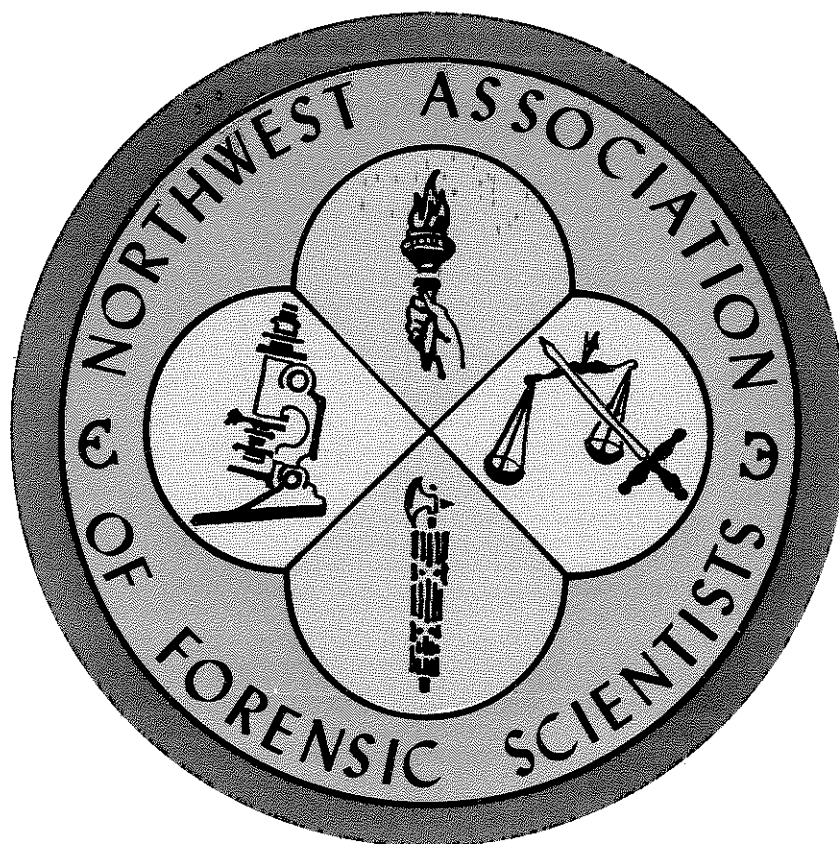


THE NEWSLETTER of



MARCH 1992

VOL. XVIII, NO.1



PRESIDENT'S MESSAGE

PANIC – I returned from a meeting to find a message on my desk that Roger wants the President's message by Friday – only two days away. This is Sunday evening, and I am finally getting time to work on it. If you are reading it, then Roger was able to wait an extra working day.

First a word about meetings. It sounds like Reno is shaping up to be a good one. Gary Knowles and Jim Pex managed to convince out administration to let them go to put on the blood spatter workshop. The things you have to do in budget crunch times. If anyone has any great memories of the past 20 years, please pass them on to Floyd Whiting. He would like to have any tidbits for our anniversary.

A second word about the Spring 1993 meeting (I guess I jumped over Portland and Fall of 1992). As you know, I have the honors here in Bend, Oregon. I called the Inn of the Seventh Mountain – same place I had the last meeting. I discovered they only have one week vacant in the Spring of 1993 and that was if we did not want a weekend to go with it. Fortunately, the week worked for us, so the dates are already set for April 26–30, 1993. Mark it on your calendars. I also put in an order for good spring snow at Mt. Bachelor. This does point up the need for people to plan ahead. I know the by-laws (did you?) say we only pick a spot two meetings in advance, but maybe we ought to change. Getting reservations can be tough.

A third word – Boise has already "volunteered" for Fall of 1993, so we will have at least one place to vote on. Do not let this deter any other of the faithful. Be ready to submit your bids.

Another interesting note – at least to me and since I am writing this, I guess I can put in what I want (as Past-President Gary Knowles said, "Its great to be King."). The State of Oregon was fortunate enough to have George Brown from Texas come up and teach for a few days on Implied Consent and Alcohol Testing. I missed George when he came to the NWAFFS workshop in Portland in the fall of 1988, and now I am really sorry. Here is a forensic scientist who would fit right in with the NWAFFS. Why didn't someone sign him up back then? A truly warped criminalistic mind. An besides, he doesn't really like lawyers.

Now down to the really serious stuff ... oh, well. What do you expect for a couple of days late and a Sunday night. Keep your rubber gloves on while doing serology and remain safe. Remember, its a jungle out there ...

Your President at a Loss for Meaningful Words,

Michael A. Howard

ASSOCIATION OFFICERS

President:

Michael Howard
OSP Forensic Lab
63319 Highway 20 West
Bend, OR 97701
(503) 388-6150

President-Elect:

Kenneth D. McDermott
WSP Crime Lab
PO Box 888
Kelso, WA 98626
(206) 577-2087

Secretary-Treasurer:

Lionel Tucker
DEA Western Lab
390 Main, Room 700
San Francisco, CA 94105
(415) 744-7051

Member At Large:

Past-President:

Gary Knowles
OSP Forensic Lab
650 Royal Ave., Suite 11
Medford, OR 97501
(503) 776-6118

COMMITTEE CHAIRMEN

Membership:

John Bowden
CA Dept. of Justice
4949 Broadway, Room F-201
Sacramento, CA 95820
(916) 739-4380

Newsletter Editor:

Roger A. Ely
DEA Western Lab
390 Main, Room 700
San Francisco, CA 94105
(415) 744-7051
(415) 744-7055 FAX

Historical:

Brad Telyen
OSP Forensic Lab
1111 2nd Ave.
Portland, OR 97204
(503) 229-5017

Technical Advancement:

Robert Thompson
Genelex Corp.
2203 Airport Way So., Suite 350
Seattle, WA 98134
(206) 382-9591

Continuing Education:

Arnold Melnikoff
WSP Crime Lab
PO Box 888
Kelso, WA 98626
(206) 577-2087

**LETTERS TO THE
EDITOR**

Dear Mr. Ely,

We are pleased to announce the release of our video program; "Not an Otis...Not a Lyle - Preparing Biologically Hazardous Evidence for the Courtroom." This program is a production of the Idaho Department of Law Enforcement with support from the Idaho Prosecuting Attorney's Association. A copy is enclosed for your review and use.

