



# NEWSLETTER

## California Association of Criminalists

# NEWSLETTER

DECEMBER 1984

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This mailing also includes the following items:

1. Seminar Abstracts - Fall 1984 at San Diego.
2. Board Meeting Minutes, August 17, 1984.
3. CAC Salary Survey - 1984.
4. Nomination Form for Distinguished Member Award.
5. Abstract Form for Spring Seminar.

Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position of the California Association of Criminalists.



## UPCOMING MEETINGS

California Association of Toxicologists - GCMS Workshop  
February 1, 1985 in San Jose, CA. Contact: Norman Wade;  
California Department of Justice. (916) 739-5128.

California Association of Toxicologists - Quarterly Meeting  
February 2, 1985. Burlingame, CA. Amfac Hotel. Contact: Randall  
Baselt; University of California, Davis. (916) 752-2710.

American Academy of Forensic Sciences  
February 11-15, 1985. Las Vegas, Nevada. Riviera Hotel. Contact:  
AAFS; 225 S Academy Boulevard; Colorado Springs, Colorado 80910.  
(303) 596-6006.

ACS Symposium on Analytical Methods in Forensic Chemistry  
April 29 - May 2, 1985. Miami, Florida. Contact: Dr. M.H. Ho.  
(205) 934-4747.

California State Division - IAI  
May 1985. Long Beach, CA. Contact Bill Corson; 3042 Baltic  
Avenue; Long Beach, CA 90810. (213) 590-7205.

California Association of Toxicologists  
May 3-4, 1985. Newport Beach, CA. Contact: Lee Knight; American  
BioScience. (714) 750-0502.

Association of Firearm & Tool Mark Examiners  
May 13-17, 1985. Michigan State Police Academy. Contact: James  
Berglund (517) 348-5449.

CALIFORNIA ASSOCIATION OF CRIMINALISTS - SPRING SEMINAR 1985  
May 17, 18, 19 (Friday, Saturday, Sunday). Oakland, CA. Hyatt  
Regency Hotel. Hosted Jointly by the Oakland Police Department  
Crime Laboratory and the University of California, Berkeley.  
Contact: Jan Bashinski; Oakland Police Department Crime Lab; 455  
7th Street, Rm 608; Oakland, CA 94607. (415) 273-3386.

California Association of Toxicologists  
August 3, 1985. Sacramento, CA. Contact: Ron Briglia;  
Consolidated Medical Lab. (916) 441-0186.

Electron Microscopy Society of America / Microbeam Analytical  
Society - Joint Meeting  
August 5-9, 1985. Louisville, KY. Contact: S. Basu; New York  
State Police Headquarters; Crime Laboratory; Building #22, State  
Campus; Albany, NY 12226. (518) 457-1208.

Society of Forensic Haemogenetics - 11th International Congress  
August 6-10, 1985. Copenhagen, Denmark. Panum Institute of the  
University of Copenhagen. Contact: Spaddile Congress Service;  
Sommervej 3; DK-3100 Horbaek, Denmark. (The official language for  
the congress is English.)



## UPCOMING MEETINGS (Continued)

## CALIFORNIA ASSOCIATION OF CRIMINALISTS - FALL SEMINAR 1985

October 24, 25 & 26, 1985. Los Angeles, CA. New Otami Hotel. Hosted by the Los Angeles Police Department Criminalistics Laboratory. Contact: Greg Matheson; Los Angeles Police Department; 150 N. Los Angeles Street, Room 435; Los Angeles, CA 90012.

## American Academy of Forensic Sciences

February 11-15, 1986. New Orleans, LA. Hyatt Regency Hotel. Contact: AAFS; 225 S Academy Boulevard; Colorado Springs, Colorado 80910. (303) 596-6006.

## ATF ARSON SYMPOSIUM - UPDATE

February 12, 1985 - Las Vegas

Plans are being finalized for the ATF Symposium on Recent Advances in Arson Analysis and Detection scheduled for February 12, 1985 in Las Vegas at the Riviera Hotel. The one-day seminar is being held in conjunction with the American Academy of Forensic Sciences (AAFS) annual meeting.

The registration fee is \$35 which includes all the Symposium materials, coffee breaks, and lunch. Following the Symposium, Aetna Life and Casualty Co.'s Fraud and Arson Unit is sponsoring a hospitality hour. The registration is being handled through the AAFS offices, 225 S. Academy Blvd., Colorado Springs, CO 80910, Ph. (303)596-6006. There is no need to be an Academy member or register for the AAFS meeting to attend the Symposium. The Symposium is Tuesday, the day before AAFS papers begin.

Topics to be discussed include Accelerant Detection Dogs, GC/MS Applications and Interpretation, Pre-Analysis Clean-Up Procedures, a Survey of Sorption/Elution Techniques, Microwave Sample Preparation, Cryogenic Focusing, and Computer-Aided Pattern Recognition. If more information is required, please contact Rick Tontarski, ATF National Laboratory Center, 1401 Research Blvd., Rockville, MD 20850 - (202)294-0420.



