



# ToxTalk

The official publication of the SOCIETY OF FORENSIC TOXICOLOGISTS, INC.

VOLUME 25 No. 2

JUNE 2001

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## REGULAR FEATURES

Career Opportunities ✕ Professional Calendar  
From the Editor's Desk ✕ Journal Club ✕ Toxichem + Krimtech

## TECHNICAL NOTES

**Drugs In The News:** Beta Blockers (Papa), PPA (Papa)

**Case notes:** An unusually high postmortem hydrocodone concentration in a driver from a motor vehicle accident. (Dunn)

**New Drugs:** Ziprasidone (Anderson)

## SPECIAL INTEREST

Preliminary SOFT 2001 Annual Meeting Information

## INSERTS

2001 SOFT Meeting forms and information  
2001 SOFT Membership Directory (*members only*)

# SOFT 2001 NEW ORLEANS

## September 30 – October 5

### Radisson Hotel

ToxTalk is mailed quarterly (bulk mail) to members of the *Society of Forensic Toxicologists, Inc.* It is each member's responsibility to report changes of address to the SOFT mailing address (Mesa, AZ - above). Non-members may now receive ToxTalk for \$15 per calendar year. Make your check payable to SOFT and mail it directly to the ToxTalk Editor.

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

**NEXT DEADLINE: AUGUST 1, 2001**

# SOFT ANNUAL MEETING SEPTEMBER 30 to OCTOBER 5, 2001

## Radisson Hotel - NEW ORLEANS, LA

### MEETING AT A GLANCE

#### SUNDAY – SEPTEMBER 30, 2001

WORKSHOP #1 – *ALTERNATIVE TESTING (Part A)*  
8 a.m. – noon Vince Papa, Ph.D.,  
WORKSHOP #3 – *ALTERNATIVE TESTING (Part B)*  
1 p.m. – 5 p.m. Leon Glass, Ph.D.  
WORKSHOP #2 – *HERBAL MEDICINE*  
8 a.m. – noon Barbara Manno, Ph.D.  
WORKSHOP #4 – *URINE TESTING AND HUMAN*  
PERFORMANCE 1 p.m. – 5 p.m.  
Joseph Manno, Ph.D.

#### MONDAY - OCTOBER 1

WORKSHOP #5 – *ETHANOL*  
8 a.m. – 5 p.m. James Garriott, Ph.D.  
WORKSHOP #6 – *CLINICAL TOXICOLOGY*  
8 a.m. – noon Larry Broussard, Ph.D.  
WORKSHOP #7 – *THE IMPACT OF DAUBERT ON*  
*TESTIFYING AS A FORENSIC TOXICOLOGIST*  
WORKSHOP #8 – *ADULTERANT TESTING*  
1:30 p.m. – 5 p.m. Mahmoud ElSohly, Ph.D.

#### TUESDAY – OCTOBER 2

SOFT Run/Walk 7 a.m.  
Registration 7:30 a.m. – 5 p.m.  
ABFT Examination 8 a.m. – noon  
WORKSHOP #10 *VOODOO – DOES THIS PRACTICE*  
*USE TOXINS?* 9 a.m. – 4 p.m.  
ABFT Board Meeting noon – 6 p.m.  
Exhibit set up 2 p.m.  
NLCP Inspectors Workshop 7 p.m. – 10 p.m.

#### WEDNESDAY – OCTOBER 3

Registration 7:30 a.m. – 5 p.m.  
Poster set up 7 a.m. – 9 a.m.  
Consultants Breakfast 7 a.m. – 8 a.m.  
WELCOME and Opening of Scientific Program 8 a.m.  
SOFT Business Meeting 8 a.m. – noon  
Exhibits and Posters 9 a.m. – 3:30 p.m.  
Luncheon noon – 1 p.m.  
Exhibits open noon – 5 p.m.  
Scientific Session 1 p.m. – 3:45 p.m.  
Welcome Reception 7 p.m. – 10 p.m.