The objective of the program is to teach those who must handle biologically hazardous evidence in court how to do so in a safe manner. The tape explains:

- The hazards posed by this evidence;
- Which common evidence items are involved;
- How to package items for introduction in court and how to repackage them again for long-term storage;
- When substitution may be the best alternative to using the contaminated item;
- How to store and dispose of hazardous evidence;
- Some common sense hygiene rules;
- Sources for additional information.

The program is designed as a good introduction to this topic, but we would encourage those using it to combine the video with other instruction specifically tailored to the audience. For instance, court clerks and prosecutors will each have concerns specific to their roles. Discussing the material presented and encouraging questions will help clarify the program's message.

Additional copies of the tape are available for \$10.00, which covers our duplication and shipping costs. If you find the program beneficial, we'd encourage you to tell others. Perhaps you have a department newsletter which would serve this purpose.

(Editor's Note: To order, send a check for \$10.00 made to Idaho State Police or a purchase order to:

*Idaho Department of Law Enforcement
MCSAP Video Section
6027 Clinton St.
Boise, ID 83704*

The copy sent to me has been forwarded to the Continuing Education Chairman, Arnold Melnikoff at the WSP Crime Lab in Kelso, WA).

The following letter was sent to Past-President Gary Knowles regarding the formation of a new forensic association in the state of New Jersey.

Dear Mr. Knowles:

I am pleased to announce the formation of the New Jersey Association of Forensic Scientists, Inc. (NJAFS), a fraternal association for the advancement of forensic science in the state of New Jersey. The association was formed in an effort to increase the appreciation and understanding of forensic science. We look forward to communicating with our fellow associations in pursuit of these goals. We would appreciate it if you would provide, on a regular basis, any information about your organization that may be of benefit to our members including; technical news, association and symposium sched-

ules, educational conferences, course announcements, and employment opportunities. Please forward all information to:

Mr. Michael A. Koval
NJAFS Publications Chairperson
P.O. Box 77329
West Trenton, NJ 08628

Thank you for your support as we begin the work of forwarding the field of forensic science.

George M. Hickman
President, NJAFS

Here I sit in front of the ol' monitor, staring at a nearly blank screen, wondering just how I'm going to jump into my observations of the past three months. Thank goodness Windows has a busy border screen - I don't think I could face looking at the blank stare of the WordPerfect screen. Well, here goes!

Travel Money Tight

Yeah, I know. Tell you something new. In talking with colleagues around the country and Canada, there is considerable consternation by the bench level scientist at the substantial cuts in money allocated for conference and training travel. It has never ceased to amaze me that when the financial going gets tough, the bean-counters slash away at this expenditure first. But do they realize the implications of such budget cuts? Let's take a look at a few:

1. The first and most obvious impact on training and conference travel reduction is the ability of the bench scientist to receive training to keep current in their field of expertise. Granted, you aren't going to be able to have a court-qualified hair examiner or firearms examiner simply because they attend a one-day workshop on the subject at an Association meeting. But how

It has never ceased to amaze me that when the financial going gets tough, the bean-counters slash away at this expenditure first.

do you assign an investment dollar amount on the contacts generated at these workshops and the sharing of information during informal conversations? You can't. Yet these "informal" interactions over dinner, drinks, or at airports are often the foundation of new resources and contacts for the examiner. Face it, would it be more expensive to send a person to such a meeting or have them spend valuable bench time re-inventing the wheel?

Take for example the recent American Academy meeting in New Orleans. I found the oral drug related presentations often superficial in content as I struggled to understand an unlabeled spectrum of some 30 character long compound (why don't people draw structures on spectra for presentation?). I also struggled to make sense of slides (poorly exposed) projected on an 8x8 screen containing

AS I SEE IT

Roger A. Ely
Editor

information photographed from a full typed page of information – who could read and digest this mess in a 15 minute block?

(Maybe it's a comment on the differences in resources of the presenters, but I was SO impressed with the quality of the visual materials from the pathology, toxicology, and physical anthropology papers I viewed. Most used commercially available computer generated images (Harvard Graphics, Aldus Persuasion, etc.). We could learn a little.)

Probably the most informative portion of the meeting was the poster sessions where you could stand and talk at length with the author; and the informal groups that would gather at breaks, in rooms, and at social hours where the topic of discussion would usually end-up being job and technique related. It is unfortunate that so much excellent information never gets shared or written down from the Academy meeting – the conversations between 2 or more scientists.

Further, I made contacts with people I had either heard about, had only written, or talked with on the phone. In addition, I made contacts of people outside of the criminalistics field that have specialties I can now draw on – likewise, I have offered my services to them. You can't assign a silly per diem number to that, folks

...

2. Seems to me one of the criteria for the ASCLD Accreditation Program is the training program you provide for your staff. I think a lot of systems cop out to this one by saying they provide "in-house" training using an experienced staff member as the instructor. Well, they are only fooling themselves. While I am not saying this is necessarily bad, the breadth of training is not wide enough. A bench scientist must see and hear the opinions of outside experts not bound by a Laboratory Operations Procedures manual. Face it, how many LOPs have you seen which are firmly rooted in science and not for CYA? I was first exposed to this phenomenon when I went to work for the WSP system in 1982 from a two-man lab in Fresno. At Fresno, I was exposed to two diametrically opposed views on criminalistics, and felt I landed on a middle ground. It was refreshing to move into a system with 20 people doing similar examinations, and discussing problems, techniques and interpretations with them. I didn't agree with many; but I understood how they reached their opinion. Some information I used; much I just filed away as background. Such has been the case at DEA. One of our chemists will seek the advice or opinion of the other staff members and will be guaranteed at least two radically different opinions, with the balance filling in the space between. Such interaction causes us to re-examine our values and judgements.
3. Finally, the topic that is always in the background lurking around, certification. If you had a chance to look at the drafted documents of the ABC Dale Mann had at the Fall meeting, you should have been interested in the section regarding the recertification process. This process, as drafted, is not a tested procedure. Rather you accumulate points for such things as providing training, getting training, attending meetings, publishing papers, and other extracurricular profession activities. It may come a day (sooner than later) that certification will be a condition of employment. Think not? It is happening now ...

