



NEWLETTER California Association of Criminalists NEWLETTER

OFFICERS 1983 - 1984

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JUNE / SEPTEMBER 1983

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This mailing includes the following items:

1. CAC Roster - July, 1983.
2. Copy of CAC By-Laws.
3. Board Meeting Minutes, April 7, 1983. (Approved).
4. Board Meeting Minutes, May 11, 1983. (Approved).
5. Business Meeting Minutes, May 13, 1983. (For approval).
6. Proxy for Fall Meeting.

ASSOCIATION ACTIVITIES

Northern Section Meeting

The Santa Clara County Crime Laboratory hosted a dinner meeting on June 24, 1983 at Veneto's in San Francisco. The speaker was Wilkaan Fong from the Santa Clara Lab, who spoke on interesting aspects of fiber examination.

Southern Section Meeting

The Orange County Sheriff Crime Laboratory hosted the meeting on Friday, June 17, 1983 at Crest Catering in Stanton. W. Jack Cadman, Anthony Longhetti and Joseph Orantes gave a very interesting presentation on "Crime Laboratories: Past, Present and Future." The meeting was videotaped and will be added to the archives. The dinner was preceded by meetings of the Serology, Drug and Trace Evidence Study Groups.

Trace Evidence Study Group - North

The group met on June 30 at the Oakland Police Department. They discussed the resurrection of the hair proficiency exercise designed by Ed Blake and George Sensabaugh a few years ago. They also began making plans for another Trace Evidence Summit Meeting at Yosemite Valley for the weekend of Nov. 11-13. Anyone interested in attending should contact Marty Blake or Steve Shaffer.

Trace Evidence Study Group - South

The Trace Evidence Study Group met on June 17, 1983 at Crest Catering. Ed Rhodes gave a brief presentation on the examination of pollens and then led a discussion on the results of the analysis of two glass samples submitted to various labs. Jim Bailey reported on the outcome of the recent Hair Symposium at the FBI Academy in Quantico.

Serology Study Group - South

The Serology Study Group met on June 17, 1983 at Crest Catering. Among the topics discussed were:

1. Anal intercourse - how to interpret results or lack thereof.
2. Possibility of finding a better test for saliva than amylase activity.
3. Quantitating antigens in vaginal/seminal mixtures.

Drug Study Group - South

The Drug Study Group met on June 17, 1983 at Crest Catering. Darrel Clardy led a discussion on the benefits of quantitating drugs in solid dosage form. The major argument against quantitating was the amount of time involved. The group also discussed the fact that drug quantitation would most likely be a requirement of laboratory certification in the future.

MS FROM THE PRESIDENT

The 1983-84 CAC season is off and running. New faces on the board and on committees face a double challenge: seeing how things get done and seeing that they do get done. Bob Ogle has been named Public Relations Chair (a most important job to the success and life of our organization); John Patty will head up Training and Resources, with Debbie Wakida helping him; Ed Rhodes will be in charge of nominating a new slate in 1984; and Jerry Chisum will take a seat on the Ethics Committee (joining Luke Haag and Jan Bashinski). Karen Sheldon, Kathryn Holmes and Pete Barnett will continue to offer their special talents to the Awards, Public Health and By-Laws (respectively) for at least another year. The Historical Committee will be retained, but so far we don't have a chairman or chairwoman for it. Any nominees? There is a new ad hoc committee, one to collect data on the performance of breath alcohol retention systems. It will act as an advisor to Public Health and anyone else who wants the "real dope" on this issue. Kathryn Holmes, Luke Haag, Larry Ragle and Bill Casper will pool their resources with Lowell Bradford as Chair. They face a real time crunch, so if you have any data on breath sampling, contact one of them now.

The board is investigating reduced subscription rates on scientific journals for CAC Members and the availability of professional liability insurance. The Southern Section dinner meeting with Jack Cadman, Joe Orantes and Tony Longhetti as featured speakers was a big hit and will be extended in format at the Ontario Meeting. The June talks were videotaped and will be duped for CAC archives.

Now for the fun stuff. Bill Baird promises the Ontario Meeting to be a really special one, with lots of panel discussions, workshops and some heavy technical stuff, leavened with lots of fun things to do. (See announcements).

The CAC is playing "host" at the Academy meeting in February at the Disneyland Hotel in Anaheim. We are planning a hospitality suite with an entertaining display of historical memorabilia. If you have photos, case histories or other materials surviving from the early days of criminalistics (pre 1960?, pre 1950?), contact me to arrange for their display.

