## FIFTH ANNUAL SYMPOSIUM REPORT ON CRIME LABORATORY DEVELOPMENT





FBI ACADEMY QUANTICO, VIRGINIA OCTOBER 16-20, 1977 FEDERAL BUREAU OF INVESTIGATION U.S. DEPARTMENT OF JUSTICE



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### ACQUISITIONS

# FIFTH ANNUAL SYMPOSIUM REPORT ON CRIME LABORATORY DEVELOPMENT

FBI ACADEMY QUANTICO, VIRGINIA OCTOBER 16-20, 1977

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## GOVERNING BOARD AMERICAN SOCIETY OF CRIME LABORATORY DIRECTORS

#### CHAIRMAN

Douglas M. Lucas, M. Sc. Director Centre of Forensic Sciences 26 Grosvenor St. Toronto, Ontario, Canada M7A2G8

As Chairman of the ASCLD, Douglas M. Lucas combines an outstanding background of education, training and experience as a criminologist with proven ability as an administrator.

Mr. Lucas, 49, was born in Windsor, Ontario where he received his early education. In 1953, he received his Bachelor of Science degree from the University of Toronto and in 1957, also from the University of Toronto, he received a Master of Science degree in pharmaceutical chemistry.

He began his forensic science career in 1957, when he joined the staff of the Centre of Forensic Sciences, and in 1967 was named its Director.

His past professional associations include membership in the International Association of Arson Investigators and the International Association of Forensic Toxicologists. He has also served as President of the Canadian Society of Forensic Science, the American Academy of Forensic Sciences and the International Association of Forensic Sciences. In addition, he has chaired the Committee on Alcohol and Drugs, and the U. S. National Safety Council.

Mr. Lucas is married and has five children.

### VICE-CHAIRMAN

Thomas F. Relleher, Jr. Assistant Director FBI Laboratory Washington, D. C. 20535

Mr. Kelleher was born July 27, 1928 in New York City. He served two years in the United States Army and one year in the United States Navy, and received his Bachelor of Science Degree from Fordham University, New York City, in 1950. He later attended George Washington University, Washington, D. C., and in 1971, was awarded a Master of Science Degree in Forensic Science.

Mr. Kelleher entered on duty with the FBI as a Special Agent in July, 1955, and following a period of training, was assigned to the Miami, Florida, FBI Office. He served in the Savannah, Georgia, FBI Office from May, 1956, to July, 1959, when he was ordered to FBI Headquarters, Washington, D. C., to assume supervisory duties in the Laboratory Division. He returned to investigative duties in the Savannah Office in May, 1963, was transferred to the Jackson, Mississippi, Office in January, 1966, and was reassigned to the Laboratory Division in May, 1966.

Mr. Kelleher was designated Inspector - Deputy Assistant Director of the FBI Laboratory in May, 1975, and was Assistant Director of that division in July, 1977. He is Vice - President of the American Society of Crime Laboratory Directors, a member of the International Association of Chiefs of Police, a Fellow of the American Academy of Forensic Sciences, and has lectured as adjunct faculty for George Washington University.

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He is married and has seven children.

### SECRETARY

Travis E. Owen Director Acadiana Criminalistics Laboratory P. O. Box 643 New Iberia, Louisiana 70560

Travis E. Owen is currently the Director of the Acadiana Criminalistics Laboratory in New Iberia, Louisiana.

Mr. Owen, 41, was born in Mobile, Alabama where he received his early education. In 1957, he obtained his Bachelor of Science degree in Chemistry from Spring Hill College in Mobile. Four years later, he received a Master of Science degree in Biochemistry from Louisiana State University.

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Mr. Owen was first employed by the Louisiana State Police Crime Laboratory as a Criminalist and in 1970 became the Laboratory's supervisor. In 1971, he was named Director of the Acadiana Criminalistics Laboratory in New Iberia.

His other professional activities include memberships in the Southern Association of Forensic Scientists, the Louisiana Association of Forensic Scientists, the American Academy of Forensic Sciences, and the Louisiana Board of Crime Laboratory Directors and Administrators, Inc.

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### TREASURER

Captain Stark Ferriss Director New York State Police Scientific Laboratory Building #22, State Campus Albany, New York 12226

Captain Stark Ferriss, 46, has been Director of the New York State Police Scientific Laboratory since 1970. Prior to that he held the position of Assistant Director and was formerly a member of the Laboratory's criminalistics staff.

Preceding his 15 years with the State Police, Captain Ferriss spent 3 years as a Special Agent with the F.B.I. and an additional 3 years with the Marine Corps.

His education includes a BA Degree from St. Lawrence University and a Juris Doctor Degree from the University of Connecticut School of Law.

Other professional activities include memberships in the Society for Applied Spectroscopy, Harvard Associates in Police Science, Northeast Association of Forensic Science, American Academy of Forensic Science and the International Association for Identification.

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## MEMBERS OF THE BOARD

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Lieutenant Joseph E. Barry North Regional Lab New Jersey State Police Department Little Falls, New Jersey

Dr. Robert C. Briner Regional Crime Lab Southeast Missouri State University Cape Girardeau, Missouri

Mr. Cordell G. Brown Chief Forensic Chemist Bureau of Investigation Denver, Colorado

Mr. Thomas A Easterling Commander Laboratory Unit Kentucky State Police Frankfort, Kentucky

Mr. Theodore R. Elzerman Bureau Chief Bureau of Scientific Services Department of Law Enforcement Joliet, Illinois

Mr. Don Flynt Chief Chemist Oklahoma State Bureau of Investigation Crime Lab Oklahoma City, Oklahoma Dr. Larry B. Howard Director Georgia Crime Laboratory Georgia Bureau of Investigation Atlanta, Georgia

Mr. George Ishii Director Western Wasnington Regional Crime Lab Seattle, Washington

Mr. Anthony Longhetti Laboratory Department San Bernardino County Sheriff's Department San Bernardino, California

Dr. Carl J. Rehling Director Alabama Department of Toxicology and Criminal Investigation Auburn, Alabama

Mr. Eldon Straughan Manager of Laboratories Texas Department of Public Safety Crime Laboratories Austin, Texas

## MEMBERSHIP COMMITTEE REPORT

Source: Mr. Edward Whittaker, Chairman Supervisor Crime Laboratory Bureau Dade County Sheriff's Dept. 1320 Northwest 14th St. Miami, Florida 33125

Presently, there are 213 members of the ASCLD, and in 1977, the Society gained 41 new members and lost 23. Almost all state and local crime laboratories in the United States are now represented in the Society.