#### THURSDAY – OCTOBER 4

Registration 7:30 a.m. – noon  
ABFT Breakfast 7 a.m. – 8:30 a.m.  
Vendors' Meeting 8 a.m. – 9 a.m.  
Scientific Session 8 a.m. – noon  
Exhibits and Posters open 9 a.m. – 3 p.m.  
Luncheon noon – 1 p.m.  
Scientific Session 1 p.m. – 5 p.m.  
Farewell Dinner 6 p.m. – 9 p.m.  
Elmer Gordon Forum 9 p.m. to 11 p.m.

#### FRIDAY – OCTOBER 5

Scientific Meeting 8 a.m. – noon  
Poster Session 9 a.m. – noon  
Exhibits open 9 a.m. - noon

#### For further information contact:

Pat Pizzo 504-361-8989 x291 ppizzo@labz.com  
David Green 225-926-9173 x206  
dgreen@lrl.dynacare.com


**Important deadlines:** Aug 1 - Mail registration, no late fee & free t-shirt Sept. 7 - Radisson reservations

**STOP THE PRESS! MEETING ABSTRACT DEADLINE EXTENDED TO JULY 1**

#### ***New information:* SOFT AIRLINE DISCOUNTS: Southwest and Delta Offer Reduced Fares**

Southwest: Call 1-800-433-5368 (Mon.-Fri. 8 a.m. to 5 p.m. and Sat.-Sun. 9:30 a.m. to 3:30 p.m.) and reference I.D. code R6864 for a 10% discount on most of SWA's low fares. Reservation deadline: 5 or more days prior to travel.

Delta: Call 1-800-241-6760 (Mon.-Fri. 7 a.m. to 11 p.m. and Sat.-Sun 8:30 a.m. to 11 p.m. EST) and reference file 160656A for a 10% discount 60 days prior to travel or 5% when making reservations less than 60 days before travel.

Additional information and forms, including registration and abstracts, are included as inserts in this issue of **ToxTalk** and may also be found on **www.soft-tox.org** 

# SOFT TREASURER'S REPORT JANUARY - MARCH 2001

*Submitted by Daniel Isenschmid, Ph.D., Treasurer*

<b>\$16,116.76 TOTAL EXPENSES</b>
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<b>\$22,105.08 TOTAL INCOME</b>
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3,490.72	AAFS Hospitality
2,011.49	Administrative
657.15	Fees: Bank, Credit Cards
335.00	ERA Fund Awards
864.00	Fun Run/Walk
170.00	Incorporation Fee
5,700.00	JAT Special issue
748.30	Officer Expense
489.14	SOFT Promotional Items
200.00	ToxTalk
1,450.00	Web Site

40.00	Application Fees
17,213.00	Dues
626.00	ERA Fund Donations
3,010.08	Interest
275.00	Lab Guidelines
91.00	Late Fees
800.00	Mail Label Leases
50.00	SOFT Logo Items

ACCOUNT	OPENING BALANCE	CLOSING BALANCE
CHECKING	105,111.44	108,426.68
RESERVE	25,000.00	25,000.00
ERA FUND	91,624.83	94,299.91
<b>TOTAL</b>	<b>\$221,738.27</b>	<b>\$227,726.59</b>

**Guidelines for Hosting an Annual SOFT Meeting Now Available:** Potential SOFT meeting hosts should contact Laurel Farrell (farrell@oneimage.com) for details. ☒

## ***Toxichem + Krimtech*** 66:2, 74 (1999)

*Submitted by Donald Kippenberger, Ph.D.*

Authors, MJ Bogusz, R-D Maier and K-D Krueger

A new kind of solid phase extraction (SPE) has been recently introduced by Varian Sample Preparation Products under the name abselut<sup>tm</sup>. These cartridges, filled with a new sorbent NEXUS were claimed to isolate acidic, neutral and basic drugs from biological fluids in one analytical run. Moreover, the activation (wetting) step was omitted.