Finally, Steve Cooper reports that plans for the Monterey Seminar are moving well. The Casa Munras is the place, early May is the time. Plan on being there.

Its going to be a great year.

All the best,

John DeHaan

ANNOUNCEMENTS

Accreditation of Laboratories.

The American Society of Crime Laboratory Directors/Laboratory Accreditation Board announces the accreditation of the City of Oakland Criminalistics Laboratory and of the Washington State Patrol Crime Laboratory System which houses six crime laboratories located at Seattle, Tacoma, Kelso, Kennewick, Everett, and Spokane. The laboratories were accredited effective February 17, 1983 for a five year period.

The Laboratory Accreditation Board congratulates the staffs of the seven laboratories for their professional accomplishments and leadership in the forensic sciences.

Student Forensic Science Symposium Fund Raiser.

The Organization of Forensic Scientists at Northeastern University (OFSNU) is raising funds to support a national student forensic science symposium. T-shirts bearing the writing "Forensic Scientists Make It A Crime" are offered for sale at \$5 each. Sizes (S,M,L,XL); Colors (light blue, red, black, navy). Allow 3-4 weeks for delivery. Send to: OFSNU, c/o Kathleen Higgins, Forensic Chemistry Program Coordinator, 144 Knowles-Volpe, 360 Huntington Avenue, Boston, MA 02115.

UPCOMING MEETINGS

Southern Association of Forensic Scientists

September 9-10, 1983. Chattanooga, Tennessee. Contact William Darby, Tennessee Bureau of Investigation, Forensic Services - Crime Laboratory, 3201 Lebanon Road, P.O. Box 140170, Donelson, TN 37214.

Asian Pacific Congress on Legal Medicine and Forensic Sciences

September 18-22, 1983. Singapore. Contact Dr. Wee Keng Poh, Medico-legal Society, 4-A College Rd., Singapore 0316.

Northeastern Association of Forensic Scientists

October 7-8, 1983. Hasbrouck Heights, New Jersey. Contact Richard Saferstein, New Jersey State Police, Forensic Science Service Bureau, P.O. Box 7068, W. Trenton, N.J. 08625.

CALIFORNIA ASSOCIATION OF CRIMINALISTS - FALL SEMINAR

October 20, 21 & 22, 1983 in Ontario, CA. Red Lion Inn (Next to Ontario Airport). Hosted by San Bernardino County Sheriff's Crime Lab. Contact: William Baird, San Bernardino Sheriff's Regional Crime Lab, 200 South Lena Ave., San Bernardino, CA 92415. (714)-383-7344.

Mid-West Association of Forensic Scientists

November 2-5, 1983. Peoria, Illinois. Contact: Susan Johns, Bureau of Scientific Services, 1810 South Main Street, Morton, Illinois 61550. (309)-263-7491.

International Association of Forensic Sciences

September 18-25, 1984. Oxford, England. Contact IAFS, c/o Forensic Science Society, P.O. Box 41, Clarke House, Harrogate, HG1 1BX, England.



THE INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES

President Professor Stuart S Kind Telephone 0423 56068 Clarke House PO Box 41 Harrogate HG1 1BX England

TENTH MEETING OF THE INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES:
OXFORD: 18TH-25TH SEPTEMBER, 1984.

Subjects for Inclusion in the Clinical Forensic Medicine Section
of I.A.F.S. Meeting (Other topics may be considered)

Examination of Police - recruits; retirement; medical discharge.
 Occupational Health. Stress. Specialised category medicals - Heavy
 goods vehicles, Fire-arms Units, Underwater Units, Exposure to hazards.

The Forensic Clinician - Training, Examination Room, Equipment.
 Specialised Facilities (sexual assault referral centres).

Examination of the Living. Ethics, Consent, Fitness of Subject
 (for custody, trial, interview), Mental illness and subnormality,
 Special examinations, Identification, Photography, Documentation and
 Records, Collection of Forensic Evidence.

The Forensic Clinician and Unexpected Death.

Assaults, Wounds and their interpretation in the living. Classification
 and recording of wounds, Misleading wounds, Injuries due to gunshot and
 explosion, Thermal and Radiation wounds, Alleged assault by the Police.

Sexual Assaults. Examination of victim and offender, Hetero- and
 homosexual assaults, Sexual assaults on children, Indecent exposure,
 Incest, Sexual assault and sexually transmitted disease, After care
 of the sexual assault victim, Offences connected with pregnancy.

Violence within the family, Non-accidental injury in children, Non-
 accidental injury in adults (battered wives, battered grandparents).

