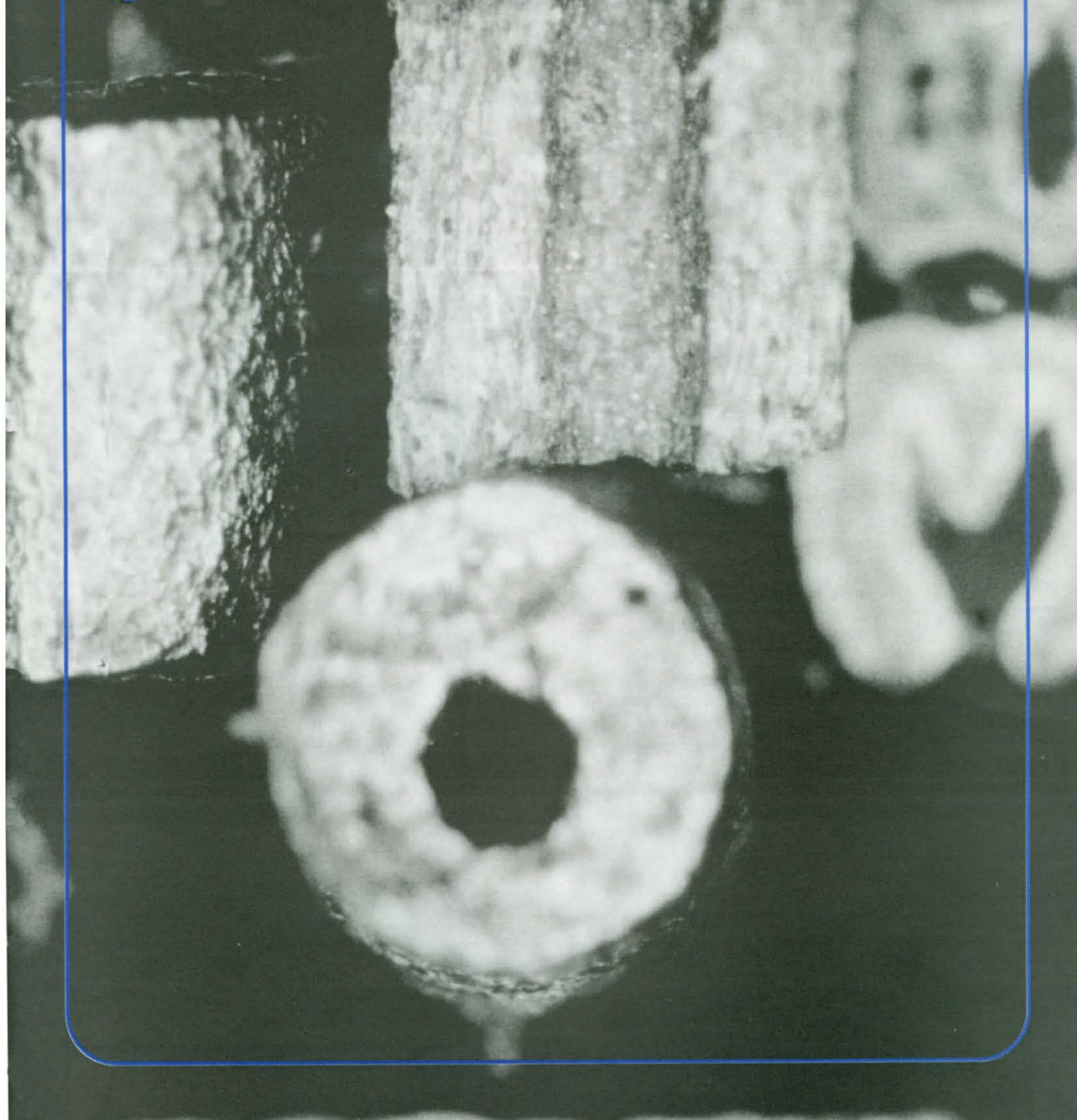


News of the California Association of Criminalists • Winter 1994

The CACNews



The President's Desk

The last quarter of 1994 has been an event-filled several months. The highlight of the fall was the joint meeting with the Forensic Science Society. The Los Angeles Sheriff's Department laboratories did a fabulous job as hosts of the meeting. The technical program was jam packed with presentations and workshops were full. The meeting was

a wonderful opportunity to meet new colleagues (many of whom we feel we know in some way having read their names so many times in journals), and to renew old acquaintances with old friends.

Your President-Elect, Carol Hunter, discussed with FSS President Viv Emerson the possibility of having our meeting proceedings published by the Journal of the Forensic Science Society. There was interest expressed among our

membership in such a publication and the Society is receptive to exploring the idea further. Details will be forthcoming.

For those of you who could not attend the banquet, the Forensic Science Society presented the CAC with a chain of office. It is truly a work of art. The CAC seal has been cut and engraved from a solid piece of sterling silver and parts of the seal are gilded. It hangs from a royal blue ribbon. The detail of the piece is exquisite, and as I remarked at the banquet, it will take all of my self-discipline to hand this over to Carol in May. What a beautiful and generous gift! We also announced the creation of a Young Scientist Award to be awarded annually. The FSS winner will attend a CAC meeting and the CAC winner will attend an FSS meeting in alternate years. Airfare will be sponsored generously by IBIS Corporation. Finally, to top the meeting off, the Forensic Science Society extended the invitation to the CAC for another joint meeting possibly as soon as the Spring of 1996, this time in the U.K. The Seminar Committee will be looking into the details of such a meeting.

On another front, the CAC submitted a written response to a request for input by the National Research Council's Committee on Forensic DNA Analysis. The NRC is considering the statistical evaluation and population genetics issues in the forensic use of DNA. In addition to the written response, the Association sent DNA Quality Assurance Committee Chairman Keith Inman to Washington, D.C. to represent our views to the Committee. You will find the CAC position paper and Keith's impressions of the day-long Washington meeting in this edition of your newsletter.

On behalf of the Board of Directors, I hope your happy holiday season was happy, and that a prosperous New Year brings you lots of interesting cases and successful Kelly-Frye hearings.




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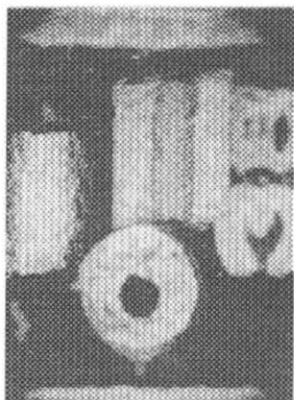
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The CACNews is published four times a year (January, April, July, and October) by the California Association of Criminalists, a non-profit professional society dedicated to the furtherance of forensic science in both the public and private sectors.



Departments



On the cover:

A closer look at a particle of smokeless powder. End view, side view and cutaway. Prepared by Edwin L. Jones, Jr.

Features



Brian Wraxall enjoys the Fall Seminar—More pix on page 10.

Technical Papers



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Notice to Contributors

This newsletter publishes material of interest to its readers and is pleased to receive manuscripts from potential authors. Meetings and course announcements, employment opportunities, etc. are also solicited. Advertisements are also accepted, although a fee is charged for their inclusion in The CAC News. Please contact the Advertising Editor for further information. Because of the computerized typesetting employed in The CAC News, we request that where possible, submissions to the News be made in the form of IBM or MS-DOS compatible files on 5.25 or 3.5 inch floppy disks (high or low density). Text files from word processors should be saved as ASCII files without formatting codes, e.g. bold, italic, etc. An accompanying hardcopy of the file may be submitted along with the disk to illustrate the author's preference for special emphasis. Graphics, sketches, photographs, etc. may also be placed into articles. Please contact the Editorial Secretary for details. FAX submissions are also acceptable. The FAX number for the Editorial Secretary is (408) 298-7501. The deadlines for submissions are: December 15, March 15, June 15 and September 15.

Dean Gialamas Selected for Kirk Award

The Awards Committee has selected Dean Gialamas as the Paul Kirk Award recipient for 1994. This annual award, designed to honor exceptional work by the newest members of the criminalistics profession, was presented to Dean at the Fall Seminar in Pasadena by President Gibbons. Dean earned a dual B.S. degree in chemistry and biology from the University of California at Irvine in June, 1992. That same month he was hired as a Criminalist at the California Laboratory of Forensic Science (Cal Lab) where he has since distinguished himself in both his work and his professional commitments. Dean has proved to be a valuable asset to Cal Lab in methods development and organization, including: Organizing MSDS / Chemical Safety Inventory, Developing the GSR Concentration Method, Improving the Arson Analysis Protocol, Organizing the Sexual Assault and Bloodstain Analysis Protocols for Accreditation, Developing the "SBSO IEF Multisystem"

Dean has also been very active in professional organizations, particularly the CAC. Dean has been a regular contributor to the CAC newsletter with such articles as: "Say 'Bye-Bye' to Frye" CAC Newsletter, Fall 1993, "Is It Gasoline or Insecticide?" "The Officer, His Weapon, and His Hands: An Empirical Study of GSR on the Hands of Non-Shooting Police Officers" "Testing the Test: The First Step Toward Accelerant Detection canine Certification in California" and he has been active behind the scenes with his input as: CAC Ad Hoc Committee - CAC Journal Survey Chair, CAC Southern Section Serology Study Group Co-chair, CAC Training and Resources Committee

The Awards Committee is grateful to Carol Hunter for nominating Dean for this award, and we look forward to seeing Dean continue his development in the criminalistics profession.

—Dave Stockwell
Awards Committee

DNA Standards Required by New Bill

The omnibus crime bill, H.R. 3355, which Congress cleared late (August) after much acrimonious debate, includes a section that requires the FBI director to ensure issuance of DNA quality assurance and proficiency testing standards. Developing such standards is the job of an independent advisory board consisting of scientists from state, local and private forensic laboratories, molecular and population geneticists, and a representative from the National Institute of Standards & Technology. The standards are to specify criteria for quality assurance and proficiency tests to be applied to various types of DNA analyses used by forensic laboratories and include a system for grading each lab's proficiency in order to determine if its performance is at an acceptable level. The bill also allows the FBI director to establish an index consisting of the

DNA identification records of convicted criminals and analyses of DNA samples recovered from crime scenes and unidentified human remains.

—C&EN, Sept. 5, '94

See related excerpt from the actual bill later in this issue.

Inside Information

PROMOTIONS

Greg Matheson to Assistant Laboratory Director, LAPD; **Tom Abercrombie** to Supervisor at BFS Berkely, from BFS; **Riverside Jim Jeffrey** to Supervisor at BFS Berkeley, from BFS CCI; **Eva Steinberger** to Supervisor at BFS Berkeley, from Orange County Sheriff **Ed Rhodes** to Supervisor of Latent Prints/Evidence Technicians, San Diego PD

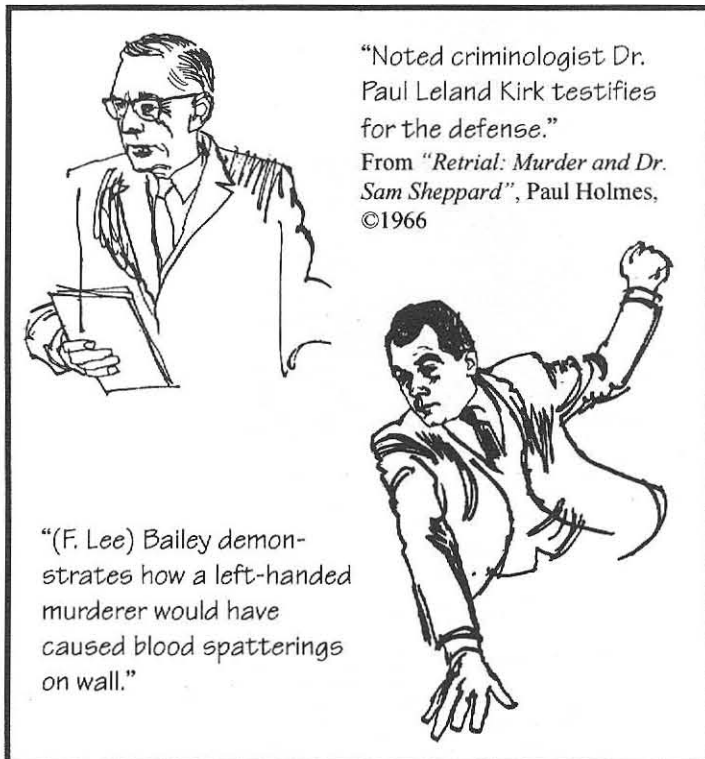
TRANSFERS

Terry Spear transferred from BFS Berkeley to BFS CCI; **Sandy Wiersema** resigned from San Diego PD to take a job with the FBI as a shoe and tire tread comparison analyst; **Keith Inman** returned to BFS Berkeley from Oakland PD; **Stephan Schliebe** left Cal Lab to take a job with LA S.O. lab in their trace section; **Frank Cassidy** retired from DOJ after many years of distinguished service.

PLAY BY PLAY

On August 28 the Berkeley Lab met a combined Sacramento Lab, CCI, and Sacramento HQ staff team in a softball game which was considered Baseball's World Series for 1994. For two grueling hours both teams battled to a final score of 9 to 9. Play was cancelled due to intolerable thirst and debilitating hunger pains. It was decided that play would resume next season to allow the muscles and strains to heal.

Great Moments



"Noted criminologist Dr. Paul Leland Kirk testifies for the defense."

From "Retrial: Murder and Dr. Sam Sheppard", Paul Holmes, ©1966

"(F. Lee) Bailey demonstrates how a left-handed murderer would have caused blood splatterings on wall."

Jobs • Meetings • Courses

The ABC is looking for a few good persons to help pilot the Trace Evidence Specialty Exam in Seattle next February. The exam will include a core module and a hairs and fibers module. It may also include a paint / polymer module. If anyone is interested, please contact **Peter Barnett**, FAX: 510-222-8887

Course Schedules

Winter 1995—Calif. Criminalistics Institute

- A103 Courtroom Presentation of Evidence (Part. funded by O.T.S.)—Jan 18-20, 1995
- A103 Courtroom Presentation of Evidence (Part. funded by CAC)—Mar 1-3, 1995
- A103 Courtroom Presentation of Evidence (subject to funding)—Mar 29-31, 1995
- B101 Forensic Serology—Feb 15-17, 1995
- B250 DNA - PCR/DQa—Jan 9-13, 1995
- E252 Latent Print Photography (FBI)—Jan 23-27, 1995
- M112 Paint Examination and Comparison—Mar 6-10, 1995
- M101 Basic Practical Microscopy—Jan 16-20, 1995
- S111 Crime Scene Investigation I—Jan 30-Feb 3, 1995
- S213 Crime Scene Investigation II—Mar 13-17, 1995

Spring 1995

- A103 Courtroom Presentation of Evidence (subject to funding)—Jun 6-8, 1995
- E151 Latent Print Techniques—May 1-5, 1995

Highlights:

Courtroom Presentation of Evidence. All CAC members interested in the three day "Courtroom Presentation of Evidence" course are invited to submit applications. NO CHARGE to CAC members—public, private or out-of-state! The course is scheduled for March 1-3, 1995 in Sacramento at the California Criminalistics Institute (CCI). Members from public agencies and private sector laboratories may apply. The class is limited to twelve students and is POST reimbursable, Plan IV. Applications already on file will be given priority. This course is partially funded by the A. Reed and Virginia McLaughlin Endowment. For further information please contact **Louis Maucieri** at (916) 227-3575.

McCrone Microscopy

Spring 1995

- 504 Forensic Microscopy—March 13-17, 1995
 - 520B Microscopical Study of Pigments and Extenders—March 20-24, 1995
 - 207A Microchemical Methods—March 27-31, 1995
- Santa Ana Classroom: Orange Co. S.O. Note: CAC members will receive an Endowment Supplement for the Microchemical class. If funds remain, they will be applied to CAC members

enrolled in the Forensic Microscopy class. For registration information, contact **Nancy Daerr** at McCrone (312) 842-7100.

Forensic Wound Pathology Seminar

A four-day seminar hosted by the CAC T&R and UCI Medical School will be held July 24-27, 1995. The instructor will be **Dr. Patrick Besant-Matthews**. The fee is \$50 for CAC members and \$150 for non-members. For more information, contact **Dean Gialamas** at Cal Lab (714) 669-9461. See enclosed flyer.

Upcoming Meetings

Canadian Society of Forensic Science

The 42nd Annual Meeting of the Canadian Society of Forensic Science, Toronto, Ontario, Canada
September 26-30, 1995

Contact: **Dr. Joel Mayer**, Centre of Forensic Sciences
25 Grosvenor Street, Toronto, ONT M7A 2G8, Phone: (416) 314-3159, FAX: (416) 314-3225

International Society for Forensic Haemogenetics

16th International Congress
Santiago de Compostela, Spain
September 12-16, 1995

Contact: **Maria Sol Rodriguez-Calvo**, Secretary, Institute of Legal Medicine, C/ San Francisco S/N, 15704 Santiago de Compostela, Spain, Phone: 0034/81/582327, FAX: 0034/81/580336

Training Conferences

The Bi-Annual Seminar of the Investigation of Crime
"Investigation of Crime: Crime Scenes, Computers and Children", Santa Fe, New Mexico, January 12 and 13, 1995

The seminar is designed for investigators (new and experienced) and attorneys. The seminar explores the basic techniques, new concepts and the equipment used in investigations. The seminar is being presented by the Center For Medicolegal Research and Consultation.