The new chairman is Eldon Straughan, Manager of the Texas Dept. of Public Safety Crime Laboratories in Austin, Texas. Committee members include John Klosterman, Director of the Eastern Ohio Forensic Laboratory in Youngstown, Chio, Duayne J. Dillon, Chief of the Criminalistics Lab of the Contra Costa Co. Sheriff's Office in Martinez, California, and Edward Whittaker.

Those desiring membership should contact Mr. Travis Owen for applications at the following address:

Director Acadiana Criminalistics Lab P. O. Box 643 New Iberia, Louisiana 70560

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## CRIMINALISTICS CERTIFICATION

## COMMITTEE REPORT

Mr. Don Flynt, Chairman Source: Chief Chemist Administrative and Technical Division Oklahoma State Bureau of Investigation Crime Lab P. O. Box 11497 Cimarron Station Oklahoma City, Oklahoma 73111

#### FINDINGS

Regional/Professional Associations Polled	Participants
Association of Firearms and Toolmark Examiners	Richard Janel
California Association of Criminalists	Jan S. Bashin
Mid-Atlantic Association of Forensic Scientists	Anthony A. Ca
Mid-Western Association of Forensic Scientists	Robert A. Boe
Northeastern Association of Forensic Scientists	Thomas A. Kub
Northwest Association of Forensic Scientists	Kay M. Sweene
Southern Association of Forensic Scientists	James E. Hall

## Janelli Bashinski A. Cantu . Boese . Kubic weeney Halligan, Jr.

#### 1. FINDINGS

Representatives of the above regional/professional associations communicated and exchanged information with one another prior to the completion of questionnaires which were mailed to their respective memberships, following the April meeting.

#### DISCUSSION

In the interests of gathering information on the relevant feelings of the total criminalistics community regarding certification, an attempt was made to coordinate as much of the information sought as possible. The various regional association representatives did not feel that a completely uniform national questionnaire was practical at that time because of the varying levels of certification study in the different regions up to that time.

Committees to assist in the investigation of certification have been established or are in the process of being established in each regional association and AFTE.

At the third meeting of the Criminalistics Certification Study Group held at the Chicago Police Department, Criminalistics Division on September 30 - October 1, 1977 the respective questionnaire findings were critically compared. The other Criminalistics Certification Study Group members present who participated in the deliberations were:

California State University at Los Angeles

American Society of Crime Laboratory Directors

W. J. Cadman Chairman of Study Group

Donald A. Flynt

Willard C. Stuver

Richard S. Frank

Francis D. Silas

Walter C. McCrone

Shelton F. Payton

Dade County Crime Laboratory

Drug Enforcement Administration, U.S.

Federal Bureau of Investigation, U.S.

McCrone Research Institute

Canadian Society of Forensic Scientists

#### Non-voting participants:

The Forensic Sciences Foundation, Inc.

The Forensic Sciences Foundation, Inc.

American Academy of Forensic Sciences

Joseph L. Peterson Executive Director

Robert D. Albro Special Assistant to the Director

Kurt M. Dubowski Profession-Wide Coordinator of Certification Activities

#### 2. FINDING

The majority of the individuals polled by all of the above regional groups and AFTE agree with the concept of national, voluntary, peer group certification.

#### DISCUSSION

Over 600 members of the above associations responded to the respective questionnaires. Of those responding approximately 78% were in agreement with the above finding. The favorable vote by the associations ranged from a low of 65% for the concept to a high of 93%.

#### 3. FINDING

The overwhelming majority of the members of the organizations polled felt that the Criminalistics Certification Study Group should continue to study the feasibility and desirability of certification.

#### DISCUSSION

Approximately 88% of those responding favored the composition and continuance of the study group. The favorable responses to the respective questionnaires ranged from a low of 67% to a high of 98%.

#### 4. FINDING

The majority of the individuals polled were in favor of their associations continuing to be represented on the study group to insure input and dissemination of information.

#### DISCUSSION

Associations which included such a question on their questionnaire found that the membership favored representation on the study group even if it meant their own association would have to provide travel funds to send their representatives to meetings of the group.

#### 5. FINDING

Gauging by the results of the regional association questionnaires, the study committee determined that it was unneccessary at this time to issue a national questionnaire.

#### DISCUSSION

In the interest of avoiding repetitive, time consuming (for those answering) questionnaires, it was decided the committee had gathered sufficient information for this stage of the study.

All committee members plan to meet with their respective memberships in internal committees both to inform them of progress made by the study committee and to solicit additional study input.

#### 6. FINDING

Data from the questionnaires indicated there was no possible agreement on how to group types of physical evidence examinations by disciplines, therefore the most practical approach at this time is not to group by specialties (disciplines) but rather to certify by type of physical evidence examinations.

#### DISCUSSION

Data show it is difficult to assign specific examinations to a specific discipline or specialty, therefore it was much more practical to utilize the types of physical evidence examinations, e.g., one questionnaire showed that semen examinations were conducted by a firearms specialist in the laboratory. There were many less extreme examples of an incongruous nature in other specialties. The disciplines are not clearly delineated.

#### 7. FINDING

There is agreement that all examiners should possess the same minimum qualifications for each type of physical evidence examination.

#### DISCUSSION

Approximately 76% of respondents queried supported the proposition that all individuals engaged in the examination of specific physical evidence types should possess the same minimum qualifications. Therefore both "generalists" and "specialists" engaged in the examination of a type of physical evidence for the same property would be expected to meet the same minimum standards.