Alcohol and drugs. Interpretation of blood levels, Effect of drugs on
 behaviour and performance, The intoxicated driver, Police custody and
 the alcohol and drug abuser, Inhalation of solvents.

The Forensic Clinician and the presentation of evidence in court.

Registration for the Congress should be sent to - The Secretariat,
 10th I.A.F.S. Meeting, Clarke House, 18 Mount Parade, Harrogate, England HG1 1BX.

Abstracts for the Clinical Forensic Medicine Section should be sent to -
 Dr. M. Clarke, Secretary, Clinical Forensic Medicine Section, Vine House,
 Huyton Church Road, Huyton, Nr. Liverpool L36 5SJ, Merseyside, England.

EMPLOYMENT OPPORTUNITIES

CRIMINALIST I. PHOENIX CRIME LABORATORY (entry level position)

Requires four-year degree in chemistry or closely related physical or natural science (minimum 30 semester hours of chemistry).

Contact: Arizona Department of Public Safety, Personnel Section, 2339 North 20th Avenue, P.O. Box 6638, Phoenix, AZ 85005. (602)-262-8291.

CRIMINALIST. CITY OF SAN DIEGO (open #T7618)

Requires Bachelor's degree (or equivalent) in Criminalistics, Forensic Science, or a physical or biological science; as well as two years professional criminalistics experience. (Master's in Criminalistics or Forensic Science may substitute for one year experience; if applicant does not have a degree, applicant may substitute one year of professional criminalistics experience for each year of education lacked.)

Contact: Employment Information Counter, City Administration Building Lobby, 202 C Street, San Diego, CA 92101. (619)-236-6400.

ASSISTANT CRIMINALIST. CITY OF SAN DIEGO (open #T7617)

Requires equal to a Bachelor's degree in Criminalistics or Forensic Science; or equal to a Bachelor's degree in physical or biological science with either one years experience or a Master's in Criminalistics or Forensic Science; or, if applicant does not meet degree requirements, applicant may substitute one year of professional criminalistics experience for each year of education lacked.

Contact: Employment Information Counter, City Administration Building Lobby, 202 C Street, San Diego, CA 92101. (619)-236-6400.

CRIMINALIST or SENIOR CRIMINALIST. ORANGE COUNTY SHERIFF/CORONER

Requires a Bachelor's degree in criminalistics or a physical science. To be hired as a Senior Criminalist applicant must also have two years professional forensic science experience.

Contact: Margaret Kuo, Orange County Sheriff/Coroner, P.O. Box 449, Santa Ana, CA 92702. (714)-834-3073.

DIRECTOR. FORENSIC SCIENCE CENTRE, SOUTH AUSTRALIA

(See next page for description.)

TECHNICAL SUPERVISOR. NEW JERSEY STATE POLICE LABORATORY

Contact: Capt. Vincent P. O'Donoghue, Division of State Police, Special & Technical Services Section, P.O. Box 7068, River Road, West Trenton, NJ 08625.

ASSISTANT LABORATORY DIRECTOR (FORENSIC SCIENTIST IV)

Requires a bachelor's degree and preferably one year of forensic science supervisory work experience. (See below for contact.)

TRAINING AND APPLICATIONS MICROSCOPY COORDINATOR (FORENSIC SCIENTIST IV)

Requires a bachelor's degree and preferably experience in the microscopy area.

Contact (send resume) to Bruce W. Vander Kolk, Bureau Chief, Bureau of Scientific Services, 610 Armory Building, Springfield, Illinois 62706. Deadline 11/1/83.

FORENSIC SCIENCE

DIRECTOR

In July 1982, the South Australian Government established a Forensic Science Centre within the Department of Services and Supply. The Centre provides to police departments, defence lawyers, general practitioners, private investigators and the general public, a comprehensive range of forensic services in the areas of pathology, biology and chemistry. Odontology and metallurgy services are provided by other agencies with some co-ordination by the Centre.

Following a review of forensic science services in South Australia by Dr. A.S. Curry, formerly of the Home Office Laboratories in the UK, the Government is seeking to appoint a person of some eminence and professional standing, as Director of the Forensic Science Centre.

The appointment will be the first of its kind in South Australia and consequently in addition to the day-to-day management of the Centre, the Director will be responsible for the development of coordinated forensic science services in the State; the establishment of professional and quality standards for the Centre; and the introduction of effective mechanisms for liaison with the South Australian Police Department and professional and academic organisations.

In the initial stages therefore, the Director's responsibility will be essentially developmental in nature. It follows from this that the successful applicant will require a high level of managerial skills with proven experience in the management, at a senior level, of a comprehensive range of scientific operations.

