to observe, (his age), his memory, his manner while testifying, and interest, bias, or prejudice he may have, and the reasonableness of his testimony considered in the light of all the evidence in the case. *Illinois Pattern Jury Instruction 1.02 - Jury is Sole Judge of the Believability of Witnesses*

Federal (sample)

You have heard [an expert] give opinions about matters requiring special knowledge or skill. You should judge this testimony in the same way that you judge the testimony of any other witness. The fact that such a person has given an opinion does not mean that you are required to accept it. Give the testimony whatever weight you think it deserves, considering the reasons given for the opinion, the witness's qualifications, and all of the other evidence in the case. *Pattern Federal Jury Instructions for the Seventh Circuit: Criminal No. 3.07 - Weighing Expert Testimony; Civil No. 1.21 - Expert Witness*.

Opinion (Witness) Testimony

Federal (sample)

You have heard the testimony of _____, who testified as an opinion witness. You do not have to accept _____'s opinion. In deciding how much weight to give it, you should consider the witness's qualifications and how he reached his conclusions. Also consider the other factors discussed in these instructions for weighing the credibility of the witnesses. Remembering that you alone decide how much of a witness's testimony to believe, and how much weight is deserves. *Pattern Federal Jury Instructions for the Sixth Circuit: Criminal No. 7.03 - Opinion Testimony*.

Expert Witness Fees/Compensation

State (sample)

You're also instructed that the amount of an expert's fee is a matter which you may consider as possibly affecting the

credibility, interest, bias, or partisanship of the witness. However, since all expert witnesses expect to be paid and are paid, you are instructed that there is nothing improper in an expert witness being paid a reasonable fee for his work and time in attending court and in preparing for attendance in ... court. New Jersey Model Jury Charges (Criminal, Expert Testimony - Sept. 15, 2000)

APPENDIX - D

Protective Order - Trace Evidence

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

GERTNER, D.J.

PROCEDURAL ORDER: TRACE EVIDENCE
March 8, 2010

In the light of the 2009 report to Congress of a Committee of the National Academy of Sciences,' NATIONAL RESEARCH COUNCIL COMMITTEE ON IDENTIFYING THE NEEDS OF THE FORENSIC SCIENCE COMMUNITY, STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD (2009) [hereinafter cited as NRC 2009], this Court orders the following:

At or prior to the pretrial conference, parties are **ORDERED** to:

a) identify whether or not they seek to introduce trace evidence;

b) state whether or not either party seeks a Daubert/Kumho hearing prior to trial; and,

c) state the witnesses required for the Daubert/Kumho hearing and the exhibits that the parties seek to admit.

No later than two months before the pretrial conference, counsel must also indicate:

a) if counsel is appointed, whether expert funds are sought to deal with the trace evidence;

b) whether all discovery obligations under the Local Rules have been met or whether additional discovery required.

The NRC 2009 report, building on the writing of academic commentators, called for sweeping changes in the presentation and production of evidence of identification involving fingerprints, bullets, handwriting, and other trace evidence. The report noted

> that the forensic science disciplines exhibit wide variability with regard to techniques, methodologies, reliability, level of error, research, general acceptability, and published material. ... Many of the processes used in the forensic science disciplines are ... not based on a body of knowledge that recognizes the

> underlying limitations of the scientific principles and methodologies for problem solving and discovery. ... [S]ome of these activities [encompassed by the term "forensic science"] might not have a well developed research base, are not informed by scientific knowledge, or are not developed within the culture of science. NRC 2009 - 1-3.

While the report does not speak to admissibility or inadmissibility in a given case, it raised profound questions that need to be carefully examined in every case prior to trial: "1) the extent to which a particular forensic discipline is founded on a reliable scientific methodology that gives it the capacity to accurately analyze evidence and report findings and (2) the extent to which practitioners in a particular forensic discipline rely on human interpretation that could be tainted by error, the threat of bias, or the absence of sound operational procedures and robust performance standards." NRC 2009 S-7.

