



Society of Forensic Toxicologists, Inc.

TOX TALK

Volume 17, No. 1

March 1993

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PRESIDENT'S MESSAGE ALPHONSE POKLIS, PH.D., DABFT

With 1993 well underway, I am sure we are all looking forward to our joint meeting in October with our colleagues, the California Association of Toxicologists (CAT). However, as President I can't help also looking back over the last few years at the tremendous growth and development of SOFT. Since becoming an officer 4 years ago, I have seen our membership increase by more than 100 members. This growth is obvious to all "old" members with the publication of the 1993 Directory. With much work from our Executive Coordinator, Patricia Mohn-Monforte, procedures for the acceptance and maintenance of membership information were standardized. Similarly, immediate past treasurer Mark Lewis performed a Herculean task in organizing our financial matters, including a successful confrontation with the IRS. Mark's efficient, concise financial reports at our annual meetings were only the tip of the iceberg in terms of the time and effort he put forth for the Society. Likewise, the Board of Directors developed and refined SOFT policies and procedures so that we can effectively and consistently deal with the business of a mature professional organization. (cont. page 2)

VICE PRESIDENT

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1993 SOFT/CAT JOINT MEETING October 10-16 Phoenix, Arizona

July 1 deadlines: CALL for Papers, Grand Canyon Workshop registration, free T-shirt

ADDITIONAL DIRECTORS

Vickie W. Watts, M.S.
Ronald C. Backer, Ph.D., DABFT
H. Chip Walls, B.S.
W. Lee Hearn, Ph.D.
Barry S. Levine, Ph.D., DABFT
Jeanne M. Beno, Ph.D.
Past President (ex officio)
Joseph R. Monforte, Ph.D., DABFT
ToxTalk Editor (ex officio)

1993 SOFT/CAT Meeting Host: Vickie W. Watts, Mesa Police Department
130 North Robson, Mesa, AZ 85201

IN THIS ISSUE

EXECUTIVE COORDINATOR

Patricia Mohn-Monforte
(313) 884-4718
Fax (313) 884-4718

REGULAR FEATURES - Journal Club - Elmer Gordon Open Forum - Communique
- Career Opportunities - Professional Calendar

OF SPECIAL INTEREST - ERA Information

TECHNICAL NOTES - Case Notes: Death Due To Nasal Insufflation of Heroin
INSERTS - 1993 SOFT Directory (for current members only)

- 1993 SOFT/CAT Meeting Program and Registration Form
- 1993 SOFT/CAT Meeting Call for Papers

S.O.F.T. /C.A.T. JOINT MEETING

October 10-16, 1993
Phoenix, Arizona

Vickie W. Watts
Meeting Host
Mesa Police Crime Lab
130 N. Robson
Mesa, Arizona 85201
(602) 644-2077
Fax (602) 644-2478

ToxTalk is mailed quarterly (bulk mail) to current members of the Society of Forensic Toxicologists, Inc. It is each member's responsibility to report changes of address to the SOFT Administrative Office. Non-members may now receive ToxTalk for \$15 per calendar year. Mail a check (payable to S.O.F.T.) to ToxTalk at the address below. All members and others are invited to contribute to ToxTalk. Contact the Administrative Office for membership applications.

DEADLINES: Feb. 1, May 1, Aug. 1, and Nov. 1.

NEXT DEADLINE --
MAY 1, 1993

S.O.F.T. ADMINISTRATIVE OFFICE: 1013 THREE MILE DRIVE • GROSSE POINTE PARK • MICHIGAN 48230-1412
The S.O.F.T. Administrative Office will be relocating in 1993. If necessary, correspondence may be addressed to President Poklis.

ERA RECIPIENT ANNOUNCED

The Educational Research Awards committee recently granted, with the support of the SOFT Board, the latest ERA to AMANDA J. JENKINS, M.S. for her research titled "An Investigation of the Pharmacokinetics and Pharmacodynamics of Smoked Drugs of Abuse in Human subjects." Ms. Jenkins is enrolled in the toxicology program at the University of Maryland, and her advisor of Dr. Edward Cone.

INSTRUCTIONS TO APPLY FOR A SOFT EDUCATIONAL RESEARCH AWARD

Graduate students pursuing advanced degrees in forensic toxicology related disciplines whose research projects are consistent with the needs of forensic toxicologists may apply. They must submit five copies of the following to the SOFT Administrative Office:

A) Letter from an appropriate authorized representative approving the application on behalf of the institution.