The purpose of this study was to check the applicability of abselut<sup>tm</sup> NEXUS cartridges for the isolation of basic drugs in wide polarity range (amphetamine, MDMA, MDEA, codeine, morphine, cocaine, benzoylecgonine, morphine-3-glucuronide, morphine-6-glucuronide, codeine-6-glucuronide) as well as acidic drugs of low and middle polarity (tetrahydrocannabinol and THC-COOH). All drugs were extracted from serum with abselut<sup>tm</sup>, NEXUS cartridges and with SPE (Bond Elut C18 cartridges) as control procedures. All basic drugs were determined with LC-MS (atmospheric pressure chemical ionization), the cannabinoids with GCMS.

The analytical recovery of basic drugs of low and middle polarity (amphetamine, MDMA, MDEA, codeine, morphine, cocaine, benzoylecgonine) was similar for abselut<sup>tm</sup> and Bond elut cartridges. However, the polar opiate glucuronides were not extracted by abselut<sup>tm</sup> at all, while the Bond elut cartridges extracted them very well. Cannabinoids were extracted with abselut<sup>tm</sup> cartridges to some extent (similar as with the SPE procedure used for basic drugs), but the recovery was too low for the required sensitivity.

This study did not confirm the statement of the manufacturer concerning the universal applicability of abselut<sup>tm</sup> NEXUS SPE columns. ☒

**Next ToxTalk deadline: AUGUST 1, 2001**

# CASE NOTES: An unusually high postmortem hydrocodone concentration in a driver from a motor vehicle accident.

Submitted by William A. Dunn, M.S., Forensic Toxicologist, National Medical Services, Inc., Willow Grove, PA 19090

Reported here is a case of an individual who was driving with an unusually high blood hydrocodone concentration. By history, this individual made a U-turn in front of another vehicle. In the resulting accident, he sustained a fractured neck as well as a laceration of the exterior jugular vein. He was pronounced dead at the scene. The cause of death was listed as exsanguination from the laceration. At autopsy there were no fresh "track marks" found on the decedent, but microscopic findings indicated pulmonary changes consistent with the injection of non-soluble excipient materials. His past medical history included years of hydrocodone use for "back problems", as well as a history of past i.v. drug abuse. In addition, there was a history of psychiatric problems, but no medications for this problem were listed or found.

The results of postmortem blood and urine toxicological analyses are shown in the table below.

Baselt (1) reports that in a series of eleven hydrocodone deaths the blood concentrations ranged from 130 ng/mL to 7,000 ng/mL with an average concentration of 1,400 ng/mL. In this series, most (n = 8) of the concentrations were between 130 ng/mL and 600 ng/mL.

The anatomical site for blood collection was the pulmonary artery/right ventricle. Although the site is technically heart blood, the possibility of postmortem redistribution may be a moot point. Dalpe-Scott and co-workers found that the heart blood and femoral blood concentrations of hydrocodone were identical (in [1]). In addition, the markedly elevated concentrations of hydrocodone and its metabolites in the urine support the reported high blood concentration.

This case illustrates the extent to which an individual can become tolerant to the effects of opiates and other CNS depressants, and hydrocodone in particular. The individual had a blood hydrocodone level that could be associated with a fatal overdose of hydrocodone, especially in conjunction with the other CNS depressant compounds detected. Yet he still managed to physically maneuver a motor vehicle, albeit in an unsafe manner.

