



# Society of Forensic Toxicologists, Inc.

P.O. Box #5543, Mesa AZ 85211-5543 Telephone/ FAX: 602-839-9106

## ToxTalk

Silver Anniversary  
"1970 - 1995"  
Celebrating 25 Years

**VOLUME 19, No. 1**

**MARCH 1995**

**EDITOR:** Joseph R. Monforte, PhD DABFT **EDITORIAL BOARD:** H. Chip Walls, BS, Jim Wigmore, BSc, Carl Selavka, PhD  
**PUBLISHER:** Patricia Mohn-Monforte

### **PRESIDENT'S MESSAGE . . . Vina Spiehler, Ph.D., DABFT**

Thank you for electing me president of the Society of Forensic Toxicologists. It is an honor to serve in this office held by so many distinguished toxicologists. There have been twenty presidents of SOFT, beginning with Dr. Jane Speaker in 1975. This year marks the 25th anniversary of the organization of SOFT. The first meeting was held in 1970 on Long Island, NY, organized by Abe Freireich. Our Silver Anniversary celebration will be the theme of the 1995 annual meeting in Baltimore and will be recognized in various ways during the year. The first event was our Silver Anniversary Reception during the AAFTS meeting in Seattle where SOFT members gathered at a brewpub for a taste of the northwest and to renew memories and friendships.

### **S.O.F.T. CONTACT INFORMATION:**

① **VOICE MAIL & FAX 602-839-9106**

✉ **MAILING ADDRESS P.O. Box 5543, Mesa, AZ 85211-5543**

**New ToxTalk mailing address:** Joseph R. Monforte, Ph.D., DABFT, ToxTalk Editor  
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### **IN THIS ISSUE**

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**ITEMS OF INTEREST:** 1995 SOFT Committees/Chairs

**INSERTS:\*** 1995 SOFT Meeting Information and Call for Papers

\*If available at time of mailing

**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 mailing address (above). Non-members may now receive **ToxTalk** for \$15 per calendar year. Mail a check, payable to SOFT, to the **ToxTalk** Editor.

All members and others are encouraged to contribute to **ToxTalk**, mail material to (new address): Joseph R. Monforte, **ToxTalk** Editor, 846 Smoki Drive (H.P.), Prescott, AZ 86301

**DEADLINES:** Feb. 1, May 1, Aug. 1, and Nov. 1. **NEXT DEADLINE: MAY 1, 1995**

SOFT is a supporting organization of the American Board of Forensic Toxicology

#### **PRESIDENT**

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Joseph R. Monforte, Ph.D., DABFT  
(ToxTalk Editor)

#### **1995 Annual Meeting Host**

Yale H. Caplan, Ph.D., DABFT  
National Center for Forensic Sciences  
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# FROM THE EDITOR'S DESK . . . . Joseph R. Monforte, Ph.D., DABFT

My sincere thanks to Ed Cone and his staff for compiling the abstracts from the 1994 TIAFT/SOFT meeting which were distributed in the last issue of **ToxTalk**. Ed and his staff worked very hard to provide a quality product which could be distributed in a timely fashion. These abstracts are very useful, particularly to those members who were unable to attend the meeting. I apologize for the printer's (Office Max) collation error - for proper sequence, turn each page over then re-staple. To have them recollated before mailing would have delayed distribution considerably.

Please take time to read the article on the detection of fentanyl in hair. A confirmed positive may have resulted after a single exposure to the drug. If you have similar case experience, please forward a simple case note to me for publication consideration. ✂

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## REMINDER: SOFT/JAT SPECIAL ISSUE

Deadline for completed papers - **April 3, 1995**  
For further information, contact Vickie Watts 602-644-2077

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## 1995 S.O.F.T. COMMITTEES ANNOUNCED

**NOMINATING:** Mark B. Lewis (Chair), Horton McCurdy, and Robert Bost

**MEMBERSHIP:** Vickie Watts (Chair), Teri Stockham, Andrew Mason, and Deb Rector

**BY-LAWS:** Kurt Dubowski (Chair)

**BUDGET, FINANCE AND AUDIT:** James Valentour, (Chair) - looking for volunteers

**TOXTALK:** Joseph Monforte (Chair/Editor) Editorial Board: H. Chip Walls, Carl Selavka, and Jim Wigmore. Publisher: Patricia Mohn-Monforte