B) Curriculum vitae describing the student's activities.

C) Research proposal describing the proposed research with appropriate literature references, experimental protocols, and budgetary needs.

D) Statement from the research advisor providing background information about the student, the proposed research, and the advisor's or institution's willingness to receive and administer funds.

Applications are encouraged as funds are currently available. <> <> <>

THANKS, 1992 ERA CONTRIBUTORS!

According to our records, the following persons contributed to the Educational Research Award in 1992. Their generous support is appreciated and gratefully acknowledged:

BOGEMA, STUART	BUSH, DONNA	DOVENSKY, WILLIAM	MCGARRY, RICHARD
ELLENBERGER, HERMAN	OLSON, BLYTHE	PINDER, RICHARD	RIEDERS, FREDRIC
SLADE, MICHAEL	SPIEHLER, VINA	SUNSHINE, IRVING	WALLS, H CHIP
HOWARD, LARRY	ANDERSON, WILLIAM	CAPLAN, YALE	DUNN, WILLIAM
LEVINE, BARRY	MC GEE, MICHAEL	PLATOFF, LTC GENNADY	SIEK, THEODORE
SUTHEIMER, CRAIG	VALENTOUR, JAMES	VONDRAK, SUSAN	BENO, JEANNE
BIDANSET, JESSE	CLEMENT, GERALD	MONFORTE, JOSEPH	RAO, N.G.S.
READING, CHARLES	SHAW, RICHARD	TOWNSEND, G FRED	LIN, RENG-LANG
OTTINGER, WILLIAM	ROBB, JEFFERY	KELLY, RAYMOND	MCCLURE, III, FRED
STEWART, G JOSEPH	HERNANDEZ, MONICA	MACLURE, RICHARD	PREX, DONALD

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POSTDOCTORAL FELLOWSHIP Ph.D. with HPLC, GC and GC/MS experience. Clinical and forensic analytical tox for 1100 bed university hosp and assoc clinics plus reference forensic testing and environmental/occupational monitoring. Immediate opening. Contact Dr. Poklis at 804-786-0272 or send CV and refs to Dr. Alphonse Poklis, Pathology Dept, Box 597, Medical College of Virginia, Richmond, VA 23298-0597. page). <> <> <>

PRESIDENT'S MESSAGE (continued from page 1)

SOFT's activities, as reflected by the granting of Educational Research Awards, publication of ToxTalk and the annual special SOFT issues of the Journal of Analytical Toxicology, reports of all the standing committees such as "Professional Guidelines" and "Driving Under the Influence of Drugs," as well as reports of advisory committees such as "Hair Analysis," have both informed us and enhanced our practice of forensic toxicology. The newly-created "Continuing Education and Training" committee, working in conjunction with AAFS, AACC, and CAT, will provide excellent continuing education opportunities for us all.

I look forward to serving you and continuing this tradition of SOFT's commitment to the profession. If you have suggestions or ideas which will enhance the activities of SOFT, please feel free to contact me at any time. <> <> <>

Spring housecleaning has come early to the SOFT Administrative Office. As I go through the numerous boxes, drawers and shelves of SOFT related materials in nearly 300 square feet of SOFT allotted space, I become increasingly amazed at how much "stuff" has accumulated and the data available. I was surprised to realize that this is my tenth anniversary working with SOFT, originally as an assistant for the 1983 annual meeting. A set of membership labels dated 10/86 indicates we had no more than 260 members at that time (the list included some non-members). Today, membership has increased by more than 50% of that figure - a tremendous growth pattern.

For archival interest, an even bigger bonanza was discovered when Joe Monforte cleared out his former office at the Wayne County Medical Examiner's Office. SOFT now has on file most of the back issues of ToxTalk, many minutes of past meetings, and a copy of nearly all issues of the SOFT Special Issue of Jat.

As all the available materials are reviewed, sorted, etc. I shall be making comments and requests for missing materials under the title "ARCHIVAL INTEREST" in future issues of ToxTalk. This will not appear until we have relocated in Arizona.

We are still in Michigan and will notify members when and exactly where we relocate. Although we have an address while the new home and office are being built, we do not yet have a mailbox! Hopefully, specific information will be available for the June issue of ToxTalk.