For further information, contact:

Karen Griest, MD, 160 Washington SE #234, Albuquerque, NM 87108, Phone: (505) 281-8109

The Bi-Annual Seminar of the Investigation of Crime
"Investigation of Crime: Crime Scenes, Computers and Children", Petaluma, California, January 28 and 29, 1995

The seminar is designed for investigators (new and experienced) and attorneys. The seminar explores the basic techniques, new concepts and the equipment used in investigations. The seminar is being presented by the University of Northern California.

For further information, contact: **Karen Griest, MD**, 160 Washington SE #234, Albuquerque, NM 87108, Phone: (505) 281-8109

Employment

Senior Forensic Scientist

The Department of General Services is recruiting for an individual to perform forensic examinations, including identification and DNA HLA DQA typing and comparisons of genetic material, on criminal evidence related to rapes, homicides and other criminal cases using state-of-the-art analytical methodologies, techniques and instrumentation. Prepares reports of findings for use by the criminal justice system and testifies in court as an expert witness. Communicates with medical and legal officials on testing procedures and results. Must possess a valid driver's license. Qualifications include a BS/BS degree in a biological, chemical or forensic science, including undergraduate or graduate courses in genetics, biochemistry and molecular biology as required by TWGDAM. The deadline for application is February 1, 1995. Salary range is \$40,018-48,900. Contact:

Department of General Services
Human Resources
805 East Broad Street
Room #117
Richmond, VA 23219

Forensic Scientist 2 & Forensic Scientist 3

The Washington State Patrol Crime Laboratory Division is seeking experienced applicants to fill the positions at either the Forensic Scientist 2 or 3 level within the division. Currently there are two full-time positions available.

Minimum requirements for both levels are: a bachelor of science degree in forensic science or a natural science which includes 20 semester (30 quarter) hours of chemistry, and 5 semester (8 quarter) hours of physics. The Forensic Scientist 2 levels require two years full-time paid technical experience in an analytical, research, or crime laboratory, one year of which must have been in a forensic science lab performing analyses of physical evidence and testifying as an expert in courts of law. The Forensic Scientist 3 requires three years of full-time paid technical experience in a forensic science laboratory performing analyses of physical evidence which includes testifying as an expert in courts of law. Monthly salary for the Forensic Scientist 2: \$2470-3162, Forensic Scientist 3 \$3011-3852.

Contact for Applications:

Captain **Robert M. Leichner**
Crime Laboratory Division
PO Box 42632
Lacey, WA 98504-2632
Phone: (206) 753-6540

Criminalist II

The Las Vegas Metropolitan Police Department is seeking qualified applicants for the position of Criminalist II. This position requires a DNA specialty and the best candidates will have a combination of experience in any of the following areas: forensic DNA analysis (RFLP and/or PCR), serology and gradu-

ate courses in genetics, biochemistry and molecular biology. The position will remain open until a sufficient number of qualified applications are received. The monthly salary range is \$3,464-\$4,558.

Contact: Las Vegas Metropolitan Police Department
Personnel Bureau
601 East Fremont
Las Vegas, NV 89101

Criminalist III—Firearms / Toolmarks

The Ventura County Sheriff's Crime Lab is looking for qualified applicants for the position of firearms/toolmarks examiner. Requirements include a B.S. or equiv. in a physical science, three years experience as a firearms/toolmarks examiner (testifying independently as to findings), and must be AFTE eligible. The position will remain open until a sufficient number of qualified applications are received. The monthly salary range is \$3,218-\$4,295.

Contact: Ventura County Personnel Dept.
800 S. Victoria Ave.
Ventura, CA 93009

Assistant Criminalist / Criminalist III (anticipated)

The Oakland Police Dept. Criminalistics Laboratory anticipates openings for an Assistant Criminalist, the entry level position in the laboratory (\$3,440-\$4,220 per month), and for a Criminalist III, the DNA technical lead position in the laboratory (\$4,707-\$5,779 per month). The tentative application period for the Assistant Criminalist will run through January 20. Applications for Criminalist III are not yet being accepted. Interested persons may contact Mary Gibbons, Laboratory Director, (510) 238-3386, to receive an application for the Assistant Criminalist position or to discuss the anticipated Criminalist III opening.

Crime Lab Administrator

\$48,381 - \$76-253. Plans, develops, supervises and administers the criminalistics laboratory for the City of Phoenix Police Department and prepares the Police Crime Laboratory budget. The Phoenix Police Crime Lab has a staff of 51 employees and a budget of \$2.8 million. The Crime Lab Administrator oversees chemical tests and analyses of a wide variety of substances and plans and supervises blood alcohol, drug, photographic and microscopic examinations, as well as other types of physical evidence examinations.

Requires six years of progressively responsible experience in a criminalistics laboratory, including three years of at least second-level supervision, and a bachelor's degree in Criminalistics, Chemistry or a related field.

Applications available beginning 11-7-94, open until filled. Applications for Maricopa County residents are available at 135 N. 2nd Ave., Phoenix, AZ 85003. Outside Maricopa County write or call (602) 262-6277 for an application. City of Phoenix AA/EEO/D Employer.

Section Reports

The CAC Northern Section Computer Study Group met on October 12, 1994, at the Contra Costa County Crime lab to hear a presentation by Duayne Dillon on the subject of digital image processing. Duayne led us through some of the pitfalls of digital image processing, including the pitfall of attempting to demonstrate the process at a computer users' meeting.

A bibliography of articles on the subject was provided.

For people who did not attend this meeting, I will mail a copy of the bibliography and other material Duayne provided at the meeting. Please e-mail or FAX your request for that material to me.

The next meeting will be December 7. Chuck Morton will discuss photo CD. More details about the time and location of that meeting will be forthcoming.

Peter Barnett

FAX: 510-222-8887

NORTHERN

Jennifer Mihalovich of FSA hosted the September 15, 1994 dinner meeting. The meeting was attended by approximately 25 individuals. The guest speaker was **Anatoli**

Zoltaryov, a Forensic Pathologist who formerly worked in the Soviet Union. His talk focused on Forensic Science in the Soviet Union. The talk was well received.

SOUTHERN

A dinner meeting hosted by the Ventura Sheriff's Crime Lab was held Dec. 8 in Ventura. Featured speaker was **Anatoli Zolotaryov**, who recently emigrated from Russia. Dr Zolotaryov presented work he and others have done in Russia which aids in the determination of weapon type through careful examination of damaged clothing fibers. Blade configuration, size, sharpness and other characteristics of knives could be determined with confidence after considerable experimentation and observation.

Thanks to the efforts of **Joe Hourigan** and the LAPD crime lab, 20 people attended the November 7 workshop on courtroom presentation skills. The idea for this workshop came after Joe attended a similar one-day workshop held at the Spring CAC meeting in Oakland. A special thanks to the CAC Endowment Fund which underwrote a major cost for the workshop and to Joe's wife who baked baklava for the entire class.

LAPD THE SEMINAR

The legend continues

"A PERFECT TEN!
SIZZLING! A MUST
SEE! ★★★★★"

—CACNews

THE CALIFORNIA ASSOCIATION OF CRIMINALISTS PRESENTS A LOS ANGELES POLICE DEPARTMENT CRIME LAB PRODUCTION "LAPD THE SEMINAR" PRODUCER JOE HOURIGAN ASSOCIATE PRODUCER LARRY BLANTON STARRING TOP NAMES IN EVERY FIELD FEATURING EQUIPMENT VENDORS AND OTHERS (213) 237-0061 OR (213) 237-0058

PG-13 PARENTS STRONGLY CAUTIONED
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STARTS OCTOBER 18th, 1995

SORRY NO PASSES



Some Thoughts on Silencer Determinations

Recently, this laboratory was asked to determine if a certain type of flash suppressor for a .223 caliber firearm was a silencer. The tests showed no measurable difference between the sound of the firearm with or without the flash suppressor. The flash suppressor was tested again on a .22 caliber rifle. This series of tests showed a 2 1/2 decibel reduction. Since the average human ear cannot discern a 2 1/2 decibel difference in two sounds, does this flash suppressor constitute a silencer?

We also tested a Hi-Standard .22 caliber pistol with a 4 1/2 inch barrel. After running the series of tests, the 4 1/2 inch barrel was removed and a 6 3/4 inch barrel was attached. The longer barrel reduced the sound 4 decibels, which was clearly audible to the human ear. Does the 6 3/4 inch barrel constitute a silencer?

When the law defines a silencer as a device or attachment of any kind designed, used, or intended for use in silencing the report of a firearm, does that include an attachment which is designed for some legitimate purpose but which, coincidental to its design, also reduces the report of a firearm? Let's suppose that someone tries to make a silencer, but the design is so poor that there is no measurable sound reduction. Will that attempted silencer be classified as a silencer because it was designed and intended for use in silencing a firearm, even though it doesn't work?

Where do we draw the line dividing silencers from non-silencers? How much of a reduction of sound is necessary for a device to be classified as a silencer? Does the law require an audible reduction or a measurable reduction? Should each laboratory have their own standards, or should there be a uniform standard throughout the State? We don't have all the answers, but is there anyone out there that is interested enough to share their ideas on this subject?

Ed Peterson

Nancy Marte

Bruce Moran

Santa Clara County Crime Lab

**SOFT 1995
TJOS**

SOCIETY of FORENSIC TOXICOLOGISTS

25TH ANNIVERSARY

OCTOBER 9-14, 1995

BALTIMORE, MD

SHERATON INNER HARBOR

HOST: YALE H. CAPLAN, PH.D.

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BALTIMORE, MD 21227

(410) 536-1485

**VIOLENT CRIME CONTROL AND LAW ENFORCEMENT
ACT OF 1994, H.R. 3355**

Subtitle C—DNA Identification

SEC. 210301. SHORT TITLE.

This subtitle may be cited as the "DNA Identification Act of 1994".

SEC. 210302. FUNDING TO IMPROVE THE QUALITY AND AVAILABILITY OF DNA ANALYSES FOR LAW ENFORCEMENT IDENTIFICATION PURPOSES.

(a) Drug Control and System Improvement Grant Program.—Section 501(b) of title I of the Omnibus Crime Control and Safe Streets Act of 1968 (42 U.S.C. 3751(b)) as amended by section 150003, is amended—

(1) by striking "and" at the end of paragraph (23);

(2) by striking the period at the end of paragraph (24) and inserting "; and"; and

(3) by adding at the end the following new paragraph:

"(25) developing or improving in a forensic laboratory a capability to analyze deoxyribonucleic acid (hereinafter in this title referred to as 'DNA') for identification purposes."

(b) State Applications.—Section 503(a) of title I of the Omnibus Crime Control and Safe Streets Act of 1968 (42 U.S.C. 3753(a)) is amended by adding at the end the following new paragraph:

"(12) If any part of funds received from a grant made under this part is to be used to develop or improve a DNA analysis capability in a forensic laboratory, a certification that—

"(A) DNA analyses performed at such laboratory will satisfy or exceed then current standards for a quality assurance program for DNA analysis, issued by the Director of the Federal Bureau of Investigation under section 210303 of the DNA Identification Act of 1994;

"(B) DNA samples obtained by, and DNA analyses performed at, such laboratory will be accessible only—

"(i) to criminal justice agencies for law enforcement identification purposes;

"(ii) in judicial proceedings, if otherwise admissible pursuant to applicable statutes or rules;

"(iii) for criminal defense purposes, to a defendant, who shall have access to samples and analyses performed in connection with the case in which such defendant is charged; or

"(iv) if personally identifiable information is removed, for a population statistics database, for identification research and protocol development purposes, or for quality control purposes; and

"(C) such laboratory, and each analyst performing DNA analyses at such laboratory, will undergo, at regular intervals of not to exceed 180 days, external proficiency testing by a DNA proficiency testing program meeting the standards issued under section 210303 of the DNA Identification Act of 1994."

(c) DNA Identification Grants.—

(1) In general.—Title I of the Omnibus Crime Control

and Safe Streets Act of 1968 (42 U.S.C. 3711 et seq.), as amended by section 210201(a), is amended—

(A) by redesignating part X as part Y;

(B) by redesignating section 2401 as section 2501; and

(C) by inserting after part W the following new part:

"PART X—DNA IDENTIFICATION GRANTS

"SEC. 2401. GRANT AUTHORIZATION.

"The Attorney General may make funds available under this part to States and units of local government, or combinations thereof, to carry out all or a substantial part of a program or project intended to develop or improve the capability to analyze deoxyribonucleic acid (referred to in this part as 'DNA') in a forensic laboratory.

"SEC. 2402. APPLICATIONS.

"To request a grant under this part, the chief executive officer of a State or unit of local government shall submit an application in such form as the Attorney General may require.

"SEC. 2403. APPLICATION REQUIREMENTS.

"No grant may be made under this part unless an application has been submitted to the Attorney General in which the applicant certifies that—

"(1) DNA analyses performed at the laboratory will satisfy or exceed then current standards for a quality assurance program for DNA analysis issued by the Director of the Federal Bureau of Investigation under section 210303 of the DNA Identification Act of 1994.

"(2) DNA samples obtained by and DNA analyses performed at the laboratory shall be made available only—

"(A) to criminal justice agencies for law enforcement identification purposes;

"(B) in judicial proceedings, if otherwise admissible pursuant to applicable statutes or rules;

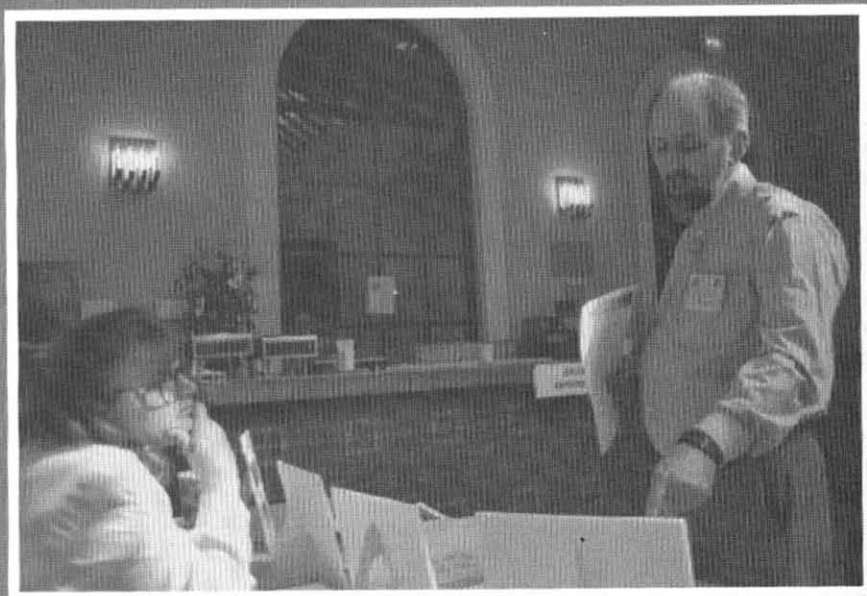
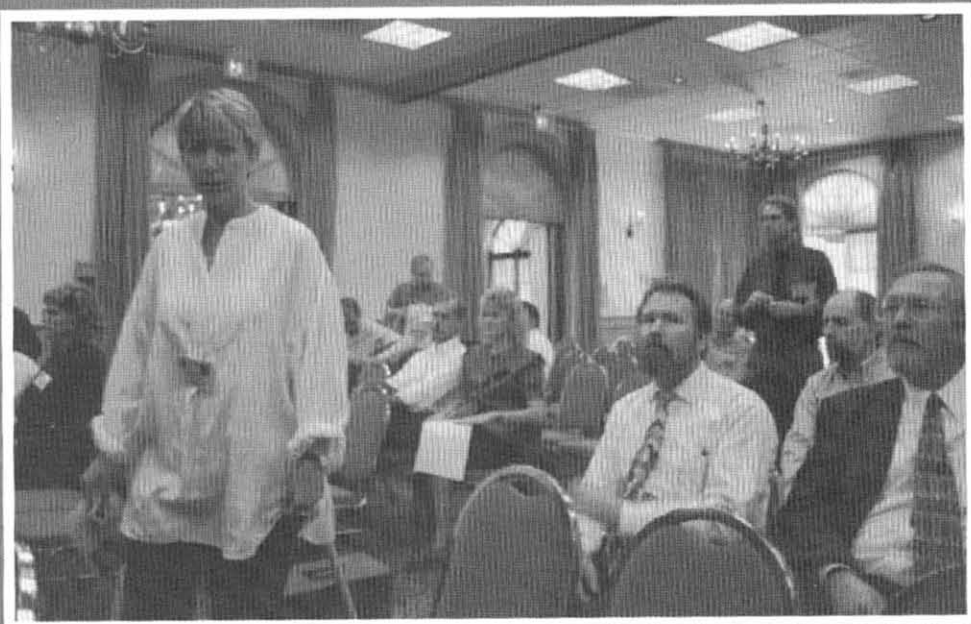
"(C) for criminal defense purposes, to a defendant, who shall have access to samples and analyses performed in connection with the case in which the defendant is charged; or

"(D) if personally identifiable information is removed, for a population statistics database, for identification research and protocol development purposes, or for quality control purposes; and

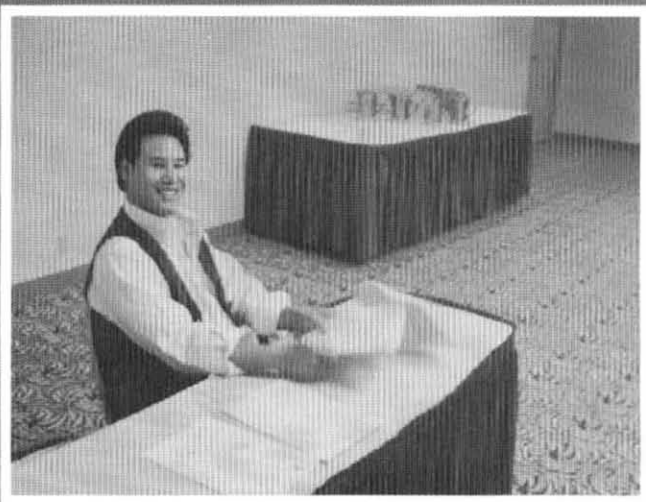
"(3) the laboratory and each analyst performing DNA analyses at the laboratory shall undergo, at regular intervals not exceeding 180 days, external proficiency testing by a DNA proficiency testing program that meets the standards issued under section 210303 of the DNA Identification Act of 1994.