## EMPLOYMENT OPPORTUNITIES

(Members actively seeking employment are encouraged to contact the Editorial Secretary to keep informed of employment opportunities arising between Newsletters. This is most important for those considering positions outside California. Also, for those positions listed there is often additional information which may be obtained from the Editorial Secretary.)

## CHEMIST SUPERVISOR IV. FORENSIC SEROLOGY. Indiana State Police.

Requires BS in natural science or criminalistics; expertise in forensic serology including court testimony; knowledge of scientific instruments used in forensic serology; ability to communicate orally and in writing to scientific and non-scientific personnel; training and/or experience in personnel management and administrative procedures is desirable.

Contact: Captain Robert S. Conley; Laboratory Division Commander; Indiana State Police; 8500 E. 21st Street; Indianapolis, Indiana 46219. (317) 899-8521.

## CRIMINALIST II. HAIR AND FIBERS. Kansas Bureau of Investigation.

Lead examiner in hair and fiber section with opportunity to cross train in serology.

Requirements: BS/BA Degree in a physical or natural science and two years hair and fiber experience in a crime laboratory.

Contact: Mr. Ronald L. Jones; Laboratory Administrator; Kansas Bureau of Investigation; 1620 SW Tyler; Topeka, Kansas 66612. (913) 232-6000.

## LATENT PRINT EXAMINER. City of San Diego.

Requirements: One year filing and classification of known fingerprints, comparison and identification of latent prints and acceptance by the courts to give expert testimony in all phases of friction ridge identification.

Contact: German Gonzalez (619) 236-6400.

## FORENSIC CHEMIST. USACIL-Europe. Frankfurt, Germany.

Requirements: 1) Bachelors degree in a physical or biological science with sufficient chemistry and mathematics to meet Office of Personnel Management standards; 2) Three years experience as a forensic examiner in the trace/drugs field including testifying in court as an expert witness; 3) Firm foundation in instrumental analysis.

Contact: Michael C. Moore; LTC, CmlC; Department of the Army; US Army Criminal Investigation Command; USACIL-Europe; APO New York 09757. (The Editorial Secretary has application information and details of the extensive benefits of the position.)



## CALL FOR NOMINATIONS for CAC OFFICERS

The Nominating Committee solicits your nominations for the following offices, the election for which will take place at the Spring Seminar

PRESIDENT-ELECT  
TREASURER  
EDITORIAL SECRETARY  
REGIONAL DIRECTOR - SOUTH

PRESIDENT-ELECT is a three year commitment, including one year each as President-elect, President and Immediate Past President. The incumbent is responsible for presiding over meetings of the Board and Corporation and official correspondence of the Association; previous Board experience is highly desirable, as is access to secretarial assistance.

TREASURER holds office for a two year term. The incumbent is responsible for the receipt of funds from the membership, management of funds on deposit, and disbursement as directed by the Board of Directors; a knowledge of basic accounting procedures is highly desirable; prior experience as an organizational treasurer would be helpful.

EDITORIAL SECRETARY holds office for a two year term. The incumbent is responsible for the receipt, editing, and delivery of scholarly papers to the Journal of the Forensic Science Society for publication, as well as organization and publication of the Newsletter.

REGIONAL DIRECTOR - SOUTH holds office for a two year term. The incumbent is responsible for coordinating, arranging and reporting activities of the Association in Southern California; acquaintance with a large section of the membership in the southern region, including southern California, southern Nevada, Arizona, and New Mexico is necessary; recent participation in hosting/arranging regional meetings, study groups, seminars, etc. is highly desirable.

Names of interested persons will be compiled and reviewed by the Nominating Committee, which will decide the slate to be proposed to the general membership. There is no bar, constitutional or by precedent, to the renomination of a sitting officer. Selected nominees will be asked to prepare a position statement regarding the office for which they are nominated for distribution to the Association's members.

Nominations may be made in writing or by telephone with any member of the Committee.

Hiram Evans	San Bernardino Co. Sheriff's Dept.	(714) 383-7344
Laurie DeHaan	Serological Research Institute	(415) 654-7374
Victor Reeve	CA Dept. of Justice, Sacramento	(916) 739-5136
Theresa Spear	Alameda Co. Sheriff's Dept.	(415) 577-1705
David Sugiyama	Los Angeles Co. Sheriff's Dept.	(213) 974-4647



# DAVID SUGIYAMA RECEIVES PAUL KIRK AWARD

David Sugiyama was presented the Paul Kirk Award at the Fall Seminar in San Diego in October. David is employed by the Los Angeles Sheriff's Department and has been involved in research of electrophoretic technique which resulted in a paper published in the CAC newsletter and a presentation at a CAC seminar. He has also presented a paper on another topic to the Southern Section Serology study group which he has been co-chairman of since November 1983. He is currently working on a project on the detection of genetic markers in urine. David provides training to criminalists in his laboratory as well as members of other local laboratories. He has also given training to police recruits and district attorneys on sexual assault evidence. In addition to attending the Serology study group in the past and presently the group's co-chairman, David is a member of the CAC nominating committee.