**PUBLICATIONS:** Vickie Watts and Tom Simonick (Co-chairs/JAT Special Issue Editors)

**EDUCATIONAL RESEARCH AWARD ENDOWMENT(ERA):** David Moody (Chair), Daniel Isenschmid, and new member

**MEETING RESOURCE COMMITTEE:** H. Chip Walls (Chair), Vickie Watts, Yale Caplan, Tom Simonick, Bruce Goldberger, Marilyn Huestis, Bob Zettl, Horton McCurdy, and Laurel Farrell

**FORENSIC TOXICOLOGY LABORATORY GUIDELINES (SOFT/AAFS Joint Committee):** Graham Jones (Chair), Yale Caplan, W. Lee Hearn, C. Nicholas Hodnett, H. Horton McCurdy, J. Rod McCutcheon, Joseph Monforte, Michael Peat, Richard Shaw, and Marina Stajic

**HEALTH AND SAFETY:** Daniel Isenschmid (Chair), John Cody, Laurel Farrell, and Elizabeth Marker

**DRIVING UNDER THE INFLUENCE OF DRUGS (DUID) - Joint SOFT/AAFS Committee:** Dennis Crouch (Chair), Everett Solomons, Sam Howell, Norman Wade, J. Rod McCutcheon, Mark Lewis, Joseph Saady, Vickie Watts, Teri Stockham, Ronald Bell, James Valentour, Robert Zettl, Laurel Farrell, H. Chip Walls, Anthony Costantino, and Anna Ezell

**CONTINUING EDUCATION:** H. Chip Walls (Chair), W. Lee Hearn, and Vickie Watts. Represent SOFT on the Joint Committee on Education and Training in Toxicology (JCETT)

**LIABILITIES AND INSURANCE:** C. Nicholas Hodnett (Chair)

**ADVISORY COMMITTEE ON ABSTRACTS AND PRESENTATIONS:** Alphonse Poklis, (Chair), Michael Smith, and Barry Levine

**1995 SOFT MEETING HOST:** Yale Caplan

# Case Notes: GC/MS DETECTION OF A SINGLE EXPOSURE TO FENTANYL IN HAIR?

Submitted by

Andrew P. Mason, Ph.D., DABFT, and Carl M. Selavka, Ph.D., DABC, National Medical Services, Inc., Willow Grove, PA

It is generally recognized that the probability of detecting a drug in a hair specimen is maximized when both the dose or exposure frequency per unit time and dosages administered are maximized. We now wish to report an unusual case where the confirmation of fentanyl in a hair specimen may have resulted from a single administration of the drug.

An anesthesiologist who was suspected of diverting fentanyl from hospital stores was previously determined to have had a fentanyl hair concentration of 900 ng/g in a specimen collected in April, 1993. After successfully completing a rehabilitation program, the physician returned to his duties. As part of his rehabilitation and following that period, the subject's urine was periodically monitored for fentanyl, with all tested specimens reported as "None Detected" at reporting limits less than 0.8 ng/mL by GC/MS. A second head hair specimen collected 11 July 1994 was determined to contain no detectable fentanyl (reporting limit 1ng/g). A third head hair specimen, two (2) cm in length and cut approximately one (1) cm from the surface of the scalp, was collected 20 December 1994. This third hair specimen was determined to contain fentanyl at 3ng/g in duplicate and independent SIM-IE GC/MS analyses of two specimen aliquots (100 mg each).

Upon investigation, it was determined that the patient had a documented exposure of fentanyl (1000 mcg total) delivered over a period of three hours on 25 July 1994, administered during a surgical procedure performed on the patient's back. Based on an average growth rate of 1.0 cm/month with a standard deviation of 0.2 cm/month, this administration date cannot be excluded from the analyzed growth segment at the 95% confidence level.

Previous literature reports have described the detection of fentanyl by RIA of head hair specimens taken from surgical patients exposed one time to between 1.0 and 6.0 mg of the drug [1]. In addition, we previously reported the detection of fentanyl in head hair (at 20 ng/g) by GC/MS following a subject's use of four (4) fentanyl transdermal patches diverted from evidence submitted to a crime laboratory in a criminal case[2]. However, in the present case the identity of fentanyl was established by a confirmatory technique following (potentially) only a single exposure.