A contract appointment is proposed, for a term of (say) three years, with right of renewal. However, other employment arrangements (for example, secondment or permanent appointment) could be negotiated in order to secure the right person.

Remuneration of around A\$55,000 per annum is envisaged, although for a suitably qualified medical practitioner a higher salary will be negotiated. Financial assistance for relocation will be provided.

More specific details can be provided by Mr Ray Dundon, Director, Support Services, Department of Services and Supply, GPO Box 1738, Adelaide, South Australia, or telephone (61 8) 227 2800 (reverse charges)

Applications are invited from persons regardless of sex, race, ethnic background or physical impairment.

Applications stating qualifications, experience, publications and the names and addresses of three referees from whom confidential enquiries may be made, should be lodged with Mr. Dundon, at the above address, by Wednesday August 10, 1983.

SOUTH AUSTRALIAN GOVERNMENT



California Association of Criminalists

OFFICE OF

By-Laws Committee

August 1, 1983

OFFICERS 1983 - 1984

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Editorial Secretary

DAVID STONEY
Institute of Forensic Sciences
610 16th St., No. 307
Oakland, California 94612

Dear Members:

The following are proposed changes to the CAC By-Laws to elect the Regional Director-North and the Regional Director-South for two year terms, with elections in alternated years. These changes will be voted on at the next business meeting. Deletions are indicated like this Additions are indicated like this.

ARTICLE IV -- DIRECTORS

SECTION 1: The corporate powers, business and affairs of the Corporation shall be exercised, conducted and controlled by a Board of Directors consisting of the President, the President Elect, the Immediate Past President, the Secretary, the Treasurer, a member at large from the Northern section of the State Regional Director-North, a member at large from the Southern section of the State Regional Director-South, a Membership Secretary, an Editorial Secretary, all of whom shall either be Members or Life Members. All of the Directors with the exception of the President and the Immediate Past President shall be elected by the membership of the Corporation for the terms of office set forth below.

The President Elect shall be elected to a three year term to be served one year as the President Elect, one year as the President and one year as the Immediate Past President.

The Secretary, Treasurer, Membership Secretary, Regional Director-North and Regional Director-South shall be elected to two year terms.

The Member at Large-North and the Member at Large-South shall be elected to one year terms.

SECTION 4: All the directors of the Corporation shall be elected by ballot by the membership of the Corporation at the annual meeting. A President Elect, a Member at Large-North and a Member at Large-South shall be elected at each annual meeting. A Secretary, a Regional Director-North and a Membership Secretary shall be elected at annual meetings held in even numbered years. A Treasurer, a Regional Director-South and an Editorial Secretary shall be elected at annual meetings held in odd numbered years.



California Association of Criminalists

OFFICE OF THE AWARDS COMMITTEE

OFFICERS 1983 - 1984

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610 16th St., No. 307
Oakland, California 94612

Dear Colleague:

The General Section of the American Academy of Forensic Sciences has again given our Association \$100 to be used to award one of our members in recognition of contributions made to the profession. The American Academy has asked that the fund be used to honor individuals who have been employed in the profession for fewer than five years. At the Seminar in November 1982, the Board decided to name this award in honor of Paul Kirk. The Awards Committee is now asking for nominations for the 1983 recipient of this Award.

Nominations, using the attached 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. This will allow individuals in other professions who interact with potential candidates (e.g. detectives, attorneys) to submit nominations. No self nominations will be considered.

The nomination period will be open from September 1 - September 30, 1983. No nominations will be accepted after this period. The award recipient will be announced at the Fall Seminar.

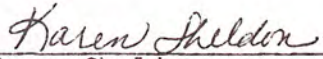
In addition to the five year qualifying period assigned by the American Academy, the Awards Committee has established the following criteria for candidate qualifications:

- 1) The five year qualifying period is defined as October 1978 - October 1983.
- 2) The employment shall be full-time employment and shall not include time in pre-professional positions, such as intern or laboratory technician, even though these positions may have been full-time positions.