David received a plaque from the Association during the business meeting of the Fall Seminar. In addition, the American Academy General Section Award, consisting of a \$100 stipend, was also awarded to David as the 1984 recipient of the Paul Kirk Award as described in earlier announcements. This year's Paul Kirk Award is also being given in conjunction with the American Academy Regional Award as mentioned in earlier announcements. David will present his paper on the "Typing of Genetic Markers in Urine" in a poster session at the Academy meeting in February 1985 as a result of being selected for this award. David's registration fees to the meeting will be paid by the American Academy and he will also receive a plaque from them as well.

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## FBI SYMPOSIUM ON THE ANALYSIS AND IDENTIFICATION OF POLYMERS

During the week of July 30 through August 4 the FBI held the first International Symposium on the Analysis and Identification of Polymers. Attending were representatives of forensic labs in the United States and from foreign countries including Northern Ireland, England, Germany and Switzerland. Private industry was also represented. The papers given ranged from the making of polymers to the analysis of "Super-Glue." Topics of interest to the criminalist included pyrolysis GC, pyrolysis GCMS, FTIR, gel permeation chromatography and NMR. The Standardization Procedures Panel discussion raised a point. The ACS is attempting to standardize procedures for paints. The majority of attendees believed that this was not a good idea for the following reasons:

- 1) if their current system worked there was no need to change it,
- 2) that since it took over two years for a small number of laboratories to get the same reproducible results, and that since that was for packed column chromatography, it would take too long to set up procedures for capillary columns.

## SOUTHERN REGIONAL DIRECTOR CHANGES ADDRESS

The Southern Regional Director, Eston Schwecke, has changed addresses. Eston's new address is: Huntington Beach Police Department, 2000 Main St; Huntington Beach, CA 92648. (714) 536-5683.





# California Association of Criminalists

## OFFICE OF THE AWARDS COMMITTEE

Dear Colleague:

The Awards Committee is requesting nominations for the 1985 Distinguished Member award. This is an award presented annually to a member for significant contributions to the Association.

Nomination, using the enclosed form, will be submitted to the Awards Committee by mail. The Committee will screen the candidates' qualifications and submit their recommendation(s) to the Board, who will then select the recipient of the award. Although candidates must be members of the CAC, nominating parties need not be. No self nominations will be considered. The nomination period will be open from February 1 - 28, 1985. No nominations will be accepted after this period.

The Awards Committee has established the following criteria for candidate qualifications:

1. The candidate must be a CAC member (in any status) at the time of nomination.
2. The candidate shall have contributed significantly to the Association in one or more of the following areas:
  - Long term service to the Association as a member of the Board or a committee.
  - Sustained production of papers or technical notes in newsletters or at seminars.
  - Organization of study groups or workshops etc.
  - Significant research and dissemination of the information to the forensic science community (i.e. journal or newsletter publication, seminar papers, workshops or study groups etc.)
  - Any other unusual or significant contributions to the improvement of the profession of criminalistics.

Nomination or receipt of the award in previous years shall not prevent a member from consideration in the current year. The award recipient will be announced at the Spring Seminar and will receive a plaque from the Association.

The Awards Committee is pleased that we will have this opportunity to recognize our colleagues who have contributed significantly to the Association and the profession. We would like to encourage as many nominations from each member or laboratory as possible.

Sincerely,

*Karen Sheldon*

Karen Sheldon  
Awards Committee Chairman



#### ATF ARSON DETECTION COURSE CONTINUES

The Bureau of Alcohol, Tobacco and Firearms is continuing to conduct its Accelerant Detection Course for state and local forensic examiners. The one-week course, conducted at ATF's National Laboratory Center (NLC) in Rockville, MD, emphasizes hands-on laboratory analysis utilizing all of the sample preparation techniques in common use today for arson examination. Lectures and discussions cover classifying accelerants, examining incendiary devices, capillary column theory and installation, developing your own analysis scheme, and collecting evidence properly. Each class has only 10 students. Three classes will be conducted in 1985 - March 11-15, April 22-26 and June 3-7.

The course is designed for state and local chemists who perform or will be performing laboratory arson analysis. There is no tuition or registration fee, and all course materials are provided at no cost to the attendee. All transportation, lodging, and per diem costs must be borne by the local department or individual. The ATF Laboratory will arrange a group rate for all selected students at a hotel convenient to the NLC.