The AAFS is planning a workshop on applying for DNA grants at the Seattle meeting.

—Ed.



cac fall '94



Technical Note

A Remedy for PGM Alteration in IEF of EDTA Blood Samples

DAVE STOCKWELL

SAN BERNARDINO COUNTY SHERIFF'S CRIME LAB

Many laboratories conducting subtyping of phosphoglucose mutase (PGM₁) by isoelectric focusing with Ampholine® brand ampholytes have encountered difficulties in typing EDTA blood samples. The anomalous results are variously seen as altered banding positions, additional banding, and as uninterpretable smears. This problem was encountered in my laboratory in the summer of 1993, although we had received reports of other laboratories having observed the problem much earlier. Dr. Schanfield of Analytical Genetic Testing Center told me about his dialogue with both representatives of Sigma (the distributor) and Pharmacia (the manufacturer) of the troublesome ampholytes. His synopsis was that Pharmacia was aware of the problem, that it appeared with lots of Ampholines prepared at a new manufacturing site in Sweden, and that the problem was under investigation. Unfortunately, the problem continues to plague us.

The alteration of PGM banding has only been seen in EDTA blood samples. EDTA is a chelator added to blood samples to bind calcium ions (a required clotting cofactor) as a means to prevent coagulation of the blood sample. Although there are other anticoagulants such as ACD which do not interfere with PGM typing, EDTA is the anticoagulant of choice for samples destined for DNA analysis and therefore is a commonly encountered sample in forensic serology.

In discussing this situation with other analysts several solutions were offered:

- 1-Request reference bloods be drawn in non-EDTA blood tubes,
- 2-Substitute different vendors' ampholytes, and/or blend new ampholytes of different pH intervals,
- 3-Use a conventional PGM subtyping method, such as Isogel zone electrophoresis.

Of these suggestions, the first relies too heavily on exercising control over our client agencies, and besides the DNA analysts prefer the EDTA samples. The second would take a great deal of time to research, apply, and validate. The third alternative is the most viable since it utilizes a proven method which has not shown problems with EDTA blood samples. Unfortunately, this approach for these troublesome samples is frustrating since an entire run is often set up to analyze one or two reference blood samples. There had to be an easier means based on selectively absorbing the EDTA out of the sample.

EDTA has four exposed acetate groups lending it strong anionic properties at most pH ranges. I set out to determine if commonly available anion exchange resins would be capable of selectively absorbing out the EDTA of an extracted sample without affecting the electrophoretic or enzymatic properties

of the enzymes. (The IEF system I use detects five enzymes, PGM₁, ACP₁, EsD, ADA, and AK.) I experimented with two different exchange resins with various extraction methods. I quickly discarded one of the two ion exchange resins (Amberlite IRA 400 OH) because it is such a strong anion exchange resin. This led to an extremely basic extraction medium which denatured the proteins. I had much better results using a mixed bed ion exchange resin, Amberlite MB-1.

I prepared the MB-1 resin by washing the resin beads in distilled/deionized water 3 times to remove excess exchange material which is not bound to the exchange beads. The resin beads are then centrifuged in a piggy-back centrifuge assembly (see figure 1) to remove excess water from the beads. This procedure, when performed immediately prior to the addition of extracted bloodstain material, should produce the optimum moisture content of the resin beads. The resin beads can also be stored for later use, however the moisture content of the beads may alter with time which will affect the ultimate recovery volume of eluate.

The extraction protocol I found that worked best involved eluting a 5x5 mm section of blood stained cotton cloth in 20-25 mL of 0.05 M dithiothreitol. Once the stain was sufficiently eluted, the eluate was pipetted into a 500 mL capped centrifuge tube, then the remaining volume of the tube was filled with the prepared ion exchange resin beads. The sample is then vortexed and shaken to distribute the eluate throughout the volume of resin beads. The sample is intermittently vortexed during the absorption phase of approximately 15 minutes. The eluate is then recovered by poking a small hole in the bottom of the centrifuge tube and centrifuging the eluate into a second centrifuge tube using piggy back centrifugation.

Figure 2 shows the results of both the effects of increas-

Figure 1.

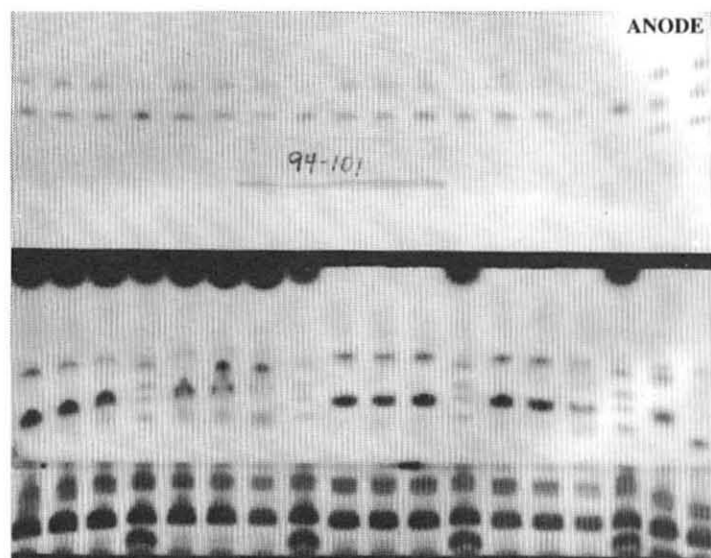


ing concentrations of EDTA and the ability of the ion exchange resin to remove the EDTA. In the figure the anode is at the top. Three enzymes (ADA at the top, followed by PGM₁ and AK) are visible, although EsD and ACP₁ were developed as well. From left to right, samples 4, 8, 12, and 16 are PGM₁ 4 band standards. Samples 1 through 3 and 5 through 7 show the effects of doubling concentrations of EDTA on a known PGM₁ 1+ blood sample. (Sample 7 contained 1 mM EDTA.) Samples 9 through 11 and 13 through 15 are the same set of EDTA samples but run through Amberlite MB-1 resin mixture. (Note that the staining effect of dithiothreitol, present in the previous samples, has also been absorbed out by the ion exchange resin.) Samples 17 and 18 (both are EDTA samples) are included reference standards for the other enzymes. These samples were also treated with MB-1 resin. As the photograph shows, only the sample containing 1 mM EDTA still shows some artifactual effects due to unabsorbed EDTA. In practice I have found that the MB-1 resin can effectively absorb even 10 times this amount of EDTA. I believe that proper distribution of the eluate through the resin beads by vortexing and inversion is the most critical factor.

I have been using this clean up method for EDTA samples for approximately 6 months. The MB-1 resin routinely absorbs out much if not all of the EDTA in the samples. Since the ion exchange resins do possess a maximum capacity (MB-1 is rated at 0.55 meq per mL) samples containing too much EDTA may not be fully absorbed. Since I use a multiple enzyme run it is also important to determine if the resin affects the properties of the other enzymes. In my experience I have not encountered any problems with typing of EsD, ACP₁, ADA, or AK. (I do routinely run my standards through the MB-1 resin as a double check.)

Hopefully, Pharmacia will eventually determine the cause of EDTA induced alteration of PGM and correct it, but until then this stopgap technique may alleviate the problem.

Figure 2.



TRAINING & RESOURCES

NEW!

Founder's Lecture—J. Osterburg, Fall '91
Back to Basics: Fibers—Mumford, Bailey, Thompson
Glass Methods—Bailey, Sagara, Rhodes
Forensic Firearms Evidence—L. Haag
Deadly Effects: Wound Ballistics—A. Jason
Against All Odds: Inside Statistics (13hrs)

SEROLOGY

Back to Basics Series:

- Electrophoresis Basics — Ron Linhart
- Glycogenated Vaginal Epithelia — Ed Jones
- TAPE 1:** • Erythrocyte Acid Phosphatase — Berni Rickard
- Phosphoglucomutase — J. White / M. Hong
- Haptoglobin — David Hong
- TAPE 2:** • Immunology — David Stockwell
- TAPE 3:** • Gm / Km — Stockwell / Wraaxall
- TAPE 4:** • Peptidase A — Colin Yamauchi
- TAPE 5:** • ABO — Jeff Thompson
- TAPE 6:** • Saliva — Terry Spear (incl DNA Kelly-Frye/Howard Decision)
- TAPE 7:** • Presumptive Tests/Human Determination — Peterson/Mayo
- TAPE 8:** • Gc — Devine/Navette
- TAPE 9:** • Statistics — M. Stamm

Also available:

Population Genetics & Statistics Course

Dr. Bruce Weir, Instructor
 Eight two-hour tapes, PLUS the course notebook.

Bloodspatter Lecture — Fall '92 CAC Meeting (Knowles)

Bloodspatter Lecture — J. Chisum

Micro. Exam. of Sex Assault Evidence — Ed Jones

Ed Jones, Instructor

DNA Workshop — Spring 1993 CAC Meeting, 4 Tapes

GENERAL INTEREST

- ABC News 9/23/91: "Lab Errors"
- TAPE 1:** • CBS News 4/27/92: "Animation Reconstruction"
- Alex Jason / Jim Mitchell: "Trial Animation"
- TAPE 2:** • 48 Hours 9/25/91: "Clues"

Founder's Lectures by: Stuart Kind — Fall '93
 Walter McCrone — Spr '90
 Lowell Bradford — Spr '93

TRACE EVIDENCE

Basic Microscopy Lecture — Ed Rhodes, Instructor, Two tapes

Tire Impressions as Evidence — Lauren Nause, RCMP, Instructor

Five two-hour tapes PLUS the course notebook

(from the three day course at SBSO)

Evaluation of Lamp Filament Evidence — Lowell Bradford, Instructor

FTIR Lecture — Wayne Moorehead, Instructor

Gunshot Residue Lecture — Ray Calloway, Aerospace, Instructor

Footwear — Bodziak, Instructor, Two tapes

Footwear Mfg. Tour — Van's Shoes

Please address requests to

Dean Gialamas, T&R Chair
 c/o Cal Lab of Forensic Science
 17842 Irvine Blvd. Suite 224
 Tustin, CA 92680

Get the Inside Scoop on the *Crime* Scene

**Contra Costa
Spring '95**

**85th Semi-Annual Meeting of the
California Association of Criminalists**

Walnut Creek Marriott Hotel

May 10-13, 1995

\$68 Single or Double

Contact:

Karen Sheldon

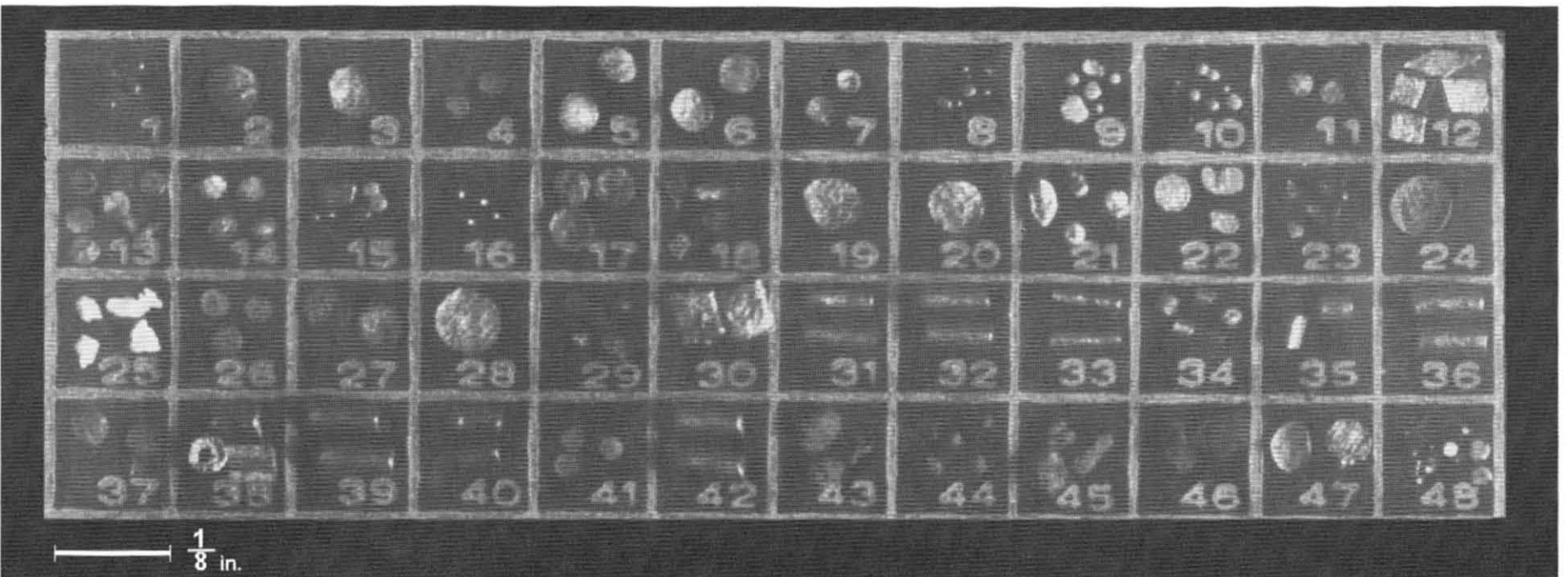
Contra Costa County Sheriff-Coroner's Department

1122 Escobar St.

Martinez, CA 94553

(510) 646-2455





- | | | | |
|----|--------------------------------------|----|-----------------------------|
| 1 | S&W .38 spl 125gr JHP | 25 | Golden Powder |
| 2 | Super Vel .38 spl 110gr JHP | 26 | IMR "PB" Smokeless Powder |
| 3 | W-W .357 110gr JHP | 27 | IMR "HI SKOR" 700X |
| 4 | Federal .38 spl 158 RNL | 28 | IMR "HI SKOR" 800X |
| 5 | Super Vel .357 110gr JHP | 29 | FFG Black Powder |
| 6 | S&W .38 spl 158gr JHP | 30 | 6.5 Dutch Mann |
| 7 | Super Vel .357 137gr SNL | 31 | IMR 3031 |
| 8 | Federal .22 LR lubaloy | 32 | IMR 4064 |
| 9 | WIN 9mm Luger JHP silver | 33 | IMR 4198 |
| 10 | PMC .30 Carbine hardball | 34 | IMR 4227 |
| 11 | FC 9mm Luger JHP | 35 | IMR 4320 |
| 12 | GFL 9mm Luger hardball | 36 | IMR 4350 |
| 13 | AGUILA 9mm Luger hardball | 37 | IMR 4756 |
| 14 | Bullseye | 38 | IMR 4759 |
| 15 | W-W 296 | 39 | IMR 4831 |
| 16 | Spitzer 8mm mag 178gr ball (Israeli) | 40 | IMR 4895 |
| 17 | Hercules Blue-Dot | 41 | IMR 7625 |
| 18 | ALCAN #5 | 42 | IMR 7828 |
| 19 | DuPont 800X Hi Score | 43 | HODGDON "Pyrodex" CTG |
| 20 | UNIQUE (Hercules) | 44 | HODGDON "Pyrodex" P |
| 21 | W-W 630 | 45 | HODGDON "Pyrodex" RS |
| 22 | W-W 231 | 46 | HODGDON "Pyrodex" Select RS |
| 23 | GOEX FFFF G Black | 47 | Unique |
| 24 | Remington 12 GA Peters Steel 2 SMag | 48 | PRO-LOAD 9mm 124gr JHP |

At left are samples of most of the powders in our reference collection, and is not intended to be exhaustive. Several samples are identified as to their source (e.g. S&W .38 spl.) rather than their manufacture.