- 3) The candidate must be a CAC member (in any status) at the time of nomination.
- 4) During the five year qualifying period, the candidate shall also have demonstrated interest in a professional forensic science organization such as, but not limited to, the CAC.
- 5) Members who meet the above criteria can qualify for the award by any one (or more) of the following contributions to the profession:
 - a) Casework which provided a significant contribution to the investigation or adjudication of the case (one or more cases).
 - b) Research and dissemination of the results in the form of publication (i.e. journal, newsletter), or paper at a seminar, workshop or study group, etc.
 - c) Sustained production of papers or technical notes in newsletters or at seminars.
 - d) Training to law enforcement agencies, other users of criminalistics services, or other criminalists. Financial compensation may or may not have been received.
 - e) Involvement in study groups in the form of organizing speakers or group data gathering projects which will produce information that will be made available to the forensic science community.
 - f) Development or design of materials or items to be used by criminalists, or law enforcement agencies, to ensure evidence integrity or enhance its quality, with an effort made to disseminate this information (e.g. evidence collection kits).
 - g) Any other unusual or significant contributions to the improvement of the profession of criminalistics.

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

Sincerely,


Karen Sheldon
Awards Committee Chairman

KS:ph

Return Completed Form To:

Karen Sheldon, Awards Chairman
1122 Escobar Street
Martinez, CA. 94553

Paul Kirk Award

NOMINATION FORM

Please follow the criteria described on the attached letter. Use this form only, use the back if necessary.
Any questions should be directed to Karen Sheldon (415)372-2455.

CANDIDATE _____

EMPLOYMENT

WHERE

DATES

CONTRIBUTIONS (One or more contributions may be discussed. Do not use a separate form for each contribution).

NOMINATION PARTY (Please list two additional references should a clarification by the Awards Committee be needed).

NAME

PHONE

1.

2.

3.

John Murdock

Contra Costa County Sheriff-Coroner's Department, Criminalistics Laboratory

Our laboratory, like many others, is involved in a fair amount of training. This is done on many levels; from crime scene technicians, to investigators and lawyers, and finally to Courts as we present the results of our findings. Several Criminalists here expressed the need to have a written description of some basic terms dealing with associative evidence. We have found the handout below to be quite useful for training that we present at police academy's and to investigators. I wrote several drafts, all of which were carefully and thoughtfully edited by other staff members. You have me alone to blame for the drawings. I sincerely hope that you can make use of these definitions in your training.

Samples Necessary for the Evaluation of Associative Evidence*

Physical evidence often consists of two samples or items which must be compared with one another in order to determine whether or not they share a common origin. In some cases, if the evidence warrants it, a very strong statement or conclusion can be made. In other instances it may be possible to only state that two samples could have shared a common origin. When comparing associative evidence, forensic scientists will ask for certain types of samples, in order to provide the most complete and comprehensive answer possible. The following sections will define and discuss these samples.

1. Questioned - This is a sample of material that is foreign to the environment under investigation. In the case of a crime scene, materials which are not normally present may be brought there by a responsible and left behind.

Typical examples are:

1. Fired bullets and cartridge cases.
2. Blood, semen, and saliva stains from a responsible.
3. Paint transferred to a door frame from a tool used to pry open the door.
4. Grease from someone's hands transferred to parts of the scene.
5. Hairs and fibers left on a carpet alongside of a bed upon which a rape occurred.
6. Paint fragments transferred from a responsible's car onto a damaged area of the victim's car.

In addition, materials which are normally present at the scene may unintentionally be taken away by a responsible and may be found later on his clothing, car seats or in his dwelling.

Typical examples are:

1. Hairs and fibers from the victim or from carpets, pet blankets, etc.
2. Blood, semen, and saliva from a victim transferred to the responsible.
3. Paint, Sheetrock, wood fragments transferred onto the responsible or to tools in his possession.
4. Various types of grasses and foliage.
5. Soil, decorative rock and bark.

There are specific procedures to be used for collecting these different types of samples.

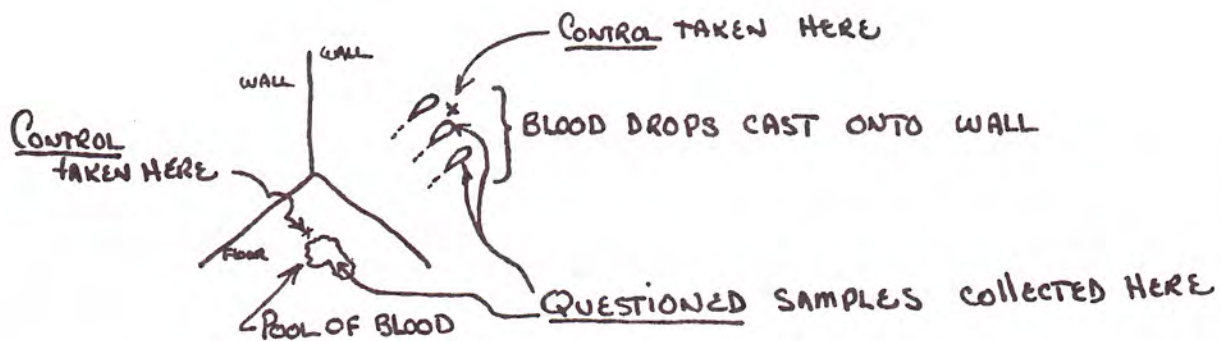


FIG. 1

Standards- These samples are just as their name implies, samples from a known source which can be relied upon as being an accurate representation of what may be present elsewhere as questioned associative evidence. Laboratory comparisons are conducted on the questioned material and the standard to determine common source of origin.