Those persons interested in applying for the school can obtain an application from their ATF district office or by contacting Rick Tontarski at ATF NLC, 1401 Research Blvd., Rockville, MD 20850 - (202)294-0420. The application deadline is January 31, 1985. Applicants will be notified of their selection in February.

#### NOTICE OF SCHEDUALING OF TWO DAY BOARD MEETING

The next CAC Board of Director's Meeting, originally scheduled for Friday, March 15, will be extended to a two-day meeting commencing on Thursday, March 14, 1985. Contact President John Murdock for further information.



**CAC SPRING SEMINAR  
May 16-19, 1985  
Oakland**

Dear Colleague,

This is the first announcement and call for papers for the 65th semi-annual seminar. The seminar will be held Friday through Sunday, May 17-19, at the HYATT REGENCY in Oakland. We hope to have a workshop on Thursday, May 16. The seminar co-hosts are the Oakland Police Dept. Criminalistics Laboratory and the Forensic Science Group at the University of California, Berkeley.

The preliminary seminar schedule is as follows:

Thursday, May 16: Workshops, Board meeting  
Friday, May 17: Beginning of the regular meeting,  
Technical sessions, Business meeting,  
Banquet  
Saturday, May 18: All day technical sessions  
Sunday, May 19: Half day technical sessions

Sunday is also the day of a special event in the Bay Area - the San Francisco Bay to Breakers Run. This is a run both for the serious runner and for those who want to have a good time. Several of the seminar organizers plan on running and invite all who wish to do so to join in.

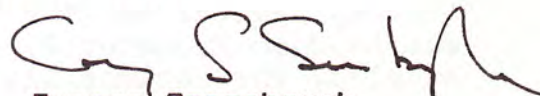
The Oakland Hyatt Regency is a new hotel in downtown Oakland. It is the showpiece of the new Oakland Convention Center. At the time of this writing, it is the Super Bowl headquarters for the Miami Dolphins. Transportation to the airport and to other parts of the Bay Area is convenient. BART trains to San Francisco leave from its very doorstep.

Registration materials will be coming to you in a later mailing. Take note now of the enclosed abstract form; even though the deadline for abstract submission is a few months away, time flies. Act now!

We look forward to seeing you in Oakland in May.



Jan Bashinski  
Criminalistics Section  
Oakland Police Dept.  
455 7th St.  
Oakland, CA 94607



George Sensabaugh  
Forensic Science Group  
School of Public Health  
University of California  
Berkeley, CA 94720



## ASSOCIATION ACTIVITIES

## Northern Section Meetings

The Alcohol, Tobacco and Firearms Laboratory on Treasure Island hosted a dinner meeting on January 4, 1985 at the Officer's Club. The speaker was Jerry Taylor of their explosives technology section. He talked about a number of different types of explosive devices which would be encountered by law enforcement, ranging from very simple fuse initiated ones to radio controlled devices. The meeting was well attended with between 60 and 70 people present.

The next Northern Section dinner meeting is scheduled for the latter part of March and will be hosted by the Institute of Forensic Sciences. Announcements will be forthcoming.

## Southern Section Meetings

The Huntington Beach Police Department Laboratory hosted a meeting on December 6, 1984. The speaker was Agent Brent Frost from the office of the F.B.I. Agent Frost spoke on "Current Aspects of Psychological Profiling." Agent Frost indicated that almost all of the work on profiling has been done on serial murderers, putting them into two broad groups: the organized and the disorganized murderers. The F.B.I. is now in the process of computerizing the profiles.

The next Southern Section dinner meeting will be held on January 17, 1985 hosted by Carol Rhodes of the California Laboratory of Forensic Science. The speaker will be Dr. James Webb, a Vector Ecologist who will discuss "Forensic Entomology."

Another Southern Section dinner meeting is scheduled for March 21, 1985. This meeting will be hosted by the Ventura County Sheriff's Office.

## Toxicology Seminar

A short seminar on "The State of the Art of Forensic Toxicology" was held on December 7, 1984 at California State University at Los Angeles. The seminar was partially sponsored by the CAC and had approximately 20 people in attendance.



## STUDY GROUP MEETINGS

(The following Study Groups are currently active. For further information regarding one of these groups, or to be placed on a mailing list, contact the member listed.)

## South:

Drug	Darryll Clardy
Serology	Barbara Johnson, Carol Rhodes, Dave Sugiyama
Trace Evidence	Harley Sagara, James Bailey, Ernie Kuo

## North:

Serology	Jan Bashinski
Trace Evidence	Marty Blake, Terry Spear

Trace Evidence Study Group - South (H. Sagara, J. Bailey, E. Kuo)

The group did not meet due to a transition in leadership. The team leadership of Ed Rhodes, Sandy Wiersema and Jim White has been appreciated. The new leadership of Harley Sagara, James Bailey and Ernie Kuo will conduct thier first meeting prior to the January 17, 1985 dinner meeting.