The SOFT DIRECTORY is enclosed - let me know if you have any changes. It is the responsibility of each member to notify the SOFT Administrative Office of any address change. Receipts/ membership cards were mailed to all members who paid their dues. By action of the Board, only members who have paid their 1993 dues are included in the enclosed SOFT DIRECTORY and will receive official mailings, including ToxTalk.

I've enjoyed working with Vickie Watts and her committee preparing for the upcoming SOFT/CAT meeting. Take my word for it, this is going to be a great meeting. <> <> <>

36 NEW S.O.F.T. MEMBERS IN 1992

Per the SOFT membership database, the following persons were approved by the Membership Committee and admitted as SOFT members in 1992.

FULL MEMBERS (29): David Armsbruster, Michael Asselin, Edward Azary, Jeffrey Caughlin, Gregory Clark, Donald Dicks, Maureen Drost, Laurel Farrell, John Fenton, Peter Gur, Christine Hearn, Wayne Jeffery, Amanda Jenkins, Cathy Jolin, Demi Jones, Pascal Kintz, Tai Kwong, D. Russell Lowe, Bavani Mailvaganam, Robert Meatherall, Susan Mills, Arvind Modak, Ashraf Mozayani, Gregory Ohlson, Celia Queen, Jac-E Reiser, Kerry Slattery, Judy Stewart, and Antoine Tracqui.

ASSOCIATE MEMBERS (5): Harry Bertram, Deborah Denson, Rick Hoover, Carl Wolf II, and Alan Wu.

STUDENT AFFILIATE MEMBERS (2): Gennady Platoff and Wm. Bruce Walker.

These members requested and received promotions to Full membership status during 1992: George Jackson, Peggy Kelly, Michael Lehrer, Joel Mayer, Lucy Mormann, and Michael Wagner.

Also in 1992, two members petitioned the Board and were granted "retirement" status: Joan Vogel and Robert Cravey. Only full members with 25 years experience in forensic toxicology or 10 years of full membership in SOFT who have reached the age of 65 are eligible for retirement status. Retired members may vote and, although they do not pay dues, must complete and submit an annual dues form to remain on the mailing list. An application form must be presented at a Board meeting, and the "retirement" status is effective the subsequent year.

Application forms for membership, promotion, and retirement are available from the SOFT Administrative Office. Simply write, phone or FAX your request to Pat. <>

AVERAGE TEMPERATURE FOR PHOENIX IN OCTOBER Max: 87.6 Min: 56.8 Mean: 72.2
% Probable Sunshine: 88

CASE NOTES: DEATH DUE TO NASAL INSUFFLATION OF HEROIN

submitted by Jeanne M. Beno, Ph.D., and Donna R. Nemeth, M.S., Monroe County Medical Examiner's Officer, 435 E. Henrietta Rd., Rochester, NY 14620

Nasal insufflation or snorting of heroin has long been known to be an effective, although not particularly popular, route of administration for this drug. This lack of popularity may be related both to the slow rate of absorption relative to I.V. use and to a street purity of heroin that may normally be too low to achieve an effective response by this route. Heroin targeted for snorting is usually much purer than street heroin marketed for intravenous administration (1). In 1992, Rochester, New York, recorded a record number of heroin related deaths. Information provided by the D.E.A. in Rochester indicates that the purity of heroin is on the rise in our area. The increased purity combined with the fear of AIDS has led to an increase in the popularity of snorting heroin, particularly among young people (2). While most deaths were still believed to be by the intravenous route, two of the cases were known to be due to nasal insufflation.

CASE #1: a 30 y.o. Hispanic male was found unresponsive in bed by his live-in girlfriend. He had a long history of cocaine abuse but had never been known to use heroin. Word on the street was that he was poisoned because he was believed to have turned police informant. The previous night he was seen snorting what he thought was cocaine, 3 packets at a time. He then reported to his girlfriend that he was tired and went to bed, where he was found dead the next morning. The only finding at autopsy was bilateral pulmonary congestion. Nasal swabs were positive for opiates by RIA. A packet of "cocaine" he was seen snorting the night before was positive for heroin, monoacetylmorphine and acetylcodeine. Toxicology results were as follows:

	Free Morphine	Cocaine	Benzoyl-ecgonine	Ethanol
Blood:	0.48 mg/L	0.11 mg/L	N.A.	0.04%
Urine:	4.83 mg/L	50.0 mg/L	48.0 mg/L	0.13%
Bile:	1.77 mg/L			
Liver:	0.28 mg/L			
Brain:	0.48 mg/L			
Gastric:	0.2 mg			
Vitreous:		0.28 mg/L	N.A.	0.10%

CASE #2: A 43 y.o. Hispanic male, never known to abuse drugs, was found dead in bed by his wife. The previous evening he had gone out with a boyhood friend from out of town who was a known drug dealer. He appeared intoxicated when he returned home. He took a shower, then retired to bed. His wife checked on him 3 hours later, and he was dead. At autopsy, a white powder was visible in each nostril. Nasal swabs were positive for heroin, monoacetylmorphine and acetylcodeine. Based on the toxicology results, we believe the deceased went out drinking that evening and was convinced to try cocaine. We hypothesize that he was given 5 or 10 mg. of Valium and a packet of heroin to take after he returned home to help "bring him down" or help him sleep and that he took these after showering. We don't know if he was aware of what drugs he was using. Toxicology results were as follows:

	Free Morphine	Free Codeine	Cocaine	Coca-ethylene	BE
Blood:	0.17 mg/L	none detected	0.025 mg/L	0.025 mg/L	0.25 mg/L
Urine:	1.83 mg/L	0.08 mg/L	1.2 mg/L	1.4 mg/L	11.7 mg/L
	Alcohol	Diazepam	Nordiazepam		
Blood:	0.11%	0.03 mg/L	0.01 mg/L		
Liver:		0.10 mg/kg	0.25 mg/kg		
Urine:	0.18%				
Vitreous:	1.16%				

(Continued next page)

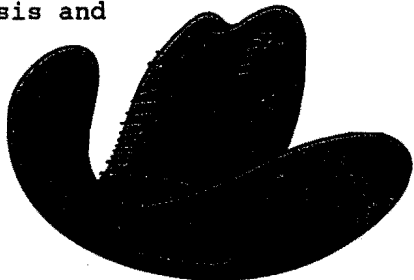
(. . . CONTINUED)

There is little or no data in the literature on blood or tissue levels of morphine in deaths due to nasal insufflation of heroin. As snorting heroin increases in popularity, deaths due to this route of administration will invariably increase, creating a need for a data base against which to interpret postmortem levels. As case #1 illustrates, accidental or homicidal heroin deaths can occur when cocaine addicts mistakingly snort heroin instead of cocaine. An addict may snort large quantities of powder because he thinks he bought "bad coke" and can't achieve his normal high. Overdose does not require administration of multiple doses, however. In Case #2, we believe that the deceased snorted only one packet of heroin of unknown purity. In both cases, alcohol ingestion probably contributed to the toxic effects of heroin. Nasal swabs can be invaluable in determining that heroin was administered intranasally.

1. M. Ellenhort and D. Barceloux, Medical Toxicology: Diagnosis and Treatment of Human Poisoning, Elsevier, NY, 1988, 698-0699.

2. Personal communication. DEA, Rochester, NY.

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YEE-HAW!! '93 MEETING PLANS UNDERWAY

After the "snowstorm of the century" has swept the eastern seaboard, this is a good time to plan to attend the 1993 SOFT/CAT meeting in sunny Arizona. The enclosed program indicates this will be a great meeting. Fair warning to all - the deadline for the Grand Canyon workshop is firm and only 98 beds are available. All persons registering by July 1st will receive a free T-shirt. Pat just washed her XXX cotton/poly T-shirt which kept its shape and is still nice and roomy. T-shirts will be acceptable meeting wear.

Attendees will have an opportunity to interact with representatives from the following registered exhibitors: Biochemical Diagnostics, Biosite Diagnostics, Diagnostic Products Corp., Dotech Inc., Finnigan Matt, Hewlett-Packard Corp., Microgenics, Preston Publications, Radian Corp., Roche Diagnostics, Sigma Chemical Co., STC Diagnostics, and Teckmar. Contact Tom Simonick or Vickie Watts at 602-644-2077 for information on exhibits and corporate sponsor opportunities. We are still seeking support for a luncheon and coffee breaks.