The possibility of continued surreptitious self-administration of fentanyl by the anesthesiologist in this case during the relevant hair growth period cannot be excluded from consideration. However, the single documented exposure to a dose of fentanyl during this same period provides an alternate explanation for the drug's presence. This case raises for consideration the proposition that, contrary to the generally accepted view among those who are active in forensic hair drug testing, a single large administration of a drug may be detected in hair. This case illustrates and underscores the need for further study of that proposition, the critical role of case history information, and the need for caution when interpreting forensic hair drug analysis findings.

- [1] Wang WL, Cone E, Zacny J, "Immunoassay evidence for fentanyl in hair of surgery patients." Proceedings of the Society of Forensic Toxicologists 22nd Annual Meeting, Cromwell, CT, Platform Session 5 (Paper 2), 10/16/92.
- [2] Selavka CM, Mason AP, Riker CD, and Crokham S, "Determination of Fentanyl in Hair: The Case of the Crooked Criminalist." *J For Sci* 40(4):in press, 1995. ✂

## CALL FOR CASE NOTES

Your case note should be about 1/2 page in length, no more than a full page. Material or a disk (using Microsoft Works/Word 2.0) may be mailed to:

Joseph R. Monforte, Ph.D., DABFT, ToxTalk Editor

846 Smoke Dr. (H.P.), Prescott, AZ 86301

- or - Telephone/FAX: 520-717-0617 (new area code)

Other items of interest to SOFT members are also welcome.

Next deadline: May 1, 1995

## SOFT MEMBERSHIP DIRECTORY TO BE PREPARED

*Is your contact information correct????*

The new central database system is on-line and complete. Secretary Watts asks all SOFT members to notify her of any address, telephone, or FAX changes so your contact information will be published correctly in the 1995 SOFT Membership Directory. **FAX ALL CHANGES IMMEDIATELY TO: 602-839-9106.** The directory will be distributed with the June issue of *ToxTalk*. ✂

# Technical Notes: BLUTALKOHOLKONZENTRATION No. 8

Submitted by: J.G. Wigmore, B.Sc., Toxicology Section, Centre of Forensic Sciences, Toronto, Ontario, Canada

**FORMATION OF METHANOL "IN VITRO" IN "IN VIVO" (FORMATION OF METHANOL AFTER CONSUMPTION OF PECTIN)** by O. Gruner, N. Bilzer, and J. Liebman; *Blutalkohol* 31:228-232, 1994

German title: Zur Methanolbildung in vitro und in vivo (Methanolbildung nach Pektingaben)

A study was conducted as to the formation of methanol from pectin in vitro and in human subjects. Different citrus fruit juices were stored in a refrigerator for 34 days. The initial methanol concentrations of the juices were between 10 and 270 mg/kg, which increased with storage time to a maximum of 600 mg/kg.

Twenty-six subjects consumed pectin 3 times a day (40 g daily) for up to 2 days. The initial serum methanol concentrations ranged between 0.000070 and 9.000 g/100 mL (mean 0.000096 g/100mL). After 2 days of pectin administration the serum methanol concentration increased to between 0.000074 and 0.0022 g/100 mL (mean 0.0016 g/100 mL). Five subjects then consumed 0.5 g/kg ethanol and the serum methanol concentration increased further to a maximum of 0.0050 g/100 mL (mean 0.0028 g/100 mL), five hours after the beginning of drinking.

The authors caution that the interpretation of congener analysis may be affected by these findings and that a serum methanol concentration of greater than 0.001 g/100 mL may not be diagnostic of a chronic alcoholic. ☒

## TREASURY NOTES

Treasurer Saady reports that at the last SOFT Board Meeting in Seattle, it was decided that \$25,000 of our General Fund monies would be separated and entitled "Emergency Fund". This money is equivalent to approximately one year's operating expenses and would exist for the purpose of providing a cushion, in the event that one of our annual meetings loses money. Emergency Fund money will be conservatively invested (e.g. U.S. Treasury Bills) and the interest will be used for the ERA Endowment Fund.

"Thank you" to the 333 SOFT members who have submitted their 1995 dues. If you have not yet paid this year's dues, please do so by submitting your payment directly to Treasurer Joseph Saady. ☒

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# SOFT ANNUAL MEETING

## October 9-14, 1995

Silver Anniversary Sheraton Inner Harbor Hotel

For further information contact:

Yale H. Caplan, Ph.D., National Center for Forensic Science (MetPath),  
1901 Sulphur Spring Road, Baltimore, MD 21227 telephone: 410-536-1485

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## ABFT NEWS

The following SOFT members met all certification requirements and have recently been admitted to the American Board of Forensic Toxicology as Forensic Toxicology Diplomates: Edward Briglia, Gary Kunsman, and Ashraf Mozayari. Congratulations!

