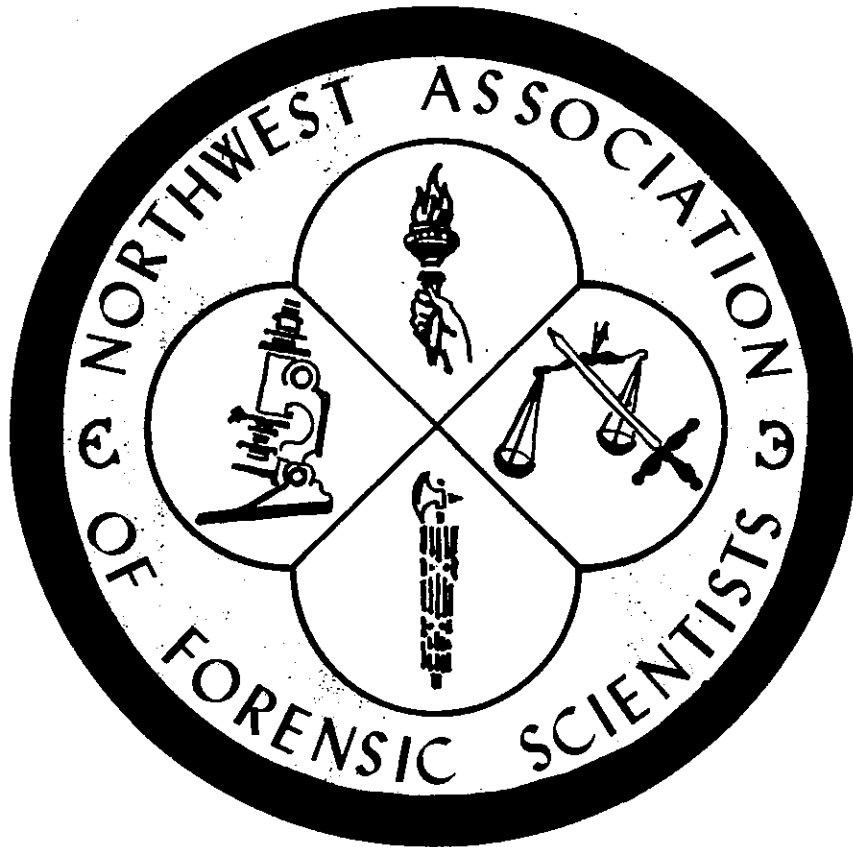


THE NEWSLETTER
of



SEPT 84

VOL 10 NO 3

NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS

Executive Committee

President Don MacLaren
Vice President Rich Brooke
Secretary-Treasurer Lionel Tucker
Executive Committee Member-at-Large Wally Baker
Past President Ken Konzak

Committees

Ethics Arnold Melnikoff
Membership Robert Sager
Publication George Matsuda
Historical Floyd Whiting
Technical Advancement Mike Grubb
Continuing Education Beth Carpenter

Upcoming Meeting

FALL 1984

October 3, 4 & 5

Holiday Inn
Medford, Oregon

Program Chairman:
Brad Telyea
650 Royal Ave., Suite 11
Medford, OR 97501
(503) 776-6118

Presidents Message

The spring meeting in Coeur d' Alene was well received. Jerry Chisum and Joe Rynearson presented an excellent workshop on crime scene reconstruction. Everyone I talked to seemed to feel that the organizations money was well spent in sponsoring this program. Again our thanks to Jerry and Joe for making this presentation available to us. I would also like to thank the Idaho Crime Lab system staff for all their work in putting the meeting together and particularly to Wally Baker and Bob Martin who served as program chairpersons.

It hardly seems possible that the fall meeting in Medford is almost upon us. Brad Telyea is program chairman for this meeting and he indicates that there is plenty of time available on the program for more papers. If you have anything to present contact Brad.

At the spring meeting in Coeur d' Alene the executive committee recommended that several changes be made in the organizations constitution and/or by-laws. Elsewhere in this newsletter the proposed wording changes are spelled out in detail. There are three areas in which changes have been proposed. The first of these is to change the office of Vice-President to President-Elect. The feeling of the executive committee is that this will allow for more continuity in the leadership of the organization from year to year. Hopefully since the president-elect knows that he or she will automatically assume the presidents role in the following year that person, with the presidents help, will stay on top of what is happening in the organization.

The second proposed change involves establishing the Continuing Education Committee as a standing committee of the organization. This is an important committee and it seems time to give it formal recognition. It should be noted that the Continuing Education Committee does not have the same role as the Technical Advancement Committee. The latter committee is currently a standing committee and deals solely with the organizations proficiency testing program.

The final proposed change requires that the organizations fall meeting be held in either Oregon or Washington. This means that the major business meeting of the year would occur in the geographical area that contains the largest proportion of organization members.