Trace Evidence Study Group - North (T. Spear, M. Blake)

1/4/85. The group met at the ATF Lab on Treasure Island prior to the Northern Section dinner meeting. Fifteen members attended. The topic of discussion centered around the propriety of conclusions dealing with trace evidence and a review of David Stoney's paper: Evaluation of Associative Evidence: Choosing the Relevant Question.

Another meeting is schedualed in conjunction with the March dinner meeting.

Drug Study Group (D. Clardy)

12/6/85. The group met prior to the Southern Section dinner meeting with 20 people in attendance. Vina Spiehler presented the paper she gave at the Oxford meeting and led discussion of some of the other drug-related papers which were presented at Oxford. Other topics discussed were 1) Quality control and assurance and 2) the compliance of the California Drug Code with the Federal Code.

The next meeting is scheduled to be held prior to the dinner meeting on Janurary 17, 1985.



## STUDY GROUP MEETINGS (Continued)

## Serology Study Group - South (B. Johnson, D. Sugiyama, C. Rhodes)

11/8/84. The group met with 12 people in attendance. Plans were made for 1985 and the remaining topics from the F.B.I. Electrophoresis Symposium were discussed.

12/6/84. The group met prior to the Southern Section dinner meeting in the Santa Ana Police Department Auditorium with 26 people in attendance. George Sensabaugh was flown down to present the papers he gave at the Oxford meeting and led a review of the other papers presented at the international meeting. George's papers were "The Loss of Semen in the Vagina After Intercourse" and "Determinant Stability in the Dry State." Dr. Chew, a visitor at the Orange County Sheriff's Office from China, was present and spoke briefly on their many successes in typing hair including one on a 2000 year old cadaver. There were 26 people in attendance.

The next Southern Section Serology Group meeting is scheduled in February.

## Serology Study Group - North (J. Bashinski)

1/4/85. The group met at the Oakland Police Department just prior to the dinner meeting with five members attending. Topics of discussion included a review of the Oxford Meeting papers by Dr. Sensabaugh and how to increase study group attendance and participation.



## ADMISSABILITY OF GENETIC MARKER TYPING

At the business meeting held on October 26, 1984 at the last CAC seminar the membership directed President Murdock to have the report of the Ad Hoc Committee on Genetic Marker Typing, dated March 22, 1984 published in the Newsletter. This committee was charged with reviewing and commenting on an Amicus Curiae brief filed by Dr. Benjamin W. Grunbaum in the Case of People of the State of California vs. Albert Greenwood Brown, Jr. The committees report follows along with two other related documents:

1. The official response of the American Society of Crime Laboratory Directors to the Amicus Curiae Brief (March 20, 1984).
2. The statement of an ad hoc committee constituted by the Criminalistics Section of the American Academy of Forensic Sciences which generally addresses the reliability of genetic marker typing in blood and body fluid stains (March 23, 1984).

It is the intent of the CAC to distribute these three documents as widely as possible. Their reproduction is encouraged.





# California Association of Criminalists

## OFFICE OF

Ad Hoc Committee  
on Genetic Marker Typing

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John DeHaan, President  
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Building 233  
Treasure Island, CA 94130

Dear Mr. DeHaan:

This committee has been requested by the Board of Directors of the California Association of Criminalists to review and comment on the Amicus Curiae brief filed by Dr. Benjamin W. Grunbaum in the case of Albert Greenwood Brown, Jr. # 22501.

The Grunbaum brief makes two basic allegations regarding the genetic typing of physiological stain evidence (p. 12.):

- (a) that "methods currently in use for the analysis of physiological stains have not been established as reliable by any impartial and objective measurement", and
- (b) that "United States crime laboratories have not yet attained an acceptable level of reliability in the analysis of physiological stain evidence".

In addition, Dr. Grunbaum makes the serious charge that defense and prosecution experts are in collusion in that "the profession has agreed not to disagree" (Grunbaum brief, p. 18 footnote) and that this collusion is mandated by the code of ethics of this organization.

The charge questioning the existence of established reliable methods for physiological stain analysis is incorrect on its face. To the contrary, there is international acceptance that



physiological stains can be reliably subjected to genetic typing. Indeed, most of the methods used for genetic typing of stain material are essentially identical to those used in medical and scientific research laboratories. There is a substantial scientific literature on the subject as demonstrated by the bibliographies we have provided you. The literature up to 1980-81 is reviewed in Gaensslen, Sourcebook in Forensic Serology, Immunology, and Biochemistry, published by the National Institute of Justice, 1983, 692 pages. The field is thus neither in its infancy nor are the methods it uses new.

In assailing methodology, Grunbaum misrepresents the central issues of physiological stain analysis.