Blood (Pulmonary artery/Right Ventricle)	
Ethanol	61 mg/dL
Diazepam	320 ng/mL
Nordiazepam	220 ng/mL
Hydrocodone	3,800 ng/mL
Dihydrocodeine	340 ng/mL
Acetaminophen	110 µg/mL

Urine	
Ethanol	66 mg/dL
THCC	11 ng/mL
Hydrocodone	61,000 ng/mL
Dihydrocodeine	7,000 ng/mL
Hydromorphone	4,200 ng/mL
Diazepam	Less than 50 ng/mL
Nordiazepam	290 ng/mL
Oxazepam	350 ng/mL
Temazepam	470 ng/mL
Lorazepam	45 ng/mL
Acetaminophen	520 µg/mL

#### Reference:

1. R.C. Baselt, *Hydrocodone*, in *Disposition of toxic drugs and chemicals in man*. 1999, Biomedical Publications: Davis, Calif. pp. 422-423.



## CALL FOR CASE NOTES

***We need your contribution! This need not take much time.***

Your case note should be about 1/2 page in length, no more than a full page.

Material and/or a disk (arial font, size 10, Microsoft Word 6.0 preferred) may be submitted to:

Joseph R. Monforte, Ph.D., DABFT, **ToxTalk** Editor  
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Or fax: 480-595-MONF (6663). PLEASE remember that Arizona is hours behind the East Coast.

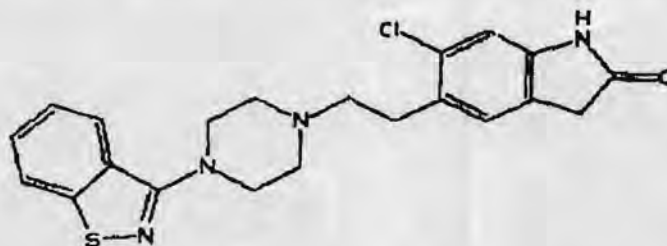
**NOTE: Dr. Monforte has returned to his original e-mail address: [DrMonforte@aol.com](mailto:DrMonforte@aol.com)**

The rarely-checked alternate is still [monforte@juno.com](mailto:monforte@juno.com)

*Other items of interest to SOFT members are also welcome.*

## Ziprasidone (Zeldox®)

**Structure:**



**Manufacturer:** Pfizer, USA

**FDA Status:** -July, 2000 - Advisory Committee to the FDA recommended approval  
-July, 1998 - Approved in Sweden

**CAS registry No.:** 146939-27-7 (free base)

**Chemical Name:** 5-(2-(4-(1,2-Benzisothiazol-3-yl)piperazin-1-yl)ethyl)-6-chloroindolin-2-one hydrochloride hydrate - or -  
2H-Indol-2-one,5-[2-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]ethyl]-6-chloro-1,3-dihydro-

**Molecular formula:** C<sub>21</sub>H<sub>21</sub>ClN<sub>4</sub>OS

**Molecular weight:** 412.949

**Therapeutic Category:** -Neuroleptic, Atypical anti-psychotic for Schizophrenia  
-High affinity and selectivity for dopamine and serotonin receptors  
-Reduced sedative behavior compared to Haloperidol and Risperidone

**Bio-availability:** Oral - 60%

**Protein Binding:** Greater than 99%

**Volume of Distribution (V<sub>d</sub>):** 2.3 L/kg

**Metabolism:** -Extensively metabolized in liver  
-Mild-to-moderate impairment of renal function has minimal effect

**Half-Life (T<sub>1/2</sub>):** 4-5 hours ☼

Submit information on new drugs relative to forensic toxicology to:

Daniel Anderson, M.S. L.A. County Coroner's Dept., 1104 N. Mission Road, Los Angeles, CA 90033

E-mail: danderso@co.la.ca.us Ph: 323-343-0530

## DRUGS IN THE NEWS

Submitted by Vincent M. Papa, Ph.D. Brooks AFB, TX. 78238

**BETA BLOCKERS:** USA Today reported in February that the use of Beta Blockers gives golfers an unfair edge. Beta blockers are a family of more than ten legal prescription drugs. In general, they reverse the effects of adrenaline and decrease heart rate which can result in a feeling of euphoria. They are not banned by the Professional Golf Association (PGA). They are banned in certain Olympic sports.