For example, it was suggested at this time that those persons engaged in the typing of blood by the ABO system only, could be certified to perform that level of analysis.

#### 8. FINDING

If the concept of national voluntary peer group certification is found to be feasible and desirable for the purposes of initiating a criminalistics certification program it will probably be necessary to "grandparent" qualified individuals with the condition that these persons be required to pass an examination within a specified (three years) period of time.

#### DISCUSSION

Associations which included one or more questions on the subject found that "grandfathering" based on some combination of experience, education,

publications, reputation, and contributions to forensic science was acceptable when followed by those persons being required to pass the same examination as other non-grandparented individuals by a specified date. The vote of those responding favorably was 71 - 77%.

#### 9. FINDING

The Certification Study Group is supportive of and wishes to maintain liaison with the American Society of Crime Laboratory Directors (ASCLD) voluntary peer group laboratory accreditation study committee (Laboratory Evaluation and Standards Committee).

#### DISCUSSION

The laboratory accreditation study is related to the certification study. It is considered that both efforts are complementary and probably desirable in the public interest if found to be feasible and acceptable.

#### BENEFITS OF A POSSIBLE NATIONAL PROGRAM OF CERTIFICATION IN CRIMINALISTICS

NEED: A lack of adequate educational and training facilities has led to on-the-job training as the major means of acquiring the necessary skills for professionals in criminalistics. Unfortunately, very high case loads, lack of trained personnel and other pressures have lowered the effectiveness of such training efforts. As a result in-house and other proficiency testing programs have increasingly revealed a need for some means of improving the training of professionals in all the diverse fields of criminalistics. A National program of certification seems to hold the greatest promise for:

- 1. defining an acceptable level of professional practice,
- 2. pin-pointing the need for training,
- 3. guiding the training effort,
- 4. monitoring individual progress,
- 5. recognizing the abilities of gualified personnel.

DEFINITION: Certification is defined as a voluntary process of peer-review whereby a practitioner is recognized as having accumulated the qualifications necessary to practice in one or more particular disciplines of criminalistics. The objectives of certification are:

- 1. to define an acceptable level of professional practice,
- 2. to guide professionals in the attainment and maintenance of an accepted level of competence,
- 3. to provide a means of evaluating the competence of practitioners,
- 4. to provide a formal process for the recognition of <u>practitioners</u> who have met an accepted level of competence.

<u>Criminalistics</u> is that profession and scientific discipline directed to the recognition, identification, individualization and evaluation of physical evidence by the application of the natural sciences to law-science matters.

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BENEFITS: The Criminalistics Certification Study Committee representing the major professional organizations within the field of criminalistics drew up a list of potential benefits for a possible certification program during its April 27-28 meeting in Chicago. This list may aid in the setting of goals and objectives of a possible National program for certification should such be deemed acceptable and feasible by a majority of the practitioners in the fields of criminalistics. The benefits of a voluntary peer-group National certification program are both direct and indirect, short and long-term, practical and philosophical. In an overall sense the benefits of the program can be expressed as:

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- 1. improvement in the administration and quality of civil and criminal justice,
- 2. progress toward nation-wide equality of performance in the examinations, analysis and interpretation of physical evidence.

These are further benefits for the active professional:

- 3. increased availability of training and education opportunities,
- 4. setting of goals for professional development,
- 5. definition of limits in capabilities of personnel and laboratories,
- 6. improved methods for the collection, study, characterization, identification and comparison of physical evidence,
- 7. increased proficiency in the application of the above methods,
- 8. defining an acceptable level of professional competence,
- 9. recognition of individual attainment of professional competence,
- 10. ensure that certification is carried out by peer-group evaluation in each of the diverse disciplines of criminalistics.
- 11. improved qualification for, and confidence in, court appearances,
- 12. enhanced recognition of criminalistics as a profession.

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The laboratory administrator will benefit from the greater proficiency of his personnel but other tangible benefits include:

- 13. pin-pointing areas of need, both in equipment and personnel capability,
- 14. aid in justification of funding for training, equipment, increased salaries and filling positions,
- 15. assure the administrator that certification is done by active practitioners in criminalistics.

Finally there will be benefits to the educational and training system and to the judiciary:

- 16. guidance in the planning and implementation of educational and training programs adequate both in number and scope,
- 17. improved understanding by the legal profession, the judiciary and the public of the capabilities and limitations of expert witnesses in the field of criminalistics.

## RESEARCH AND DEVELOPMENT COMMITTEE REPORT

Source: Mr. Robert B. Johnson, Acting Chairman Crime Laboratory Director Birmingham Police Department 710 N. 20th St. Birmingham, Alabama 35203

A report on the progress of the Forensic Science Research and Training Facility at the FBI Academy was presented to the group by Tom Kelleher, Jr., Assistant Director, FBI Laboratory, and Dr. Glenn McWright. A resume of Mr. Kelleher's remarks is as follows:

Late in the spring of 1977, Congress took a renewed interest in the Forensic Science Research and Training Facility set out in the FBI FY-'78 budget and appropriated \$100,000 for the design and planning of the building. This appropriation became available on Oct. 1, 1977, and planning is expected to get under way after the first of the year. The FBI has budgeted \$3.5 million in FY-'79 to construct the building, and .5 million in the FY'80 budget to furnish and equip the building. The projected time-table is as follows: 1978-design and planning; 1979-construction: expected to be completed in September, 1980. The contracts for the furnishings and equipment will be let in 1980, and the facility is expected to be ready for use in early 1981.

<u>Goals and Objectives:</u> The projected building will contain approximately 40-45,000 square feet and will be slightly smaller than the present classroom building. It will be functionally divided between training and research and will contain a teaching amphitheater with a seating capacity of 250. The facility is to be built in the area near the present classroom building. It will be attached to the complex by corridors similar to those in the other areas of the Academy.