Inorder to make the above changes the constitution requires that the membership be notified in writing of the proposed changes at least 30 days in advance of the fall business meeting(changes to the by-laws may be voted on at either the spring or fall meeting but changes to the constitution must be voted on at the fall business meeting). Approval of the changes requires that 3/4 of the voting

members attending the Medford meeting favor them. Please take the time to read the attached changes and be prepared to vote on them in Medford.

As my term of office comes to a close I would like to thank all those people who have assisted me and the organization during the past year. The help has made this job much easier. I hope to see many of you in Medford.

Sincerely,

Don MacLaren

Don MacLaren

President

IMPORTANT

Proposed Constitution and By-laws Changes

The following material presents the changes to the constitution and/or by-laws which were recommended by the executive committee at the spring meeting in Coeur d'Alene. These proposed changes will be presented to the membership for a vote at the business meeting in Medford, Oregon on October 4, 1984. Approval of any or all of the changes will require that 3/4 of the voting members attending the meeting approve them. The appropriate section(s) of the constitution and/or by-laws are indicated. Any current wording that is being eliminated is crossed out and new wording is indicated in parentheses.

1) Change Office of Vice-President to President-Elect

Relevant section of constitution

Article V Officers

Officers of this association shall consist of President, ~~Vice-President~~(President-Elect) and Secretary-Treasurer. Officers of this association shall be elected annually at the fall business meeting(except that the office of President-Elect shall be automatically assumed by the member elected President-Elect the previous year). Each officer shall hold office for one year or until their successors shall have been elected and qualified. In the event of the death or incapacitation or resignation of the president, the ~~Vice-President~~(President-Elect) shall automatically be elevated to the office of President for the unexpired term(and then serve their own term as President). In the event of the death or incapacitation or resignation of both the President and ~~Vice-President~~(President-Elect), the position will be held by the secretary treasurer for the remainder of the term.

Relevant sections of by-laws

Chapter II: Government

Section 2: The President shall preside at the business meeting and appoint necessary committees. In the absence of the President, the ~~Vice-President~~(President-Elect) shall preside.

Chapter III: Committees

Section 2:

(A) Executive committee consisting of the association President, ~~Vice-President~~(President-Elect), Secretary-Treasurer, Past-President and an elected Member-

At-Large.

Section 4: Duties of the appointed committees are:

(A) The membership committee shall fulfill all requirements as stated in the by-laws of this association. This committee will also be responsible for presenting nominations at the fall business meeting for the offices of President, ~~Vice-President~~(President-Elect), Secretary-Treasurer and executive committee Member-At-Large.

- 2) Require that fall meeting be held in Oregon or Washington

Relevant section of constitution

Article IV Meetings

Semiannual meetings shall be held in the spring and the fall. ~~with location selected by the voting members.~~ (Both meeting locations will be selected by the voting members, however, the fall meeting will be restricted to a location in Oregon or Washington). The exact date of the semiannual meeting shall be selected by the program chairperson.

- 3) Establish the Continuing Education Committee as a Standing Committee

Relevant sections of the by-laws

Chapter III: Committees

Section 2:

add(F) (The Continuing Education Committee consisting of a chairperson, appointed by the president, and such members as the chairperson shall select).

Section 4: Duties of the appointed committees are:

add(F) (The Continuing Education Committee shall be responsible for planning and coordinating educational and training programs that the organization makes available to its members. The committee will also have responsibility for maintaining the organization library and making purchases of educational materials for the library).

Spring Meeting
NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS
May 2, 3, and 4, 1984

PROGRAM SCHEDULE

Tuesday, May 1, 1984

6:00 PM - 7:00 PM Early Registration
Hospitality Suite

Wednesday, May 2, 1984

8:15 AM - 9:00 AM Registration & Opening Remarks

9:00 AM - 9:30 AM Proposed U.S. Forest Service
Paint Tracer Identification
System Arnold Melnikoff
Montana State Crime Lab
Missoula, Montana

9:30 AM - 10:00 AM A Rapid, Qualitative Method
for the Combined Determination
of Protein Concentration and
Acid Phosphatase Activity Chester Park
Washington State Patrol
Crime Laboratory
Spokane, Washington

10:00 AM - 10:30 AM Evaluations of the A.L.E.R.T.
Alco-Sensor, and Intoxilyzer
Direct Breath Alcohol Testers -Donna McDonough
Idaho State Crime Lab, Boise, Idaho
-Bill Newhouse
Montana State Crime Lab, Missoula

