



Society of Forensic Toxicologists, Inc.

1013 Three Mile Drive, Grosse Pointe Park, MI 48230-1412*

Telephone/FAX: 313-884-4718

VOLUME 18, No. 1

MARCH 1994

ToxTalk

PRESIDENT

Mark B. Lewis, B.S., DABFT
N Y State Police Crime Lab
Bldg 22 - State Campus
Albany, NY 12226-0001
518-457-1208

VICE PRESIDENT

Vina Spiehler, Ph.D., DABFT
422 Tustin
Newport Beach, CA 92663
714-642-0574
FAX: 714-642-0574

SECRETARY

Vickie W. Watts, M.S.
Mesa Police Crime Laboratory
130 N. Robson
Mesa, AZ 85201
602-644-2077
FAX: 602-044-2478

TREASURER

Joseph J. Saady, Ph.D., DABFT
Virginia Commonwealth University
Medical College of Virginia Station
Richmond, VA 23298-0597
804-786-8165
FAX: 804-786-7722

ADDITIONAL DIRECTORS

Ronald C. Backer, Ph.D., DABFT
H. Chip Walls, B.S.
W. Lee Hearn, Ph.D.
Barry S. Levine, Ph.D., DABFT
Marilyn A. Huestis, Ph.D.

ex officio:

Alphonse Poklis, Ph.D., DABFT
(Past President)
Joseph R. Monforte, Ph.D., DABFT
(ToxTalk Editor)

EXECUTIVE COORDINATOR

Patricia Mohn-Monforte
313-884-4718
FAX: 313-884-4718

TIAFT/SOFT 1994

SOFT Hosts:

Marilyn Huestis, Ph.D.
Horton McCurdy, Ph.D., DABFT
P.O. Box 10856
Tampa, FL 33679-0856

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

EDITOR: Joseph R. Monforte, Ph.D., DABFT EDITORIAL BOARD: H. Chip Walls, B.S., Jim Wigmore, Carl Selavka, Ph.D.
PUBLISHER: Patricia Mohn-Monforte

MESSAGE FROM THE PRESIDENT. Mark B. Lewis, B.S.

What an exciting time to be President of SOFT! Through ToxTalk and other available communication tools, I intend to keep members abreast of SOFT activities. Currently, of major importance is the development of the "Conference on Drug Testing in Hair". This conference is being organized by SOFT and is sponsored by the U.S. Department of Health and Human Services, Division of Workplace Programs (HHS/DWP). HHS/DWP is responsible for local arrangements and any compensation for invited speakers. SOFT has agreed to put together the scientific program under the direct and explicit understanding that **all SOFT members will be invited to attend**. Since this conference will take place the weekend immediately preceding the TIAFT/SOFT Joint Congress, TIAFT members will also be invited to attend. Considering the anticipated huge attendance, we will try to design the program to encourage "controlled participation" (i.e., the audience will be invited to ask questions and offer opinions in a way that will promote equality of voice within established time limits). Please note that **pre-registration is required by September 30th**. Check ToxTalk and the flyer for more details. (continued on page 4)

IN THIS ISSUE

REGULAR FEATURES: Journal Club & Career Opportunities & Professional Calendar
Blutalkoholkonzentration & Communicue

TECHNICAL NOTES: Chemical Hazards - Radiation (A.J. Jenkins)
Case Notes: Black Pills for Arthritis (G. Grinstead)
& Benzoylcegonine Excretion Study in a neonate (H.C. Walls)
& Detection of Sodium Azide by Capillary Electrophoresis (C.A. Robinson)

SPECIAL INTEREST: SOFT Hair Conference Announcement (with insert)

INSERTS: TIAFT/SOFT 1994 Joint Congress information:
Preliminary Program & Hotel Registration Form
Call for Papers & Registration Options & Forms
1994 SOFT Directory (for members only)
Survey: 1996 potential meeting site
D.U.I.D. materials order form

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 SOFT, to ToxTalk at the address below. All members and others are encouraged to contribute to ToxTalk. Contact the Administrative Office for SOFT membership applications.

DEADLINES: February 1, May 1, August 1, and November 1. **NEXT DEADLINE: MAY 1, 1994**

*Alternate mailing address for SOFT: **SOFT MAIL SERVICE, 8503 N. 104th Avenue, Peoria, AZ 85345**

YET ANOTHER REASON WHY YOU SHOULDN'T MISS THE TAMPA TIAFT/SOFT 1994 JOINT CONGRESS

submitted by H. Horton McCurdy, Ph.D., DABFT, SOFT Meeting Co-Host

Putting aside for a moment the rare opportunity for the international scientific exchange of information that will be afforded toxicologists at the TIAFT/SOFT meeting in Tampa, there will be some other equally rare opportunities to partake of as well. One of these will be the opportunity for pin trading!

By all accounts, our fellow toxicologists from the European countries and elsewhere would be most eager to trade lapel pins from their respective countries for American pins and, of course, vice versa. Each SOFT member should, therefore, endeavor to bring as many pins from their particular city, state and/or country as they can afford. (There also shouldn't be any reason why SOFT members wouldn't want to trade pins amongst themselves for ones from other cities and states.) These pins aren't cheap, it's realized, costing perhaps \$2-5 apiece; but, obviously, the more you can bring, the more you will have for trading purposes. It certainly doesn't hurt to ask if you buy in quantity, say 20 or more, whether or not a discount could be in the offering. Also, don't forget to ask the store where you purchase the pins if any unused (i.e., untraded) pins can be returned for credit. It may be worth your time, too, to check with your local tourism board to see if they might have any free or low cost offerings in this regard. At the same time, we will be talking up this idea with TIAFT so that their members from other countries will be sure to bring plenty of pins for trading.