The training area will be used to conduct classes in forensic science disciplines on the order of those presently being offered by the Academy, with "hands-on" laboratory work in the schedules. The laboratory modules will serve both as teaching labs for the various courses, as well as models for the type of facilities and equipment needed to carry out particular kinds of criminalistics laboratory work.

In the research area, the FBI expects to move their research staff presently housed in the Hoover Building to Quantico to serve as a nucleus and continuing staff for the facility. Offices and laboratories are planned for them as well as for research fellows to be brought into the facility from over the country to develop new criminalistics concepts and technology. The FBI presently has 13 people working on 20 projects, most of which are directed toward advancing the horizons of criminalistics rather than "in-house" projects. Monies are expected to be provided for fellowships or grants-in-aid to fellows for travel and off-campus housing.

Ongoing policies and policy administration of the facility will be by a board composed of FBI Laboratory personnel, other federal personnel and members from state and local laboratories. This board will be similar to the board of CLIS.

Because the major thrust of the committee since its inception has been in the direction of fostering the establishment of a Forensic Science Institute, and now that this goal is within reach, but several years until fruition, we took a fresh look at our position as a We felt that we could best serve the crime laboratory committee. community by: 1) making ourselves available for whatever input we could have on the Institute, which for the present is a passive function, but in preparation, we should: 2) Keep abreast of research in the five areas previously delineated as the areas of most pressing need. 3) Keep abreast of all research in the forensic science field, bearing in mind that the climate of the community is subject to change. 4) To begin inquiry into private and public foundation funding for research, and to compile a list of possible sources of funding, concentrating on the concept of "acorn grants" to take care of the needs in the interim period, with the possibility that they later be tied into the Institute when it becomes functional.

In order to accomplish our goals, we: 1) Appointed a subcommittee under the chairmanship of Dale Heideman, Tallahassee, to compile a list of foundations which might be sources of funding, and to draft letters to be presented to the board at the St. Louis meeting in February to make an official inquiry through the board. 2) To undertake a second survey of research; this study to be made during the late spring or summer of 1978, in order to make recommendations for directions of research the Institute should take, and to make efforts to support study of such research during the interim. Heideman was instructed to choose members of his subcommittee needed to carry out his mission. No one was designated to undertake the survey-project.

Of the five areas in which we proposed to write and publish "state of the art" papers, three have been presented and published through the CRIME LABORATORY DIGEST:

- 1. Hair and Fibers--Aaron Rash, North Dakota.
- 2. <u>Technology of Arson Evidence</u>--Irving Stone and John Lomonte, Southwest Institute of Forensic Sciences, Dallas.

#### 3. Detection of Gun Powder/Gun Powder Residues-- Charles Midkiff, Jr., ATF Laboratories, Washington, DC.

A fourth paper on body fluid stains was presented orally to the committee last May at Quantico, but as of yet, has not been written or published.

A fifth paper on glass, including statistical techniques, has not been heard from.

Richard Fox, Ventura, California, presented the paper on blood and body fluids; Dr. Irving Stone, Southwestern, Dallas, volunteered the paper on glass. A sixth paper on toxicology was volunteered but as of yet has not been presented. We recommend that the authors of the unpublished papers be contacted to see if publication can be implemented.

Inasmuch as we find that we are constantly adding new members to the committee, and are often in a position of "reinventing the wheel" in order to keep the whole committee informed, Aaron Rash volunteered to act as secretary and furnish each member with a package of the past papers and reports.

Other members of the Research and Development Committee: Aaron Rash, Eugene Shultz, Robert Johnson, Phillip Whittle, Dale Heideman, H. M. Irvin, David Nydam, and Ronald Taylor.

## EDUCATION AND TRAINING COMMITTEE REPORT

Source: Mr. Cordell G. Brown, Chairman Chief Forensic Chemist Colorado Bureau of Investigation Laboratory 2002 Colorado Blvd. Denver, Colorado 80222

The Education and Training Committe members met at the FBI Academy with nine educators from colleges and universities around the United States that presently have active Forensic Science programs.

The invitation to attend the Fifth Annual Symposium on Crime Laboratory Development extended to the members of the Academy by the FBI proved to be very productive.

The Committee feels that the establishment of a formal accreditation procedure for post secondary criminalistic education programs would be too expensive and require resources not presently available to the ASCLD.

Mr. Kenneth Joseph, Assistant Director of the FBI, and W. Jack Cadman explained the structure and functions of the Academy of Criminal Justice Sciences, an organization responsible for accreditations of Criminal Justice Education programs. The ACJS is interested in accreditation of forensic science programs at this time. One important provision is that the on-site visitation teams will consist of scientists acquired primarily from the forensic science academic community.

Based on this information the committee agreed that the ACJS was in a much better position to provide an accreditation program than the ASCLD. Upon recommendation from the committee, Jack Cadman was requested to serve as the official representative of the ASCLD on the ACJS Accreditation and Standards Committee. The following guidelines for accreditation were developed:

#### OVERALL OBJECTIVES OF ACADEMIC PROGRAMS IN FORENSIC SCIENCE

<u>Accreditation and Qualification of Faculty</u> – As plans for the accreditation of forensic science programs through the ACJS materialize, the following quidelines for baccalaureate and graduate level programs can serve as reference material. The quality of the program and the quality of the faculty will be given consideration by any accreditation committee.

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#### Objectives -

- 1. Education of future practitioners.
- 2. Advance knowledge through basic and applied research.
- 3. To be concerned with the long term development of forensic science as a profession.

A sound academic base is essential for growth and development of a profession.

Baccalaureate Programs - Undergraduate preparation in forensic science should have the following goals:

- 1. A sound foundation in the analysis and interpretation of physical evidence.
- 2. A sound foundation in the natural sciences.
- 3. Preparation for graduate studies.