For additional information on the 1993 SOFT/CAT meeting, contact: Vickie W. Watts, Mesa Police Crime Lab, 130 N. Robson, Mesa, AZ 85201 (602-644-2077 FAX 602-644-2478)

IMPORTANT MEETING DEADLINES

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JULY 01: Grand Canyon Workshop, Call for Papers, free T-shirt

SEPTEMBER 10: Pre-registration without late penalty, purchased T-shirt orders

SEPTEMBER 21: Hotel reservations (Buttes, Tempe - 602-225-9000)

OCTOBER 02: Mail registration closed

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A.B.F.T. UPDATE

SOFT members certified! Congratulations to Bruce Goldberger and Daniel Scheier, the first persons to be certified as TOXICOLOGY SPECIALISTS and Michael Smith and Jeffrey Gere who have been certified as FORENSIC TOXICOLOGISTS. Persons with a masters degree interested in certification as a Toxicology Specialist and Ph.D.'s interested in Forensic Toxicologist certification should contact: A.B.F.T. Administrative Office, P.O. Box 669, Colorado Springs, CO 80901-0669 (Telephone: 719-636-1100).

ABFT DIPLOMATE AND TOXICOLOGY SPECIALISTS ARE INVITED to attend the first ABFT Breakfast which will be held on October 14th in the exquisite "Top of the Rock" restaurant at the Buttes Resort during the SOFT annual meeting. <> <> <>

JOURNAL CLUB

Submitted by: H. Chip Walls, Toxicology Lab, Rm 706, 600 South State St., Syracuse, NY 13202 (315-435-3802)