Prepared by
Edwin L. Jones, Jr., Ventura SO

Gunpowder Atlas

Report from the NRC Public Meeting

In mid 1994, the National Research Council, with sponsorship from NIJ, State Justice Institute, NIH, and DOE, convened a second Committee on DNA in Forensic Science. The mandate for this committee is to update the 1992 NRC report (which confirmed the general reliability of DNA typing) with regard to statistical and population genetics issues. Seeking input from appropriate experts, and reviewing relevant studies and data, it will examine the importance of population substructure and how (or whether) it should be taken into account in the calculation of probabilities or likelihood ratios.

A call was made via a letter from the Committee for input into their deliberations. This input was solicited in two ways; the first was to answer a set of questions prepared by them, while the second was by addressing the panel directly during a Public Meeting.

The CAC has always been active in providing information and position papers on forensic issues to interested parties. Given the current judicial status of DNA, President Mary Gibbons considers our professional input essential. She therefore requested that the ad hoc DNA Committee on Quality Assurance prepare a response to the questions of the panel, and also sought approval from the Board of Directors to send a representative to the Public Meeting to present our views.

During the October 1994 Semi-Annual Meeting of the CAC held in Pasadena, the ad hoc DNA Committee on Quality Assurance of the CAC met and drafted a response to the questions posed by the panel. A list of the questions and the CAC response is given in full at the end of this report. Additionally, the CAC answers were sent to all laboratories who had members in the CAC with the request that letters of endorsement of our position be provided for inclusion with the answers themselves, so that panel would clearly understand the support for the positions taken.

The Board of Directors also approved sending a representative to Washington D.C. to address the panel.

The meeting was held on Nov, 18, 1994 at the Foundry Building in the Georgetown area of the Capital. Eighteen individuals who had requested time were each given a chance to speak for ten minutes. In addition, 4 individuals were invited by the Committee to appear and provide information; these were given 30 minutes apiece. Members of the Committee could ask questions at the end of the time if they desired. At the end of both the morning and afternoon sessions, a discussion period was held.

As your representative, I tried to emphasize, among other things, that forensic science is an applied science. It is clearly not technician work, but the application of rigorous scientific thinking and testing (including quality assurance) to ascertain the physical properties of an item of evidence. On the basis of this analysis and interpretation, someone will make a practical decision. I pointed out that the practical value of DNA is well

established, and that the academic discussion of forensic DNA typing is much more about "how much," rather than "if." I argued that the greatest contribution that they could make as a panel is to outline the utility of DNA typing and make clear that the current academic conversation is just that. If the same level of debate were allowed to invade and impact clinical medicine, the diagnosis and treatment of disease would come to a halt and people would not die of cancer, MS, or Alzheimer's, but of a "disease process that can sometimes, but not always, be ascribed to cancer, MS, or Alzheimer's." In the interest of academic freedom, some might insist that the person is not proved dead yet, while others might argue that he or she could not be shown to have ever been alive.

The invited speakers included Dr. Ranajit Chakraborty, Dr. Elizabeth Thompson, Dr. Kathryn Roeder (pronounced "raider," she tells me), and Dr. Lawrence Mueller. These were all given 30 minutes to make technical presentations to the panel. A summary of all of the comments and presentations is beyond this report, but I did tape record some (not all) of the comments. These I expect to provide to the CAC Training and Resources Committee.

Any impression of the meeting that I might provide is necessarily subjective, so what may emerge from the committee may be different than what I perceived to be the attitude of the panel members during this public hearing. What I did note is that most of the questions by panel members were directed at those who have argued publicly for the unreliability or uncertainty of forensic DNA typing, and therefore for its admissibility. These questions appeared to be asking for a defense of the speakers stand in light of data presently available.

The California Association of Criminalists was the *only* professional organization of any kind present at the meeting. I am honored for the privilege of representing the CAC, and hope that I have fairly and clearly represented the views of the membership.

*Respectfully submitted,
/s/ Keith Inman*

CAC's Response to the NRC Committee on DNA in Forensic Science

The Axioms of Forensic Science

The committee's work Should be predicated on the precepts (axioms) of forensic science or it will lack the appropriate foundation within the field. These precepts have evolved over decades as a framework for the examination, interpretation, and presentation of the analysis of physical evidence.

Science used in court does not establish guilt or innocence (which are the province of the judge and jury); rather, forensic science contributes information about *associations*, that is, associating one item with another. There are two principal concepts by which associations are made; these are

known as *identifications* and *individualizations*. An item is *identified* when it can be placed into a class of items with similar characteristics. An item is *individualized* when it can be described in such a way that no other item in the world is like it, even items identified as being similar. Polymorphic sites of variation in DNA are traits that, in combination, lead to individualization. These concepts of association through identification and individualization form the core concepts for forensic DNA examination.

There are two important observations that come out of a consideration of the key components to forensic DNA examinations. The first is that it is the evidence (not the suspect) that defines what is relevant to the case. The second is that individuality can never be proven, it can only be inferred. The conclusion of individualization is a matter of education, training, experience, and collective agreement among those most knowledgeable about the testing and the nature of the variation observed.

Response to NRC Questions:

1. "What kinds of problems have you encountered or do you anticipate in analyzing or understanding forensic DNA evidence, and in communicating or explaining such evidence to the courts, the scientific community, and the public?"

Despite the overall conclusion that DNA technology was considered generally accepted, the language of the NRC report was both vague and inconsistent from chapter to chapter. It failed to produce a ringing endorsement, especially in light of the concerns raised about the statistical issues. The courts have interpreted this equivocation and inconsistency as evidence of a lack of consensus on population issues. This has led courts to exclude DNA evidence.

Some segments of the legal community have argued that DNA typing is reliable only when results exclude an individual. In fact, if spurious results were likely, then DNA typing would not be reliable for inclusion or exclusion purposes. Validation studies have repeatedly demonstrated that DNA testing is highly reliable. Therefore, this position is illogical and scientifically inconsistent.

There is a misconception among the public and some in the judicial system that DNA typing can establish guilt or innocence. The judiciary in particular is concerned that presentation of statistical evidence invades the province of the jury. DNA typing evidence, as presented by forensic scientists, is analogous to other types of individualizing evidence (including fingerprints, firearms, and physical matches), and must be considered in the context of the entire case. These types of evidence have never been advanced by forensic science as establishing guilt or innocence. They establish associations. The courts have nothing new or different to fear from DNA typing.

2. "What method do you recommend for the statistical evaluation of DNA evidence?"

The statistical analysis of any scientific result is a tool that provides information to the analyst; but it is not a conclusion by itself. In the context of DNA analysis, statistical analysis provides a measure of the significance of the genetic concordance seen between an evidence sample and a reference sample so that an analyst might draw a conclusion about the strength of the association between the two. The genetic loci currently used for VNTR/RFLP analysis are highly polymorphic in all populations surveyed. Whether one employs fixed-bins, floating-bins, boundary methods, pair-wise comparisons, or likelihood ratios for RFLP tests, the inference or conclusion is the same: a three—or more—probe similarity demonstrates a strong association between the evidence and reference sample. The more probes used, the stronger the association becomes. At some point the association becomes so overwhelming that an individualization has been made. Even the critic Hartl has suggested in reports and depositions that genetic concordance at 7-9 such hypervariable VNTR loci constitutes an individualization "to a scientific certainty".

We recommend that scientifically sound statistical and population genetic methods be deemed appropriate for use in assessing the significance of VNTR/RFLP typing results (these include floating bin calculations, fixed bin calculations, pair-wise comparisons, boundary methods, and likelihood ratios based on published or available databases of adequate size). The committee should recognize and state that there are several acceptable methods for evaluating DNA typing results, and that the multiplicity of methods should not be construed as a lack of consensus. The capabilities and limitations of the test should be defined (for example, by upper confidence limits). **Furthermore, a set of verbal predicates, similar to those adopted for parentage testing, should be developed in order to communicate the significance of the inferences drawn from the statistical analysis of the genetic data.** Methods used should be simple to explain and workable for presentation in court.

3. "What major factors do you believe should be taken into account, and how, in performing statistical analyses of DNA evidence and interpreting the results of such analyses?"

4. "How should genetic substructure of populations affect the statistical evaluation of DNA evidence and its interpretation?"

Statisticians frequently make a distinction between findings that are statistically significant and those that have practical significance. Population surveys have demonstrated differences between races that are statistically significant. **However, the differences detected have no practical significance when multiple hypervariable loci are used.** For example, if you are told that the frequency of a profile is estimated at 10^{-9} , but that substructuring may change that figure to 10^{-7} , this is still strong evidence for an association between the evidence and reference samples. The exceptions to this are when data from fewer than three hypervariable VNTR loci are obtained, or when loci of significantly lower diversity are used.

In those cases, **estimates for racial frequencies are appropriate. There is no reliable data to support the contention that ethnic substructuring significantly alters frequency estimates or final conclusions for forensic purposes.**

Some segments of the legal community have applied the NRC ceiling calculation to all genetic markers (HLA, DQA1, STR markers, as well as to classical blood group and protein markers). We believe this is an unintended use of this calculation. **Any recommendation on frequency estimates should clearly specify the markers for which they are developed.** Particular consideration should be given to the emerging PCR markers so they are not inadvertently lumped with recommendations intended for RFLP continuous allele systems.

5. “What are the magnitude and nature of laboratory error (both gross errors, or ‘blunders’, and intrinsic measurement error) in forensic DNA analysis and how does such error affect the significance of statistical analyses? How can it be more accurately assessed, and how can it best be minimized?”

The term “risk of error” is more appropriate than error rate; error rate implies that the rate of error is unchanging, whereas the process of proficiency testing and validation identifies errors that can then be corrected (NRC pg 89 para2). The risk of error is time-, method-, laboratory, case and circumstance-dependent, and may not be quantifiable. **As was noted in the first report, the risk of error should be considered separately from the frequency estimate and any verbal predicate, so that the trier of fact can independently assess the weight to be attached to the evidence** (NRC pg 94, para 3).

Combining the extrinsic risk of error with frequency estimates as has been suggested by some Bayesian statisticians, is unprecedented and unjustified. It is entirely appropriate to include intrinsic imprecision in a frequency estimate. The frequency of intrinsic measurement imprecision is already included in RFLP frequency calculations by use of a match window and binning procedures. A global assessment of the risk of error should only be used to alert scientists and courts to the possibility of error in any one analysis.

The notion that confidence limits bound error rates assumes that errors are random. The extrinsic mistakes (“blunders”) in DNA testing, however, are not random. Therefore, **confidence limits on error rates are not appropriate.**

Because errors are both laboratory and individual specific, proficiency tests cannot provide an industry-wide measure of the risk of error. Errors are properly assessed and minimized by strict adherence to QA standards (TWGDAM guidelines and rigorous case review) and by routine QA audits (accreditation audits), as well as by proficiency testing. Proficiency tests should not [be] used as the sole or even primary measure of risk of error in an individual laboratory. The committee should also acknowledge that while blind testing is a useful QA tool, the required semiannual open proficiency tests by themselves are acceptable measures of the

quality of forensic lab work, and blind tests need not be a required element of the laboratory’s QA program.

6. “What are the scientific possibilities for identifying someone definitely and uniquely using forensic DNA techniques, both current ones and those under development?”

7. “What is the feasibility and utility of increasing the number of loci used in RFLP and PCR analyses?”

Historically, the threshold for individualization of evidence (fingerprints, firearms, physical matches) has reflected a consensus of the workers in a field. **We recommend that when frequency estimates approach 1000 times the population of the earth** (presently about 6×10^9 , for a final figure of about 6×10^{12}) **using an appropriate method of calculation as outlined above, individualization is effectively achieved.** (The rationale starts with the premise that, with the exception of identical twins, every person is unique, and hence in a class of one; the exponent is adjusted for substructure and sampling effects, which may add two orders of magnitude at that level; then one more order of magnitude is added for safety). This threshold value can be achieved by the use of any combination of DNA loci that gives the recommended number, whether by the addition of VNTR probes to RFLP analysis or PCR typing of numerous loci. Alternatively, any combination of DNA loci typed by any method that achieves some defined threshold probability of discrimination may be appropriate.

[8.] * * *

9. “What other issues do you believe that the committee should examine?”

Many courts have interpreted the NRC report as rejecting PCR as a reliable forensic tool. The enormous amount of literature in medical and research genetics and validation of PCR markers for forensic use amply justifies the statement that PCR is a reliable forensic tool.

We recommend that you make a clear differentiation between a true assailant (the evidence) and that suspect/defendant (the reference), and that statistical considerations be based on the former, not the latter.

We recommend a thorough proofreading and careful editing of your final draft to eliminate inconsistencies between sections.



Street Terms: Drugs and the Drug Trade

October 1994

The ability to understand current drug-related street terms is an invaluable tool for law enforcement, public health, and other criminal justice professionals who work with the public. This document contains over 1,500 street terms that refer to specific drug types or drug activity.

Examples include "woolah," which is a hollowed cigar filled with marijuana and crack; "kibbles & bits," which is a term used to describe small crumbs of crack; "rave," which describes a party designed to enhance a hallucinogenic experience through lights and music; "skeegers," which can be used interchangeably with the term "skeezers" and means a crack-smoking prostitute; "wild cat," which is a term for methcathinone mixed with cocaine.

All terms are cross-referenced where possible. A single term or similar terms may refer to various drugs or have different meanings, reflecting geographic and demographic variations in slang. All known meanings and spellings are included. No attempt was made to determine which usage is most frequent or widespread. Different definitions for a single term are separated by semi-colons (;). The use of commas (,) and the connective "and" indicates that the term refers to the use of the specified drugs in combination.

For source information, please contact the Drugs & Crime Data Center & Clearinghouse at 1-800-666-3332.

—From CompuServe's SafetyNet

Alphabetical Listing

A - LSD; amphetamine
Abe - \$5 worth of drugs
Abe's cab - \$5 bill
Abolic - veterinary steroid
Acapulco gold - marijuana from S.W. Mexico
Acapulco red - marijuana
Ace - marijuana; PCP
Acid - LSD
Acid head - LSD user
Adam - MDMA
African black - marijuana
African bush - marijuana
African woodbine - marijuana cigarette
Agonies - withdrawal symptoms
Ah-pen-yen - opium
Aimies - amphetamine; amyl nitrite
AIP - heroin from Afghanistan, Iran, & Pakistan
Air blast - inhalant
Airhead - marijuana user
Airplane - marijuana
Alice B. Taklas - marijuana brownie
All lit up - under the influence of drugs
All star - user of multiple drugs
All-American drug - cocaine
Alpha-ET - alpha-ethyltyptamine
Ames - amyl nitrite
Amidone - methadone
Amoeba - PCP
Amp - amphetamine
Amp joint - marijuana cigarette laced with some form of narcotic
Amped-out - fatigue after using amphetamines
Amping - accelerated heartbeat
AMT - dimethyltryptamine
Anadrol - oral steroid

Anatrofin - injectable steroid
Anavar - oral steroid
Angel dust - PCP
Angel hair - PCP
Angel mist - PCP
Angie - cocaine
Angola - marijuana
Animal - LSD
Animal trunk - PCP
Animal tranquilizer - PCP
Antifreeze - heroin
Apple jacks - crack
Aries - heroin
Aroma of men - isobutyl nitrite
Artillery - equipment for injecting drugs
Ashes - marijuana
Atom bomb - marijuana and heroin
Atshitshi - marijuana
Aunt Hazel - heroin
Aunt Mary - marijuana
Aunt Nora - cocaine
Aunti - opium
Aunti Emma - opium
Aurora borealis - PCP
B - amount of marijuana to fill a matchbox
B-40 - cigar laced with marijuana and dipped in malt liquor
B.J.'s - crack
Babe - drug used for detoxification
Baby - marijuana
Baby bhang - marijuana
Baby habit - occasional use of drugs
Babysit - guide someone through first drug experience
Baby T - crack