Typical examples of standard samples are:

1. Liquid blood whose withdrawal has been witnessed, whose custody has been properly maintained and which has been properly preserved by refrigeration.
2. Representative samples of all of the different types of vegetation present along a path which may have been traveled by someone related to a crime.
3. Samples of undamaged automotive paint collected from a location adjacent to a damaged area. Paint transferred from another car may be found in the damaged area.
4. Representative samples of carpet including samples of all of the colors and fiber lengths present.
5. In the case of questioned fired bullets and cartridge cases, powder patterns, or gunshot discharge residue, the standards would be all remaining unfired ammunition of the same caliber, brand, and configuration.

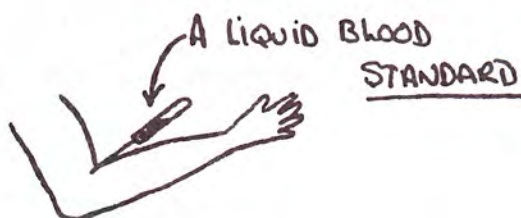


FIG. 2a

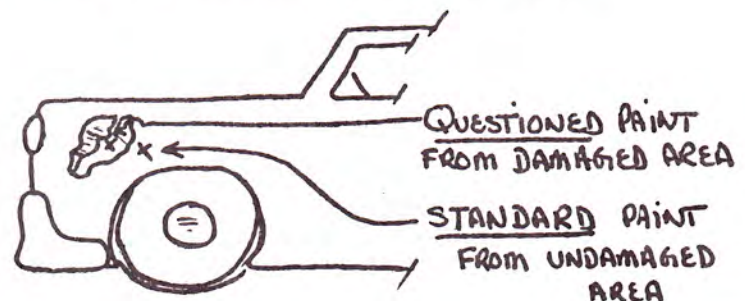


FIG. 2b

3. Control - These are samples of the surface on which the questioned material is found. They are collected from this surface to determine if surface contamination (if present) might interact with the questioned material, thereby affecting the laboratory results. If, for example, a swab is used to collect part of a questioned red (blood) stain present on a wall, a control is taken by swabbing an unstained area of the wall adjacent to the stain. These control samples are often sent through the same laboratory examination sequence that is applied to questioned stains. The results obtained help the analyst to interpret the examination results obtained with the questioned samples. Indeed, without the control samples, it is often not possible to interpret the results. The key to collecting a proper control is to look closely at the surface that bears a questioned stain. If it appears to be uniform with no apparent difference in appearance from one area to another, the control is taken from any convenient area adjacent to the questioned stain (see Figure 1). If, however, there appears to have been areas of contamination already on the surface prior to the deposition of the questioned stain, it is necessary to take control samples from each possible source or type of underlying surface contamination. When several controls are taken surrounding one stain, they may be labeled as "control 1B-1, 1B-2, 1B-3". (see Figure 3 - the questioned stain in this example is labeled 1A)

— CONTROL - UNIFORM BACKGROUND - refer to FIG. 1

— CONTROL - CONTAMINATED BACKGROUND:

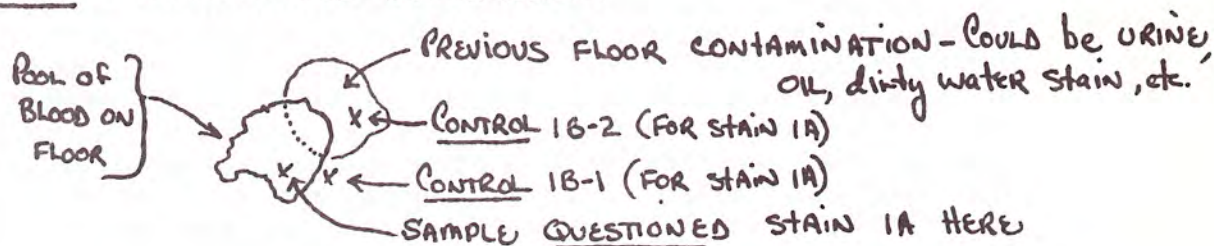


FIG. 3

4. Blank - This represents unused samples of the materials used to collect the questioned and control samples. For example, in the case of bloodstains collected on cotton swabs moistened with distilled water, the blank would be a clean swab moistened with a drop of distilled water. Both the swab and the water must be from the same source as the swabs and water used to collect the questioned and control samples. Only one blank sample is needed for a whole series of questioned and control samples as long as the source of the collection materials (swabs and water) remains the same.