If the agency is not going to bear the financial responsibility for keeping their people current, you will be the one footing the bill – and it will probably be expensive.

Management should not be so quick to slash this line item from budgets – in the long run, it will only hurt the laboratory service and certainly RUIN the morale of the bench scientists. Unhappy people tend not to be productive people ...

Certification

The first ABC Certification test was given in New Orleans in conjunction with the American Academy meeting. I understand between 15 and 20 people took the test. The test was either the California Association of Criminalist's test or a modification of it. Rick Tontarski commented in the Criminalistics Section business meeting that ABC is now going to charge \$400 a year for voting board members on the ABC. It wasn't clear to me it that meant the original 5 or 6 regional associations, or all voting members. The Criminalistics section is providing a voting member and I got the impression it would cost them \$400 per year. That means it could possibly cost OUR Association an addition \$400 per year for Dale to represent us. I would like to hear and see just how we benefitted this past year as a result of our Association being represented on the ABC. I'm sure Dale will be able to clarify some of these questions at the Reno meeting for us. I think it is time to critically evaluate what our return on investment is regarding the ABC...

I would like to hear and see just how we benefitted this past year as a result of our Association being represented on the ABC.

That's a Wrap

Well, I see by Mickey's hand on the little clock face it's time to put this puppy to bed. Keep in mind the Reno meeting coming up in May. Maria (Boom-Boom) Fassett is promising a great meeting with all kinds of interesting workshops and activities. Reno in May should be beautiful since we did get some rain and snow this year – not enough, granted – but more than the past few years. Clear your calendar and come prepared to spend some comfortable time with colleagues.

By now all members should have received the registration materials for the Spring Meeting to be held in Reno. There are a few corrections and changes that need to be made to the workshop form. First of all, the price for a room (single or double) in the Tower should be listed as \$70.00 instead of \$75.00.

AIDS Drug Lab Session: This half-day workshop has been cancelled due to scheduling problems. The Steroid session will still be presented.

Blood Spatter: Contrary to what was listed, the high speed video camera will not be available for use during the class. A video illustrating both the use of this camera and actual blood spattering will be part of the class. This class will definitely fill up, so if you are interested, send your registration in early so as not to be disappointed.

DUI: Remember that only **one** of the breath alcohol workshops can be offered – please call us with your preference or else we will have to make the decision.

RENO MEETING COMIN' UP!!

*Maria Fassett
Washoe County Crime Lab*

PCR: This workshop will start in the morning and possibly extend into the afternoon depending on the participant. You won't want to miss this opportunity if you are thinking about setting up PCR in your laboratory or even if you are responsible for referring casework to private laboratories. Several companies will be represented to show various equipment needed, and Dr. Comey will update us on what the FBI Laboratory is doing with PCR technology.

Serial Number Restoration: This workshop is now scheduled for a half day. The class will not involve working with chemicals, but with plenty of slides and informative materials, it will serve as a refresher course for the seasoned analyst as well as a great introductory class for those analysts who have not done serial number restorations before.

All workshops are limited to 25 participants. If you are interested in any of the workshops, please pick up the phone and let us know. If at least 10 people don't sign up for the class, we may have to cancel.

Twentieth Anniversary Celebration: Gary Knowles has already sent in pictures of previous meetings, where are the rest? We plan to have a poster board display set up for viewing during the banquet.

It is not too early to send in your abstract if you are planning to present a paper. The meeting is a great opportunity to share that interesting case or new technique—put pen to paper and write up that abstract today. Let's have a full two days of technical papers!!

Having just returned from the Nugget's Catering department, I'm prepared now to tempt you gastronomically as well as intellectually. Included in the price of your registration are two lunches as well as the banquet dinner. The Nugget is renown for their food and making the menu choices was difficult, but I have selected soup and crab salad croissant for Thursday's lunch followed by the four course Basque Dinner Banquet on Thursday evening. Lunch on Friday will be the Petite Filet Mignon. The wine and cheese reception (Wednesday evening) as well as the Banquet will be held in the gorgeous poolside terrace room overlooking the garden-like setting of the Nugget's pool.

How can you miss this event? Send in your registration today and make your travel plans so as not to miss any of the events. The Nugget will extend the rates from 3 days prior to 3 days after the meeting so you can take in most of what Northern Nevada has to offer. I should also mention at this time the Nugget has free shuttle service to and from the airport every half hour until midnight.

If you have any questions, need more registration forms call Maria Fassett or Floyd Whiting at (702) 328-2800.

**MEETING
ANNOUNCEMENT**

The Midwestern Association of Forensic Scientists is having its Fall meeting September 28 - October 2, 1992 at the Holiday Inn Crowne Plaza, Grand Rapids, Michigan. The program theme is "Reflect, Rebuild and Rediscover MAFS in Michigan" with workshops on Interpersonal Crime Lecture, Forensic Anthropology and Archaeology, Public Speaking and Presentation and Courtroom Testimony, Composition and Identification of Cosmetic Products, Bite Mark Evidence, Safety, Identification of Vehicles Using the Wheelbase and Wheelstance Measurements, Use of Alternate Light Sources for the Collection and Preservation of Trace Evidence and Elisa Workshop For ABO and P-30 Typing. Tentative plans include "wine and cheese" parties and an evening excursion on the Coopersville murder mystery train. Expected preregistration is \$65.00, at the door \$75.00, Room rates will be \$79.00 for a single up to quad occupancy. For additional information please contact:

Robert W. Birr
Crime Laboratory - Grand Rapids
720 Fuller Avenue N.E.
Grand Rapids, Michigan 49503
(616) 242-6650

The California Association of Criminalists, with the assistance of the CAC Endowment funds, is sponsoring a Seminar on Population Genetics and Statistics for Forensic Biology. Instruction will be given by Dr. Bruce Weir of North Carolina State University, Department of Statistics.