10:30 AM - 11:00 AM Break & Exhibitors

11:00 AM - 11:15 AM Extraction of Cocaine From
Currency Gary Sorgen, DEA,
San Francisco, California

| | | |
|------------------------------|---|--|
| 11:15 AM - 11:30 AM | <u>NWAFS Shoeprint Proficiency Test</u> | Bill Newhouse Montana State Crime Lab, Missoula |
| 11:30 AM - 12:00 PM | <u>Missing and/or Unidentified Persons</u> | William Alexander, D.M.D. Lane County Medical Examiners Office Eugene, Oregon |
| 12:00 PM - 1:30 PM | Lunch | |
| 1:30 PM - 3:00 PM | Crime Scene Reconstruction | -Joe Rynearson, California Department of Justice, Redding -Jerry Chisum, Modesto, California |
| 3:00 PM - 3:30 PM | Break & Exhibitors | |
| 3:30 PM - 4:45 PM | Crime Scene Reconstruction (cont.) | |
| Wednesday Evening | Crime Scenes - Locations to be Announced. | |
| <u>Thursday, May 3, 1984</u> | | |
| 8:15 AM - 10:00 AM | Crime Scene Reconstruction | Rynearson & Chisum |
| 10:00 AM - 10:30 AM | Break & Exhibitors | |
| 10:30 AM - 12:00 PM | Crime Scene Reconstruction | |
| 12:00 PM - 1:30 PM | Lunch | |
| 1:30 PM - 2:30 PM | <u>Profiling Sex Offenders</u> | Pete Welsh FBI, Pocatello, Idaho |
| 2:30 PM - 3:00 PM | <u>Detection of Cannabinoids in Urine</u> | Robert Martin Idaho State Crime Lab Coeur d'Alene, Idaho |
| 3:00 PM - 3:15 PM | Break & Exhibitors | |
| 3:15 PM - 3:45 PM | <u>What's New in Paper Fiber Analysis and Who Cares</u> | Russell Parham Paper Comp Laboratories Shelton, Washington |

| | | |
|----------------------------|--|---|
| 3:45 PM - 4:15 PM | <u>NBS/ATF Soot Analysis</u> | William Dietz ATF, San Francisco, California |
| 4:15 PM - Whenever | Business Meeting | |
| <u>Friday, May 5, 1984</u> | | |
| 8:15 AM - 8:45 AM | <u>Stress Management</u> | George Ishii Washington State Patrol Crime Laboratory, Seattle, Washington |
| 8:45 AM - 9:15 AM | Movie on Stress | Robert Sager DEA, San Francisco, California |
| 9:15 AM - 9:30 AM | <u>A Color Test for the Presence of Psilocin in Mushrooms</u> | -James Gaskill -Allen Steve Garrett -Steve Clemens Weber State College Criminalistics Laboratory, Ogden, Utah |
| 9:30 AM - 10:00 AM | <u>Magic Mushrooms and Not-So-Magic Mushrooms; How To Tell the Difference</u> | -John Kearns -Daryl Brender Washington State Patrol Crime Laboratory, Spokane, Washington |
| 10:00 AM - 10:20 AM | Break | |
| 10:20 AM - 10:40 AM | <u>Flammable Liquid Residues: The Result of Combustion or Evaporation?</u> | Dale Mann Washington State Patrol Crime Laboratory, Seattle, Washington |
| 10:40 AM - 11:10 AM | <u>Some Forensic Applications of Diffuse Reflectance Fourier Transform Infrared Spectroscopy</u> | Ed Suzuki Washington State Patrol Crime Laboratory, Seattle, Washington |
| 11:10 AM - 11:40 AM | <u>Practical Limitations of Spectral Subtraction of FT-IR</u> | Larry Peterson Montana State Crime Lab, Missoula |

NORTHWEST ASSOCIATION OF FORENSIC SCIENTISTS

Spring Meeting

Coeur d'Alene, Idaho

May 2-4, 1984

CALL FOR PAPERS

NAME Arnold B. Melnikoff

ADDRESS State of Montana Division of Forensic Science

PHONE _____

TITLE OF PAPER Proposed U.S.F.S. Paint Tracer Identification System

Abstract: A proposed paint identification system based upon using 2 to 1 ratio of Cerium to Lanthanum with a minimum level of 100 ppm Lanthanum incorporated into U.S.F.S. tree marker paint.

The specific elements used as markers in the paint could be easily identified by the use of flame emission spectroscopy mode on atomic absorption spectrophotometer, an instrument available to most crime laboratories throughout the United States. The problems associated with the marker presently in the U.S.F.S. tree marker paint, as well as the expected benefits and problems in adapting the new paint marker system will be discussed.