Backbreakers - LSD and strychnine
Back door - residue left in a pipe
Backjack - injecting opium
Back to back - smoking crack after injecting heroin or heroin used after smoking crack
Backtrack - allow blood to flow back into a needle during injection
Backup - prepare vein for injection
Backwards - depressant
Bad bundle - inferior quality heroin
Bad - crack
Bad go - bad reaction to a drug
Bad seed - peyote; heroin; marijuana
Bag - container for drugs
Bag bride - crack-smoking prostitute
Bag man - person who transports money
Bagging - using inhalant
Bale - marijuana
Ball - crack
Balling - vaginally implanted cocaine
Balloon - heroin supplier
Ballot - heroin
Bam - depressant; amphetamine
Bambalacha - marijuana
Bams - depressant
Bang - to inject a drug; inhalant
Bank bandit pills - depressant
Bar - marijuana
Barb - depressant
Barbs - cocaine
Barrels - LSD
Base - cocaine; crack
Baseball - crack
Base crazies - searching on hands and knees for crack Base head - person who bases
Bash - marijuana
Basuco - cocaine; coca paste residue sprinkled on marijuana or regular cigarette
Bathtub speed - methcathinone
Batt - IV needle
Battery acid - LSD
Bazooka - cocaine; crack
Bazulco - cocaine
Beam me up Scottie - crack dipped in PCP
Beamer - crack user
Beans - amphetamine; depressant; mescaline
Beast - LSD
Beat artist - person selling bogus drugs
Beat vials - vials containing sham crack to cheat buyers
Beautiful boulders - crack
Bebe - crack
Bedbugs - fellow addicts
Beemers - crack
Behind the scale - to weigh and sell cocaine
Beiging - chemicals altering cocaine to make it appear a higher purity
Belt - effects of drugs
Belushi - cocaine and heroin
Belyanda spruce - marijuana
Bender - drug party
Bennie - amphetamine
Benz - amphetamine
Bernice - cocaine
Bernie - cocaine
Bernie's flakes - cocaine
Bernie's gold dust - cocaine
Bhang - marijuana, Indian term
Big bag - heroin
Big bloke - cocaine
Big C - cocaine

Big 8	- 1/8 kilogram of crack	Blowcaine	- crack diluted with cocaine	Bottles	- crack vials; amphetamine
Big D	- LSD	Blow coke	- to inhale cocaine	Boubou	- crack
Big H	- heroin	Blow one's roof	- to smoke marijuana	Boulder	- crack; \$20 worth of crack
Big Harry	- heroin	Blow smoke	- to inhale cocaine	Boulya	- crack
Big flake	- cocaine	Blowing smoke	- marijuana	Bouncing powder	- cocaine
Big man	- drug supplier	Blowout	- crack	Boxed	- in jail
Big O	- opium	Blow up	- crack cut with lidocaine to increase size, weight, and street value	Boy	- heroin
Big rush	- cocaine			Bozo	- heroin
Bill Blass	- crack	Blue	- depressant; crack	Brain ticklers	- amphetamine
Billie hoke	- cocaine	Blue acid	- LSD	Breakdowns	- \$40 crack rock sold for \$20
Bindle	- small packet of drug powder; heroin	Blue angels	- depressant	Break night	- staying up all night until day break
Bing	- enough of a drug for one injection	Blue barrels	- LSD	Brewery	- place where drugs are made
Bingers	- crack addicts	Blue birds	- depressant	Brick	- 1 kilogram of marijuana; crack
Bingo	- to inject a drug	Blue boy	- amphetamine	Brick gum	- heroin
Bings	- crack	Blue bullets	- depressant	Bridge up or bring up	- ready a vein for injection
Birdie powder	- heroin; cocaine	Blue caps	- mescaline	Britton	- peyote
Biscuit	- 50 rocks of crack	Blue chairs	- LSD	Brccoli	- marijuana
Bite one's lips	- to smoke marijuana	Blue cheers	- LSD	Broker	- go-between in a drug deal
Biz	- bag or portion of drugs	Blue de hue	- marijuana from Vietnam	Brown	- heroin; marijuana
Black	- opium; marijuana	Blue devil	- depressant	Brown bombers	- LSD
Black acid	- LSD; LSD and PCP	Blue dolls	- depressant	Brown crystal	- heroin
Black and white	- amphetamine	Blue heaven	- LSD	Brown dots	- LSD
Black bart	- marijuana	Blue heavens	- depressant	Brown rhine	- heroin
Black beauties	- depressant; amphetamine	Blue microdot	- LSD	Brown sugar	- heroin
Black birds	- amphetamine	Blue mist	- LSD	Brownies	- amphetamine
Black bombers	- amphetamine	Blue moons	- LSD	Browns	- amphetamine
Black ganga	- marijuana resin	Blue sage	- marijuana	Bubble gum	- cocaine; crack
Black gold	- high potency marijuana	Blue sky blond	- high potency marijuana from Columbia	Buck	- shoot someone in the head
Black gungi	- marijuana from India	Blue tips	- depressant	Bud	- marijuana
Black gunion	- marijuana	Blue vials	- LSD	Buda	- a high-grade marijuana joint filled with crack
Black hash	- opium and hashish	Blunt	- marijuana inside a cigar; marijuana and cocaine inside a cigar	Buffer	- crack smoker; a woman who exchanges oral sex for crack
Black ma/black mont	- highly potent marijuana	Ba-bo	- marijuana	Bugged	- annoyed; to be covered with sores and abscesses from repeated use of unsterile needles
Black mollies	- amphetamine	Bobo	- crack		
Black mote	- marijuana mixed with honey	Bobo bush	- marijuana		
Black pearl	- heroin	Body packer	- person who ingests crack or cocaine to transport it		
Black pill	- opium pill				
Black rock	- crack	Body stuffer	- person who ingests crack vials to avoid prosecution	Bull	- narcotics agent or police officer
Black Russian	- hashish mixed with opium			Bullet	- isobutyl nitrite
Black star	- LSD	Bagart a joint	- salivate on a marijuana cigarette; refuse to share	Bullet bolt	- inhalant
Black stuff	- heroin			Bullia capital	- crack
Black sunshine	- LSD	Bohd	- marijuana; PCP	Bullion	- crack
Black tabs	- LSD	Bolasterone	- injectable steroid	Bullyon	- marijuana
Black tar	- heroin	Bolivian marching powder	- cocaine	Bumblebees	- amphetamine
Black whack	- PCP	Bolo	- crack	Bump	- crack; fake crack; boost a high; hit of ketamine (\$20)
Blacks	- amphetamine	Bolt	- isobutyl nitrite		
Blanco	- heroin	Bomb	- crack; heroin; large marijuana cigarette; high potency heroin	Bundle	- heroin
Blanket	- marijuana cigarette			Bunk	- fake cocaine
Blanks	- low quality drugs	Bomb squad	- crack-selling crew	Burese	- cocaine
Blast	- to smoke marijuana; to smoke crack	Bomber	- marijuana cigarette	Burn one	- to smoke marijuana
Blast a joint	- to smoke marijuana	Bombido	- injectable amphetamine; heroin; depressant	Burn the main line	- to inject a drug
Blast a roach	- to smoke marijuana	Bombita	- amphetamine; heroin; depressant	Burned	- purchase fake drugs
Blast a stick	- to smoke marijuana	Bombs away	- heroin	Burned out	- collapse of veins from repeated injections; permanent impairment from drug abuse
Blasted	- under the influence of drugs	Bone	- marijuana; \$50 piece of crack		
Blizzard	- white cloud in a pipe used to smoke cocaine	Bonecrusher	- crack	Burnese	- cocaine
Block	- marijuana	Bones	- crack	Burnie	- marijuana
Block busters	- depressant	Bong	- pipe used to smoke marijuana	Burnout	- heavy abuser of drugs
Blonde	- marijuana	Bonita	- heroin	Bush	- cocaine; marijuana
Blotter	- LSD; cocaine	Boo	- marijuana	Businessman's LSD	- dimethyltryptamine
Blotter acid	- LSD	Boom	- psilocybin/psilocin	Businessman's trip	- dimethyltryptamine
Blotter cube	- LSD	Boomers	- to inject a drug; to steal	Businessman's special	- dimethyltryptamine
Blow	- cocaine; to inhale cocaine; to smoke marijuana	Boost	- steal to support a habit	Busted	- arrested
Blow a fix	- injection misses the vein and is wasted in the skin	Boost and shoot	- to inhale cocaine	Busters	- depressant
blow a shot	- injection misses the vein and is wasted in the skin	Booster	- to inject a drug	Busy bee	- PCP
blow the vein	- injection misses the vein and is wasted in the skin	Boot	- to smoke marijuana	Butt naked	- PCP
		Boot the gong	- under the influence of drugs	Butter	- marijuana; crack
Blow a stick	- to smoke marijuana	Booted	- amyl nitrite	Butter flower	- marijuana
Blow blue	- to inhale cocaine	Boppers	- crack	Buttons	- mescaline
		Botray		Butu	- heroin
				Buzz	- under the influence of drugs
				Buzz bomb	- nitrous oxide

Street Terms

C	- cocaine
C joint	- place where cocaine is sold
C & M	- cocaine and morphine
C-dust	- cocaine
C-game	- cocaine
Caballo	- heroin
Cabello	- cocaine
Caca	- heroin
Cactus	- mescaline
Cactus buttons	- mescaline
Cactus head	- mescaline
Cad/Cadillac	- 1 ounce
Cadillac	- PCP
Cadillac express	- methcathinone
Cakes	- round discs of crack
Caine	- cocaine; crack
California cornflakes	- cocaine
California sunshine	- LSD
Cam trip	- high potency marijuana
Cambodian red/	
Cam red	- marijuana from Cambodia
Came	- cocaine
Can	- marijuana; 1 ounce
Canadian black	- marijuana
Canamo	- marijuana
Canappa	- marijuana
Cancelled stick	- marijuana cigarette
Candy	- cocaine; crack; depressant; amphetamine
Candy C	- cocaine
Cannabinol	- PCP
Cannabis tea	- marijuana
Cap	- crack; LSD
Caps	- crack
Cap up	- transfer bulk form drugs to capsules
Capital H	- heroin
Caps	- heroin; psilocybin/psilocin
Carburetor	- crack stem attachment
Carga	- heroin
Carmabis	- marijuana
Carne	- heroin
Carnie	- cocaine
Carpet patrol	- crack smokers searching the floor for crack
Carrie	- cocaine
Carrie Nation	- cocaine
Cartucho	- package of marijuana cigarettes
Cartwheels	- amphetamine
Casper the ghost	- crack
Cat	- methcathinone
Cat valium	- ketamine
Catnip	- marijuana cigarette
Caviar	- crack
Cavite all star	- marijuana
Cecil	- cocaine
Chalk	- methamphetamine; amphetamine
Chalked up	- under the influence of cocaine
Chalking	- chemically altering the color of cocaine so it looks white
Chandoo/chandu	- opium
Channel	- vein into which a drug is injected
Channel swimmer	- one who injects heroin
Charas	- marijuana from India
Charge	- marijuana
Charged up	- under the influence of drugs
Charley	- heroin
Charlie	- cocaine
Chase	- to smoke cocaine; to smoke marijuana
Chaser	- compulsive crack user
Chasing the dragon	- crack and heroin

Chasing the tiger	- to smoke heroin
Cheap basing	- crack
Check	- personal supply of drugs
Cheeba	- marijuana
Cheeo	- marijuana
Chemical	- crack
Chewies	- crack
Chiba chiba	- high potency marijuana from Columbia
Chicago black	- marijuana, term from Chicago
Chicago green	- marijuana
Chicken powder	- amphetamine
Chicken scratch	- searching on hands and knees for crack
Chicle	- heroin
Chief	- LSD; mescaline
Chieva	- heroin
China cat	- high potency heroin
China girl	- fentanyl
China town	- fentanyl
China White	- fentanyl
Chinese molasses	- opium
Chinese red	- heroin
Chinese tobacco	- opium
Chip	- heroin
Chipper	- occasional Hispanic user
Chipping	- using drugs occasionally
Chippy	- cocaine
Chira	- marijuana
Chocolate	- opium; amphetamine
Chocolate chips	- LSD
Chocolate ecstasy	- crack made brown by adding chocolate milk powder during production
Cholly	- cocaine
Chorals	- depressant
Christina	- amphetamine
Christmas rolls	- depressant
Christmas tree	- marijuana; depressant; amphetamine
Chronic	- marijuana; marijuana mixed with crack
Chucks	- hunger following withdrawal from heroin
Churus	- marijuana
Cid	- LSD
Cigarette paper	- packet of heroin
Cigarrode cristal	- PCP
Citrol	- high potency marijuana, from Nepal
CJ	- PCP
Clear up	- stop drug use
Clicker	- crack and PCP
Climax	- crack; isobutyl nitrite; heroin
Climb	- marijuana cigarette
Clips	- rows of vials heat-sealed together
Clacking paper	- profits from selling drugs
Closet baser	- user of crack who prefers anonymity
Cloud	- crack
Cloud nine	- crack
Cluck	- crack smoker
Co-pilot	- amphetamine
Coasting	- under the influence of drugs
Coasts to coasts	- amphetamine
Coca	- cocaine
Cocaine blues	- depression after extended cocaine use
Cochorns	- marijuana
Cocktail	- cigarette laced with cocaine or crack; partially smoked marijuana cigarette inserted in regular cigarette
Cocoa puff	- to smoke cocaine and marijuana
Coconut	- cocaine
Coco rocks	- dark brown crack made by adding chocolate pudding during production
Coco snow	- benzocaine used as cutting agent for crack
Cod	- large amount of money
Coffee	- LSD

Coke	- cocaine; crack
Coke bar	- bar where cocaine is openly used
Cola	- cocaine
Cold turkey	- sudden withdrawal from drugs
Coli	- marijuana
Coliflor tostao	- marijuana
Colorado cocktail	- marijuana
Columbian	- marijuana
Columbo	- PCP
Columbus black	- marijuana
Comeback	- benzocaine and mannitol used to adulterate cocaine for conversion to crack
Come home	- end a "trip" from LSD
Conductor	- LSD
Connect	- purchase drugs; supplier of illegal drugs
Contact lens	- LSD
Cook	- mix heroin with water; heating heroin to prepare it for injection
Cook down	- process in which users liquify heroin in order to inhale it
Cooker	- to inject a drug
Cookies	- crack
Coolie	- cigarette laced with cocaine
Cooler	- cigarette laced with a drug
Cop	- obtain drugs
Copping zones	- specific areas where buyers can purchase drugs
Coral	- depressant
Coriander seeds	- cash
Cork the air	- to inhale cocaine
Corrinne	- cocaine
Cosa	- marijuana
Cotics	- heroin
Cotton	- currency
Cotton brothers	- cocaine, heroin and morphine
Courage pills	- heroin; depressant
Course note	- bill larger than \$2
Cozmo's	- PCP
Crack	- cocaine
Crack attack	- craving for crack
Crack back	- crack and marijuana
Crack cooler	- crack soaked in wine cooler
Cracker jacks	- crack smokers
Crackers	- LSD
Crack gallery	- place where crack is bought and sold
Crack spot	- area where people can purchase crack
Crack	- methamphetamine; amphetamine; methcathinone
Cranking up	- to inject a drug
Crap/crap	- low quality heroin
Crash	- sleep off effects of drugs
Crazy weed	- marijuana
Credit card	- crack stem
Crib	- crack
Crimmie	- cigarette laced with crack
Crink	- methamphetamine
Cripple	- marijuana cigarette
Cris	- methamphetamine
Crisscross	- amphetamine
Cristina	- methamphetamine
Croak	- crack and methamphetamine
Cross tops	- amphetamine
Crossroads	- amphetamine
Crown cap	- heroin
Crumbs	- tiny pieces of crack
Crunch & Munch	- crack
Cruz	- opium from Veracruz, Mexico
Crying weed	- marijuana
Crypto	- methamphetamine
Crystal	- methamphetamine; PCP; amphetamine; co-