**SEMINAR ON
POPULATION
GENETICS AND
STATISTICS FOR
FORENSIC BIOLOGY**

WHEN: WEDNESDAY JUNE 17 - FRIDAY JUNE 19, 1992 (8-5 PM, DAILY)

LOCATION: SAN BERNARDINO COUNTY SHERIFF'S HEADQUARTERS
SHERIFF'S CONFERENCE ROOM (will accommodate 80)
655 EAST THIRD STREET
SAN BERNARDINO, CA 92415
(Ontario airport, nearby hotels, ample free parking)

REGISTRATION FEE: \$60/CAC MEMBER*
(class only) \$120/NON-CAC MEMBER
Optional Textbook \$22 (Genetic Data Analysis, Weir)

(* any current member or any applicant whose application is complete and awaiting Board approval—contact Mary Hong, CAC Membership Secretary, 714-834-4510)

REGISTRATION Monday, May 11, 1992

DEADLINE: (If class is oversubscribed (80) acceptance preference will be given to CAC members who have submitted completed registration—including check, then other applicants will be considered based upon receipt date of registration form and check.)

PURPOSE:

Statistical analyses of Forensic DNA is one of the main areas being examined in Frye and Kelly-Frye hearings across the United States. The main areas of examination are:

- (1) population data bases (source, randomness, size, racial/ethnicity documentation, appropriate data base)
- (2) statistical analyses of population data bases (Hardy- Weinberg, linkage disequilibrium, substructure issue, what are the appropriate statistical tests,

what is the power of the statistical tests)

Since many forensic biologists are in the process or will be constructing DNA population data bases and will be testifying to the statistical analyses of forensic results, it would be extremely helpful to have theoretical and practical instruction from population geneticists/statisticians who have reviewed/analyzed population data bases and who have testified to the population issues.

Population Genetics and Statistics for Forensic Biology Seminar Outline (Dr. Bruce Weir):

- a. fundamental population genetic theory (genetic equilibrium and random mating)
- b. diversity of genetic variation
- c. factors altering frequencies (eg. inbreeding, mutation, natural selection, genetic drift, heterozygote advantage)
- d. discussion of racial/ethnicity groups — assessment/documentation
- e. data base population construction (eg. sampling, size, source, randomness, documentation, data entry, binning)
- f. statistical tests review/when to use: (eg. basic probabilities, central tendencies—arithmetic mean, geometric mean, median, and mode; binomial distribution, normal distribution, standard deviation-variance-degrees of freedom, sampling—statistical and genetic, goodness of fit and chi square, maximum likelihood method, random numbers, power of the tests)
- g. data analysis: estimating frequencies (single banded patterns, experimental error, bins), disequilibrium (Hardy-Weinberg, linkage disequilibrium, multiple tests, homogeneity), diversity, population structure, paternity/relatedness, discrimination probability, probability of a match)
- h. discussion of different methods for estimating DNA profile frequency: (Weir, Chakraborty, Evett (Bayes), etc.)
- i. reporting of statistical data, appropriate data base(s), confidence intervals
- j. discussion of population issues from Frye or Kelly-Frye hearings: (eg. Landers, Cohen, Devlin, Mueller, Lewontin, Hartl Devlin, Neis, Acton, Lempert, recent articles in *Science*, Vol. 254, Dec. 1991.)
- k. open discussion

READING LIST:

- Anonymous 1990. Statement of the working group on statistical standards for DNA analysis, *Crime Laboratory Digest* 17 (3): 53-58.
- Berry DA 1991. Inferences using DNA profiling in forensic identification and paternity cases. *Statistical Science* 6: 175-205.
- Berry DA, Evett IW, Pinchin R. 1992. Statistical inference in crime investigations using deoxyribonucleic acid profiling. *Appl. Statist.* 41: (in press).
- Budowle B., et al 1991a. Fixed bin analysis for statistical evaluation of continuous distributions of allelic data from VNTR loci, for use in forensic comparisons. *Am. J. Hum. Genet.* 48: 841-855.
- Chakraborty R., Kidd KK 1991. The utility of DNA typing in forensic work. *Science* 254: 1735-1739.
- Cohen JE 1990. DNA fingerprinting for forensic identification: potential effects on data interpretation of subpopulation heterogeneity and band number variability. *Am J. Hum Genet* 46: 358-368.
- Cohen JE, Lynch M, Taylor CE 1991. Technical comments. *Science* 253:1037-1038.
- Deka R., Chakraborty R, Ferrell RE 1991. A population genetic study of six VNTR loci in three ethnically defined populations. *Genomics* 11: 83-92.
- Devlin B, Risch N, Roeder K 1990. No excess of homozygosity at loci used for DNA fingerprinting. *Science* 149: 1416-1420.
- Devlin B, Risch N, Roeder K 1991. Estimation of gene frequencies for VNTR loci.

Am. J. Hum. Genet. 48: 662-676.

Devlin B, Risch N, Roeder K 1991. Technical comments. *Science* 253: 1039-1041.

Evetts IW, Weir BS 1992. Flawed reasoning in court. *Chance* (in press).

Geisser S 1990. Some remarks on DNA fingerprinting. *Chance* 3: 8-9.

Green P, Lander ES 1991. Technical comments. *Science* 253: 1038-1039.

Lander ES 1989. DNA fingerprinting on trial. *Nature* 339: 501-505.

Lewontin RC, Hartl DL 1991. Population genetics in forensic DNA typing. *Science* 254, 1745-1750.

Nicholas RA, Balding DJ 1991. Effects of population structure on DNA fingerprint analysis in forensic science. *Heredity* 66:297-302.