Those diplomates whose certification expires in 1995 are advised to meet the application deadline.

Address changes and requests for information on ABFT or application materials should be addressed to: ABFT Administrative Office, c/o Forensic Sciences Foundation, PO Box 669, Colorado Springs, CO 80901-0669 (Ph: 719-636-1100).

1. Abusada GM. Abukhalaf IK. Alford DD. Vinzon-Bautista I. Pramanik AK. Ansari NA. Manno JE. Manno BR. Department of Psychiatry, Louisiana State University Medical Center, Shreveport 71130. **Solid-phase extraction and GC/MS quantitation of cocaine, ecgonine methyl ester, benzoylecgonine, and cocaethylene from meconium, whole blood, and plasma.** Journal of Analytical Toxicology. 17(6):353-8, 1993
2. Aderjan RE. Schmitt G. Wu M. Meyer C. Institute for Forensic Medicine, University of Heidelberg, F.R.G. **Determination of cocaine and benzoylecgonine by derivatization with iodomethane-D3 or PFFA/HFIP in human blood and urine using GC/MS (EI or PCI mode).** Journal of Analytical Toxicology. 17(1):51-5, 1993
3. Aks SE. Vander Hoek TL. Hryhorczuk DO. Negrusz A. Tebbett I. Department of Occupational Medicine, Cook County Hospital, Chicago, Illinois 60612. **Cocaine liberation from body packets in an in vitro model [see comments].** Annals of Emergency Medicine. 21(11):1321-5, 1992
4. Bailey DN. Department of Pathology, University of California, San Diego 92103-8320. **Plasma cocaethylene concentrations in patients treated in the emergency room or trauma unit.** American Journal of Clinical Pathology. 99(2):123-7, 1993
5. Balikova M. Institute for Forensic Toxicology, Medical Faculty 1, Charles University, Prague, Czechoslovakia. **Selective system of identification and determination of antidepressants and neuroleptics in serum or plasma by solid-phase extraction followed by high-performance liquid chromatography with photodiode-array detection in analytical toxicology.** Journal of Chromatography. 581(1):75-81, 1992
6. Batki SL. Manfredi LB. Jacob P 3d. Jones RT. Department of Psychiatry, University of California, San Francisco School of Medicine 94110. **Fluoxetine for cocaine dependence in methadone maintenance: quantitative plasma and urine cocaine/benzoylecgonine concentrations.** Journal of Clinical Psychopharmacology. 13(4):243-50, 1993
7. Baud FJ. Barriot P. Toffis V. Riou B. Vicaut E. Lecarpentier Y. Bourdon R. Astier A. Bismuth C. Institution Reanimation Toxicologique, Hopital Fernand Widal, Universite Paris 7, France. Title **Elevated blood cyanide concentrations in victims of smoke inhalation [see comments].** Source New England Journal of Medicine. 325(25):1761-6, 1991
8. Bennett VM. Palmer EM. Institution Document Delivery Services, Scott Memorial Library, Thomas Jefferson University Medical Center, Philadelphia, Pennsylvania 19107. Title **Electronic document delivery using the Internet.** Source Bulletin of the Medical Library Association. 82(2):163-7, 1994
9. Bilzer N. Sprung R. Schewe G. Institut fur Rechtsmedizin, Christian-Albrechts-Universitat Kiel. **Reliability of forensic evidence in breath alcohol analysis.** [German] Blutalkohol. 31(1):1-7, 1994
10. Bond AJ. Silveira JC. Institution Department of Psychiatry, Institute of Psychiatry, Denmark Hill, London, United Kingdom. Title **The combination of alprazolam and alcohol on behavioral aggression.** Source Journal of Studies on Alcohol - Supplement. 11:30-9, 1993
11. Borsman ML. Institution Access Services, Treadwell Library, Massachusetts General Hospital, Boston 02114. Title **Faxon Finder/Faxon Xpress: report from a beta test site.** Source Bulletin of the Medical Library Association. 82(2):168-70, 1994
12. Brogan WC 3d. Lange RA. Glamann DB. Hillis LD. University of Texas Southwestern Medical Center, Dallas. **Recurrent coronary vasoconstriction caused by intranasal cocaine: possible role for metabolites.** Annals of Internal Medicine. 116(7):556-61, 1992
13. Brose WG. Tanelian DL. Brodsky JB. Mark JB. Cousins MJ. **CSF and blood pharmacokinetics of hydromorphone and morphine following lumbar epidural administration.** Source Pain. 45(1):11-5, 1991
14. Brown OM. **Breath alcohol after using mouthwash [letter; comment].** JAMA. 271(18):1400-1, 1994
15. Brust JC. Department of Neurology, Columbia University College of Physicians and Surgeons, New York, New York. **Other agents. Phencyclidine, marijuana, hallucinogens, inhalants, and anticholinergics. [Review]** Neurologic Clinics. 11(3):555-61, 1993