Crystal joint	- caine	Domex	- PCP and MDMA	Embalming fluid	- PCP
Crystal meth	- PCP	Dominoes	- amphetamine	Emergency gun	- instrument used to inject other than syringe
Crystal tea	- methamphetamine	Don jem	- marijuana	Emsel	- morphine
Cube	- LSD	Dona Juana	- marijuana	Endo	- marijuana
Cubes	- 1 ounce; LSD	Dona Juanita	- marijuana	Enoltestovis	- injectable steroid
Culican	- marijuana tablets	Doobie/dubbe/duby	- marijuana	Ephedrone	- methcathinone
Cupcakes	- high potency marijuana from Mexico	Doogie/doojee/dugie	- heroin	Equipose	- veterinary steroid
Cura	- LSD	Dooley	- heroin	Erth	- PCP
Cushion	- heroin	Dope	- heroin; marijuana; any other drug	Esra	- marijuana
Cut	- vein into which a drug is injected	Dope fiend	- crack addict	Estuffa	- heroin
Cut-deck	- adulterate drugs	Dope smoke	- to smoke marijuana	ET	- alpha-ethyltyptamine
Cyclones	- heroin mixed with powdered milk	Dopium	- opium	Eve	- MDEA
D	- PCP	Doradilla	- marijuana	Explorers club	- group of LSD users
Dabble	- LSD	Dots	- LSD	Eye opener	- crack; amphetamine
Dagga	- use drugs occasionally	Doub	- \$20 rock of crack	Factory	- place where drugs are packaged, diluted, or manufactured
Dama blanca	- marijuana	Double bubble	- cocaine	Fall	- arrested
Dance fever	- cocaine	Double cross	- amphetamine	Fallbrook redhair	- marijuana, term from Fallbrook, CA
Dawamesk	- fentanyl	Double dame	- LSD	Famous dimes	- crack
Dead on arrival	- marijuana	Double rock	- crack diluted with procaine	Fantasia	- dimethyltryptamine
Deca-duabolin	- heroin	Double trouble	- depressant	Fat bags	- crack
Deck	- injectable steroid	Double ups	- a \$20 rock that can be broken into two \$20 rocks	Fatty	- marijuana cigarette
Deeda	- 1 to 15 grams of heroin, also known as a bag; packet of drugs	Double yoke	- crack	Feed bag	- container for marijuana
Delatestryl	- LSD	Dove	- \$35 piece of crack	Ferry dust	- heroin
Demo	- injectable steroid	Dover's powder	- opium	Fi-da-nie	- opium
Demolish	- crack stem; a sample-size quantity of crack	Downer	- depressant	Fields	- LSD
Dep-testosterone	- crack	Downie	- depressant	Fiend	- someone who smokes marijuana alone
DET	- injectable steroid	Draf weed	- marijuana	Fifteen cents	- \$15 worth of drugs
Detroit pink	- dimethyltryptamine	Drag weed	- marijuana	Fifty-one	- crack
Deuce	- PCP	Draw up	- to inject a drug	Finajet/finaject	- veterinary steroid
Devil's dandruff	- \$2 worth of drugs; heroin	Dream	- cocaine	Fine stuff	- marijuana
Devil's dick	- crack	Dream gum	- opium	Finger	- marijuana cigarette
Devil's dust	- crack pipe	Dream stick	- opium	Fir	- marijuana
Devilsmoke	- PCP	Dreamer	- morphine	Fire	- to inject a drug; crack and methamphetamine
Dew	- crack	Dreams	- opium	Fire it up	- to smoke marijuana
Dews	- marijuana	Dreck	- heroin	First line	- morphine
Dexies	- \$10 worth of drugs	Dropper	- to inject a drug	Fish scales	- crack
Diambista	- amphetamine	Drowsy high	- depressant	Five cent bag	- \$5 worth of drugs
Dianabol	- marijuana	Dry high	- marijuana	Five C note	- \$500 bill
Diet pills	- veterinary steroid	Duct	- cocaine	Five dollar bag	- \$50 worth of drugs
Dihydrolone	- amphetamine	'Due	- residue of oils trapped in a pipe after smoking base	Fives	- amphetamine
Dimba	- injectable steroid	Duji	- heroin	Fix	- to inject a drug
Dime	- marijuana from West Africa	Durabolin	- injectable steroid	Fizzies	- methadone
Dime bag	- crack; \$10 worth of crack	Durag	- marijuana	Flag	- appearance of blood in the vein
Dime's worth	- \$10 worth of drugs	Duras	- marijuana	Flake	- cocaine
Ding	- amount of heroin to cause death	Dust	- heroin; cocaine; PCP; marijuana mixed with various chemicals	Flame cooking	- smoking cocaine base by putting the pipe over a stove flame
Dinkie dow	- marijuana	Dust of angels	- PCP	Flamethrowers	- cigarette laced with cocaine and heroin
Dip	- marijuana	Dusted parsley	- PCP	Flash	- LSD
Dipping out	- crack runners taking a portion of crack from vials	Dusting	- adding PCP, heroin, or another drug to marijuana	Flat blues	- LSD
Dirt	- crack	Dymethzine	- injectable steroid	Flat chunks	- crack cut with benzocaine
Dirt grass	- heroin	Dynamite	- heroin and cocaine	Flea powder	- low purity heroin
Dirty basing	- inferior quality marijuana	Dyna	- heroin	Florida snow	- cocaine
Disco biscuits	- crack	Dyno-pure	- heroin	Flower	- marijuana
Disease	- depressant	Earth	- marijuana cigarette	Flower tops	- marijuana
Ditch	- drug of choice	Easing powder	- opium	Fly Mexican airlines	- to smoke marijuana
Ditch weed	- marijuana	Eastside player	- crack	Flying	- under the influence of drugs
Djamba	- marijuana inferior quality, Mexican	Easy score	- obtaining drugs easily	Following that cloud	- searching for drugs
DMT	- marijuana	Eating	- taking a drug orally	Foo foo stuff	- heroin; cocaine
Do a joint	- Dimethyltryptamine	Ecstasy	- MDMA	Foo-foo dust	- cocaine
Do a line	- to smoke marijuana	Egg	- crack	Foolish powder	- heroin; cocaine
DOA	- to inhale cocaine	Eight ball	- crack	Footballs	- amphetamine
Dog	- PCP; crack	Eightball	- 1/8 ounce of drugs	45 Minute Psychosis	- Dimethyltryptamine
Dog food	- good friend	Eighth	- crack and heroin	Forwards	- amphetamine
Dogie	- heroin	El diablo	- heroin	Fraho/frajo	- marijuana
Dallar	- heroin	El diablo	- marijuana, cocaine, heroin and PCP	Freebase	- smoking cocaine; crack
Dalls	- \$100 worth of drugs	Electric Koal Aid	- marijuana, cocaine and heroin	Freeze	- cocaine; renege on a drug deal
Domes	- depressant	Elephant	- LSD	French blue	- amphetamine
Domestic	- LSD		- PCP	French fries	- crack

Street Terms

Fries - crack
 Frios - marijuana laced with PCP
 Frisco special - cocaine, heroin and LSD
 Frisco speedball - cocaine, heroin and LSD
 Friskie powder - cocaine
 Fry - crack
 Fry daddy - crack and marijuana; cigarette laced with crack

 Fu - marijuana
 Fuel - marijuana mixed with insecticides; PCP
 Fuede - hypodermic needle
 Fuma D'Angola - marijuana Portugese term
 G - \$1000 or 1 gram of drugs; term for an unfamiliar male

 G.B. - depressant
 GHB - gamma hydroxy butyrate
 G-rock - one gram of rock cocaine
 G-shot - small dose of drugs used to hold off withdrawal symptoms until full dose can be taken

 Gaffel - fake cocaine
 Gaffus - hypodermic needle
 Gage/gauge - marijuana
 Gagers - methcathinone
 Gaggers - methcathinone
 Galloping horse - heroin
 Gamot - heroin
 Gange - marijuana
 Gangster - marijuana
 Gangster pills - depressant
 Ganja - marijuana from Jamaica
 Gank - fake crack
 Garbage - inferior quality drugs
 Garbage heads - users who buy crack from street dealers instead of cooking it themselves

 Garbage rock - crack
 Gash - marijuana
 Gasper - marijuana cigarette
 Gasper stick - marijuana cigarette
 Gato - heroin
 Gauge butt - marijuana
 Gee - opium
 Geek - crack and marijuana
 Geeze - to inhale cocaine
 Geezer - to inject a drug
 Geezin a bit of dee gee - injecting a drug
 George smack - heroin
 Get a gage up - to smoke marijuana
 Get a gift - obtain drugs
 Get down - to inject a drug
 Get high - to smoke marijuana
 Get lifted - under the influence of drugs
 Get off - to inject a drug; get "high"
 Get the wind - to smoke marijuana
 Get through - obtain drugs
 Ghana - marijuana
 Ghost - LSD
 Ghost busting - smoking cocaine; searching for white particles in the belief that they are crack

 Gick monster - crack smoker
 Gift-of-the-sun - cocaine
 Giggie smoke - marijuana
 Gimmick - drug injection equipment
 Gimmie - crack and marijuana
 Gin - cocaine
 Girl - cocaine; crack; heroin
 Girlfriend - cocaine
 Give wings - inject someone or teach someone to inject

Glacines
 Glad stuff - heroin
 Glading - cocaine
 Glass - using inhalant
 Glass gun - hypodermic needle; amphetamine
 Glo - hypodermic needle
 Gluey - crack
 Go-fast - person who sniffs glue
 Go into a sewer - methcathinone
 Go loco - to inject a drug
 Go loco - to smoke marijuana
 Go on a sleigh ride - to inhale cocaine
 God's flesh - psilocybin/psilocin
 God's medicine - opium
 Gold - marijuana; crack
 Gold dust - cocaine
 Gold star - marijuana
 Golden Dragon - LSD
 Golden girl - heroin
 Golden leaf - very high quality marijuana
 Golf ball - crack
 Golf balls - depressant
 Golpe - heroin
 Goma - opium; black tar heroin
 Gondola - opium
 Gong - marijuana; opium
 Goob - methcathinone
 Good and plenty - heroin
 Good butt - marijuana cigarette
 Good giggles - marijuana
 Good go - proper amount of drugs for the money paid
 Good H - heroin
 Good lick - good drugs
 Goodfellas - fentanyl
 Goof butt - marijuana cigarette
 Goofball - cocaine and heroin; depressant
 Goofers - depressant
 Goofy's - LSD
 Goon - PCP
 Goon dust - PCP
 Gopher - person paid to pickup drugs
 Goric - opium
 Gorilla biscuits - PCP
 Gorilla pills - depressant
 Got it going on - fast sale of drugs
 Graduate - completely stop using drugs or progress to stronger drugs

 Gram - hashish
 Grape parfait - LSD
 Grass - marijuana
 Grass brownies - marijuana
 Grata - marijuana
 Gravel - crack
 Gravy - to inject a drug; heroin
 Grease - currency
 Great tobacco - opium
 Green - inferior quality marijuana; PCP; ketamine
 Green double domes - LSD
 Green dragons - depressant
 Green frog - depressant
 Green goddess - marijuana
 Green gold - cocaine
 Green goods - paper currency
 Green leaves - PCP
 Green single domes - LSD
 Green wedge - LSD
 Greens/green stuff - paper currency
 Greeter - marijuana
 Greta - marijuana
 Grey shields - LSD

Griefo - marijuana
 Griff - marijuana
 Griffo - marijuana
 Grit - crack
 Groceries - crack
 Ground control - guide or caretaker during a hallucinogenic experience

 Gum - opium
 Guma - opium
 Gun - to inject a drug; needle
 Gungun - marijuana
 Gutter - vein into which a drug is injected
 Gutter junkie - addict who relies on others to obtain drugs
 Gyve - marijuana cigarette
 H - heroin
 H & C - heroin and cocaine
 H Caps - heroin
 Hache - heroin
 Hail - crack
 Hair - heroin
 Half - 1/2 ounce
 Half-a-C - \$50 bill
 Half a football field - 50 rocks of crack
 Half G - \$500
 Half load - 15 bags (decks) of heroin
 Half moon - peyote
 Half piece - 1/2 ounce of heroin or cocaine
 Half track - crack
 Hamburger helper - crack
 Hand-to-hand - direct delivery and payment
 Hand-to-hand man - transient dealers who carry small amounts of crack

 Hanhich - marijuana
 Happy cigarette - marijuana cigarette
 Happy dust - cocaine
 Happy powder - cocaine
 Happy trails - cocaine
 Hard candy - heroin
 Hard line - crack
 Hard rock - crack
 Hard stuff - opium; heroin
 Hardware - isobutyl nitrite
 Harry - heroin
 Hats - LSD
 Has - marijuana
 Have a dust - cocaine
 Haven dust - cocaine
 Hawaii - very high potency marijuana
 Hawaiian sunshine - LSD
 Hawk - LSD
 Hay - marijuana
 Hay butt - marijuana cigarette
 Haze - LSD
 Hazel - heroin
 HCP - PCP
 Head drugs - amphetamine
 Headlights - LSD
 Heart-on - inhalant
 Hearts - amphetamine
 Heaven dust - heroin; cocaine
 Heavenly blue - LSD
 Heeled - having plenty of money
 Helen - heroin
 Hell dust - heroin
 He-man - fentanyl
 Hemp - marijuana
 Henpicking - searching on hands and knees for crack
 Henry - heroin
 Henry VIII - cocaine

Her	- cocaine	Ice cream habit	- amphetamine; MDMA	Jum	- sealed plastic bag containing crack
Herb	- marijuana	Ice cube	- occasional use of drugs	Jumbos	- large vials of crack sold on the streets
Herb and Al	- marijuana and alcohol	Iceing	- crack	Junk	- cocaine; heroin
Herba	- marijuana	Idiot pills	- cocaine	Junkie	- addict
Hero	- heroin	In	- depressant	Kabayo	- heroin
Hero of the underworld	- heroin	Inbetween	- connected with drug suppliers	Kabuki	- crack pipe made from a plastic rum bottle and a rubber sparkplug cover
Heroina	- heroin	Inca message	- depressant; amphetamine	Kali	- marijuana
Herone	- heroin	Indian boy	- cocaine	Kangaroo	- crack
Hessle	- heroin	Indian hay	- marijuana	Kaps	- PCP
Highbeams	- the wide eyes of a person on crack	Indica	- marijuana from India	Karachi	- heroin
Hikori	- peyote		- species of cannabis, found in hot climate, grows 3.5 to 4 feet	Kaya	- marijuana
Hikuli	- peyote	Indo	- marijuana, term from Northern CA	Kentucky blue	- marijuana
Him	- heroin	Indonesian bud	- marijuana; opium	KGB (killer green bud)	- marijuana
Hinkley	- PCP	Instant zen	- LSD	K-hole	- periods of ketamine-induced confusion
Hippie crack	- inhalant	Interplanetary mission	- travel from one crackhouse to another in search of crack	Kibbles & Bits	- small crumbs of crack
Hit	- crack; marijuana cigarette; to smoke marijuana	Isda	- heroin	Kick	- getting off a drug habit; inhalant
Hit the hay	- to smoke marijuana	Issues	- crack	Kick stick	- marijuana cigarette
Hit the main line	- to inject a drug	J	- marijuana cigarette	Kiddie dope	- prescription drugs
Hit the needle	- to inject a drug	Jab/job	- to inject a drug	Kiff	- marijuana
Hit the pit	- to inject a drug	Jack	- steal someone else's drugs	Killer	- marijuana; PCP
Hitch up the reindeers	- to inhale cocaine	Jackpot	- fentanyl	Killer weed (1980s)	- marijuana and PCP
Hitting up	- injecting drugs	Jack-Up	- to inject a drug	Killer weed (1960s)	- marijuana
Hocus	- opium; marijuana	Jag	- keep a high going	Kilo	- 2.2 pounds
Hog	- PCP	Jam	- amphetamine; cocaine	Kilter	- marijuana
Holding	- possessing drugs	Jam Cecil	- amphetamine	Kind	- marijuana
Hombre	- heroin	Jane	- marijuana	King ivory	- fentanyl
Homegrown	- marijuana	Jay smoke	- marijuana	King Kong pills	- depressant
Honey	- currency	Jay	- marijuana cigarette	King's habit	- cocaine
Honey blunts	- marijuana cigars sealed with honey	Jee gee	- heroin	Kit	- equipment used to inject drugs
Honey oil	- ketamine; inhalant	Jefferson airplane	- used match cut in half to hold a partially smoked marijuana cigarette	KJ	- PCP
Honeymoon	- early stages of drug use before addiction or dependency develops	Jellies	- depressant	Kleenex	- MDMA
Hong-yen	- heroin in pill form	Jelly	- cocaine	Klingons	- crack addicts
Hooch	- marijuana	Jelly baby	- amphetamine	Kokomo	- crack
Hooked	- addicted	Jelly bean	- amphetamine; depressant	Kryptonite	- crack
Hooter	- cocaine; marijuana	Jelly beans	- crack	Kumba	- marijuana
Hop/hops	- opium	Jet	- ketamine	KW	- PCP
Hopped up	- under the influence of drugs	Jet fuel	- PCP	L	- LSD
Horn	- to inhale cocaine; crack pipe	Jim Jones	- marijuana laced with cocaine and PCP	L.A.	- long-acting amphetamine
Horning	- heroin; to inhale cocaine	Jive	- heroin; marijuana; drugs	L.L.	- marijuana
Horse	- heroin	Jive doo jee	- heroin	Lace	- cocaine and marijuana
Horse heads	- amphetamine	Jive stick	- marijuana	Lady	- cocaine
Horse tranquilizer	- PCP	Johnson	- crack	Lady caine	- cocaine
Hot dope	- heroin	Joint	- marijuana cigarette	Lady snow	- cocaine
Hot heroin	- poisoned to give to a police informant	Jojee	- heroin	Lakbay diva	- marijuana
Hot load/hot shot	- lethal injection of an opiate	Jolly bean	- amphetamine	Lamborghini	- crack pipe made from plastic rum bottle and a rubber sparkplug cover
Hot stick	- marijuana cigarette	Jolly green	- marijuana	Lason sa daga	- LSD
Hotcakes	- crack	Jolly pop	- casual user of heroin	Laugh and scratch	- to inject a drug
House fee	- money paid to enter a crackhouse	Jolt	- to inject a drug; strong reaction to drugs	Laughing gas	- nitrous oxide
House piece	- crack given to the owner of a crackhouse or apartment where crack users congregate	Jones	- heroin	Laughing grass	- marijuana
How do you like me now?	- crack	Jonesing	- need for drugs	Laughing weed	- marijuana
How's	- morphine	Joy flakes	- heroin	Lay back	- depressant
HRN	- heroin	Joy juice	- depressant	Lay-out	- equipment for taking drugs
Hubba, I am back	- crack	Joy plant	- opium	LBJ	- LSD; PCP; heroin
Hubba pigeon	- crack user looking for rocks on a floor after a police raid	Joy pop	- to inject a drug	Leaf	- marijuana; cocaine
Hubbas	- crack, term from Northern CA	Joy popping	- occasional use of drugs	Leapers	- amphetamine
Huff	- inhalant	Joy powder	- heroin; cocaine	Leaping	- under the influence of drugs
Huffer	- inhalant abuser	Joy smoke	- marijuana	Lemonade	- heroin; poor quality drugs
Hulling	- using others to get drugs	Joy stick	- marijuana cigarette	Lens	- LSD
Hunter	- cocaine	Ju-ju	- marijuana cigarette	Lettuce	- money
Hustle	- attempt to obtain drug customers	Juan Valdez	- marijuana	Lib (Librium)	- depressant
Hytari	- peyote	Juanita	- marijuana	Lid	- 1 ounce of marijuana
Hype	- heroin addict; an addict	Juggle	- sell drugs to another addict to support a habit	Lid proppers	- amphetamine
Hype stick	- hypodermic needle	Juggler	- teen-aged street dealer	Light stuff	- marijuana
I am back	- crack	Jugs	- amphetamine	Lightning	- amphetamine
Ice	- cocaine; methamphetamine; smokeable	Juice	- steroids	Lima	- marijuana
		Juice joint	- marijuana cigarette sprinkled with crack	Lime acid	- LSD
				Line	- cocaine
				Lipton Tea	- inferior quality drugs