A curriculum which represents these goals should include the following types of courses:

- I. <u>General Background</u> (Courses with laboratories appropriate for upper level electives in the desired discipline.)
  - A. Chemistry general, analytical, organic.
  - B. Biological Sciences.
  - C. Physics.
  - D. Math calculus, statistics.
- II. Specialized Background
  - A. Forensic Sciences -
    - 1. Fundamentals of microscopy (with laboratory).
    - 2. Laboratory courses in the analysis and interpretation of a wide variety of physical evidence types.
  - B. Criminal Justice -
    - 1. Criminal law and procedure.
    - 2. Criminal investigation.

#### III. Recommended Courses

- A. Physical chemistry.
- B. Materials science.
- C. Internship.
- D. Administration of criminal justice.

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<u>Graduate Programs</u> - At the masters level, preparation is desired toward generating an understanding of the role of forensic science in problems of law and proof. It is anticipated that masters candidates will have a baccalaureate degree in either forensic science/criminalistics or a natural/physical science. Recognizing the diversity of student backgrounds, a masters program in forensic science should have the following goals:

- 1. Provide an opportunity for a student to develop depth in a scientific discipline related to forensic science.
- 2. Broaden the students existing foundation in forensic science.
- 3. Guide and evaluate the students capacity for independent study.
- 4. Preparation of the student for practice in the crime laboratory.

Implementation of the above goals will require:

- 1. A curriculum which will be flexible enough to satisfy the program objectives.
- 2. A course of independent study as exemplified by a masters thesis.
- 3. Formalized contact with the profession as exemplified by an internship.

The doctorate degree is a research degree which can lead to a career in teaching, research, and/or practice.

The committee held an open discussion wherein the laboratory directors and the forensic science educators developed a set of guidelines concerning the requirements for the internship portion of an academic program.

#### A. Purpose -

An internship serves as an integral portion of the overall educational process and provides real-world contact and experience. The laboratory, the student, and the educational program all benefit from this interaction. It allows the laboratory to evaluate the various educational programs and their products. Also the laboratory gets a chance to obtain assistance for in-house project work and with direct contact with future employees. The student gets the opportunity to integrate the analytical processes with the legal ones, a necessary step in his professional

development which cannot be provided outside of a working laboratory. He will also develop a work reference from someone in the field. The program receives an evaluation of itself from both the laboratory and the student. In this manner adjustments can be made to reflect changes in needs.

The following is a list of expectations concerning the student and the host laboratory:

B. Student -

- 1. Will have an adequate background in forensic science.
- 2. Will not get involved in the evidentiary chain.
- 3. Will rotate throughout the entire laboratory on a mutually agreed upon schedule.
- 4. Does not expect to be paid.
- 5. With approval, will work on a project of some sort the host's projects will have priority.
- 6. Will complete an evaluation for the educator and/or laboratory.
- 7. Expects to undergo some kind of background check.
- 8. Is liable for his own actions.

#### C. Laboratory -

- 1. Develops details of internship with student prior to beginning date.
- 2. Will allow access to analytical area of the laboratory.
- 3. Will check out student on each type of instrument.
- 4. Will give an evaluation to student and to educator (A student evaluation form is being developed by the committee and is available upon request).
- 5. May terminate relationship at any time.
- 6. Will give assistance in finding housing.

Many of the forensic science educators do not have laboratories in their areas that are able to accept interns. In order to set up a clearinghouse for information on internship openings, those laboratories interested in participating in this type of educational program are requested to send the following form or a copy to: Cordell G. Brown, Colorado Bureau of Investigation, 2002 South Colorado Blvd., Denver, CO 80222.

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Under the section "constraints" please list such things as the nature of background check, time of year preferred, areas where your laboratory has particular expertise, liability requirements, or other pertinent conditions which must be met.

#### ASCLD - Education & Training Committee Internship Clearinghouse

Name Address Phone

ess	Degree Restriction	Other Constraints	Have Had Interns Before
	BS only BS/MS		
	MS only		

The forensic science educators requested that the members of the ASCLD use the CRIME LABORATORY DIGEST as a central clearinghouse for employment opportunities on a wider scale than is presently being practiced.

At the present time there are approximately 400 forensic science programs in the colleges and universities of the United States. The Education and Training Committee is attempting to determine how many of these programs provide degrees in Criminalistics. The following list identifies the Professors and Laboratory Directors that the Education and Training Committee knows are actively involved in Criminalistic educational programs. As more of these programs are identified, they will be published in the CRIME LABORATORY DIGEST.

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Dr. Robert C. Briner Regional Crime Laboratory Southeast Missouri State University Cape Girardeau, Missouri 63701

Mr. W. Jack Cadman Professor Criminalistics California State University at L.A. 5151 State University Drive Los Angeles, California 90032

Dr. Michael Camp Northeastern University Boston, Massachusetts 02115 Dr. Robert Fraas (Eastern Kentucky University) Fountain Circle, Route 4 Richmond, Kentucky 40475

Mr. Dennis G. Hahn Administrator Pittsburgh & Allegheny County Crime Lab Jones Law Annex 311 Ross Street Fittsburgh, Pennsylvania 15219

Dr. Charles R. Kingston (John Jay College) #6 Surrey Close White Plains, New York 10607

Dr. Henry C. Lee Division of Criminal Justice University of New Haven West Haven, Connecticut 06505

Dr. William W. McGee, III Director Forensic Science Program Florida Technical University Post Office Box 25,000 Orlando, Florida 32816

Professor Joseph D. Nicol (University of Illinois, 23 West 165 Hillview Drive Chicago Circle) Naperville, Illinois 60540

Dr. Charles O'Rear George Washington University Washington, D.C. 20006

Dr. Brian Parker (California State University, Sacramento) 5117 Ridgegate Way Fair Oaks, California 95628

Dr. George Sensabaugh Assistant Professor Forensic Sciences Earl Warren Hall University of California, Berkeley Berkeley, California 94720 Mr. Irvin C. Stone Chief Physical Evidence Section Southwestern Institute of Forensic Sciences Box 35728 Dallas, Texas 75235

Professor Ralph Turner College of Social Sciences School of Criminal Justice Michigan State University East Lansing, Michigan 48824

Mr. Jay Segal Metropolitan State College Department of Chemistry 1006 11th Street Denver, Colorado 80204

Other members of the Education and Training Committee: Robert Briner, W. Jack Cadman, Jerry Chisum, Robert Cooper, Dennis Hahn.