16. Cami J. Guerra D. Ugena B. Segura J. de la Torre R. Department of Pharmacology and Toxicology, Instituto Municipal de Investigacion Medica, Barcelona, Spain. **Effect of subject expectancy on the THC intoxication and disposition from smoked hashish cigarettes.** *Pharmacology, Biochemistry & Behavior.* 40(1):115-9, 1991
17. Challoner KR. McCarron MM. Newton EJ. Department of Emergency Medicine, Los Angeles County/University of Southern California Medical Center 90033. **Pentazocine (Talwin) intoxication: report of 57 cases.** *Journal of Emergency Medicine.* 8(1):67-74, 1990
18. Chesher GB. Bird KD. Jackson DM. Perrignon A. Starmer GA. Department of Pharmacology, University of Sydney, N.S.W. Australia. **The effects of orally administered delta 9-tetrahydrocannabinol in man on mood and performance measures: a dose-response study.** *Pharmacology, Biochemistry & Behavior.* 35(4):861-4, 1990
19. Christophersen AS. Morland J. National Institute of Forensic Toxicology, Oslo, Norway. **Drug analysis for control purposes in forensic toxicology, workplace testing, sports medicine and related areas.** [Review] *Pharmacology & Toxicology.* 74(4-5):202-10, 1994
20. Clark SM. Berglund SL. Reference Department, Hawaii Medical Library, Honolulu 96813. **Computer-assisted search of medical literature.** *Hawaii Medical Journal.* 52(12):346-8, 1993
21. Colburn N. Meyer RD. Wrigley M. Bradley EL. Department of Sociology, University of Alabama School of Medicine, Birmingham 35294. **Should motorcycles be operated within the legal alcohol limits for automobiles.** *Journal of Trauma.* 35(2):183-6, 1993
22. Combs AB. Acosta D. Division of Pharmacology and Toxicology, College of Pharmacy, University of Texas, Austin 78712. **Toxic mechanisms of the heart: a review.** [Review] *Toxicologic Pathology.* 18(4 Pt 1):583-96, 1990.
23. Cone EJ. Hillsgrove M. Darwin WD. Addiction Research Center, National Institute on Drug Abuse, Baltimore, MD 21224. **Simultaneous measurement of cocaine, cocaethylene, their metabolites, and "crack" pyrolysis products by gas chromatography-mass spectrometry.** *Clinical Chemistry.* 40(7 Pt 1):1299-305, 1994
24. Conolly RB. Andersen ME. Chemical Industry Institute of Toxicology, Research Triangle Park, North Carolina 27709. **Biologically based pharmacodynamic models: tools for toxicological research and risk assessment.** [Review] *Annual Review of Pharmacology & Toxicology.* 31:503-23, 1991.
25. Corburt MR. Koves EM. Centre of Forensic Sciences, Toronto, Ontario, Canada. **Gas chromatography/mass spectrometry for the determination of cocaine and benzoylecgonine over a wide concentration range (< 0.005-5 mg/dL) in postmortem blood.** *Journal of Forensic Sciences.* 39(1):136-49, 1994
26. Corburt MR. Koves EM. Centre of Forensic Sciences, Toronto, Ontario, Canada. **Gas chromatography/mass spectrometry for the determination of cocaine and benzoylecgonine over a wide concentration range (< 0.005-5 mg/dL) in postmortem blood.** *Journal of Forensic Sciences.* 39(1):136-49, 1994
27. Dean RA. Harper ET. Dumaul N. Stoeckel DA. Bosron WF. Department of Pathology, Indiana University School of Medicine, Indianapolis 46202-5200. **Effects of ethanol on cocaine metabolism: formation of cocaethylene and norcocaethylene.** *Toxicology & Applied Pharmacology.* 117(1):1-8, 1992
28. DeHoff JB. **Urine drug testing, water intoxication, and anticholinergic medication [letter; comment].** *JAMA.* 265(20):2672, 1991
29. Denney RC. School of Biological and Chemical Sciences, Thames Polytechnic, London, United Kingdom. **Solvent inhalation and 'apparent' alcohol studies on the Lion Intoximeter 3000.** *Journal of the Forensic Science Society.* 30(6):357-61, 1990
30. Devgun MS. Dunbar JA. **Alcohol consumption, blood alcohol level and the relevance of body weight in experimental design and analysis.** *Journal of Studies on Alcohol.* 51(1):24-8, 1990
31. Dow-Edwards D. State University of New York Health Science Center. **Fetal and maternal cocaine levels peak rapidly following intragastric administration in the rat.** *Journal of Substance Abuse.* 2(4):427-37, 1990.