CALL FOR PAPERS

NAME GARY J. SORGEN

ADDRESS 450 Golden Gate Ave. P.O. Box 36075

San Francisco, CA 94102

PHONE (415) 556-0951

TITLE OF PAPER EXTRACTION OF COCAINE FROM CURRENCY

ABSTRACT SEE Extraction of Cocaine from Currency by

Gary J. Sorgen and James A. Heagy

MICROGRAM Vol. XVI, No. 8, August 1983

NAME WILLIAM E. ALEXANDER, D.M.D.

ADDRESS 1400 MILL STREET

EUGENE, OR. 97401

PHONE (503) 686-9750

TITLE OF PAPER MISSING and/or UNIDENTIFIED PERSONS

ABSTRACT 2 1/2 million people are reported missing every year in the U.S. 90 % of them show up. Thus, 1/4 million or 250,000 people are really missing. That's 5,000 for every state in the Union. 7,000 Jane and John Doe's are buried each year. Oregon and Washington both now have mandatory reporting laws and use the forms designed by th U.S. Dept. of Justice, F.B.I., and the National Crime Information Center. All of Canada is also in the network.

NAME James Gaskill and Allen Steve Garrett and Steve Clemens

ADDRESS Weber State College, Criminalistics Laboratory #1206

Ogden, Utah 84408

PHONE (801) 626-6147

TITLE OF PAPER A Color Test for the Presence of Psilocin in Mushrooms

ABSTRACT A simple, reliable test has been developed to screen for the presence of psilocin in halucinogenic mushrooms. Dozens of speices have been tested and only those that subsequently were shown to contain psilocin have tested positive. The technique for running the test will be demonstrated along with possible cautions about it's use.

NAME John A. Kearns and Daryl Brender

ADDRESS Washington State Patrol Crime Laboratory, 100 Public Safety Building

Spokane, Washington 99201

PHONE (509) 456 4144

TITLE OF PAPER Magic Mushrooms and Not-so-magic Mushrooms; How to Tell the Difference.

ABSTRACT Homologous series of indole compounds, some controlled and others not controlled, will be explored in depth. Differentiation of individuals within such series will be stress, especially where non controlled individuals are present in a series with controlled individuals. Extraction and isolation procedures, previously presented, will be restated stressing advantages and modifications.

NAME Dale C. Mann

ADDRESS Washington State Crime Lab, Public Safety Bldg. 2nd floor
Seattle, WA. 98104 PHONE 206-464-7074

TITLE OF PAPER Flammable Liquid Residues: The Result of Combustion or Evaporation:

ABSTRACT Frequently in arson cases it would be useful to know if a flammable liquid residue is the result of the original product going through a fire, or if it is due to evaporation at moderate temperatures. Capillary gas chromatography was used to compare a series of evaporated and combusted gasoline samples. Comparison of normalized relative recovery curves generated from these analyses were unable to distinguish between the two modes of accelerant loss.

NAME Edward M Suzuki Ph.D. and William R. Gresham Ph.D.

ADDRESS Washington State Patrol Crime Lab, Seattle

PHONE _____

TITLE OF PAPER Some Forensic Applications of Difuse Reflectance Fourier Transform Infrared Spectroscopy

ABSTRACT Diffuse reflectance Fourier transform infrared spectroscopy offers several significant advantages over conventional methods of sampling (pellets, mulls, films, etc.) for the examination of solids. Some of these include: (1) sample preparation is greatly simplified, (2) a greater range of sample concentrations may be examined (down to microgram amounts in some cases). (3) background scattering problems for opaque or highly scattering samples are alleviated, and (4) useful spectra of weakly absorbing substances are easily obtained. The principle of diffuse reflectance spectroscopy will be briefly discussed and several examples illustrating the above advantages for some samples of forensic interest will be presented. Diffuse reflectance spectra of some materials normally considered unsuitable for analysis by infrared methods will also be presented to illustrate the greater scope of applications made possible with this technique.

Symposium on Recent Advances in Arson Analysis and Detection by
Bureau of Alcohol, Tobacco and Firearms

Background

The Bureau of Alcohol, Tobacco and Firearms (ATF) Laboratories have been assisting state and local agencies in investigating fires since 1970. ATF special agents have been involved in the fight against arson since 1977. Within the framework of statutory authority provided by Title II of the Gun Control Act of 1968 and Title XI of the Organized Crime Control Act of 1970 (commonly known as the Explosives Control Act), ATF's enforcement approach has been structured toward the investigation of arson for profit schemes involving commercial or industrial interstate activities, especially those schemes perpetrated by members of organized crime, white-collar criminals, members of organized "arson rings," or violent criminals.

Working hand-in-hand with state and local investigators and other Federal law enforcement agencies in arson task forces, ATF has both initiated and assisted in arson investigations. While arson is basically a local problem, a coordinated effort among Federal, State and local agencies is imperative if the continuing arson epidemic is to be curtailed.