## LAW ENFORCEMENT LIAISON

## COMMITTEE REPORT

Source: Lt. Joseph E. Barry North Regional Laboratory New Jersey State Police Dept. Little Falls, New Jersey 07424

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Since the formation of ASCLD, this committee has made repeated attempts through all available medias to IACP indicating ASCLD's interest in working with IACP in keeping police administrators informed as to the cost value effectiveness of the crime laboratory to the Police Chief.

During the past year the Law Enforcement Liaison Committee in cooperation with IACP was successful in presenting an ASCLD paper at the annual IACP Conference held during October 1977 at Los Angeles, California.

The Forensic Program was presented in conjunction with a cooperative effort on behalf of ASCLD and the Forensic Sciences Subcommittee of IACP. Mr. Jack Cadman, ASCLD Member Emeritus, California State University at Los Angeles presented a paper on behalf of ASCLD entitled "How To Get The Most Out Of Your Crime Laboratory." This program was well received by those IACP members who attended.

It is the goal of this committee to develop an on-going program with IACP so that a crime laboratory program can become part of the Annual IACP Conference.

Plans are underway in conjunction with the Forensic Sciences Subcommittee of the IACP to formulate a program for the IACP Conference to be held in the fall of 1978 in the City of New York. This program will be planned with the assistance of those crime laboratories geographically located in the New York City area. Further progress on this program will be reported at the American Academy Meeting in St. Louis following meetings to be held with the concerned laboratories and the Forensic Science Committee of IACP.

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## LEGISLATIVE COMMITTEE REPORT

Source: Mr. Theodore R. Elzerman Bureau Chief Bureau of Scientific Services Department of Law Enforcement 515 E. Woodruff Road Joliet, Illinois 60432

Following is a listing of Laws, Rules and Decisions of interest to crime laboratories. Copies may be obtained by writing Theodore R. Elzerman, Bureau Chief, Bureau of Scientific Services, Department of Law Enforcement, 515 E. Woodruff Road, Joliet, Illinois 60432.

All ASCLD members are requested to submit goals and standards or state master plans on forensic science to the committee chairman so that a readily accessible file will be available upon request to interested individuals.

The committee appreciates the efforts of those who have provided information for the following list.

A. Laws and Bills

- 1. Establishment of Labs, etc.
  - Alabama 1935 Law establishing the State Toxicologist and laboratory. Revised 1939 and 1951.

Florida 1974 Statute 943.31-37 Enlarging statewide crime laboratory system and outlining duties thereof to serve the state better.

- Michigan 1909--Act No. 122. Establishing the state bacteriologist, who would also do examination and analysis in matters of criminal nature, when requested, for a fee.
  - 1942--State crime detection lab established under state department of health.

1952--Established lab in Kent County.

- Virginia 1972 Law establishing Bureau of Forensic Science within Division of Consolidated Laboratory Services and detailing Bureau functions.
- Iowa Chapter 7, Paragraph 49a--Establishing state criminalistics laboratory and medical examiner.

Wisconsin Establishing crime lab in state of Wisconsin, Chapter 165, Sub-chapter 3, Department of Justice.

#### 2. Related to Drugs and Marijuana

New York Has compiled laws in a booklet "Study Guide for Criminal Justice Personnel-Drug Abuse Control Program"--Lists degrees of offense--how much in possession is what offense, etc.

New penalties and laws concerning drug offenses and outlining lesser penalties for those already convicted. N.B. 300 effective July 1, 1976 defines weights of bulk amounts of controlled substances. Defines marihuana as genus Cannabis instead of Cannabis sativa L. Includes a drug chart defining penalties of H.B. 300 and listing specified offenses requiring mandatory sentences.

Illinois Controlled Substances and Dangerous Drug Act (Chapter 56.5) of Illinois Revised Statutes. Pertains to marijuana and identifies the drugs which are in violation of law, lists weights and penalties prescribed for possession and delivery.

#### 3. Related to Alcohol

Ohio

New York Chemical Analysis for blood, urine, breath or saliva is defined and described by law.

New York Article 31, Paragraph 1192 pertains to operating motor vehicle while under influence of alcohol or drugs.

#### 4. Funding

California Bill proposed to fund state lab through fees for chemical analysis for drinking and/or drug driving offenses. 1975

#### 5. Evidence Destruction

- California 1974. Authorizes public laboratory to destroy without a court order any amount of a controlled substance over 10 pounds after analysis of random samples.
- Arizona 1975--allows destruction of excess of 10 pounds of marijuana from a larger amount seized after selecting a random 10 pounds to analyze.
- New York Penal Code, Section 400.05 Regarding destruction of weapons and dangerous instruments.
- New York State Article 715. Destruction of dangerous drugs. Outlines procedures for the destruction of dangerous drugs

Providing that certain ammunition and firearms shall be deposited with the State Criminalistics Laboratory.

#### 6. Expert Witness--Testimony Reports

Towa

Nevada Bill proposed 1975 and referred to judiciary committee, to allow expert witnesses to submit affidavits to court identifying controlled substances.

Virginia Paragraph 19.2-187 allowing certificates of analysis to be admitted as evidence.

New York Section 180:60 Reports of experts and technicians admissable in felon hearing to same extent as in Grand Jury. Section 190:30 Grand Jury may receive a report or copy of a report by a public servant (chemist, firearms, examiner, Q.D. examiner, other expert) as evidence of facts stated therein.

- Wisconsin Department of Justice 165.79 Section 3-Allowing submission of a report of lab findings to be received at any preliminary examination without the examiner being present.
- New York Article 240 Discovery. Outlines procedures to be followed for making available to the defense, evidence which will be used by the prosecution, in criminal proceedings.