Street Terms

Lit up - under the influence of drugs
 Little bomb - amphetamine; heroin; depressant
 Little smoke - marijuana; psilocybin/psilocin
 Liesca - marijuana
 Load - 25 bags of heroin
 Loaded - high
 Loaf - marijuana
 Lobo - marijuana
 Locker room - isobutyl nitrite
 Locoweed - marijuana
 Log - PCP; marijuana cigarette
 Logor - LSD
 Loused - covered by sores and abscesses from repeated use of unsterile needles
 Love - crack
 Love affair - cocaine
 Love boat - marijuana dipped in formaldehyde; PCP
 Love drug - MDMA; depressant
 Love pearls - alpha-ethyltyptamine
 Love pills - alpha-ethyltyptamine
 Love trip - MDMA and mescaline
 Love weed - marijuana
 Lovelies - marijuana laced with PCP
 Lovely - PCP
 LSD - lysergic acid diethylamide
 Lubage - marijuana
 Lucy in the sky with diamonds - LSD
 Ludes - depressant
 Luding out - depressant
 Luds - depressant
 M - marijuana; morphine
 M.J. - marijuana
 M.O. - marijuana
 M.S. - morphine
 M.U. - marijuana
 M&M - depressant
 Machinery - marijuana
 Macon - marijuana
 Magic dust - PCP
 Magic mushroom - psilocybin/psilocin
 Magic smoke - marijuana
 Main line - to inject a drug
 Mainliner - person who injects into the vein
 Make up - need to find more drugs
 Mama coca - cocaine
 Manhattan silver - marijuana
 Marathons - amphetamine
 Mari - marijuana cigarette
 Marshmallow reds - depressant
 Mary - marijuana
 Mary and Johnny - marijuana
 Mary Ann - marijuana
 Mary Jane - marijuana
 Mary Jonas - marijuana
 Mary Warner - marijuana
 Mary Weaver - marijuana
 Maserati - crack pipe made from a plastic rum bottle and a rubber sparkplug cover
 Matchbox - 1/4 ounce of marijuana or 6 marijuana cigarettes
 Matsakow - heroin
 Maui wauie - marijuana from Hawaii
 Max - gamma hydroxy butyrate dissolved in water and mixed with amphetamines
 Maxibolin - oral steroid
 Mayo - cocaine; heroin

MDM - MDMA
 MDMA - methylenedioxy-methamphetamine
 Meg - marijuana
 Megg - marijuana cigarette
 Meggie - marijuana
 Mellow yellow - LSD
 Merchandise - drugs
 Merk - cocaine
 Mesc - mescaline
 Mescal - mescaline
 Mese - mescaline
 Messarole - marijuana
 Meth - methamphetamine
 Meth head - regular user of methamphetamine
 Meth monster - person who has a violent reaction to methamphetamine
 Methatriol - injectable steroid
 Methyltestosterone - oral steroid
 Mexican brown - heroin; marijuana
 Mexican horse - heroin
 Mexican mud - heroin
 Mexican mushroom - psilocybin/psilocin
 Mexican red - marijuana
 Mexican reds - depressant
 Mezz - mescaline
 Mickey Finn - depressant
 Mickey's - depressant
 Microdot - LSD
 Midnight oil - opium
 Mighty Quinn - LSD
 Mighty Joe Young - depressant
 Mighty mezz - marijuana cigarette
 Mind detergent - LSD
 Minibennie - amphetamine
 Mira - opium
 Miss - to inject a drug
 Miss Emma - morphine
 Missile basing - crack liquid and PCP
 Mission - trip out of the crackhouse to obtain crack
 Mist - PCP; crack smoke
 Mister blue - morphine
 Madams - marijuana
 Mohasky - marijuana
 Mojo - cocaine; heroin
 Monkey - drug dependency; cigarette made from cocaine paste and tobacco
 Monkey dust - PCP
 Monkey tranquilizer - PCP
 Monos - cigarette made from cocaine paste and tobacco
 Monte - marijuana from South America
 Mooca/moocah - marijuana
 Moon - mescaline
 Moonrock - crack and heroin
 Mooster - marijuana
 Mootah/mutah - marijuana
 Mooters - marijuana cigarette
 Mootie - marijuana
 Mootos - marijuana
 Mor a grifa - marijuana
 More - PCP
 Morf - morphine
 Morning wake-up - first blast of crack from the pipe
 Morotgara - heroin
 Mortal combat - high potency heroin
 Mosquitos - cocaine
 Mota/moto - marijuana
 Mother - marijuana
 Mother's little helper - depressant

Mouth worker - one who takes drugs orally
 Movie star drug - cocaine
 Mow the grass - to smoke marijuana
 Mud - opium; heroin
 Muggie - marijuana
 Mujer - cocaine
 Mule - carrier of drugs
 Murder one - heroin and cocaine
 Murder 8 - fentanyl
 Mushrooms - psilocybin/psilocin
 Musk - psilocybin/psilocin
 Mutha - marijuana
 Muzzle - heroin
 Nail - marijuana cigarette
 Nailed - arrested
 Nebbies - depressant
 Nemmes - depressant
 New magic - PCP
 New Jack Swing - heroin and morphine
 Nexus - 2C-B
 Nice and easy - heroin
 Nickel bag - \$5 worth of drugs; heroin
 Nickel deck - heroin
 Nickel note - \$5 bill
 Nickeloniens - crack addicts
 Niebla - PCP
 Nimbies - depressant
 Nix - stranger among the group
 Nod - effects of heroin
 Noise - heroin
 Nontoucher - crack user who doesn't want affection during or after smoking crack
 Nose - heroin
 Nose candy - cocaine
 Nose drops - liquified heroin
 Nose stuff - cocaine
 Nose powder - cocaine
 Nubs - peyote
 Nugget - amphetamine
 Nuggets - crack
 Number - marijuana cigarette
 Number 3 - cocaine
 Number 8 - heroin
 O - opium
 O.J. - marijuana
 O.P. - opium
 Ogoy - heroin
 Oil - heroin
 Old Steve - heroin
 On a mission - searching for crack
 On a trip - under the influence of drugs
 On ice - in jail
 On the bricks - walking the streets
 On the nod - under the influence of narcotics or depressant
 One and one - to inhale cocaine
 One box tissue - one ounce of crack
 One-fifty-one - crack
 One way - LSD
 Ope - opium
 Optical illusions - LSD
 Orange barrels - LSD
 Orange cubes - LSD
 Orange haze - LSD
 Orange micro - LSD
 Orange wedges - LSD
 Oranges - amphetamine
 Outerlimits - crack and LSD
 Owsley - LSD
 Owsley's acid - LSD

Oz	- inhalant	Pink hearts	- amphetamine	Quinolone	- injectable steroid
Ozone	- PCP	Pink ladies	- depressant	Racehorse charlie	- cocaine; heroin
P	- peyote	Pink robots	- LSD	Ragweed	- inferior quality marijuana; heroin
PCP	- phencyclidine	Pink wedge	- LSD	Railroad weed	- marijuana
P.R. (Panama Red)	- marijuana	Pink witches	- LSD	Rainbows	- depressant
P-dope	- 20-30% pure heroin	Pipe	- crack pipe; marijuana pipe; vein into which a drug is injected; mix drugs with other substances	Rainy day woman	- marijuana
P-funk	- heroin; crack and PCP			Rambo	- heroin
Pack	- heroin; marijuana	Pipero	- crack user	Rane	- cocaine; heroin
Pack of rocks	- marijuana cigarette	Pit	- PCP	Rangood	- marijuana grown wild
Pakalolo	- marijuana	Pixies	- amphetamine	Rap	- criminally charged; to talk with someone
Pakistani black	- marijuana	Plant	- hiding place for drugs	Raspberry	- female who trades sex for crack or money to buy crack
Panama cut	- marijuana	Packet rocket	- marijuana	Rasta weed	- marijuana
Panama gold	- marijuana	Pod	- marijuana	Raw	- crack
Panama red	- marijuana	Poison	- heroin; fentanyl	Rave	- party designed to enhance a hallucinogenic experience through music and behavior
Panatella	- large marijuana cigarette	Poke	- marijuana	Razed	- under the influence of drugs
Pane	- LSD	Polvo	- heroin; PCP	Ready rock	- cocaine; crack; heroin
Pangonadalot	- heroin	Polvo blanco	- cocaine	Recompress	- change the shape of cocaine flakes to resemble "rock"
Panic	- drugs not available	Pony	- crack	Recycle	- LSD
Paper acid	- LSD	Poor man's pot	- inhalant	Red	- under the influence of drugs
Paper bag	- container for drugs	Pop	- to inhale cocaine	Red and blue	- depressant
Paper blunts	- marijuana within a paper casing rather than a tobacco leaf casing	Poppers	- isobutyl nitrite; amyl nitrite	Red bullets	- depressant
Paper boy	- heroin peddler	Poppy	- heroin	Red caps	- crack
Parabolin	- veterinary steroid	Pot	- marijuana	Red cross	- marijuana
Parachute	- crack and PCP smoked; heroin	Potato	- LSD	Red chicken	- heroin
Paradise	- cocaine	Potato chips	- crack cut with benzocaine	Red devil	- depressant
Paradise white	- cocaine	Potten bush	- marijuana	Red dirt	- marijuana
Parlay	- crack	Powder	- heroin; amphetamine	Reds	- depressant
Parsley	- marijuana	Powder diamonds	- cocaine	Red eagle	- heroin
Paste	- crack	Power puller	- rubber piece attached to crack stem	Red phosphorus	- smokable speed
Pat	- marijuana	Pox	- opium	Reefer	- marijuana
Patico	- crack (Spanish)	Prescription	- marijuana cigarette	Regular P	- crack
Peace	- LSD	Press	- cocaine; crack	Reindeer dust	- heroin
Peace pill	- PCP	Pretendica	- marijuana	Rhine	- heroin
Peace tablets	- LSD	Pretendo	- marijuana	Rhythm	- amphetamine
Peace weed	- PCP	Primo	- crack; marijuana mixed with crack	Riding the wave	- under the influence of drugs
Peaches	- amphetamine	Primobolan	- injectable and oral steroid	Rig	- equipment used to inject drugs
Peanut	- depressant	Primos	- cigarettes laced with cocaine and heroin	Righteous bush	- marijuana
Pearls	- amyl nitrite	Proviran	- oral steroid	Ringer	- good hit of crack
Pearly gates	- LSD	Pseudocaine	- phenylpropanolamine, an adulterant for cutting crack	Rippers	- amphetamine
Pebbles	- crack	Puff the dragon	- to smoke marijuana	Roach	- butt of marijuana cigarette
Peddler	- drug supplier	Puffer	- crack smoker	Roach clip	- holds partially smoked marijuana cigarette
Pee Wee	- crack; \$5 worth of crack	Pulborn	- heroin	Road dope	- amphetamine
Peg	- heroin	Pullers	- crack users who pull at parts of their bodies excessively	Roca	- crack (Spanish)
Pellets	- LSD			Rock attack	- crack
Pen yan	- opium	Pumping	- selling crack	Rock house	- place where crack is sold and smoked
Pep pills	- amphetamine	Pure	- heroin	Rock(s)	- cocaine; crack
Pepsi habit	- occasional use of drugs	Pure love	- LSD	Rocket caps	- dome-shaped caps on crack vials
Perfect High	- heroin	Purple	- ketamine	Rocket fuel	- PCP
Perica	- cocaine	Purple barrels	- LSD	Rockets	- marijuana cigarette
Perp	- fake crack made of candle wax and baking soda	Purple haze	- LSD	Rockette	- female who uses crack
Peth	- depressant	Purple hearts	- LSD; amphetamine; depressant	Rocks of hell	- crack
Peruvian	- cocaine	Purple flats	- LSD	Rock star	- female who trades sex for crack or money to buy crack
Peruvian flake	- cocaine	Purple ozoline	- LSD	Rocky III	- crack
Peruvian lady	- cocaine	Push	- sell drugs	Roid rage	- aggressive behavior caused by excessive steroid use
Peyote	- mescaline	Push shorts	- to cheat or sell short amounts	Roller	- to inject a drug
Phennies	- depressant	Pusher	- one who sells drugs; metal hanger or umbrella rod used to scrape residue in crack stems	Rollers	- police
Phenos	- depressant			Rolling	- MDMA
Pianoing	- using the fingers to find lost crack	Q	- depressant	Rooster	- crack
Piece	- 1 ounce; cocaine; crack	Quad	- depressant	Root	- marijuana
Piedras	- crack (Spanish)	Quarter	- 1/4 ounce or \$25 worth of drugs	Rope	- marijuana
Piles	- crack	Quarter bag	- \$25 worth of drugs	Rosa	- amphetamine
Pimp	- cocaine	Quarter moon	- hashish	Rose marie	- marijuana
Pimp your pipe	- lending or renting your crack pipe	Quarter piece	- 1/4 ounce	Roses	- amphetamine
Pin	- marijuana	Quas	- depressant	Rox	- crack
Pin gon	- opium	Queen Ann's lace	- marijuana	Roxanne	- cocaine; crack
Pin yen	- opium	Quicksilver	- isobutyl nitrite		
Ping-in-wing	- to inject a drug	Quill	- methamphetamine; heroin; cocaine		
Pink blotters	- LSD				

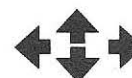
Street Terms

Royal blues - LSD
 Roz - crack
 Ruderalis - species of cannabis, found in Russia, grows 1 to 2.5 feet
 Runners - people who sell drugs for others
 Running - MDMA
 Rush - isobutyl nitrite
 Rush snappers - isobutyl nitrite
 Russian sickles - LSD
 Sack - heroin
 Sacrament - LSD
 Salt - heroin
 Salt and pepper - marijuana
 Sam - federal narcotics agent
 Sancocho - to steal (Spanish)
 Sandoz - LSD
 Sandwich - two layers of cocaine with a layer of heroin in the middle
 Santa Marta - marijuana
 Sasfras - marijuana
 Satan's secret - inhalant
 Satch - papers, letter, cards, clothing, etc., saturated with drug solution (used to smuggle drugs into prisons or hospitals)
 Satch cotton - fabric used to filter a solution of narcotics before injection
 Sativa - species of cannabis, found in cool, damp climate, grows up to 18 feet
 Scaffle - PCP
 Scag - heroin
 Scat - heroin
 Scate - heroin
 Schmeck - cocaine
 Schoolboy - cocaine
 Schoolcraft - crack
 Scissors - marijuana
 Score - purchase drugs
 Scorpion - cocaine
 Scott - heroin
 Scottie - cocaine
 Scotty - cocaine; crack; the high from crack
 Scramble - crack
 Scratch - money
 Scruples - crack
 Seccy - depressant
 Seeds - marijuana
 Seggy - depressant
 Sen - marijuana
 Seni - peyote
 Sernyl - PCP
 Serpico 21 - cocaine
 Server - crack dealer
 Sess - marijuana
 Set - place where drugs are sold
 Sevenup - cocaine; crack
 Sewer - vein into which a drug is injected
 Sezz - marijuana
 Shabu - ice
 Shake - marijuana
 Shaker/baker/water - materials needed to freebase cocaine; shaker bottle, baking soda, water
 Sharps - needles
 She - cocaine
 Sheet rocking - crack and LSD
 Shermans - PCP
 Sherms - PCP; crack