In addition to its participation in arson task forces, ATF has developed and provided training to state and local agencies in two major areas:

1) State-of-the-Art Arson Laboratory techniques for chemists and 2)

Arson-for-Profit Investigation for investigators. During the past three years ATF has trained approximately 150 chemists and 1300 investigators.

To continue the training of state and local chemists, ATF is offering a Symposium on Recent Advances in Arson Analysis and Detection. The one-day workshop will be held at the American Academy of Forensic Sciences Meeting in Las Vegas on Tuesday, February 12, 1985.

Symposium Topics

During the one-day seminar, attendees will participate in discussions ranging from cause and origin to pre-analysis clean-up and GC/MS techniques.

Some of the topics to be discussed are:

- Basic Cause and Origin - it's importance to laboratory analysis
- Clandestine Drug Laboratories - Hazards/Incendiary Devices/Boobytraps
- Accelerant Detection Dogs
- GC/MS Applications
- Pre-analysis Clean-up Techniques
- Survey of Sorption/Elution Techniques

Attendance

Registration will be coordinated with the American Academy of Forensic Sciences, 225 S. Academy Boulevard, Colorado Springs, CO. A modest registration fee will be charged, to cover costs (final cost to be determined). Luncheon and refreshments at breaks will be included with registration.

More Information

For additional information and pre-registration, please contact Rick Tontarski, ATF-National Laboratory Center, 1401 Research Boulevard, Rockville, Maryland 20850 [(202)294-0420].

Dear colleague,

One of the problems in forensic science is how to increase the level of professionalism in our field. Going to regional and national meetings, participating in workshops and attending short courses or continuing education programs are some of the ways to increase one's professionalism.

Another, more traditional, way is to read all the journals that apply to your field. "Yeah, and who has all those blasted journals anyway?" and "Do you know how much that would cost?" I already know the answers to these exclamations. It isn't easy to find the time to read, let alone locate, all the scientific journals that apply to forensic science being published today.

However, as you might guess, I do have a solution – the *Scientific Sleuthing Newsletter* (SSN). The SSN editors review all the forensic science journals (and others too) and then abstract the useful articles. Each issue of SSN has 10–20 such abstracts covering journals and other publications of interest (both US and foreign). In addition the SSN publishes reviews of important law cases where appellate courts have made decisions affecting the introduction and use of scientific evidence in state and federal courtrooms. These decisions can directly affect your work; for example, several years ago an appellate court in a mid-western state decreed that to convict a person of possessing 100 tablets or capsules, the drug chemist had to analyze *all* 100 dosage units, and that a representative sample would not be sufficient. Other cases and decisions will have different impact on your work, but you as an expert testifying in court should be aware of these rulings – no sense in having the lawyers being the *only* persons in the courtroom who know the latest quirks of the law! It is possible that your reading of SSN could save you from embarrassment on the witness stand, or worse!

Now the sales pitch. SSN is published quarterly by the Mid-Atlantic Association of Forensic Scientists (MAAFS) and is inexpensive. For members of MAAFS and AAFS:

\$7 for one year; \$14 for two years and \$21 for three years.

For other individuals (persons paying with their own funds):

\$10 for a year, \$18 for two years and \$25 for three years.

And finally for libraries and all subscriptions paid by official or government funds the rates are:

\$15 for one year, \$30 for two years and \$45 for three years.

I think that you will find the the *Scientific Sleuthing Newsletter* is well worth the time to read and the money to buy it.

Respectfully,



Edward Franzosa
MAAFS Newsletter Editor



Scientific Sleuthing Newsletter

The editors review all the law reporters in the United States (plus other sources) and make concise summaries of all important court decisions that can affect the practitioners of forensic sciences. They also review numerous scientific journals and articles and make abstracts of the latest in new techniques and methodology that can be used in the forensic analysis of evidence of all kinds.



footnote in which it rejected the "philosophy" of decisions from Minnesota (*State v. Carson*, 267 N.W.2d. 170 (1978)) and the 8th Circuit (*U.S. v. Massey*, 594 F.2d. 676 (1979)) which took too low an opinion of the jury's ability "to weigh the credibility of such figures," according to the Utah Supreme Court. The exact nature of the statistical testimony of the hair expert, to which exception was taken, was not given in the opinion. The conviction was, in all respects, affirmed. *State v. Clayton*, 646 P.2d. 723 (Utah 1982).

Confrontation Right Violated by Evidence of Nontestifying Psychiatrist

*****2098*****

A Vermont sexual assault and kidnapping defendant claimed insanity. To rebut this claim the prosecutor called a forensic psychiatrist who testified about "the nature of psychosexual disorders." He also asserted that he had communicated with another psychiatrist, a leader in

the field, whose opinion concurred with his view that the defendant was sexually disturbed but not mentally ill.