Louisiana 1976 Act, Certification of Analysis of Evidence from Criminalistics Laboratories.

7. Training

Virginia 1975 Amendment Papragraph 32-31.5:2 Establishing (effective July 1, 1976) a Forensic Science Academy to train law enforcement agencies in collection and preservation of evidence.

#### 8. Availability to Defense

Virginia 1972 Bureau of Forensic Science shall also do examinations for the defense.

#### B. Rules of

#### 1. Evidence and Procedure

Illinois Rules of evidence prescribed by the Illinois Supreme Court--outlining what must be made available by the prosecution and defense in criminal proceedings. Chapter 110 A, p. 414. Missouri St. Louis County Operation Procedures--outlining function of lab, evidence reception, examination reporting results, disposition, testifying, operation of equipment, training.

Washington Rules of Court concerning what must be made available by prosecution and defense in criminal proceedings.

Iowa Rules relating to criminalistics laboratories effective December 16, 1971. Outlines capabilities of laboratory as well as evidence submission procedures, report distribution, evidence destruction.

Federal Rules of Evidence--Effective July 1, 1975. Public law 93-595. Establishes rules of evidence for certain courts and proceedings. Rules apply to actions, cases and proceedings in the courts of the United States to secure fairness in administration, elimination of unjustifiable expense and delay, and promote the growth and development of the law of evidence, to the end that the truth may be ascertained and proceedings justly determined.

#### 2. Chain of Custody of Evidence

Department of Alcohol, Tobacco and Firearms Memo 1972 concerning chain of custody of evidence.

- New York Nassau County Police Department. 1973-74 Commissioner's order--security procedures for handling controlled substances.
- 3. Regulation of Alcohol Analysis Procedures

California Booklet "Regulations Relating to Forensic Alcohol Analyses". Requirements for labs, licensing, training, collection, handling, analysis methods, analysis requirements, records.

#### C. Decisions

1. Alcohol Analysis--D.U.I.

People vs. Must preserve breathalyzer samples, blood, Hitch 1974 urine, gas chromatograph samples until cases are disposed of and appeal period runs. (California)

#### 2. Reports and Evidence Available

People vs. Johnson 1971 Defendant charged with selling or possessing dangerous drugs should have access to reports on scientific tests before trial. (New York)

3. Marijuana

People vs. Riddle 1975

Michigan Court of Appeals affirmed that all three marihuana "species" are intended to be included in the state statute defining marihuana as Cannabis sativa L.

People vs. Mayberry People vs. Hurley

Illinois Appellate Court November 1975 Docket No. 47495, 47640 Classification scheme for weight and penalty are not unconstitutional merely because they are based on the amount of "substance containing" the cannabis or controlled substance rather than upon the pure cannabis or controlled substance.

State of Washington vs. Mike Dougall

Valium (diazepam) placed under Controlled Substance Act by Board action because it was so designated in the Federal Register. Court holds that portion of Washington Law unconstitutional delegation of legislative authority.

4. Preservation of Evidence

State of Washington vs. A. J. Wright

Supreme Court #43797 Duty of Prosecutor to preserve all evidence.

Other members of the Legislative Committee: Frank Feeny, Alan Gilmore, Michael Rehberg.

## LABORATORY ACCREDITATION PLANNING

### COMMITTEE REPORT

Source: George Ishii, Chairman Director Western Washington Regional Crime Laboratory Public Safety Building Seattle, Washington 98104

The Laboratory Accreditation Planning Committee produced a rough draft for accreditation procedures and requirements. The main purpose of the rough draft is to seek input from the ASCLD membership. We have already received many comments and hope, after the stimulating discussions during the Symposium, to receive even more.

The committee anticipates reviewing the submitted comments, rewriting the draft, and placing before the general membership a final proposal in October 1978. The scheduling of these activities will be strongly dependent upon the ability of the committee to meet during the interim to discuss and modify the draft. If circumstances allow, the committee will test the final proposal in several laboratories of various size and makeup before presentation to the ASCLD membership.

If any member has not received a copy of the draft, please contact;

Dr. Joseph L. Peterson, Executive Director The Forensic Sciences Foundation, Inc. 11400 Rockville Pike Rockville, Maryland 20852

Finally, anyone who has any opinion or concerns regarding the draft, please submit them as soon as possible so that they can be properly considered by the committee.

Other members of the Laboratory Accreditation Planning Committee: Jack Cadman, John Klosterman, Tony Longhetti, Tom Mueller, Carlos Rabren, Charles Rorke, Russ Tye, and Mike White.

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## MANAGEMENT COMMITTEE REPORT

Source: Dr. Carl J. Rehling Director Alabama Department of Toxicology and Criminal Investigation Box 231 Auburn, Alabama 36830

The process of crime laboratory management presents a definite need to know the work load and laboratory performance in meeting responsibilities and objectives. Accordingly, the necessary laboratory data must be compiled, processed and analyzed to provide tools for management to meet administrative and operational needs.

Toward this goal the Management Committee has developed a modest work-load report form and we invite general ASCLD membership participation in the use of it. After considerable effort and a trial run by some committee members, a consensus produced what is regarded as a useful Work Load Report Form that would be suitable for reporting and comparing data for crime laboratory management use. To this end the Uniform Crime Reports numbers were used to better relate our efforts to this widely used coding of offenses by law enforcement agencies.

It is recognized that some laboratories presently compile and use a more detailed collection of data in house than is here presented, while some smaller laboratories may keep less. However, the Committee felt that the developed form was a reasonable compromise suitable and applicable for the entire membership, even though some may find a bit of adjustment of data necessary to suit the format. Accordingly, the kinds of data here listed are viewed as minimal for crime laboratory activity and management.