**PPA:** Recently, USA Today and the major television networks reported that the Food and Drug Administration ordered a recall of phenylpropanolamine (PPA) from the OTC market. This was based on recommendations of a scientific advisory panel after a Yale University study showed an increased incidence of cerebral vascular accidents (CVA) in various populations using the products. Last year at least 4.5 million dosages that contained PPA were sold in the US. It is a sympathomimetic drug that is approximately equivalent to ephedrine in its pharmacological properties. The D form occurs naturally in certain plants and cannot be distinguished by most analytical procedures. PPA is available in oral doses of 6-50 mg. It is an ingredient of numerous diet aids and can be found in combination with antihistamines and analgesics. ☼

# JOURNAL CLUB

Submitted by H. Chip Walls

- Journal of Chromatography. B, Biomedical Sciences & Applications 713 (2): 361-9. (1998).
- Casamenti, G., R. Mandrioli, et al. "Development of an HPLC method for the toxicological screening of central nervous system drugs" *Journal of Liquid Chromatography & Related Technologies* 23 (7): 1039-1059. (2000).
- Nowatzke, W., J. Zeng, et al. "Distinction among eight opiate drugs in urine by gas chromatography-mass spectrometry" *Journal of Pharmaceutical & Biomedical Analysis* 20 (5): 815-828. (1999).
- Wilson, Z., S. Hubbard, et al. "Drug analysis in fly larvae" *American Journal of Forensic Medicine & Pathology* 14 (2): 118-20. (1993).
- Langford, A., K. Taylor, et al. "Drug concentration in selected skeletal muscles" *Journal of Forensic Sciences* 43 (1): 22-7. (1998).
- Marks, V. and J. Teale "Drug-induced hypoglycemia [Review]" *Endocrinology & Metabolism Clinics of North America* 28 (3). (1999).
- Palmeri, A., S. Pichini, et al. "Drugs in nails - Physiology, pharmacokinetics and forensic toxicology [Review]" *Clinical Pharmacokinetics* 38 (2): 95-110. (2000).
- Sadler, D., C. Seneviratne, et al. "Effects of 3,4-methylenedioxymethamphetamine in decomposing tissues on the development of *Parasarcophaga ruficornis* (Diptera: Sarcophagidae) and detection of the drug in postmortem blood, liver tissue, larvae and pupae [letter; comment]" *Journal of Forensic Sciences* 42 (6): 1212-3. (1997).
- Pounder, D., D. Carson, et al. "Electrolyte concentration differences between left and right vitreous humor samples" *Journal of Forensic Sciences* 43 (3): 604-7. (1998).
- Zaugg, S. and W. Thormann "Enantioselective determination of drugs in body fluids by capillary electrophoresis [Review]" *Journal of Chromatography* 875 (1-2): 27-41. (2000).
- Wurst, F., C. Kempter, et al. "Ethyl glucuronide: a marker of recent alcohol consumption with clinical and forensic implications" *Alcohol* 20 (2): 111-116. (2000).
- Pounder, D. "Forensic aspects of aboriginal skeletal remains in Australia" *American Journal of Forensic Medicine & Pathology* 5 (1): 41-52. (1984).
- Pounder, D. "Forensic entomo-toxicology" *Journal - Forensic Science Society* 31 (4): 469-72. (1991).
- Chao, T. "Forensic investigation of deaths due to fire in mass disaster" *Annals of the Academy of Medicine, Singapore* 21 (5): 649-55. (1992).
- Peng, Z. and D. Pounder "Forensic medicine in China" *American Journal of Forensic Medicine & Pathology* 19 (4): 368-71. (1998).
- Pounder, D. and H. Harding "Forensic services in Australia" *American Journal of Forensic Medicine & Pathology* 5 (3): 269-78. (1984).
- Stewart, M., J. Moar, et al. "Forensic toxicology in urban South Africa" *Journal of Toxicology Clinical Toxicology* 38 (4): 415-419. (2000).
- Jones, G. and M. Peat "Forensic toxicology laboratory guidelines" *Journal of Analytical Toxicology* 23 (7): Nov-Dec. (1999).
- Beck, O., M. Kraft, et al. "Frontline (R) immunochromatographic device for on-site urine testing of amphetamines: laboratory validation using authentic specimens" *Annals of Clinical Biochemistry* 37 (Part 2): 199-204. (2000).
- Toennes, S., A. Fandino, et al. "Gas chromatographic-mass spectrometric detection of anhydroecgonine methyl ester (methylecgonidine) in human serum as evidence of recent smoking of crack" *Journal of Chromatography B* 735 (1): 127-132. (1999).
- Horowitz, M. and D. Pounder "Gastric emptying--forensic implications of current concepts" *Medicine, Science & the Law* 25 (3): 201-14. (1985).
- Bogusz, M. "Hyphenated liquid chromatographic techniques in forensic toxicology [Review]" *Journal of Chromatography B* 733 (1-2): 65-91. (1999).
- Lee, J., M. Cole, et al. "Identification of hallucinogenic fungi from the genera *Psilocybe* and *Panaeolus* by amplified fragment length polymorphism" *Electrophoresis* 21 (8): 1484-1487. (2000).
- Stimpfl, T. and W. Vycudilik "Identification of the general unknown. Application of mass selective detectors in forensic toxicology" *Journal of Analytical Toxicology* 24 (1): 32-6. (2000).
- Musshoff, F. "Illegal or legitimate use? Precursor compounds to amphetamine and methamphetamine [Review]" *Drug Metabolism Reviews* 32 (1): 15-44. (2000).
- Kechagias, S., K. Jonsson, et al. "Impact of gastric emptying on the pharmacokinetics of ethanol as influenced by cisapride" *British Journal of Clinical Pharmacology* 48 (5): 728-732. (1999).
- Cremese, M., A. Wu, et al. "Improved GC/MS analysis of opiates with use of oxime-TMS derivatives" *Journal of Forensic Sciences* 43 (6): 1220-4. (1998).