The prosecutor's closing argument emphasized the concurring opinion of the out-of-court psychiatrist. Indeed, this psychiatrist was given preeminent stature as "the man who wrote the book, so to speak."

Even though the defense never objected at the trial to this testimony, the Vermont Supreme Court found it to be so constitutionally infirm as to be a reversible error.

It is one thing, the court said, for an expert "to base his opinion upon facts or data not admissible in evidence, but reasonably relied on by experts in the field." This procedure is not objectionable either in Vermont or in most other states. But it is wholly another matter for one expert to put into evidence the opinion of a nontestifying expert and then for the prosecutor to use this testimony as the underpinning for his case. Both hearsay rules and the Sixth Amendment's right to confront one's accusers are imperiled by this tactic. The conviction was reversed. *State v. Towne*, 453 A.2d. 1133 (Vt. 1982).

From the Journals Information

Basic LIMS

*****2099*****

With the rapid increase in the use of computers and automated data systems in the laboratory there is a need for understanding of the concepts of laboratory information management systems to both increase productivity and insure the quality of laboratory results. A description of one commercially available system provides an overview of the potential applications of such systems and the criteria for selecting a system to meet an individual laboratory's needs. Reber, "Laboratory Information Management Systems", *Amer. Laboratory*, 78 (February 1983)

LIMS: Part I

*****2100*****

A more detailed look at LIMS describes the use of a system to handle

sample log-in and information retrieval. It describes the uses of a LIMS, criteria for system selection and how data is stored and retrieved. Typical hardware and software and data base concepts are introduced. Dessy, "Laboratory Information Management Systems: Part I", *Anal. Chem.*, 55:70A (1983)

LIMS: Part II

*****2101*****

The second article in the series above provides specific examples of the implementation and use of LIMS in several different commercial laboratories. A variety of systems based upon components from numerous manufacturers demonstrate different approaches to the development of a system to meet the highly individualized need of a particular type of operation. Dessy, "Laboratory Information Management Systems: Part II", *Anal. Chem.*, 55:277A (1983)

Scientific Sleuthing Newsletter

Science in Criminal Law

JULY 1983

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Authors-Editors JAMES E. STARRS

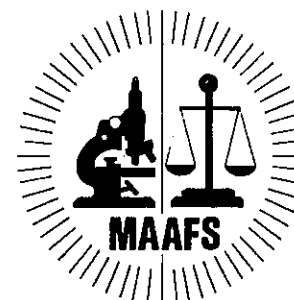
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A Tale of Two Cases

The Perils of Unrebutted Expert Testimony on Novel Scientific Techniques

by Professor James E. Starrs

Case 1: Fingernail Scratches Are Identifiable as Toolmarks Says A Pennsylvania Superior Court

*****2075*****

The case of *Commonwealth v. Graves* has developed in two year increments. In 1979, a ten year old girl and her eleven year old brother, who had been left in the care of Bennie Graves, were found to have been manually strangled. In 1981, an article entitled "Identification of Fingernail Markings in Manual Strangulation," authored by Doctors Perper and Sobel, appeared in the *American Journal of Forensic Medicine and Pathology*. This article detailed the background facts of the murders of the two children occurring in 1979 and explained the technique used to match a fingernail from Bennie Graves' left hand to a fingernail mark on the neck of the male victim. And now, in 1983, a Pennsylvania Superior Court has affirmed the murder convictions of Bennie Graves for these strangulations and has approved the use of expert testimony linking Graves' fingernail to the scratch mark on the eleven year old's neck.

The case is apparently a first in the annals of both science and the law.

At the trial, it was shown that, at autopsy, scratch marks had been observed "on the back of Lloyd Weston's body near the base of the neck." Or so the Pennsylvania appellate court said. In Perper and Sobel's article, however, two adjacent fingernail imprints (not described as "scratch marks", as the Pennsylvania court did) are illustrated on the anterior portion (not the back) of the eleven year old victim's neck. Only one of these two marks was deemed suitable for identification purposes. Nowhere is it explained how it was deduced that these abrasions were caused by a fingernail as opposed to some other object. Apparently, this conclusion was reached circumstantially -- from the fact that the markings were found on the neck of one of two victims of manual strangulation. Four experts were permitted to testify for the prosecution at the trial on the scratch marks. There is no indication in the court's appellate opinion that any experts testified for the defense to refute the prosecution's case.