Your attention is especially invited to the footnotes appearing as further clarifications for each of the three tables of the form. The second table entitled WORK UNITS BY LABORATORY ACTIVITY should be utilized according to the structure of your laboratory's activities. If several services are combined and rendered under the title of one laboratory activity, e.g., Criminalistics, the work units need not be subdivided. No attempt should be made to estimate the number of cases Growth of case load and technical laboratory staff for such activity. may later make such further division of activities desirable, for It is felt that this form will example, through more specialization. reflect work in each area of laboratory activity to better identify man power use.
Table III was further simplified to include any and all court activity as a single entity since the objective is to identify technical employee time spent in the courts. Where more detailed data on court activity is desired, such may be kept for in-house use and the total here reported as single entries.

Initial use of the developed form is requested for 1977 calendar year data. The Committee asks your cooperation by completing and forwarding your report by April 1, 1978 to:

Ronald Kuest, Coordinator State Crime Laboratory System Washington State Patrol General Administration Building Olympia, Washington 98503

Ron has agreed to tabulate and make analyses of the reported data, which results will then be relayed to the membership. We believe this project has great potential for assisting crime laboratory directors in the Work Load Management area.

Membership comments and suggestions are invited to aid your Management Committee in designing the most useful and workable form to aid laboratory directors toward better work force efficiency. We are conscious of the need for brevity, which may be apparent, but this was considered necessary for general acceptance. Every laboratory director should feel free to compile whatever in-house data he feels is needed for his operations and for this project. The more fully this form is completed, the more useful will be the product for national use in management.

Certain terms commonly used for work load identification were considered important to define for purposes of standardization. After considerable attention to this matter the committee developed the following report:

# Work Load Identifier Definitions

1. CASE: An identifier of any submission of evidence related to a crime or other occurrence which has been uniquely identified by a submitting agency. In most instances a case will be a criminal violation under investigation and will involve all evidence related to that specific violation or incident under investigation.

2. EXHIBIT: An integral component of physical evidence within a case which was examined and individually specified in a laboratory report; e.g., a bullet or a bottle of 1,000 pills. The definition and identification of an exhibit depends upon the way the case is prepared, the evidence discovered, identified and submitted to the laboratory. The key words within the definition are "integral component", "was examined" and "individually specified in a laboratory report".

3. ITEM: A singular unit of physical evidence within an exhibit; e.g., a capsule out of a bottle of 1,000 capsules.

4. EXAMINATION: A process of analytical procedure applied to an item or a uniquely distinguishable aspect of an item which contributes to reaching a finding and may consist of one or more tests.

5. TEST: A physical measurement, reaction or observation for identifying some unique or discrete fact.

Other members of the Management Committee: Dr. David Kutob, Robert Dews, Ronald Kuest, Anthony Longhetti, D. M. Lucas, Warren Darby, Eldon Straughan, Henry Hack, James W. Brackett, Jr.

# ASCLD WORK LOAD REPORT FORM

DO YOU OBJECT TO PUBLICATION OF THIS REPORT? NO ( ) YES ( )

TYPE OF CASE (1)	UCR NO. (2)	COURT APPEAR- ANCES (3)	NOT REPORTED BEGINNING	RECEIVED	REPORTED (4)	CLOSED NO-EXAM	NOT REPORTED END
Homicide	01						
Rape	02						
Robbery	03						
Assault	04						
Burglary	05						
Larceny-Theft	06						
Auto Theft	07		а На				
Arson	09						
Forgery & Counterfeiting	10						
Fraud	11						· · · · · · · · · · · · · · · · · · ·
Embezziement	12						
Stolen Property	13		·				
Vandalism	14						
Weapons Sex Offense	15 17						
Other Than Rape Controlled Substances	18						
DWI (Alc. & Drugs)	21						
Liquor Violation	22			· · · · · · · · · · · · · · · · · · ·			
Kidnapping				<b>_</b>		<u> </u>	
Hit & Run	· · · · · · · · · · · · · · · · · · ·						
Other Traffic							
Game Laws					· · · · · · · · · · · · · · · · · · ·		
Other Criminal	26			ļ			L <u>.</u>
			NON CR	IMINAL			
Death, Non- Homicide							
Other Non- Criminal							
TOTALS							·

# NOTATIONS TABLE I

(1) CASE: An identifier of any submission of evidence related to a crime or other occurrence which has been uniquely identified by a submitting agency. In most instances a case will be a criminal violation under investigation and will involve all evidence related to that specified violation or incident under investigation.

(2) For multiple crimes use lowest UCR number to report. Refer to Uniform Crime Reports 1976, Appendix II, pp 302-303.

- (3) Number of cases in which there was court activity.
- (4) Cases the Laboratory Directors consider completed as of end of reporting period

LABORATORY ACTIVITY (5)	NOT REPORTED BEGINNING	RECEIVED	REPORTED		NOT REPORTED END	WORK FORCE BENCH YEARS (6)
A. Controlled sub- stances & Dangerous Drugs						
B. Toxicology						
C. Criminalistics		·				
D. Serology						
E. Firearms & Toolmarks						4
F. Documents						
G. Latent Prints				a a N		
I. Photography (7)						474 -
J. Other (8)						
TOPALS						

TABLE II. WORK UNITS BY LABORATORY ACTIVITY

# NOTATIONS TABLE II

(5) If your laboratory is not so structured by activities, report only under appropriate title listed; e.g., if your criminalistics unit also does serology, report only under criminalistics.

(6) Number of scientific or technical positions expressed as man years or fraction thereof for each functional laboratory activity.

(7) Where photography is a separate laboratory activity.

(8) Polygraph, voice print, accident investigation, art illustration, etc.

# TABLE III. COURT ACTIVITY FOR PERIOD (9)

			DID NOT	TOTAL
NOTIFIED	APPEARED	TESTIFIED	TESTIFY	TIME (10)
·				

# NOTATIONS TABLE III

(9) Includes all judicial proceedings. This may be different than the data in Table I. Table I counts only cases in which at least one court appearance was required. This Table counts all court appearances.

(10) Total time in 8 hour days, including travel time.

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