The Report noted that these fundamental questions have not been "satisfactorily dealt with in judicial decisions pertaining to the admissibility" of evidence. Id. To be sure, the court's treatment of this evidence relates directly to the adequacy of counsel's treatment. See, e.g. Sturgeon v. Quarterman, 615 F. Supp. 2d 546, 572-573 (S.D. Tex. 2009) (defense counsel's failure to prepare a witness to testify about the unreliability of eyewitness identifications prevented defendant from presenting testimony that would have called into question the only direct evidence against him and was ineffective assistance of counsel warranting habeas relief); Richter v. Hickman, 578 F.3d 944, 946-947 (9th Cir. Cal. 2009) (en banc) (defense counsel's failure to conduct an adequate forensic investigation with respect to blood spatter, serology, and pathology comprised ineffective assistance of counsel warranting habeas relief). See also United States v. Pena, 586 F. 3d 105 (1st Cir. 2009) (affirmed the court's decision not to hold a Daubert hearing on fingerprint testimony where counsel offered no expert or evidence.

In the past, the admissibility of this kind of evidence was effectively presumed, largely because of its pedigree -- the fact

that it had been admitted for decades. As such, counsel rarely challenged it, and if it were challenged, it was rarely excluded or limited. But see United States v. Hines, 55 F.Supp.2d 62 (D. Mass. 1999) and United States v. Green, 405 F.Supp.2d 104 (D. Mass. 2005).

The NAS report suggests a different calculus -- that admissibility of such evidence ought not to be presumed; that it has to be carefully examined in each case, and tested in the light of the NAS concerns, the concerns of Daubert/Kumho case law, and Rule 702 of the Federal Rules of Evidence. This order is entered to accomplish that end.

SO ORDERED.
Date: March 8, 2010 **/s/ *Nancy Gertner***
NANCY GERTNER, U.S.D.C.

"The Justice Game - 13 Rules"*

Rule 1. Almost all criminal defendants are, in fact, guilty.

Rule 2. All criminal defense lawyers, prosecutors, and judges understand and believe Rule 1.

Rule 3. It is easier to convict guilty defendants by violating the Constitution than by complying with it, and in some cases it is impossible to convict guilty defendants without violating the Constitution.

Rule 4. Almost all police lie about whether they violated the Constitution in order to convict guilty defendants.

Rule 5. All prosecutors, judges and defense attorneys are aware of Rule 4.

Rule 6. Many prosecutors implicitly encourage police to lie about whether they violated the Constitution in order to convict guilty defendants.

Rule 7. All judges are aware of Rule 6.

Rule 8. Most trial judges pretend to believe police officers who they know are lying.

Rule 9. All appellate judges are aware of Rule 8, yet many pretend to believe the trial judges who pretend to believe the lying police officers.

Rule 10. Most judges disbelieve defendants about whether their constitutional rights have been violated, even if they are telling the truth.

Rule 11. Most judges and prosecutors would not knowingly convict a defendant who they believe to be innocent of the crime charged (or closely related crime).

Rule 12. Rule 11 does not apply to members of organized crime, drug dealers, career criminals, or potential informers.

Rule 13. Nobody really wants justice.

* A. Dershowitz, The Best Defense, Vintage Book, NYC, c.1983

De-What *

If lawyers are disbarred and clergymen defrocked, does it not follow that electricians can be delighted, musicians denoted, cowboys deranged, models deposed and dry cleaners depressed? Laundry workers could decrease, eventually becoming depressed and depleted! Even more, bed makers will be debunked, baseball players will be debased, landscapers will be deflowered, bulldozer operators will be degraded, organ donors will be delivered, software engineers will be detested, the BVD company will be debriefed, and even musical composers will eventually decompose. On a more positive note though, perhaps we can hope politicians will be devoted.

* Author Unknown. (retrieved from the Internet July/1999)

Dr. Science: Rhetorical Questions
doc@drscience.com

Dear Doctor Science:

What's the use of rhetorical questions?
-- Gilah Rittenhouse from Yellow Springs, OH

What are the ways experts, authority figures and academics have to obscure while seeming to clarify? How can we best put the onus for finding the truth on the innocent rather than the guilty? What's the best way to blame a whistle blower? These thought-provoking rhetorical questions seem to be the result of the well intentioned striving for clarity, when they are, in fact, evasive and patronizing. First invented by Bob of Rhesus, a Greek con man, they allowed Bob to gain his freedom by confusing those investigating an early Ponzi scheme.

Gold Star Question:

Why do pieces of paper, especially very important papers like money, addresses, and phone numbers always blow away from you when you bend down to retrieve them?

-- Clay Dillingham, Anthropologist from Santa Fe, NM

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