Highlights

- 11 Polygraph & 5 Hypnosis Cases Briefly Described page 3
- Bogus Fire Expert in Illinois page 4
- Pathologist Testifies on Bullet Caliber page 5
- M.D.'s Testimony as "Consistent with Rape" page 6
- Insanity Rebutted by Nontestifying Psychiatrist page 7

Scientific Sleuthing Newsletter published by the Mid-Atlantic Association of Forensic



SCIENTIFIC SLEUTHING
NEWSLETTER

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Of the prosecution's experts, Dr. Michael Sobel and Dr. Lowell Levine testified that "it was highly likely" or that "it is highly probable" that Bennie Graves' fingernails made the telltale impression. Curiously, in the Perper and Sobel article, the possibility of an identification is stated more positively. They maintain "the mark was made by the suspect's left little fingernail" and that two "outside" forensic odontologists "expressed a similar opinion." Whether by "outside" they mean impartial or something else is not explained.

A comparison of the Perper and Sobel article with the Pennsylvania court's extracts from the trial testimony of Doctors Sobel and Levine reveals other curious discrepancies. The Perper and Sobel article consistently maintains that the neck abrasion was caused by the accused's "left little fingernail." But Dr. Sobel's reported testimony is quoted as having referred to Bennie Graves' "fourth finger, left hand" as having caused the impression. Dr. Levine's testimony is not given verbatim by the Pennsylvania court, but he is reported to have attributed the mark to "appellant's fingernails," in the plural and without specifying which ones.

The other experts for the prosecution were Dr. Robert Levine, a specialist in toolmark comparisons, and Dr. Homer Campbell, Jr., another forensic odontologist.

Dr. Campbell's testimony, according to the report of the appellate court, was more of a photographic comparison than a comparison of impressions of the abrasion and Graves' actual fingernails. Campbell testified that, not the one mark, but the two of them were, with "a high degree of certainty", made by Graves' "left little finger and the left ring finger." There is no data given on the process by which this comparison was made and whether the defense objected to it.

The criminalist, Dr. Robert Levine, discerned similar class characteristics in the neck abrasion and the fingernail from Graves' left little finger, but he refused to characterize the nail as "unique", even though Perper and Sobel find such uniqueness in the "S-shaped characteristic bend of the edge of the nail, due to a fracture site." Upon being pressed, Dr. Levine said there was a "high probability" Graves' fingernail made the mark, even though he found only similar class characteristics.

The Pennsylvania Superior Court did not dwell on these discrepancies in the experts' evidence nor did it refer to the earlier Perper and Sobel article. Instead the court considered the defense attack on the admissibility, under the Frye

"general acceptance" test as adopted in Pennsylvania, of those experts' opinions.

The court found that fingernail identifications were like toolmark comparisons and bitemark comparisons. As such the experts were found to be sufficiently skilled in those cognate disciplines to state their conclusions here, particularly since impressions after the fashion of bitemark cases were taken and used for the identification in this instance.

The reviewing court also found adequate scientific recognition for the methodology employed in this case, even under the Frye standard. Since the court's analysis is almost as unique as the fingernail said to have caused the neck abrasion, it is given here unparaphrased:

"we are not dealing with an attempt to identify an individual based on some of his personal characteristics... instead we have a wound... and we have a suspected weapon (here a fingernail) and we wish to know the probability that the suspected weapon inflicted the injury."

The puzzlement evoked by this tenuous and unprecedented distinction is not dispelled by a reading of the court's cited cases, allegedly in support of it.

In concluding, the appellate court found the weight of the evidence of defendant's guilt sufficient to sustain the verdict. Other inculpatory items were mentioned, such as a public hair from Graves which was consistent with one on the female victim. (Perper and Sobel's article most emphatically states that no evidence of sexual abuse of either victim was detected at autopsy.) Graves' bathrobe had blood stains consistent with the victim's blood type. Scratch marks on Graves' upper body were said not to have matched his girlfriend's fingernails. (Whether this was another exercise in fingernail impression matching is not explained in the court's opinion or in the Perper and Sobel article.) Blood of unknown type was found under the fingernails of the female victim.

At this writing, it is not known whether this very unique case involving a unique fingernail is on its appellate way to the Pennsylvania Supreme Court. The case will be closely monitored for that possibility, since the Pennsylvania Supreme Court's negative attitude to the voice print in *Comm. v. Topa*, 369 A.2d. 1277 (Pa. 1977) and to the use of hypnosis in *Comm. v. Nazarovitch*, 436 A.2d. 170 (Pa. 1981) would seem to warrant a definitive and final review of the fingernail comparisons in this case by the Pennsylvania high court. *Comm. v. Graves*, 456 A.2d. 561 (Pa. Super. Ct. 1983)

Case 2: The Ohio Supreme Court Finds Voiceprint Testimony Reliable (Relevant) and Helpful To the Jury

*****2076*****

The defendant, Mose Williams, Jr., was convicted in an Ohio state court of aggravated robbery and felonious assault upon Mrs. Mary Flockencier. The crimes were committed in a most extraordinary way. The victim answered a knock at her door and was informed by Williams that he needed to use her telephone to call an ambulance for his pregnant wife. When Mrs. Flockencier refused him admission, the defendant forced his way into her home and called an ambulance service, asking for an ambulance to be sent to what it later appeared was a fictitious address. Then Williams was said to have attacked Mrs. Flockencier and stolen money from her.