1. Whether a genetic marker can be typed in a stain depends on whether it persists in a recognizable form in the stain material. If the marker does so persist, then methods that yield reliable results with fresh blood will also give reliable results with stain material. If the marker is so altered that it becomes unrecognizable, then it becomes untypable by any currently known methodology. Well over 100 genetic markers are known but only 20 or so have proven to be sufficiently resilient to be typed in stains. There is a sizable literature documenting the survival of these robust markers in stains.
2. The development of methods for the detection of new genetic markers, such as the subtypes of PGM, does not, as Grunbaum asserts (p. 32-33), negate all analyses conducted prior to the discovery of the new marker system. Indeed, the logic of his assertion is ludicrous. It implies that if all is not known, then that which is known is inaccurate. Based on this logic, no scientific evidence could ever be used because there is always the possibility that more will be learned. This would render all modern science unreliable.
3. There are problems associated with the analysis of stain material but these problems rarely involve methodology; rather, the problems are inherent in the evidence itself. Part of the expertise of the forensic serologist is the recognition of problem situations so that appropriate responses can be made. There is a large literature describing problem situations, some of this having been cited out of context by Grunbaum. What Grunbaum fails to note is that this literature is intended to be, and is taken as, precautionary, not proscriptive.



4. The impression that serologists base their opinions on methodology is naive to the extreme. Methodologies are merely tools used to acquire information. How this information is interpreted to shape an opinion is determined by the education, knowledge and experience of the analyst.

In sum, the issue of methodology is simply a bogus issue.

The foregoing should not be construed as a denial of the possibility of error. The possibility of error occurs in every human endeavor. However, errors usually indicate lack of proficiency on the part of the analyst rather than methodological inadequacy. Indeed, the proficiency trials cited at such length in the Grunbaum brief provide evidence that the problem is analyst proficiency, not methodological reliability. In most of the trials, the errors in typing any particular marker were concentrated in one or a few laboratories; these laboratories tended to make multiple errors. Since these laboratories used the same techniques as the majority of laboratories not making errors, it must be inferred that these laboratories lacked proficiency in the typing of the markers in question. Indeed, one of the principal reasons for the existence of the proficiency trials is to allow laboratories to recognize when they have internal problems. The trials also serve as signposts to all laboratories to illustrate the kinds of errors that can be made.

Grunbaum's characterization of the proficiency trials and of the proficiency trial results is flawed and misleading in other respects. He counts inconclusive test results as errors. He castigates analysts for not obtaining answers to questions that were not answerable. He gives the impression that the proficiency trials revealed many more errors than in fact occurred. He is selective in his citing of "errors", ignoring the fact that the vast majority of typing tests yielded correct results. The making of errors in these trials is a cause for concern in the laboratories making them but it is not a cause for despair for the field.

A final comment on proficiency needs to be made. It is important that courts assess the competency of the experts that appear before them. This is properly done on voir dire and questions pertaining to proficiency are appropriate in this regard.

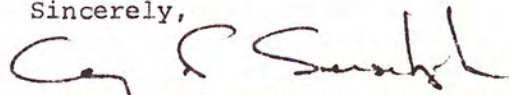
Grunbaum's characterization of the cited clause of the California Association of Criminalists code of ethics as an agreement not to disagree could be attributed to ignorance were it not that he is a former member of this organization. He knows well that members of the organization often review evidence for the defense and testify when called upon. Indeed, two members of this committee are independent consultants who often work for the defense.



Moreover, as a former member of the organization, Grunbaum should be aware of the sections of the California Association of Criminalists code of ethics pertaining to the obligation of the analyst to employ reliable methods in the analysis of evidence materials, to be aware of the limitations of his or her own expertise, and to avoid the misrepresentation of analytical findings in report and testimony.

In conclusion, we note that Dr. Grunbaum, while a member of this organization, presented a number of papers asserting the reliability of the methods he developed for bloodstain analysis. On the strength of his presentations, several crime laboratories adopted in part or in toto his methods. We find it puzzling that he should now assert that no methods currently in use have been established as reliable.

Sincerely,



George F. Sensabaugh, Committee Chairman  
Associate Professor of Forensic Science  
University of California, Berkeley

Jan S. Bashinski  
Laboratory Director  
Oakland Police Department

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March 20, 1984

Ms. Margulies  
Alameda County District Attorney's Office  
1225 Fallon Street, 9th Floor  
Oakland, CA 94612

Dear Ms. Margulies,

I have just received a copy of the Amicus Curiae Brief filed by Benjamin W. Grunbaum on the case of People vs Albert Greenwood Brown, Jr. A review of the document revealed numerous statements and conclusions that I don't believe are accurate and supportable. Dr. Grunbaum's attack on the analysis of dried blood stains and other physiological fluids is based on what I believe are partial facts, misunderstandings or misinterpretation of facts.