(Journal Club continued next page...)

(... *Journal Club continued* )

Evans, J., H. Platts, et al. "Impulsiveness and the prolactin response to d-fenfluramine" *Psychopharmacology* 149 (2): 147-152. (2000).

Horowitz, M. and D. Pounder "Is the stomach a useful forensic clock?" *Australian & New Zealand Journal of Medicine* 15 (2): 273-6. (1985).

Pounder, D. "Law and forensic medicine in Scotland" *American Journal of Forensic Medicine & Pathology* 14 (4): 340-9. (1993).

Marquet, P. and G. Lachatre "Liquid chromatography-mass spectrometry: potential in forensic and clinical toxicology [Review]" *Journal of Chromatography B* 733 (1-2): 93-118. (1999).

Clemenson, C., F. Barile, et al. "MEIC evaluation of acute systemic toxicity - Part VII. Prediction of human toxicity by results from testing of the first 30 reference chemicals with 27 further in vitro assays" *ATLA Alternatives to Laboratory Animals* 28 (Suppl 1): 161-200. (2000).

Ekwall, B. and M. Sjoström "MEIC evaluation of acute systemic toxicity - Part VIII. Multivariate partial least squares evaluation, including the selection of a battery of cell line tests with a good prediction of human acute lethal peak blood concentrations for 50 chemicals" *ATLA Alternatives to Laboratory Animals* 28 (Suppl 1): 201-234. (2000).

Dienes-Nagy, A., L. Rivier, et al. "Method for quantification of morphine and its 3- and 6-glucuronides, codeine, codeine glucuronide and 6-monoacetylmorphine in human blood by liquid chromatography-electrospray mass spectrometry for routine analysis in forensic toxicology" *Journal of Chromatography* 854 (1-2): 109-118. (1999).