Shapiro MM 1991. Imprints on DNA fingerprints. *Nature* 353:121-122.

Weir BS 1979. Inferences about linkage disequilibrium. *Biometrics* 25: 235-254.

Weir BS 1990. Genetic Data Analysis, Sinauer, Sunderland, MA (text).

Weir BS 1992. Independence of VNTR alleles defined as fixed bins. *Genetics* (in press).

For more information, contact:

Barbara L. Johnson
Los Angeles County Sheriff's Department
Scientific Services Bureau
2020 West Beverly Boulevard
Los Angeles, CA 90057
(213) 974-7018
(213) 413-7637 FAX

After 22 years of dedicated service at the Contra Costa County Criminalistics Laboratory in Martinez, California, Dorothy Northey is retiring.

Dorothy attended UC Berkeley and studied under the late Paul Kirk and later worked at his private laboratory. She then went to the Richmond Police Department and had the privilege to work with another early California criminalistics pioneer, Hillard Reeves. After a short stint with the Alameda County Sheriff's Department she came to the Contra Costa Sheriff's Criminalistics Laboratory. At Contra Costa, Dorothy has worked on a variety of evidence types. For the past 10 years she has specialized in forensic serology. In that capacity Dorothy has paved the way for the introduction of the new PCR-DNA program at Contra Costa County. Dorothy was the Sheriff-Coroner's Criminalistics Laboratory Employee of the Year in 1979, 1983 and 1986.

Dorothy has had a distinguished professional career outside of the Laboratory as well. She has always valued her membership in the Northwest Association of Forensic Scientists. She has also been a very active member of the California Association of Criminalists. She was instrumental in establishing the procedures for and preparation the CAC's first Criminalistics Certification test. She was also the CAC Delegate on the American Board of Criminalistics Examination Committee. Because of her dedication, she will continue on that committee until a specific project is completed even though that work will extend past her retirement date.

She received the Distinguished Member Award from the CAC in 1990. In March 1992 Dorothy was given life member status in the CAC.

DOROTHY NORTHEY RETIRES

Stephen Ojena
Criminalist
Contra Costa Sheriff's Lab

In retirement Dorothy plans to take cooking classes, computer classes and travel with her husband, Stan. Dorothy has said not to count her out so I'm sure she will continue to contribute to the profession. We wish Dorothy the very best as she begins her retirement.

The meeting was called to order by President Gary Knowles.

Treasurer's Report: Total amount in combined accounts \$18,482.60

Committee Reports

Membership - John Bowden

Following is the list of membership applications approved as provisional members at the Fall 1991 meeting in Coeur d'Alene.

Provisional Members

Kathleen M. Andrews	(REG)	DEA San Francisco
Jane E. Aunan	(REG)	Alaska DPS
Charles S. Baker II	(REG)	Montana FSD
Steven P. Banerian	(REG)	WSP - Seattle
Michelle M. Bird	(REG)	Idaho BFS
Michael P. Croteau	(REG)	WSP - Seattle
Janeice L. Fair	(REG)	Alaska DPS
Kevin D. Fortney	(REG)	WSP - Seattle
William F. Gergits	(ASSOC)	Therion Corp.
Helen R. Griffin	(REG)	WSP - Seattle
Ann M. Hoffman	(ASSOC)	Finnigan Corp.
Matthew Noedel	(REG)	WSP - Tacoma
Martin G. Ols	(REG)	Idaho BFS
Ray Pellegrin	(REG)	WSP - Spokane
K. Denise Richardson	(REG)	Ventura County (CA) Sheriff
Robert J. Shem	(REG)	Alaska DPS
Charles E. Solomon	(REG)	WSP - Spokane
William M. Schneck	(REG)	WSP - Spokane

Elevated Provisional to Regular

Rod Andrus	Patrick Bigelow
Chris Bommarito	Everett Clary
William Dietz	Wayne Ferguson
Hayne Hamilton	Michael Hoover
Bob Hughes	Kevin Jones
Lansing Lee	Mary-Jacque Mann
Terence McAdam	Bob McClymont
Thomas Netwal	Laurie Rawlinson
Kathryn Saft	Steve Sottolano
George Taft	Susan Torres
Kenton Wong	

Elevated Provisional to Associate

Howard Coleman	Greg Frank
Anne Jacobson	John Reffner
Ruth Stahl	

MINUTES OF BUSINESS MEETING FALL 1991, COEUR D'ALENE, ID

Lionel A. Tucker, Jr.
Secretary-Treasurer

The following members were changed to the status of corresponding member due to lack of attendance (six meetings not including Spring 1991):

Michael Asselin	Alexander Beveridge
Edward Blake	Jeffrey Caughlin
John Elsoff	Julian Graham
Howard Kalyn	Richard MacAlpine
Hiram Poon	Ronald Schiefke
Edward Suzuki	Brian Wainwright

Nominations of officers:

The following individuals were elected by majority vote:

President Elect	Mike Howard
Vice President	Ken McDermott
Member at Large	Don Wykoff
Secretary-Treasurer	Lionel Tucker

Historical Committee – Gary Knowles for Brad Teleya

Special festivities are planned for the 20th anniversary of the NWAFS at the Reno meeting this spring.

Newsletter – Roger Ely

Roger will work out problems with Newsletter printing. Roger will also look into color copies for Newsletter. We also need more submissions. Trying to put together a "Travelling Forensic Scientist Guide" listing restaurants, hotels, and other interesting things to do on the road. He will publish in the Newsletter.

Technical Advancement – Gary Knowles for Robert Thompson

Less than 50% QA's returned. We still need management to get involved. We need volunteers. Notify Robert if you're interested. There was a suggestion to place a form in Newsletter as a survey of what kinds of QAs people are interested in.

Continuing Education – Arnold Melnikoff

There was an increase in requests mostly from outside organizations. There was a discussion to limit materials to members only. This issue plus the matter of video taping at meetings should be addressed. As an organization we need a policy statement regarding these issues. Arnold also indicated a problem with getting materials back in a timely manner. It was suggested that a standardized letter be constructed with the following stipulation:

1. Material can't be copied
2. Returned within specified time
3. Recipient agrees to rules

Executive Committee

Books were audited and found to be in order.