The first issue that Dr. Grunbaum raises is the lack of standard methodology and the resistance of the professional community to accept such standardization. Having been involved in many discussions and workshops that have addressed this very issue, I have a much different view. The community does not fear standardized methods. We have been publishing such methods in several manuals and publications for quite awhile. The fear of the community is that if a "standard" method becomes the only method, then we cannot properly adjust to the varying conditions of the evidence submitted, which, as Dr. Grunbaum pointed out, is the reality of physical evidence. This is not to say that the various accepted and proven methods in use are not "standard" in the profession. It is the semantics of "standard" and "official" that cause a problem and confuse Dr. Grunbaum.

The next issue that Dr. Grunbaum raises is the unreliability of the methodology used in the analysis of physiological stain material. Dr. Grunbaum states that the Frye and Kelly requirements were not met in the appellant's case because a cross section of the scientific community was not called to testify in support of the methodology. I would point out that at the time of this testimony the overwhelming majority of the scientific community had already shown acceptance of the methodology used. Does Dr. Grunbaum believe that the scientific community should be called to testify in support of the methodology used in every case brought to trial? I do not believe this was the intent of the Frye or Kelly decisions.



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Ms. Margulies

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Dr. Grunbaum's next issue is the proficiency testing programs. His assessment of the disaster that would befall the forensic sciences once the LEAA funded proficiency testing was terminated, is not accurate. Being a member of the CMA and present at the meetings where the letter to LEAA was drafted, I differ with Dr. Grunbaum's interpretation of it. It is my recollection that we were very concerned about the funding being terminated, as we would have been about termination of funding during any other worthy project. I am sure the lab directors at the meeting did not reach a conclusion that "without follow-up proficiency testing, the prosecution could not satisfy Kelly/Frye." I would also like to point out that proficiency testing is being carried out by many crime laboratories in varied ways, regardless of government funding.

Dr. Grunbaum's analysis of the proficiency testing program (Pre 1978 and Post 1978) and its results, indicates that he doesn't fully understand how that program was and is being utilized by the crime laboratories. Having been involved in proficiency testing at both the level of an analyst and as administrator, I would like to emphasize the value and use of such a program. A proficiency testing program can be used to evaluate the technical staff's ability to perform analyses. This would be done to insure quality control of the analyst and to train new analysts entering an area of expertise. It is not the methodology being tested, but the ability of an analyst to apply that methodology. Another useful application for proficiency testing is to evaluate a lab's capability to adopt a certain methodology, or to perform a certain test. This would include a test of the personnel, equipment, reagents, etc. Several laboratories utilized the proficiency testing program to evaluate the possibility of expanding into new areas of examination. An erroneous result in such a proficiency testing program does not reflect or invalidate the method used. There was also a semantics problem, which Dr. Grunbaum fails to explain, with the interpretation of the results. In many instances the laboratory was assessed a wrong answer for not attempting additional tests. It had no reflection on the tests they had performed and whether they had performed them correctly. So a "wrong" answer did not necessarily indicate any errors in the actual analysis. Based on personal experience with proficiency testing and information obtained from other laboratory directors, I feel that the failure rate in the proficiency tests does not in any way invalidate the methodology used in the analysis.




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Ms. Margulies

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Finally, I would like to address Dr. Grunbaum's interpretation of the California Association of Criminalist's code of ethics. I was surprised to read his interpretation. Being a member of the organization and knowing that Dr. Grunbaum was also at one time a member, I cannot understand how he could conclude what he did. This code was established so that if two differing opinions emerged subsequent to an analysis, the analysts would be encouraged to review the facts that led them to their conclusions. This is done to insure that both analysts are working with the same data, evidence, information, etc. This code was not in any way intended to stifle or suppress differing opinions, but to insure that the jury was presented with reliable and accurate evidence.

In summary, I feel that Dr. Grunbaum has not proven unreliability of the methods employed by the crime laboratories, but merely shown the obvious. That when any scientific methodology is applied, caution must be exercised in its use and in the interpretation of any results. Realizing that this is a short and not comprehensive review of Dr. Grunbaum's brief, I would like to make available to you and to the court all of the resources of the American Society of Crime Lab Directors. Please feel free to contact me if I can be of any further assistance in this case.

Sincerely,



Enrico N. Togneri,  
Captain/Laboratory Director  
President/ASCLD





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TO: Donald Flynt, Chairman  
Criminalistics Section  
American Academy of Forensic Sciences

FROM: Ad Hoc Committee on Genetic Marker Typing

SUBJECT: Statement of the Ad Hoc Committee constituted by the Officers and Officers-elect of the Criminalistics Section of the American Academy of Forensic Sciences, on the reliability of genetic marker typing in blood and body fluid stains.