Shmeck/schmeek
 Shoot/shoot up
 Shoot the breeze
 Shooting gallery
 Shot
 Shot down
 Shrooms
 Siddi
 Sightball
 Silly Putty
 Simple Simon
 Sinse
 Sinsemilla
 Sixty-two
 Skee
 Skeegers/skeezers
 Skid
 Skied
 Skin popping
 Skunk
 Slab
 Slam
 Slanging
 Sleeper
 Sleet
 Slick superspeed
 Slime
 Smack
 Smears
 Smoke
 Smoke Canada
 Smoke-out
 Smoking gun
 Snap
 Snappers
 Sniff
 Snop
 Snort
 Snot
 Snot balls
 Snow
 Snowball
 Snow bird
 Snowcones
 Snow pallets
 Snow seals
 Snow soke
 Snow white
 Society high
 Soda
 Softballs
 Soles
 Soma
 Sopors
 Space base
 Space cadet
 Space dust
 Space ship
 Spark it up
 Sparkle plenty
 Sparklers
 Special "K"
 Special la coke
 Speed
 Speed boat
 Speed freak
 Speed for lovers
 - heroin
 - to inject a drug
 - nitrous oxide
 - place where drugs are used
 - to inject a drug
 - under the influence of drugs
 - psilocybin/psilocin
 - marijuana
 - crack
 - psilocybin/psilocin
 - psilocybin/psilocin
 - marijuana
 - potent variety marijuana
 - 2 1/2 ounces of crack
 - opium
 - crack-smoking prostitute
 - heroin
 - under the influence of drugs
 - injecting drugs under the skin
 - marijuana
 - crack
 - to inject a drug
 - selling drugs
 - heroin; depressant
 - crack
 - methcathinone
 - heroin
 - heroin
 - LSD
 - heroin and crack; crack; marijuana
 - marijuana
 - under the influence of drugs
 - heroin and cocaine
 - amphetamine
 - isobutyl nitrite
 - to inhale cocaine; inhalant; methcathinone
 - marijuana
 - to inhale cocaine; use inhalant
 - residue produced from smoking amphetamine
 - rubber cement rolled into balls and burned
 - cocaine; heroin; amphetamine
 - cocaine and heroin
 - cocaine
 - cocaine
 - amphetamine
 - cocaine and amphetamine
 - crack
 - cocaine
 - cocaine
 - injectable cocaine used in Hispanic communities
 - depressant
 - hashish
 - PCP
 - depressant
 - crack dipped in PCP; hollowed out cigar re-filled with PCP and crack
 - crack dipped in PCP
 - crack dipped in PCP
 - glass pipe used to smoke crack
 - to smoke marijuana
 - amphetamine
 - amphetamine
 - ketamine
 - ketamine
 - methamphetamine; amphetamine; crack
 - marijuana, PCP, crack
 - habitual user of methamphetamine
 - MDMA

Speedball
 Spider blue
 Spike
 Splash
 Spliff
 Splim
 Split
 Splivins
 Spoon
 Sporting
 Spray
 Sprung
 Square mackerel
 Square time Bob
 Squirrel
 Stack
 Star
 Stardust
 Star-spangled powder
 Stash
 Stash areas
 Steerer
 Stem
 Stems
 Step on
 Stick
 Stink weed
 Stoned
 Stones
 Stoppers
 STP
 Straw
 Strawberries
 Strawberry
 Strawberry fields
 Strung out
 Stuff
 Stumbler
 Sugar
 Sugar block
 Sugar cubes
 Sugar lumps
 Sugar weed
 Sunshine
 Super acid
 Super C
 Super Grass
 Supergrass
 Sweet Jesus
 Sweet Lucy
 Sweet stuff
 Sweets
 Swell up
 T
 T.N.T.
 Tabs
 Tail lights
 Taima
 Taking a cruise
 Takkouri
 Tango & Cash
 Tar
 Tardust
 Taste
 Taxing
 - heroin and cocaine; amphetamine
 - heroin
 - to inject a drug; needle
 - amphetamine
 - marijuana cigarette
 - marijuana
 - half and half or to leave
 - amphetamine
 - 1/16 ounce of heroin; paraphernalia used to prepare heroin for injection
 - to inhale cocaine
 - inhalant
 - person just starting to use drugs
 - marijuana, term from Florida
 - crack
 - smoking cocaine, marijuana and PCP; LSD
 - marijuana
 - methcathinone
 - cocaine
 - cocaine
 - place to hide drugs
 - drug storage and distribution areas
 - person who directs customers to spots for buying crack
 - cylinder used to smoke crack
 - marijuana
 - dilute drugs
 - marijuana
 - marijuana
 - under the influence of drugs
 - crack
 - depressant
 - PCP
 - marijuana cigarette
 - depressant
 - female who trades sex for crack or money to buy crack
 - LSD
 - heavily addicted to drugs
 - heroin
 - depressant
 - cocaine; LSD; heroin
 - crack
 - LSD
 - LSD
 - marijuana
 - LSD
 - ketamine
 - ketamine
 - PCP
 - marijuana
 - heroin
 - marijuana
 - heroin; cocaine
 - amphetamine
 - crack
 - cocaine; marijuana
 - heroin; fentanyl
 - LSD
 - LSD
 - marijuana
 - PCP
 - marijuana
 - fentanyl
 - opium; heroin
 - cocaine
 - heroin; small sample of drugs
 - price paid to enter a crackhouse; charging more per vial depending on race of customer or if not a regular customer

Tea	- marijuana	Trophobolene	- injectable steroid	Whiteout	- isobutyl nitrite
Tea party	- to smoke marijuana	Truck drivers	- amphetamine	Whites	- amphetamine
Teardrops	- dosage units of crack packaged in the cut-off corners of plastic bags	Tuie	- depressant	Whiz bang	- cocaine and heroin
Tecate	- heroin	Turbo	- crack and marijuana	Wild cat	- methcathinone and cocaine
Tecatos	- Hispanic heroin addicts	Turf	- place where drugs are sold	Window glass	- LSD
Teeth	- cocaine; crack	Turkey	- cocaine; amphetamine	Window pane	- LSD
Tension	- crack	Turnabout	- amphetamine	Wings	- heroin; cocaine
Tex-mex	- marijuana	Turned on	- introduced to drugs; under the influence	Winstrol	- oral steroid
Texas pot	- marijuana	Tutti-frutti	- flavored cocaine developed by a Brazilian gang	Winstrol V	- veterinary steroid
Texas tea	- marijuana			Witch	- heroin; cocaine
Thai sticks	- bundles of marijuana soaked in hashish oil; marijuana buds bound on short sections of bamboo	Tweak mission	- on a mission to find crack	Witch hazel	- heroin
THC	- tetrahydrocannabinol	Tweaker	- crack user looking for rocks on the floor after a police raid	Wollie	- rocks of crack rolled into a marij. cigarette
The beast	- heroin			Wonder star	- methcathinone
The C	- methcathinone	Tweaking	- drug-induced paranoia	Woolah	- a hollowed out cigar refilled with marijuana and crack
The devil	- crack	Tweek	- methamphetamine-like substance	Woolas	- cigarette laced with cocaine; marijuana cigarette sprinkled with crack
The witch	- heroin	Tweaker	- methcathinone	Woolies	- marijuana and crack or PCP
Therobalin	- injectable steroid	Twenty	- \$20 rock of crack	Wooly blunts	- Marijuana and crack or PCP
Thing	- heroin; cocaine; main drug interest at the moment	Twenty-five	- LSD	Working	- selling crack
Thirst monsters	- heavy crack smokers	Twist	- marijuana cigarette	Working half	- crack rock weighing half gram or more
Thirteen	- marijuana	Twistum	- marijuana cigarette	Works	- equipment for injecting drugs
Thoroughbred	- drug dealer who sells pure narcotics	Two for nine	- two \$5 vials or bags of crack for \$9	Wrecking crew	- crack
Thrust	- isobutyl nitrite	Ultimate	- crack	X	- marijuana; MDMA; amphetamine
Thrusters	- amphetamine	Uncle	- Federal agents	X-ing	- MDMA
Thumb	- marijuana	Uncle Milty	- depressant	XTC	- MDMA
Tic tac	- PCP	Unkie	- morphine	Yahoo/yeaho	- crack
Ticket	- LSD	Up against the stem	- addicted to smoking marijuana	Yale	- crack
Tie	- to inject a drug	Uppers	- amphetamine	Yeh	- marijuana
Tin	- container for marijuana	Uppies	- amphetamine	Yellow	- LSD; depressant
Tissue	- crack	Ups and downs	- depressant	Yellow bam	- methamphetamine
Toilet water	- inhalant	Utopiates	- hallucinogens	Yellow bullets	- depressant
Take	- to inhale cocaine; to smoke marijuana	Uzi	- crack; crack pipe	Yellow dimples	- LSD
Take up	- to smoke marijuana	V	- the depressant Valium	Yellow jackets	- depressant
Toncho	- octane booster which is inhaled	Viper's weed	- marijuana	Yellow submarine	- marijuana
Tooles	- depressant	Vodka acid	- LSD	Yellow sunshine	- LSD
Tools	- equipment used for injecting drugs	Wac	- PCP on marijuana	Yen pop	- marijuana
Toot	- cocaine; to inhale cocaine	Wack	- PCP	Yen Shee Suey	- opium wine
Tooties	- depressant	Wacky weed	- marijuana	Yen sleep	- restless, drowsy state after LSD use
Tootsie roll	- heroin	Wake ups	- amphetamine	Yerba	- marijuana
Top gun	- crack	Wasted	- under the influence of drugs; murdered	Yerba mala	- PCP and marijuana
Topi	- mescaline	Water	- methamphetamine	Yesca	- marijuana
Tops	- peyote	Wave	- crack	Yesco	- marijuana
Torch	- marijuana	Wedding bells	- LSD	Yeyo	- cocaine, Spanish term
Torch cooking	- smoking cocaine base by using a propane or butane torch as a source of flame	Wedge	- LSD	Yimyum	- crack
Torch up	- to smoke marijuana	Weed	- marijuana	Z	- 1 ounce of heroin
Torpedo	- crack and marijuana	Weed tea	- marijuana	Zacatecas purple	- marijuana from Mexico
Toss up	- female who trades sex for crack or money to buy crack	Weightless	- high on crack	Zambi	- marijuana
Totally spent	- MDMA hangover	Wheat	- marijuana	Zen	- LSD
Toucher	- user of crack who wants affection before, during, or after smoking crack	When-shee	- opium	Zero	- opium
Tout	- person who introduces buyers to sellers	Whippets	- nitrous oxide	Zig Zag man	- LSD; marijuana; marijuana rolling papers
Toxy	- opium	White	- amphetamine	Zip	- cocaine
Toys	- opium	White ball	- crack	Zol	- marijuana cigarette
TR-6s	- amphetamine	White boy	- heroin	Zombie	- PCP; heavy user of drugs
Track	- to inject a drug	White cloud	- crack smoke	Zooie	- holds butt of marijuana cigarette
Tracks	- row of needle marks on a person	White cross	- methamphetamine; amphetamine	Zoom	- PCP; marijuana laced with PCP
Tragic magic	- crack dipped in PCP	White dust	- LSD	Zoomers	- individuals who sell fake crack and then flee
Trails	- LSD induced perception that moving objects leave multiple images or trails behind them	White ghost	- crack		
Tranq	- depressant	White girl	- cocaine; heroin		
Trap	- hiding place for drugs	White-haired lady	- marijuana		
Trays	- bunches of vials	White horizon	- PCP		
Travel agent	- LSD supplier	White horse	- cocaine		
Trip	- LSD; alpha-ethyltyptamine	White junk	- heroin		
Troop	- crack	White lady	- cocaine; heroin		
		White lightning	- LSD		
		White mosquito	- cocaine		
		White nurse	- heroin		
		White Owsley's	- LSD		
		White powder	- cocaine; PCP		
		White stuff	- heroin		
		White sugar	- crack		
		White tornado	- crack		



Lab Productivity I.

Correlation to Snack Shop Visits

(Lab Productivity / daily / groups / the)

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Communicated by W. S. Riggsby, December 1, 1972

ABSTRACT Single daily visits to the Snack Shop, both alone and in groups, enhance lab productivity. Daily visits greater than one correlate with decreases in Lab Productivity. As the number of participants in the visit increases, the Lab Productivity falls drastically with each additional visit until it plateaus at three Lab Productivity Index units in the hole.

Lab Productivity Index:

- 9= Hours active lab work on day you thought was a site visit.
- 6= Hours in a lab on normal day. (may or may not be active)
- 3= Hours in lab on day director and/or major prof. was away.
- 0= Hours in lab on day when funding agency paid unexpected visit.
- 3= (-)Hours/2 you said you were working in lab last night.

This research was supported in part by Grant No. BLT-7UP-IOU-1.25. L.B. is a snack Development Award recipient, S.W. is a UT Lunch Fellow, and C.W. borrowed money from Ray. The authors wish to acknowledge Richard's Snack Shop for excellent technical assistance. For reprints send \$1 to 1st author, add your name to the list and send list with instructions to 10 friends.

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The Lab Coat as a Status Symbol

F. E. Warburton

A neat, white, knee-length coat is universally recognized as the uniform of the scientist. The lab coat's primary function as a utilitarian garment, protective against the dermolytic and vestidemolitive hazards of the laboratory, has bit by bit been replaced by its function as a status symbol. Just as we recognize a bishop by his mitre, or a burglar by his mask, we recognize a scientist by his lab coat. The soldier peels potatoes, cleans his rifle, and even fights his battles in uniform; the modern scientist rarely works in his lab coat. When work is unavoidable, he will be found in his shirtsleeves, in a coarse brown smock, or in plastic. His lab coat, clean, pressed possibly even starched, hangs safely behind

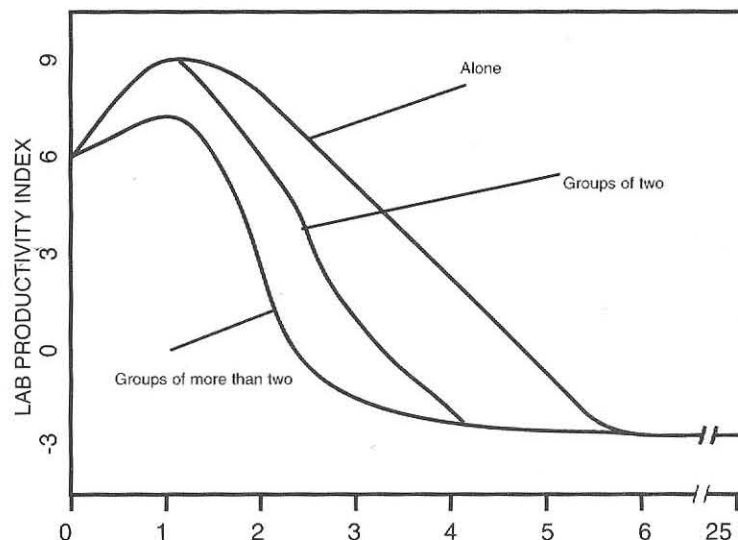


Figure 1A. Correlation between visits to the Snack Shop (SS) and Lab Productivity (LP).

the door, to be worn only when lecturing or greeting official visitors. Like spurs and shakos, the lab coat has been promoted to a new role; it is rapidly becoming, not merely the uniform, but indeed the *dress uniform* of the scientist.

Dress uniforms are worn solely for symbolic and ceremonial reasons, not for practical purposes. Nevertheless, their once-useful features are conscientiously preserved; an infantryman's sleeve buttons, or the spiked helmet of an Uhlan, are examples. The lab coat is fraught with potentialities for such symbolic survivals. Detachable buttons were highly functional on garments subject to the vicissitudes of frequent vigorous laundering. The modern lab coat should of course be safely drycleaned, but the Chinese puzzles formerly used to hold buttons in place might well be retained and even elaborated into conspicuous ornaments--no longer detachable, of course. The utilitarian lab coat always bore stains characteristic of the work of the wearer. These could be symbolized by chevrons or flashes of suitable colour; purple and red (hematoxylin and eosin) for the histologist; black and orange (sulphuric acid and bichromate) for the chemist; greenish yellow and scarlet (pus and blood) for the pathologist; blue and brown (ball point and coffee) for the statistician. Compact patterns of small holes or a bit of fringe on the cuff, might be other symbols reminiscent of the days when lab coats were worn in the lab. Vertical as well as horizontal status could be shown by such insignia: Undergraduates would wear unadorned white; graduate students might claim the right to a single grey grime-coloured insignie; Ph.D's would wear the colors of the specialties; and Nobel-prize winners, like the Admirals-of-the-fleet and Field Marshals, would be privileged to blossom out into creations of their own tasteful design.

These developments cannot be pressed; they must evolve slowly, guided by tradition and respect for the past. But they should be taken seriously. Scientists have momentarily achieved a position of high prestige, but in a democratic society (as in any other) prestige without symbols as but fleeting, while symbols without prestige may endure forever. (Originally appeared in *SCIENCE*.)

Double Takes



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