- 1. RETROGRADE EXTRAPOLATION OF BLOOD ALCOHOL DATA: AN APPLIED APPROACH.** Mark R. Montgomery and Mark J. Reasor. *Journal of Toxicology and Environmental Health.* 36:281-292, 1992
- 2. ETHANOL ELIMINATION-RATES DETERMINED BY BREATH ANALYSIS AS A MARKER OF RECENT EXCESSIVE ETHANOL CONSUMPTION.** H. Olson, J. Sakshaug, et al. *Scand J Clin Invest* 49:359-365, 1989.
- 3. VOLATILE COMPOUNDS DETECTED IN BLOOD OF DRUNK DRIVERS BY HEADSPACE/CAPILLARY GAS CHROMATOGRAPHY/ION TRAP MASS SPECTROMETRY.** Jan Schuberth. *Biolog MS* 1991
- 4. DETECTION AND IDENTIFICATION OF VOLATILE SUBSTANCES BY HEADSPACE CAPILLARY GAS CHROMATOGRAPHY TO AID THE DIAGNOSIS OF ACUTE POISONING.** Peter J. Streete, Manjit Ruprah, et al. *Analyst* 117:1111-1127, 1992.
- 5. AN INTRODUCTION TO THE CLINICAL TOXICOLOGY OF VOLATILE SUBSTANCES.** Flanagan, Ruprah, et al. *Drug Safety* 5(5):359-383, 1990.
- 6. ALCOHOL AND THE ELDERLY.** Mary C. Dufour, Loran Archer, and Enoch Gordis. *Clinics in Geriatric Medicine.* 8(1):127-141, 1992.
- 7. ADVERSE EFFECTS OF GENERAL ANAESTHETICS.** Mireille C. Berthoud and Charles S. Reilly. *Drug Safety* 7(6):434-459, 1992.
- 8. TOXICOLOGICAL AND FORENSIC APPLICATIONS OF CHROMATOGRAPHY.** This special issue covers 18 articles spanning 360+ pages. *Journal of Chromatography* 580(1+2): Sept 16, 1992.
- 9. ANALYSIS OF DRUGS AND OTHER TOXIC SUBSTANCES IN BIOLOGICAL SAMPLES FOR PHARMACOKINETIC STUDIES.** G.W. Peng and W.L. Chiou. *J. Chromatogr.* 531:1-454, 1990.
- 10. CHROMATOGRAPHY OF HISTAMINE H₁- AND H₂- RECEPTOR BLOCKERS IN BIOSAMPLES.** Hans H. Maurer. *Journal of Chromatography* 531:369-405, 1990.
- 11. ANALYSIS OF ANTIEPILEPTIC DRUGS.** Izet M. Kapetanovic. *Journal of Chromatography* 531:421-457, 1990.
- 12. PHARMACOKINETICS OF DRUG OVERDOSE.** Young-Jin Sue and Michael Shannon. *Clin. Pharmacokinet.* 23(2):93-105, 1992.
- 13. MEDICAL TOXICOLOGY.** Lewis R. Goldfrank. *JAMA* 268(3):375-385, 1992.
- 14. SIMULTANEOUS DETERMINATION OF FLUOXETINE AND NORFLUOXETINE ENANTIOMERS IN BIOLOGICAL SAMPLES BY GAS CHROMATOGRAPHY WITH ELECTRON-CAPTURE DETECTION.** George A. Torok-Both, Glen B. Baker, et al. *Journal of Chromatography* 579:99-106, 1992.
- 15. ASSAY OF TIMOLOL IN HUMAN PLASMA USING GAS CHROMATOGRAPHY WITH ELECTRON-CAPTURE DETECTION.** Bridget M. Sutton and Ralph A. Richardson. *Journal of Chromatography* 581:277-280, 1992.
- 16. DETERMINATION OF TERFENADINE AND TERFENADINE ACID METABOLITE IN PLASMA USING SOLID-PHASE EXTRACTION AND HIGH PERFORMANCE LIQUID CHROMATOGRAPHY WITH FLUORESCENCE DETECTION.** John E. Coutant, Patricia A Westmerk, et al. *Journal of Chromatography* 570:139-148, 1991.
- 17. DIRECT ENANTIOMERIC SEPARATION OF TERFENADINE AND ITS MAJOR ACID METABOLITE BY HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY, AND THE LACK OF STEREOSELECTIVE TERFENADINE ENANTIOMER BIOTRANSFORMATION IN MAN.** Kenneth Y. Chan, Ronald C. George, et al. *Journal of Chromatography* 571:291-297, 1991.
- 18. NEUROBIOLOGY OF COCAINE ABUSE.** William L. Woolverton and Kenneth M. Johnson. *Trends in Pharmacological Sciences* 13(1):193-198, 1992.
- 19. ACCUMULATION OF COCAINE IN MATERNAL AND FETAL HAIR; THE DOSE RESPONSE CURVE.** Rachel Foremen, Joyce Schneiderman, et al. *Life Sciences* 50:1333-1341, 1992.
- 20. THE VALIDITY OF HAIR ANALYSIS FOR DETECTING COCAINE AND HEROIN USE AMONG ADDICTS.** Stephen Magura, Robert C. Freedman, et al. *The International Symposium of the Addictions* 27(1):51-69, 1992.
- 21. COMPARATIVE BEHAVIORAL PHARMACOLOGY AND TOXICOLOGY OF COCAINE AND ITS ETHANOL-DERIVED METABOLITE COCAINE ETHYL-ESTER (COCAETHYLENE).** Jonathan L. Katz, Philip Terry, and Jeffrey M. Witkin. *Life Sciences* 50:1351-1361, 1992.
- 22. PLACENTAL TRANSFER AND TISSUE DISTRIBUTION OF THIOPENTAL IN THE PREGNANT RAT.** Antonio Ceadaro, Flavio Passerini, and Maurizio Bonati. *Journal of Pharmacokinetics and Biopharmaceutics* 17(4):425-440, 1989.
- 23. NEUROBIOLOGICAL PERSPECTIVES ON DRUGS OF ABUSE.** Alison Abbott. Includes other related articles. *Trends in Pharmacological Sciences* 13(5): 1992
- 24. ACUTE VALPROIC ACID OVERDOSE CLINICAL COURSE AND PHARMACOKINETIC DISPOSITION OF VALPROIC ACID AND METABOLITES.** Robert E. Dupuis, Steven N. Lichtman, and Gary M. Pollack. *Drug Safety* 5(1):65-71, 1990.
- 25. ACUTE TOXIC INHALATIONS.** David G. Rorison and Scott J. McPherson. *Emergency Medicine Clinics of North America* 10(2):409-435, 1992.
- 26. POSTMORTEM TOXICO-KINETICS OF CO-PROXAMOL.** Kosei Yonemitsu and Derrick J. Pounder. *Int J Leg Med* 104:347-353, 1992.
- 27. IDENTIFICATION OF ANTIARRHYTHMIC DRUGS AND THEIR METABOLITES IN URINE.** Hans H. Maurer. *Arch Toxicol* 64:218-230, 1990.
- 28. FORMATION OF ACTIVE METABOLITES OF ANTICONVULSANT DRUGS A REVIEW OF THEIR PHARMACOKINETIC AND THERAPEUTIC SIGNIFICANCE.** Mervyn J. Eadie. *Clin. Pharmacokinet.* 21(1):27-41, 1991.
- 29. PROBLEMS ASSOCIATED WITH INTERFERENCES IN THE ANALYSIS OF SERUM FOR POLYCHLORINATED BIPHENYLS.** Virlyn W. Burse, Margaret P. Korver, et al. *Journal of Chromatography* 566:117-125, 1991.
- 30. TRENDS IN TECHNIQUES FOR THE EXTRACTION OF DRUGS AND PESTICIDES FROM BIOLOGICAL SPECIMENS PRIOR TO CHROMATOGRAPHIC SEPARATION AND DETECTION.** K.G. Furton and J. Rein. *Anal. Chim. Acta* 236:99-114, 1990.
- 31. OBSERVATION ON THE USEFULNESS OF INTERNAL STANDARDS IN THE ANALYSIS OF DRUGS IN BIOLOGICAL FLUIDS.** D. Wilson. *Methodol. Surv. Biochem. Anal.* 20:79-82, 1990.
- 32. CHEMICAL HYGIENE PLAN FOR CLINICAL LABORATORIES.** *Clinical Laboratory Science* 5(3):157-158, 1992.