Old Business

Certification – Dale Mann

ABC getting close to first phase first exam in New Orleans at the American Academy meeting in February in New Orleans.

We received a letter from the John Marshall Institute requesting a list of experts in various fields to be given to legal profession. After a long debate it was decided to put original letter in Newsletter. Anyone interested can contact the Institute individually.

New Business

A. Voted to have Spring 1993 meeting in Bend, Oregon

B. The upcoming meetings are:
 Spring 1992 – Reno, Nevada
 Fall 1992 – Portland, Oregon

Closing Remarks:

Thanks to Daryl Brender and Alan Spanbauer for their excellent job of putting a great meeting together.

Adjourned.

ABC CERTIFICATION UPDATE

*Dale C. Mann
 NWAFFS Representative
 ABC Board of Directors*

I attended the ABC Board of Directors meeting at the AAFS meeting in New Orleans on February 17 and 18. A lot of progress has been made in the program but unfortunately I did not have sufficient time to prepare a detailed report in time for publication of this newsletter. I will have more detail than most will care to read in the June issue. To wet your appetites until then, here are the highlights of the last Board meeting:

Results for the AAFS Criminalistics Section survey approved by the section last year in Anaheim are:

Total Number of Survey Forms Sent: Each Group: Percent Returned for

Fellows and Members: n=497 Fellows and Members: 47.3%
 Provisional Members: n=303 Provisional Members: 31.7%

Fellows and Members:

	Total Number Returned n=	Percentage of Yes Responses	Percentage of No Responses	Percentage of Missing Responses
Question 1	235	78.30%	21.70%	0.00%
Question 2	235	67.23%	32.34%	0.43%
Question 3	235	54.04%	42.55%	4.68%
Question 4	235	7.23%	30.21%	62.55%

Provisional Members:

	Total Number Returned n=	Percentage of Yes Responses	Percentage of No Responses	Percentage of Missing Responses
Question 1	96	82.29%	14.58%	3.13%
Question 2	96	65.63%	34.38%	0.00%
Question 3	96	47.92%	46.88%	5.21%
Question 4	96	8.33%	34.38%	57.29%

Question 1: Should the Criminalistics Section have a voting member on the ABC Board of Directors?

Question 2: Should the Criminalistics Section formally endorse the ABC Certification effort?

Question 3: Should the Criminalistics Section support the Certification process monetarily?

Question 4: If you responded "NO" to questions 1 or 2 above, is it because you feel you do not have enough information about the ABC procedure?

Using the survey results as valid, the Criminalistics Section of AAFS approved a motion to solicit the ABC for a voting seat on the Board of Directors. The ABC, pending the application, will decide in August.

The ABC initiated a \$400 yearly fee for member organizations (they are currently CAC, NWAFS, NEAFS, SAFS, and MAAFS). This is in addition to the transportation and lodging costs of maintaining a representative. This additional fee is necessary to cover the costs involved in initiating the certification program such as printing and postage, as well as incorporation fees, post office box, insurance, and other miscellaneous expenses. To date, the agencies of the individual Board of Directors have provided mailing and Fax support.

A comprehensive summary and survey was initiated last winter by ABC. The tabulation of these results are almost complete and will be included in the June issue of this newsletter.

The ABC has somewhat relaxed its timetable for the program development. The general examination will be offered for the first time under the auspices of the ABC in February 1993 at the Boston AAFS meeting. Specialty examinations will be first offered in 1994 at the AAFS meeting in San Antonio. Regional offerings of the general exam will probably begin in 1993.

ABC is working with CAC on an agreement to pay back CAC for their developmental costs incurred in the design of this examination. The examination has been and will continue to be reviewed closely by a national testing service for clarity, fairness, liability, etc. The examination offered in New Orleans, while labelled as a CAC examination, was reworked extensively by the ABC Examination Committee prior to the test. This examination is expected to undergo continual refinement.

I recently had a DUI trial in Lincoln County that centered around the defendant's use of asthma inhalers supplied by the jail at least 15 minutes prior to blowing into the Intoxilyzer 4011A. The results of that blow were high enough to result in an arrest.

There are several brands of inhalers on the market. Most are portable and in the form of a small pressurized canister and a plastic mouthpiece. The pressure is generated by Freon and the active ingredient will vary. Some cause bronchodilation, some are anti-inflammatory, and some make your heart beat faster. All are set up to deliver a metered dose during exaggerated inhalation to deliver the active ingredient as far down the bronchial tree as possible. Some people, like myself, may have a portable nebulizer that requires 12V energy to operate a pump. An aqueous solution of Intal and Alupent are placed in a mouthpiece and inhaled over a 10-15 minute period. Neither of these solutions contain any alcohol. The following pharmaceuticals may be found in the

ASTHMA INHALERS AS A DEFENSE IN DUI

*James O. Pex
Oregon State Police Forensic
Laboratory
Coos Bay, OR*

possession of an asthmatic in the form of an inhaler: Alupent, Atrovent, Proventil, Ventolin, Aerobid, Nasalcrom, and Primatene Mist. None of the above, except Primatene Mist, contain any alcohol. Primatene Mist may contain a 30% solution of ethanol.

Since I have all of the above pharmaceuticals, I ran an experiment by inhaling two shots of the metered dose of each one, waiting five minutes, and blowing into the Intoxilyzer 4011A. The result in all cases was 0.0%.

One might think Primatene Mist would give positive response but let's take a look at this from a mathematical viewpoint. The usual form in a 15 cc cannister that is 7.0 mg/ml ephedrine (105 mg), 30% ethanol (4.5 ml) and some inert Freon-like organic compound for pressure. Some cannister will deliver 200 doses. So one dose would contain 0.525 mg of ephedrine and 22.5 ml of ethanol. Both of these minute quantities of drug are absorbed directly across the mucous membranes upon contact with the mouth, throat, and lungs. The 52.5 ml of Freon diluted in the breath will not be detected by the narrow wavelength 4011A during exhalation.