Kaempe, B. "[New discoveries in forensic medicine. Hair analysis]" *Ugeskrift for Laeger* 161 (13): 1901-5. (1999).

Morland, H. and H. Nesvold "[New substances--new diagnostic challenges (letter; comment)]" *Tidsskrift for Den Norske Laegeforening* 119 (3): 409. (1999).

Pounder, D. "The nightmare of postmortem drug changes" *Legal Medicine* : 163-91. (1993).

Kraemer, T., J. Bickeboeller-Friedrich, et al. "On the metabolism of the amphetamine-derived antispasmodic drug mebeverine: Gas chromatography-mass spectrometry studies on rat liver microsomes and on human urine" *Drug Metabolism & Disposition* 28 (3): 339-347. (2000).

Altria, K. "Overview of capillary electrophoresis and capillary electrochromatography [Review]" *Journal of Chromatography* 856 (1-2): 443-463. (1999).

Pounder, D. "The Peden case: an Australian forensic

disaster [see comments]" *Medical Journal of Australia* 153 (11-12): 712-5. (1990).

Richardson, T. "Pitfalls in forensic toxicology" *Annals of Clinical Biochemistry* 37 (Part 1): 20-44. (2000).

Gaillard, Y. and G. Pepin "Poisoning by plant material: review of human cases and analytical determination of main toxins by high-performance liquid chromatography-(tandem) mass spectrometry [Review]" *Journal of Chromatography B* 733 (1-2): 181-229. (1999).

Langford, A. and D. Pounder "Possible markers for postmortem drug redistribution" *Journal of Forensic Sciences* 42 (1): 88-92. (1997).

Yonemitsu, K. and D. Pounder "Postmortem changes in blood tranylcypromine concentration: competing redistribution and degradation effects" *Forensic Science International* 59 (2): 177-84. (1993).

Fuke, C., C. Berry, et al. "Postmortem diffusion of ingested and aspirated paint thinner" *Forensic Science International* 78 (3): 199-207. (1996).

Lewis, S., Sr., L. Lewis, et al. "Potassium nitrite reaction with 11-nor-delta 9-tetrahydrocannabinol-9-carboxylic acid in urine in relation to the drug screening analysis" *Journal of Forensic Sciences* 44 (5): 951-5. (1999).

Wennig, R. "Potential problems with the interpretation of hair analysis results" *Forensic Science International* 107 (1-3): 5-12. (2000).

Hollien, H., G. DeJong, et al. "Production of intoxication states by actors: perception by lay listeners" *Journal of Forensic Sciences* 43 (6): 1153-62. (1998).

Ferrara, S., G. Brusini, et al. "Proficiency testing for psychoactive substances in Italy" *International Journal of Legal Medicine* 113 (1): 50-4. (1999).

Lurie, I., C. Bailey, et al. "Profiling of impurities in illicit methamphetamine by high-performance liquid chromatography and capillary electrochromatography" *Journal of Chromatography* 870 (1-2): 53-68. (2000).

Tsai, J., W. Wu, et al. "Qualitative determination of urinary morphine by capillary zone electrophoresis and ion trap mass spectrometry" *Electrophoresis* 21 (8): 1580-1586. (2000).

Reuschel, S., S. Percey, et al. "Quantitative determination of LSD and a major metabolite, 2-oxo-3-hydroxy-LSD, in human urine by solid-phase extraction and gas chromatography-tandem mass spectrometry" *Journal of Analytical Toxicology* 23 (5): 306-12. (1999).