In spite of the fact that the victim identified Williams as her attacker, the prosecution sought to introduce the testimony of two voiceprint experts to identify the voice on the tape of the telephone call to the ambulance service as being the voice of Williams. Williams gave an exemplar of his voice to the prosecution using the language of the questioned telephone call which was also placed to and taped by the same ambulance service.

At the trial, Dr. Henry Truby and Lt. Lonnie Smrkovski testified to the reliability of the voice spectrographic technique. Lt. Smrkovski indicated that he "made a positive identification in this case and I am absolutely convinced beyond a reasonable doubt that these voices belong to the same speaker." The Ohio Supreme Court affirmed the convictions and found the voice analysis testimony admissible.

The Ohio high court refused to adopt both the Frye "general acceptance" test or the more lax McCormick "relevancy" standard. Instead the court pointed to its Rules of Evidence (Rules 402 and 702, for which the Federal Rules were the model) and required only a showing that a "newly ascertained or applied scientific principle" be both relevant to the issues at hand and of assistance to the jury in its fact finding function. The court called this a "third and preferable approach" to the admissibility of novel scientific evidence.

It is to be noted that no expert evidence was introduced to rebut that of the prosecution's experts. This is to be regretted since the court nowhere

mentions the very cautionary study of voice spectrograph by the National Academy of Sciences, whose report was published in 1979, which report would give serious pause to any court's acceptance of voiceprint identification evidence. In addition, the Ohio Supreme Court erred in relying on the first edition

of the Moenssens, Moses and Inbau text on *Scientific Evidence in Criminal Cases* rather than the 1978 second edition which took a less favorable attitude on the admissibility of voiceprint testimony than did the first edition. *State v. Williams*, 446 N.E.2d. 444 (Ohio 1983).

From the Courts

Decisions

*****2082*****

Pennsylvania reaffirms its refusal to admit polygraph test results even where there is a so-called stipulation of admissibility. *Comm. v. Brockington*, 455 A.2d. 627 (Pa. 1983).

*****2083*****

Confession must be suppressed as involuntary when it results from police threats of polygraph as a psychological rubber hose. *State v. Caffrey*, 322 N.W.2d. 269 (S.D. 1983).

*****2084*****

Prosecution may not rehabilitate its witness by showing he was required to take and pass a polygraph test as part of a plea bargain. *State v. Middleton*, 658 P.2d. 555 (Ore. App. 1983).

*****2085*****

Arizona rule limiting admissibility of polygraph test results to those which are the result of a stipulation of prosecution and defense applies to sentencing as well as the trial. *State v. Zuck*, 658 P.2d. 179 (Ariz. App. 1982).

*****2086*****

Evidence of a refusal to take a polygraph is inadmissible in Maryland. *Oliver v. State*, 454 A.2d. 858 (Md. Spec. App. 1983).

*****2087*****

The Massachusetts' limited approval of the use of polygraph test results as to an accused will not be extended to its use to impeach or corroborate other witnesses, at least not without a pretest stipulation to that effect. *Comm. v. DiLego*, 439 N.E.2d. 807 (Mass. 1982).

Briefly Noted

Polygraph

*****2077*****

A prosecutor's comment in closing argument on the failure of a defense alibi witness to volunteer to take a lie detector test is not grounds for a mistrial. The remedy of mistrial is too drastic where there is no suggestion of a refusal to take a lie detector test. *Poole v. State*, 453 A.2d. 1218 (Md. 1983).

*****2078*****

Psychological Stress Evaluator's action voids Vermont polygraph licensing statute under Vermont's Sunset Act. *Heise v. State*, No. 82-196, Slip. Op., 2/7/83 Vt. Supreme Court.

*****2079*****

Michigan allows polygraph test results on motion of accused for a new trial. *People v. Snell*, 325 N.W.2d. 563 (Mich. App. 1982).

*****2080*****

An accused's willingness or refusal to take a polygraph is inadmissible in Alaska unless the accused voluntarily broaches the subject. *Leonard v. State*, 655 P.2d. 766 (Alaska App. 1982).

*****2081*****

Inadvertent mentioning of polygraph in response to a defense question which does not state results of testing is not grounds for a mistrial. *People v. Kiczinski*, 324 N.W.2d. 614 (Mich. App. 1982).

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