ELMER GORDON OPEN FORUM

ToxTalk BACK ISSUES AVAILABLE

AN OPPORTUNITY FOR INFORMAL DIALOGUE

ATTN CALL WAITING AND MODEM USERS: To temporarily override "Call Waiting" while transmitting via modem (or any other time), when you hear the dial tone, press 7 0. After you hear a second dial tone, dial the target modem. Call waiting is automatically restored when you hang up. You may add the * 7 0 prefix to numbers in your modem's autodial memory. If your keyboard does not have the * key, 1 1 7 0 usually works. The cancel feature works the same way on voice calls. <> <> <>

SOFT members who would like any back issue(s) of ToxTalk should follow these simple instructions. Send a self-addressed 9x12 envelope to the SOFT Administrative Office with the following postage affixed: 52 cents for the 1st issue requested plus 23 cents for each additional issue. Include a sheet of paper with your name and the issues requested. Copies of most issues since March 1986 are available, inserts may not be available. This offer expires on May 15, 1993, at which time all extra old issues will be destroyed. <> <> <>

ABRAHAM STOLMAN 1908 - 1992

submitted by C. Neal Reading, Ph.D.

Dr. Abraham Stolman, a pioneer of modern toxicological analysis, died December 17th in Hartford, Connecticut. His career as a forensic toxicologist spanned the transition from exclusively wet chemical analysis (Stass-Otto) to present day instrumental techniques.

Dr. Stolman established the Toxicological Services Laboratory for the State of Connecticut, serving as Chief Toxicologist from 1950 until his retirement in 1987. The publication of his two volume Toxicology, Mechanisms and Analytical Methods in 1960 and the five subsequent volumes of Progress in Chemical Toxicology contributed significantly to the rapidly expanding field of forensic toxicology. Dr. Stolman's passing further marks the transition between the era of "classical" chemical analysis and toxicology and our present day reliance on electronic technology. Those of us who have personally known and worked with Abe acknowledge the influence he had in our professional development. He will be missed. <> <> <>

SOFT / JAT SPECIAL ISSUE REMINDER

DEADLINE FOR ABSTRACTS: March 31, 1993
COMPLETED PAPERS: April 15, 1993

For further information, contact Dr. Joseph Manno, JAT SOFT Special Issue Editor, by telephone at 318-674-7800 or FAX 318-674-7811.



Joint Meeting of the Society of Forensic Toxicologists (SOFT) and the California Association of Toxicologists (CAT)

October 11-16, 1993 Phoenix, Arizona

CAREER OPPORTUNITIES

Positions available are listed for the consideration of SOFT members. There is no fee for this service. In future issues of ToxTalk, information will be repeated only if resubmitted. Note: The following were listed as new positions in the ToxTalk Bulletin mailed in January. No additional information has been received.