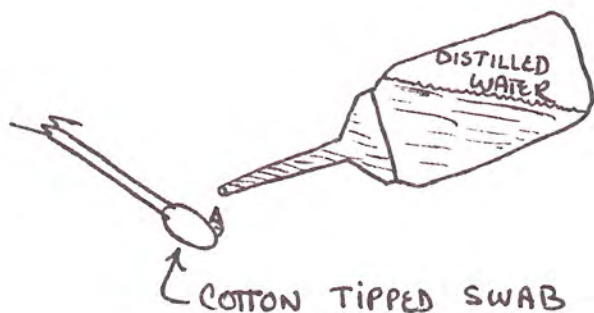


FIG. 4

Computer Study Group

The CAC has formed a Computer Study Group to explore the possible applications of computers, especially microcomputers, to criminalistics. Announcements of the formation of this group have been sent to most laboratories and there has been a good response to the initial announcements. I am planning to have the first meeting of the Study Group in late July. Anyone who would like to be on the mailing for this Study Group, and who has not responded to one of the previous announcements, can send me a letter. I am also interested in communicating via any of the various electronic mail facilities that are available.

One of the ideas behind the formation of the Computer Study Group was the management of the FORENSIG electronic bulletin board which was announced with the last newsletter. Unfortunately, there has been a delay in getting this service into operation. I hope that the problems will soon be resolved and that the service can be established. In the meantime, the Computer Study Group will begin its operation dealing with subjects of interest to the participants. Some of the subjects we will be discussing are selection of computer hardware and software, maintenance of technical reference files on a microcomputer, telecommunication with other mainframe or microcomputers, instrument applications, and any other subjects that are of interest to the participants. If you are interested, and have not already replied to me, send a letter to:

Peter D. Barnett
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FIREARM SAFETY HAZARD - KG-99

Lance T. Martini

During a recent investigation of an accidental discharge involving a 9mm KG-99 pistol manufactured by Interdynamic of America, a major safety defect was discovered. This condition can result in serious injury to the firearm examiner or nearby individuals. Please disseminate this information to concerned examiners.

The design of the KG-99 allows for the protrusion of the firing pin into the bolt face during extraction. This presents no problem during actual firing. Should a live cartridge be cycled through the action, there is a 10% to 20% chance of a discharge occurring outside of the chamber area.

While pulling the bolt to the rear, the extractor holds the cartridge (live) in position. When the bolt has traveled to the rear approximately 1 inch the firing pin then protrudes into the bolt face under significant spring tension. The firing pin's impact with the primer is sufficient to indent the primer cup or sometimes ignite the primer compound. Metal fragments and gas resulting from the case rupture can produce serious injury to the examiner or those in close proximity.

During test firing, eye and hearing protection should always be used. While test firing the pistol, all ammunition should be expended before attempting to make the firearm safe. Manual functioning should employ test (dummy) cartridges. Attempt to maintain a position opposite the ejection port when extracting live cartridges.

For further information contact: Lance T. Martini
Accuracy Gun Shop
3651 University Ave.
San Diego, CA 92104

Ethical Dilemma

Peter D. Barnett

The definition of Criminalistics adopted by the California Association of Criminalists, and often reprinted in various texts and other sources, states, in part, "Criminalistics is that profession...dedicated to the...preservation of physical evidence." While it is inherently one of our professional responsibilities to preserve physical evidence, the courts have made it clear that this is also a legal responsibility on the part of law enforcement agencies and, I presume, such obligation is extended to agencies and individuals who are utilized by law enforcement agencies in an investigation. The Hitch case has caused all law enforcement agencies to become more aware of preserving evidence, and the Nation case has encouraged agencies to preserve evidence in such a fashion as to make it useable for re-analysis should that occasion arise.