The existing serological, immunological, and biochemical procedures for the determination and typing of blood group, isoenzyme, and polymorphic serum protein genetic markers in blood and body fluid stains are completely reliable. The procedures have been subjected to extensive scientific testing in hundreds of laboratories in the United States, Canada, Europe, Asia, Australia, and Africa by hundreds of forensic serological, immunological, and biochemical scientific specialists over the course of many years. There is widespread agreement in the relevant scientific community that reliable, accurate determination of genetic marker antigens and types in dried blood and body fluid stains is possible using these techniques and procedures; and the techniques and procedures are currently in use in hundreds of forensic science laboratories throughout the world as well as throughout the United States.

The collective experience of the members of this Committee is extensive, involving many thousands of determinations and typings of dried blood and body fluid stains in the course of examining tens of thousands of items submitted in connection with legal proceedings. The collective experience includes examination of items and cases submitted by representatives of the People and of defendants in criminal matters and by representatives of plaintiffs and defendants in civil matters. It further includes the supervision of forensic serological testing by many other examiners, the re-examination of items previously examined and tested, and thousands of hours of instruction devoted to the teaching and training of younger examiners. In addition, the members of the Committee collectively have a complete familiarity with and grasp of the relevant scientific literature. The

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**Kenneth S. Field, M.B.A.**  
Colorado Springs, Colorado



Committee's opinion on the reliability and accuracy of the existing techniques and procedures is based on the extensive collective scientific knowledge and experience of its members.

The following points are important in understanding the Committee's reasoning and conclusions:


- (1) The methods and procedures currently in use for the determination and typing of genetic markers in blood and body fluid stains have been subjected to repetitive testing on many thousands of occasions by thousands of different forensic scientists in hundreds of different laboratories using stains of known genetic marker types. A very large number of samples have been tested when fresh and after drying on a great variety of sub-strata and after storage under a wide variety of different conditions. These studies have been conducted in many different laboratories in many different parts of the world. Further, known controls are included in every genetic marker test procedure performed, thereby adding many additional thousands of repetitive tests.
- (2) There is a critical distinction between a measurement and its interpretation. A measurement is a determination or observation made under a controlled set of conditions. Interpretation is the intellectual exercise which assigns a meaning to the measurement in terms of what is then known in a scientific sense about the object of the measurement. Discussions of the reliability of the scientific techniques and procedures have to do with measurements - not with interpretation of the results of measurements. The widely employed and currently available techniques and procedures do produce accurate measurements of exactly what they are designed to measure. This fact does not mean that a given analyst cannot utilize a procedure incorrectly, nor does it mean that a given analyst cannot obtain an inaccurate measurement. Further, it does not mean that an absolutely accurate measurement scrupulously obtained by the most widely accepted of scientific techniques cannot be misinterpreted by a given individual in a given circumstance.
- (3) The massive literature that developed as a result of the many scientific studies on this subject shows in the aggregate that the techniques and procedures used for the determination of blood group antigens, antibodies, and enzyme and semen protein types are accurate and reliable. In addition, hundreds of scientific studies have been carried out to explore the effect of the drying and aging of blood and body fluid stains and of definable environmental influences on the determination and typing of genetic markers in such stains. Appreciation of these various effects in blood and body fluid stain analyses

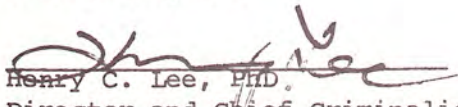


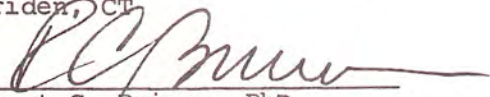
in no way demonstrates that the procedures and techniques for typing are not reliable. These considerations have, in fact, nothing to do with the reliability of the techniques and procedures used for determination and typing as such. Rather, they have to do with the interpretation of the test results. Indeed, the scientific investigation of these effects and circumstances in blood and body fluid stain analysis represents a systematic effort to understand and catalog the different influences and effects so that these can be taken properly into consideration in the interpretation of the results of the tests.

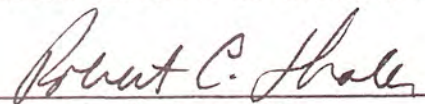
- (4) The stability of genetic markers in blood and body fluid stains is not relevant to any consideration of the reliability of the methods used to determine or type the genetic markers in such stains.

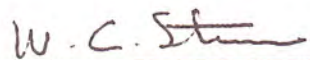
The reliability of the methods and techniques used for typing and determination of genetic markers in blood and body fluid stains has been well established by appropriate and properly controlled scientific investigations. That the techniques can be incorrectly or incompetently employed, that incorrect measurements can be made, or that the results obtained can be affected by definable factors and circumstances beyond the analyst's control do not in anyway disturb that fundamental conclusion. For if they did, no scientific procedure or technique, applied to forensic case-work samples or otherwise, could be considered reliable or accurate.

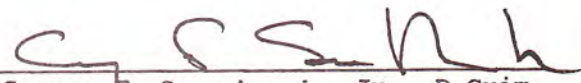
  
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