A second test was done by inhaling a dose of Primatene Mist and immediately exhaling into the 4011A. The resultant response by the 4011A was 0.0%.

In conclusion, an asthmatic may receive his medications prior to a breath test and no interference will be expected in the final readout. It is proper that a police officer record the medication used by the accused and follow the checklist. If the accused is having an asthmatic attack, he or she should be given medical attention. Otherwise, there shouldn't be a problem in waiting fifteen minutes after medication to do a blow.

An individual who has active asthma has a constriction of the bronchial tree in the lungs and is operating in an oxygen deficit. The wheezing is from the air whistling through the narrow tubules and the rapid respiration is the body's response by cycling oxygen in and out faster. Some medications (Alupent) will increase the heart rate to improve the exchange of oxygen and carbon dioxide on the blood vessel side.

Active asthmatics who indulge in alcohol to excess are shooting themselves in the foot. Ethanol is a central nervous system depressant. It slows respiration and heart rate counteracting the effects of the medications and further complicating and accentuating the symptoms associated with the disease. Ethanol is also a histamine releaser and can turn a small response to a food allergen or airborne substance into an asthmatic attack. For this reason doctors have been trying to get Primatene Mist off the market.

Each year, Continuing Education committee chairperson Arnold Melnikoff publishes a listing of the materials held by the Association in its library. If you are interested in examining any of these materials, contact Arnold at (206) 577-2087.

NWAFS CONTINUING EDUCATION MATERIALS

Books and Manuals

1. Christian, Gary D., and Epstein, Michael S., "Atomic Absorption Spectroscopy," -ACS Audio Course
2. DeJongh, Don C., "Interpretation of Mass Spectra" - ACS Audio Course
3. McNair, Harold M., "Basic Gas Chromatography" 2nd Edition - ACS Audio Course
4. Colthup, Norman B., "Interpretation of Infrared Spectra" ACS Audio Course
5. Rodwell, Victor W., "Thin Layer Chromatography" - ACS Audio Course
6. Blach, Rodney J., "Standard Reference Collection of Animal Spermatozoa" Part

I - MAC

7. Blach, Rodney J., "Standard Reference Collection of Animal Spermatozoa" Part II - MAC
- B. Resource Manual "Glass" - Ca. St. Dept. of Justice, Bur. of Forensic Services
9. Tulloch, E.C., "Liquid Chromatography" Training Manual - June 1980
10. McClure, D.J., "IR Theory of Operation" Training Guide
11. Strelis, I. and Kennedy, R.W., "Identification of North American Commercial Pulpwoods and Pulp Fibers" U. of Toronto Press
12. O'Connor, John J., "Practical Fire and Arson Investigation" Elsevier
13. Goldstein, Seth L., "The Sexual Exploitation of Children" Elsevier
14. Geberth, Vernon J., "Practical Homicide Investigation" Elsevier
15. Perrin, Charles, "Probability and Statistics for Chemists" ACS
16. Eckert, William G., M.D.; James, Stuart H., "Interpretation of Bloodstain Evidence at Crime Scenes" Elsevier

Three black binder cassette holders with manuals each titled as follows:

- a. "Interpretation of Infrared Spectra"
- b. "Atomic Absorption Spectroscopy"
- c. "Interpretation of Mass Spectra"

Two plastic containers labeled as follows:

- a. Standard Reference Collection of Animal Spermatozoa-Part I
- b. Standard Reference Collectipn of Animal Spermatozoa-Part II

Video Cassette Tapes

Fyre Hearing (Texas v. Tyrone Fuller 88-059, #1-5)
"A Media Relations Briefing Tape"
"Not an Otis...Not a Lyle"

NWAFS Fall 1989 meeting, #1-4

NWAFS Spring Meeting 1989, USF&WS Lab - Ashland, OR
12 Tapes of Presentations are as follows:

1. Big Game Meat ID - Tom Moore
Electrophoresis Differentiation Dall Sheep and Mountain Goat - James Wolf
2. Nuclear Magnetic Resonance in Animal Bile - J. H. Theis
Species Identification by Radioimmunoassay - Jarold M. Lowenstein
Electrophoretic Identification of Fish - James B. Shaklee
3. Timber Investigation - James Keefer USDA Forest Service
Alaskan Ivory Case - Ken Goddard DOI FWS
4. Forensic Recovery of Bodies - Gary Knowles
Identification of Human Blood Stains - Theresa F. Spear
Hair Transfers / Sexual Assault - Mary-Jacque Mann
Anabolic Steroids - John P. Bowden
Composition of Bullet Lead - Robert D. Koons
5. Composition of Bullet Lead (cont)
Firearms Information System - John I. Thornton
Forensic Examination of P2P - Roger A. Ely

Isolation of Cocaine Free Base - Lewis M. Bolf

6. GCIR Nicolet Workshop Tape 1
7. GCIR Nicolet Workshop Tape 2
Spectra Tech Tape 1
8. SpectraTech Tape 2
9. Genetic Markers/Bighorn Sheep - Lauris Rawlinson
Enzyme Variations - Domestic vs. Bighorn Sheep - Brian Wraxall
Fatty Acid Profiles-Cultured vs. Wild Fish - Michael Jalucke
Keratin Studies - Donna Butler
Low Temperature Casting - James Wolf
10. DNA Analysis of Big Game - L. Kirby
Molecular Genetics-Endangered Species - Jonathan Conquire
Sex Identification Using DNA - Steve Menke (cont)
11. DNA Sequence Evolution in Sea Urchins - Steven R. Fain
DNA Techniques for Non-Human Species - Robert R. Sheehy
DNA/Museum Specimens - W Kelley Thomas
DNA/Hyacinth Macaws - Lisa Forman
12. DNA/Hyacinth Macaws (cont)
Identification/Sex Chromatin Dimorphism - Janet M. Hough

Equipment

1. Hitachi Tape Recorder - still in box
2. Hitachi Tape Recorder
3. Electric Cord
4. Headset

Miscellaneous

1. Manila envelope containing misc. papers, magazines, etc.
2. Orange folder containing two letters.
3. Manila envelope containing "Check Out" slips.