Clearly, then, it seems there is both a professional and legal responsibility on the part of law enforcement agents to preserve evidence. To a scientist, it should be apparent that this is a necessary part of the job, since only in that way can the results of analyses be verified. This verification provides the quality control in science. Many scientists have the opportunity for unlimited amounts of equivalent material for analysis, so experiments designed to validate their hypotheses can readily be conducted by other scientists. The sample a criminalist works with, however, is the result of a single event which happened in the past, and can never be exactly repeated. For this reason criminalists must be sparing in their consumption of the evidence during analyses, and document and preserve the results of their analyses as much as possible.

This month's ethical dilemma deals with the responsibility of a criminalist to preserve the results of an analysis, particularly in a case where all of the evidence is consumed in the analysis. This month's dilemma also deals with the question of how much a criminalist should ethically be required to know. Cross-over electrophoresis (CEP) is a well-established technique for the determination of the species origin of a bloodstain. This technique is a common biochemical procedure and is described in the forensic literature as early as 1971 by Culliford. One of the advantages of this test for the criminalist is that it allows the preservation of the results of the test. Indeed, when properly done, the gel is dried, and then stained, to visualize the precipitin bands which are formed when an antigen-antibody reaction occurs. Thus, the test, while having significant advantages of time and sensitivity over other techniques, has the additional advantage of allowing easy preservation of the sample. Indeed, the necessary staining procedure is best done after the gel has been dried making the subsequent preservation of the sample trivial (it is placed in an envelope).

If a criminalist does this test, fails to preserve the gel, and, indeed, is unaware that the gel can be preserved, has he met his ethical obligations to "keep abreast of new developments" (Section I.F) and use "proven methods... where it is practical to do so..." (Section II.A).

Does Section II.H. of the Code of Ethics, which "requires (that) the individual be aware of his own limitations" mean that, before one undertakes an analysis, he should be familiar with the technique? Is the process of saving

CEP gels one that everyone using CEP should be familiar with? If, in giving testimony, a criminalist asserts that there is no known technique by which CEP gels can be preserved, is this evidence of the experts failure to give "formal consideration" to the test? Section II.H. explicitly requires the criminalist to be aware of his own limitations and to "seek knowledge in new fields." If the criminalist does not know whether or not a CEP gel is preservable, is he aware of his own limitations? Is this procedure one that a criminalist should be aware of it he or she "has had adequate training and experience?" Is it the responsibility of the criminalist or the laboratory supervisor to see that the criminalist is adequately trained and experienced? How do we evaluate what a criminalist is ethically required to know--or is a criminalist not required by the Code of Ethics to know anything about criminalistics?

In deciding these questions, two separate issues must be addressed: First, the issue of whether the criminalist is expected to know that CEP gels can be preserved. Is the method of doing a CEP analysis "above reproach" if the method does not include preservation of the gel. The second issue to be considered is whether or not the criminalist is ethically required to preserve the gel. The criminalists opinion is based on the characteristics observed in the gel. Does proper laboratory procedure require documentation of observations and data to the extent possible? If an analysis consumes all of a sample, are the requirements for documentation more rigid? Are legal precedents which require the retention of breathalyzer ampoules, the proper preservation of biological evidence, or the retention of a breath alcohol sample simply legal requirements which are not related to the proper practice of the science of criminalistics? Or, should criminalists preserve evidence (including documenting its analysis) whether it is possible to do so? Do laboratory managers have a responsibility to provide resources for preservation and documentation of evidence and its analysis?

The ethical dilemma in the previous newsletter dealt with a criminalist who obtains, and utilizes for courtroom qualifications, a Ph.D. in Forensic Science which had none of the characteristics we usually associate with such a degree. Apparently, given the few responses, this is not a widespread concern. Professor Starrs hopes that the criminalist will "make complete disclosure...of (the) inherent inadequacies (of the degree)", but does not believe that the person "who gets a fraudulent degree will be honest enough to own up to the fraud." Gary Siglar observes that "the criminalist's eithics are in question...solely for preserving a 'quickie' degree..." He suggests that, when testifying, the criminalist notes "what benefits were derived from (obtaining the degree)" and "more importantly, (describe) its limitations in detail." Both Art Terkelson and Dave Stoney feel that there is nothing wrong in using the degree as part of the qualifications of the witness to give expert testimony.

Response Sheet
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The criminalist's ignorance of the fact that a CEP gel can be preserved is a violation section_____ of the CAC Code of Ethics.

The criminalist's assertion in testimony that the CEP gel cannot be preserved is a violation of section_____ of the CAC Code of Ethics.

The failure of the criminalist to preserve the CEP gel is a violation of section_____ of the CAC Code of Ethics.

Comments:

return to: Peter D. Barnett
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