LeBeau, M., W. Andollo, et al. "Recommendations for toxicological investigations of drug-facilitated sexual assaults" *Journal of Forensic Sciences* 44 (1): 227-30. (1999). ☼

**MEETING ABSTRACT DEADLINE extended to 7/01**

# ELMER GORDON OPEN FORUM

## AN OPPORTUNITY FOR INFORMAL DIALOGUE

Send items for this section to Editor Joseph Monforte: E-mail [DrMonforte@aol.com](mailto:DrMonforte@aol.com) or fax to 480-595-6663.

### 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 person who submitted it confirms the information. If you have a job position available, FAX (480-595-6663) or E-MAIL ([DrMonforte@aol.com](mailto:DrMonforte@aol.com)) to **ToxTalk** or mail to: Dr. Joseph Monforte, **ToxTalk** Editor, 42408 N. Sombrero Rd., Cave Creek, AZ 85331-2821.

**M.E. CHIEF TOXICOLOGIST** to manage ME post-mortem tox lab and create/execute new comprehensive tox program in newly renovated facility. Advanced degree in tox and 5 yrs experience preferred. \$80,134 - \$101,318/yr. Serves at the pleasure of the appointing authority. Contact Jonathan Arden, M.D. by phone (202-698-9001) or fax (202-698-9101) or e-mail ([jonathan.arden@dc.gov](mailto:jonathan.arden@dc.gov)).

The following employment opportunities are listed on the SOFT website (2/28-5/31/01). For more information, go to [www.soft-tox.org](http://www.soft-tox.org)

#### Position – City – State - Post Date

Sr. Criminalist Mesa AZ 5/31/01

Toxicologist Houston TX 5/31/01

For Sci (Breath Alcohol Sect Missoula MT 5/25/01

Positive Certif Scientist Des Plaines IL 5/25/01

EMIT - Supervisor Fort Worth TX 5/18/01

Sr. Toxicologist Minneapolis MN 5/13/01

Toxicologist I (postmortem tox Miami FL 5/11/01

Toxicologist II (postmortem tox) Miami FL 5/11/01

Criminalist II and III Phoenix AZ 5/4/01

Forensic Certifying Scientist St. Paul MN 5/2/01

Toxicologist Jacksonville FL 4/23/01

R&D Chemist 3 Fort Worth TX 4/17/01

Forensic Tox Lab Supervisor Miami FL 4/17/01

Positive Certifying Scientist Gainesville GA 4/5/01

Instrument Tech2 (EMIT) Fort Worth TX 4/2/01

GCMS Technician 2 Fort Worth TX 4/2/01

Instrument Tech 2 (GCMS) Fort Worth TX 4/2/01

QA Coordinator - Toxicology Tampa FL 3/11/01

Quality Assurance Coord Syracuse NY 3/6/01

### PROFESSIONAL CALENDAR

#### SOFT MEETINGS:

2001 - New Orleans, LA - Pat Pizzo September 30 – October 5

2002 - Detroit, MI - Dan Isenschmid /Brad Hepler October 12-7, 2002

2003 - Portland, OR - Kent Johnson

2004 - Washington, D.C. - Marc LeBeau

**MAFS 30th ANNUAL MEETING 2001 - A FORENSIC ODYSSEY** : September 24-28, 2001, Minneapolis, MN. Contact Dan Bergman ([Dani.Bergman@state.mn.us](mailto:Dani.Bergman@state.mn.us)) or Ann Marie Gross ([Ann.Gross@state.mn.us](mailto:Ann.Gross@state.mn.us)) or check out the MAFS website at: <http://www.mafs.net> for the latest information.

**NORTHEASTERN ASSOCIATION OF FORENSIC SCIENTISTS:** October 3-6, 2001, Mt. Snow, VT. Contact Mary Eustace 914-231-1810, e-mail: [mme1@westchestergov.com](mailto:mme1@westchestergov.com)

**INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES:** September 2-7, 2002, Montpellier, France. Information by e-mail: [algcsi@mnet.fr](mailto:algcsi@mnet.fr)

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All members and others are encouraged to contribute to **ToxTalk**. Please mail your contribution to:

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

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