London

A judge has spared from prison a man who strangled his nagging wife, giving him instead a suspended 18-month sentence.

Judge Neil Denison told Bisla Rajinder Singh on Wednesday: "You have suffered through no fault of your own a terrible existence for a very long time.

"I do not see that sending you to prison is going to do you or your children any good. In fact, it would do them positive harm."

Singh, a 44-year-old business man, had denied murdering his wife, Abnash, in May at their home in Erith, Kent, but admitted to the lesser charge of manslaughter on the ground that her constant nagging provoked him.

(Editor's Note: The following commentary was given to me by a close friend during the American Academy meeting in New Orleans. It, unfortunately, has a great deal of truth within and serves as a humbling view of the profession from outside eyes.)

I think we've seen the last of the experts testify at the William Kennedy Smith rape trial.

It's a good thing. The witness stand was turning into a red-light district.

Not that I blame these guys: The Hanky Man. The Sand Man. The Grass Man. The Moon Man. And Monday's grand finale ... The Penis Man.

It's nice work if you can get it.

Take the Moon Man, meteorologist Herb Spiegall. The Smith defense team has paid him \$2,300 to essentially figure out the moonlight conditions on the morning of March 30.

Let's see. Full moon, nearly no clouds. Hmm ... (meter's running at \$75 per hour) ... Hmm ... I'll have to take more measurements ... (meter's still running) ... Better shoot that azimuth angle ...

The Moon Man concludes: "The moon was visible, it was full and therefore would have illuminated the yard."

Amazing. A full moon would illuminate a yard! Now, you might say, "Hey, where do I sign up for a gig like this?"

It's not as easy as it sounds. To be a good expert witness, you need to bludgeon jurors with your education. You need to explain common-sense things in such a technical, convoluted way that no one really knows what you're talking about.

The Moon Man took more than an hour Monday to guide us through his heavenly testimony. Somewhere along the line, he put Smith's cousin Michael Kennedy to sleep. The bailiff had to wake him up.

The Grass Man, Dr. Robert Webster, was a master.

"I'm just a simple grass taxonomist," he told the jury.

As opposed to a cross-dressing grass taxonomist, I guess.

See, the way it works is, lawyers spend a month picking a jury. They end up, as in this case, with six people who don't have a single college degree among them, and then they bombard them with experts such as the Grass Man.

"What's a vascular plant?" defense lawyer Mark Selden asked The Grass Man.

"A plant that has vascular tissue," he answered.

Got that, sluggos?

Lawyers seem to operate by the theory that you never can insult a juror's intelligence. That's why they ask the same question five times. That's why they put on bogus

MAN WHO STRANGLED NAGGING WIFE GETS SUSPENDED SENTENCE

*San Francisco Chronicle
January 31, 1992*

THE WILLIAM KENNEDY SMITH RAPE TRIAL: ISN'T IT JUST COMMON SENSE? ONLY AN 'EXPERT' CAN TELL

*Frank Cerabino
The Palm Beach Post
Tuesday, December 10, 1991*

testimony.

Take for example, The Hanky Man.

He's Dr. Henry Lee, a forensic scientist for the state of Connecticut. The defense wanted Lee to show that the alleged rape victim would have had grass stains on her black Ann Taylor dress if Smith had tackled her on the back lawn of the Kennedy estate.

An how did Dr. Lee go about proving it? He wiped a white handkerchief on the lawn.

You uneducated slobbs may wonder: Why would you rub a white cotton handkerchief on the grass when you want to find out whether a black dress made of synthetic fiber would pick up stains?

As long as you're spending \$4,500 to get Hanky Man to testify, why don't you splurge for \$125 and let him rub the identical black Ann Taylor dress on the lawn?

Fools. You don't know anything about expert testimony.

You may get the idea that I disapprove of experts. On the contrary, they often provide the highlights of the trial.

For example, the Grass Man was the only witness to testify in black sneakers. For the most part, these scientists provide a refreshing break from the crush of relevant and important information that seems to weigh down trials.

That's why I was really happy Monday afternoon when the defense called The Penis Man.

He's Dr. Raphael Good, who's got the medical quiniela of being a psychiatrist and a gynecologist at the same time ("So when did your father abandon you? Please slide up a little more, ma'am.")

What he's doing in this trial is anybody's guess. He's not a specialist on rape, and in 43 years of practicing medicine, he's seen 30-40 rape victims.

His last published article was titled: "Women's Attitudes Towards Douching."

Good was called - I'm not making this up - to testify that it's not likely for a man with a "partially erect penis" to have sex with an unwilling woman.

"It's like trying to put a thread through a needle," he told the jury. "As you know from common experience, you wet the end and twist it a little."

My guess is that Tony the Bartender, who testified Saturday, might be able to opine in this area as much as the 70-year-old doctor.

But then again, it would have looked pretty silly to pay Tony \$3,000 to say it.

HOW A HUNTER CAN GET THE LAST SHOT

SF Chronicle
March 24, 1992

You've heard of shotgun weddings, but maybe not shotgun funerals. Jay Knudsen of Des Moines, Iowa, offers a way to send hunters off with a bang.

Knudsen runs a service for the survivors of dedicated hunters. For about the cost of a funeral, he'll load the ashes of the dear departed into shotgun shells, take the ashes to the sportsman's favorite march, perform whatever ritual the family wishes and blast them away. "We can't get you to heaven," he advertises. "But we promise to land you in the happy hunting ground."

Knudsen's service isn't limited to hunters, he told the Des Moines Register. "We just had a lady send us her father's ashes from Missouri to put in golf clubs," he said. "There's no end to this. You could put ashes in bowling balls, in baseball bats - lots of things. We're putting ashes into lures for fishermen, duck decoys for hunters, that sort of thing."