Aloha! TECHNICAL DIRECTOR for Tripler Army Med Ctr FUDTL in Honolulu. Ph.D. required, job includes lab management, GC/MS and screening technology supv, inspection preparation, data review, QC and testifying. GS-12 (\$40,298-52,385) plus 22.5% COLA and moving expenses. Call Maj Aaron Jacobs at 808-433-5176, refer to NS-39-92b.

CHIEF TOXICOLOGIST: M.E.O., Ph.D. + 1 yr exp. or M.S. + 2 yrs exp., ABFT cert preferred, \$46,554-76,210, Chapel Hill, NC. Call Nancy Moore 919-966-2253. <> <> <>

PROFESSIONAL CALENDAR

CALIFORNIA ASSOCIATION OF TOXICOLOGISTS quarterly meetings and workshops. For information contact Susan Knight, CAT, 18457 Santa Carlotta, Fountain Valley, CA 92708 (phone/fax: 714-965-9854) May 7-8, Los Angeles: How to Publish and Present a Scientific Paper workshop; and Aug. 6 (N. Calif.); Oct. 10-16 joint meeting with SOFT, Phoenix, AZ.

3rd INTERNATIONAL CONGRESS OF THERAPEUTIC DRUG MONITORING AND CLINICAL TOXICOLOGY: May 25-28, 1993 Philadelphia. Contact Dr. Albert D. Fraser, Victoria General Hospital, 1278 Tower Rd, Halifax, Nova Scotia B3H 2Y9.

NIDA 2nd NATIONAL CONFERENCE ON DRUG ABUSE RESEARCH AND PRACTICE: AN ALLIANCE FOR THE 21ST CENTURY: July 14-17, 1993, Washington, D.C. Call 301-565-2205.

THE INTERNATIONAL ASSOCIATION OF FORENSIC TOXICOLOGISTS (TIAFT) Congress on Forensic Toxicology: August 15-20, 1993, Leipzig (Germany) Contact Dr. Vina Spiehler, TIAFT Secretary, DPC, 5700 W 96th St, Los Angeles, CA 90045.

INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES: August 22-28, 1993, Dusseldorf. Contact Institut fur Rechtsmedizin, Congress Secretariat, Moorenstr. 5, d-4000 Dusseldorf, Germany

2nd NATIONAL CONFERENCE ON DRUG ABUSE RESEARCH AND PRACTICE: AN ALLIANCE FOR THE 21st CENTURY - July 14-17, Washington, DC, sponsored by NIDA. Contact Basic Health Mgmt, Inc., 8403 Colesville Rd, Suite 805, Silver Spring, MD 20910 (Tel 301-565-2205)

CSFS ANNUAL MEETING - Sept 8-12, Winnipeg, Manitoba. Contact Ron Hrynchuk, c/o Forensic Lab RCMP, 621 Academy Rd, Winnipeg, Manitoba R3N 0E7 Canada (Tel 204-983-7376)

SOFT/CAT JOINT MEETING - OCTOBER 10-16, 1993 - PHOENIX, ARIZONA
Contact: Vickie Watts, 1993 SOFT/CAT Meeting Host, 130 N Robson, Mesa, AZ 85201
Telephone: 602-644-2077 FAX: 602-644-2467

SOFT/TIAFT (The International Association of Forensic Toxicologists) JOINT MEETING: Oct. 31 - Nov 4, 1994, Tampa, FL. First joint SOFT/TIAFT meeting! SOFT Host - Dr. Horton McCurdy, Georgia Bureau of Investigation, Division of Forensic Sciences, P.O. Box 370808, Decatur, GA 30037-0808 (telephone: 404-244-2683)

A.A.F.S. ANNUAL MEETING: 1994 San Antonio Contact Brenda Papke, P O Box 669, Colorado Springs, CO 80901 (Telephone 719-636-1100)

XVth CONGRESS OF THE INTERNATIONAL ACADEMY OF LEGAL MEDICINE AND SOCIAL MEDICINE: May 31 - June 2, 1994. Contact Secretariat of the Congress, Institut de medicine Legale, 11 rue Humann, F-67085 Strasbourg Cedex, France.

1995 - SOFT 25th ANNIVERSARY MEETING, Baltimore. Contact Dr. Yale Caplan, 1995 SOFT Meeting Host, National Center for Forensic Science, Div Maryland Medical Lab, 1901 Sulphur Spring Rd, Baltimore, MD 21227 (Telephone: 410-536-1485) <> <> <>