32. Drummer OH. Horomidis S. Kourtis S. Syrjanen ML. Tippet P. Victorian Institute of Forensic Pathology, Monash University, South Melbourne, Australia. **Capillary gas chromatographic drug screen for use in forensic toxicology.** Journal of Analytical Toxicology. 18(3):134-8, 1994
33. Duhart HM. Fogle CM. Gillam MP. Bailey JR. Slikker W Jr. Paule MG. Division of Neurotoxicology, National Center for Toxicological Research, Jefferson, Arkansas 72079-9502. **Pharmacokinetics of cocaine in pregnant and nonpregnant rhesus monkeys.** Reproductive Toxicology. 7(5):429-37, 1993
34. Engels WR. Department of Genetics, University of Wisconsin, Madison 53706. **Contributing software to the internet: the Amplify program. [Review]** Trends in Biochemical Sciences. 18(11):448-50, 1993
35. Farbey R. **Searching the literature. Be creative with Medline [letter; comment].** BMJ. 307(6895):66, 1993
36. Felby S. Nielsen E. **Determination of ketone bodies in postmortem blood by head-space gas chromatography.** Forensic Science International. 64(2-3):83-8, 1994
37. Felby S. Nielsen E. Institute of Forensic Chemistry, University of Copenhagen. **Postmortem blood alcohol concentration.** Blutalkohol. 30(4):244-50, 1993
38. Felby S. Nielsen E. **The postmortem blood alcohol concentration and the water content.** Blutalkohol. 31(1):24-32, 1994
39. Ferko AP. Barbieri EJ. DiGregorio GJ. Ruch EK. Department of Pharmacology, Hahnemann University, School of Medicine, Philadelphia, Pennsylvania 19102. **The accumulation and disappearance of cocaine and benzoylecgonine in rat hair following prolonged administration of cocaine.** Life Sciences. 51(23):1823-32, 1992.
40. Ferrara SD. Zancaner S. Giorgetti R. Centre of Behavioural and Forensic Toxicology, University of Padova, Italy. **Low blood alcohol concentrations and driving impairment. A review of experimental studies and international legislation. [Review]** International Journal of Legal Medicine. 106(4):169-77, 1994.
41. Fitzgerald RL. Fishel CE. Bush LL. Mass Spectrometry Laboratory, VA Hospital, San Diego, CA. **Fatality due to recreational use of chlorodifluoromethane and chloropentafluoroethane.** Journal of Forensic Sciences. 38(2):477-83, 1993
42. Flanagan RJ. Ruprah M. Meredith TJ. Ramsey JD. Poisons Unit, Guy's Hospital, London, England. **An introduction to the clinical toxicology of volatile substances. [Review]** Drug Safety. 5(5):359-83, 1990
43. Freitag WJ. Adesso VJ. Department of Psychology, University of Wisconsin-Milwaukee 53201. **Mood effects of alcohol and expectancies across the menstrual cycle.** Alcohol. 10(4):291-8, 1993
44. Fukuda T. Takahashi H. Naito H. Department of Anesthesiology, University of Tsukuba, Ibaraki-ken, Japan. **Arteriovenous differences of blood alcohol concentrations after celiac plexus block.** Clinical Pharmacology & Therapeutics. 52(3):249-51, 1992
45. Garnier R. Guerault E. Muzard D. Azoyan P. Chaumet-Riffaud AE. Efthymiou ML. Paris Poison Center, Hopital Fernand-Widal, France. **Acute zolpidem poisoning--analysis of 344 cases.** Journal of Toxicology - Clinical Toxicology. 32(4):391-404, 1994
46. Gately SJ. Yu DW. Fowler JS. MacGregor RR. Schlyer DJ. Dewey SL. Wolf AP. Martin T. Shea CE. Volkow ND. Department of Chemistry, Brookhaven National Laboratory, Upton, New York 11973. **Studies with differentially labeled [<sup>14</sup>C]cocaine, [<sup>14</sup>C]norcocaine, [<sup>14</sup>C]benzoylecgonine, and [<sup>14</sup>C]- and 4'-[<sup>18</sup>F]fluorococaine to probe the extent to which [<sup>14</sup>C]cocaine metabolites contribute to PET images of the baboon brain.** Journal of Neurochemistry. 62(3):1154-62, 1994
47. Gengo FM. Gabos C. Straley C. Manning C. Neuropharmacology Division, Dent Neurologic Institute, Buffalo, New York. **The pharmacodynamics of ethanol: effects on performance and judgment.** Journal of Clinical Pharmacology. 30(8):748-54, 1990

# ELMER GORDON OPEN FORUM AN OPPORTUNITY FOR INFORMAL DIALOGUE

**ANSYS OFFERING \$15,000 AWARD FOR OUTSTANDING APPLICATIONS USING SOLID PHASE EXTRACTION USING SPEC AND \$1,000.00 FOR SUBMITTING SPEC ARTICLES TO ACCEPTED REFEREE JOURNAL. *Deadline: June 1995.*** For further information, including a list of acceptable journals, telephone Darrell Adams, Ansys/Toxi-Lab, at 800-854-0277 or Fax 714-770-0863. (repeated from last issue)

**CONGRATULATIONS, DR. RONALD BACKER**, recipient of the AAFS Raymond Abernethy Award that was recently presented in Seattle. ☼

## CAREER OPPORTUNITIES

*Positions available are listed for the consideration of SOFT members. There is no fee for this service. The information will be repeated in the next issue only if the information is confirmed by the person who submitted it.*

**PhD TOXICOLOGIST:** CAP lab, UDT and forensic ME experience or training. Florida's east central coast. Contact: Wuesthoff Health systems, Inc., P.O. Box 565002, Rockledge, FL 32956-5002.

**TOXICOLOGY TECHNICAL SPECIALIST** MT with NRCC/Tox cert (or equiv of either), 5 yr min experience, general, medical, forensic & occupational testing. Legacy Emanuel Hosp & Health Ctr, Portland, OR. Call Kandis Allison at 503-280-4164 for application packet. ☼

## PROFESSIONAL CALENDAR

**California Association of Toxicologists (CAT)** quarterly meetings and workshops. For information contact Vickie Watts 602-644-2077, FAX 602-644-2478. 5/06/95 Los Angeles

**American Academy of Forensic Sciences (AAFS)** annual meeting: Contact Brenda Papke, 719-636-1100. Future AAFS meetings: 2/19-24/96 Nashville; 2/17-22/97 New York City.

**ACS National Meeting:** April 2-7, Anaheim, CA. Contact ACS Meetings at 202-872-4396.

**Advances in Clinical and Forensic Toxicology (ADFT II):** May 11-12, Milwaukee, WI. Contact Laura Geurts, CME, MEB, Medical College of Wisconsin, 8701 Watertown Plank Rd, Milwaukee WI 53226 (414-456-4989, FAX 414-266-8905)

**Analytical and Molecular Biological Techniques in Environmental Toxicology and Forensic Sciences:** September 11-12, San Juan, Puerto Rico. Sponsored by Puerto Rico Chemists Assoc and the American Registry of Pathology, \$200. Contact Dr. Jose Centeno, AFIP, 14th & Alaksa Ave. NW, Washington, DC 20306-6000. Ph 202-782-2839, Fax 202-782-9215

**SOFT 25th Anniversary Meeting:** October 9-14, Baltimore. Contact Dr. Yale Caplan, 1995 SOFT Meeting Host, National Center for Forensic Science, Div. Maryland Medical Lab (MetPath), 1901 Sulphur Spring Rd., Baltimore, MD 21227 (telephone: 410-536-1485).

**FUTURE S.O.F.T. MEETINGS:** 1996 - Denver, CO

### REMINDER - S.O.F.T. CONTACT INFORMATION:

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