It's been suggested that a sponsor might be found to provide caps as a convenient means to show off our collection of pins while at the meeting. If no sponsor can be found and there is a sufficient ground swell of interest, perhaps caps containing both the TIAFT and SOFT logos could be made available for sale at the meeting site. *Nota bene:* The Japanese, I understand, are especially big on trading business cards, so you probably shouldn't forget to bring a goodly number of these with you as well.

Remember, free T-shirts to those who register early! ☺

TIAFT/SOFT 1994 JOINT CONGRESS

October 31st to November 4th

Tampa, Florida - Hyatt Regency Westshore

For information contact:

TIAFT/SOFT 1994 JOINT CONGRESS
P.O. Box 10856
Tampa, FL 33679-0856

***BE SURE TO READ ALL THE MEETING-RELATED MATERIALS
INSERTED IN THIS ToxTalk***

SOFT Conference on DRUG TESTING IN HAIR

October 29 and 30, 1994

Hyatt Westshore, Tampa, FL

REGISTRATION DEADLINE: SEPTEMBER 30, 1994 *No on-site registration*

SOFT PREPARES FOR HAIR CONFERENCE WEEKEND BEFORE TIAFT/SOFT '94

The Society of Forensic Toxicologists, Inc., has accepted an invitation to facilitate a conference sponsored by the U.S. Department of Health and Human Services - Division of Workplace Programs concerning the use of hair in drug testing. SOFT President Mark Lewis will serve as chairman of the scientific portion of the conference. The two-day program will begin on the morning of October 29th and feature scientists recognized for their experience in this field. Dialogue will be encouraged and ways to promote organized audience participation are being developed.

Some session topics currently under consideration include:

Epidemiology of Drugs in Hair

Pharmacology of Drugs in Hair

Environmental Exposure and Decontamination Procedures

Analytical Methodology

GC/MS, GC/MS/MS, MS/MS

Standards and Interlaboratory Comparisons

The program will be actively promoted only within the SOFT and TIAFT organizations since this is a SOFT-sponsored event and SOFT insists all its members be given an opportunity to register. The registration fee is \$60 for SOFT and/or TIAFT members and \$100 for non-members. No on-site registration will be permitted. ***You must pre-register for the conference by September 30th.*** Your registration form is included in this **ToxTalk** mailing.

PLEASE NOTE: The Hyatt Westshore has agreed to allow the hair conference participants to register at the reduced TIAFT/SOFT meeting rates - but their deadline of September 30th will still be strictly enforced. Registrants are responsible for their accommodations. The Saturday/Sunday venue will accommodate members who wish to take advantage of many airlines' reduced airfare policies.

Additional information will be published in **ToxTalk** as it is available. A program outline should be available for the June issue. You may also contact: The CDM Group, Inc. by phone (301-654-6740) or FAX (301-654-2210), ask for Mr. Jerome Thompson or Mr. Kenneth Claytor. ☞

COMMUNIQUE . . . *Patricia Mohn-Monforte, SOFT Executive Coordinator*

BULK MAIL: ToxTalk utilizes bulk mail to keep postage costs at a minimum. The post office requires that all pieces of mail sent bulk must be identical. That is why all SOFT members receive dues notices in the September and December issues of ToxTalk.

TAKE FOREVER TO GET ToxTalk? According to the post office, it should take 2-3 weeks for bulk mail deliveries. The projected mail date for this issue is no later than Thursday, March 10. If you have received it later than 3 weeks, it is up to the receiver to complain to their local post office.

SOFT 48230: Yes, we are still in Michigan. You may continue to contact me at the Grosse Pointe Park address or use the Arizona SOFT Mail Service contact.

THANKS, NEAL: Neal Reading very kindly has input a lot of reference information onto the SOFT database. (We wish him continued positive recovery from his serious fall in 1992.)

PHOTOS FROM THE 1993 SOFT/CAT MEETING were displayed and passed around at the 1994 AAFS meeting. The available duplicates will be displayed at the TIAFT/SOFT 1994 Joint Congress. At a designated time toward the end of the conference, anyone will be invited to take the duplicate pictures for their personal enjoyment. Look for these in Tampa. Thanks to everyone who sent me copies of photos they had taken in Arizona. ☺

CONFUSED ABOUT CERTIFICATION FOR FORENSIC TOXICOLOGISTS??? The only certification program for forensic toxicologists formally supported by the Society of Forensic Toxicologists is the **American Board of Forensic Toxicology**. For information contact: A.B.F.T. Administrative Office, c/o The Forensic Sciences Foundation, Inc., P.O. Box 669, Colorado springs, CO 80901-0669 or telephone 719-636-1993.

PRESIDENT'S MESSAGE . . . continued from page 1

Back by popular demand! An impromptu SOFT-sponsored hospitality event was held during the recent AAFS meeting. Arrangements were made (Thank you, VW and JS) with a local restaurant to provide soft drinks and an informal snack buffet. In order to contain costs and liability potential, only SOFT members and AAFS Toxicology Section members were invited. Free drink tickets were offered to current SOFT members, and a cash bar was also available. While, unfortunately, I had to turn away a few good friends at the door (they were not SOFT or AAFS/Tox colleagues), I do understand that everyone enjoyed the return to this SOFT tradition and its opportunity for informal discussion. This method (off-site) of hosting a SOFT hospitality event will be reviewed and may be revisited in the future.

Once again we had a productive (and long) Board meeting. There are currently 15 active SOFT committees, including the recently appointed "Advisory Committee on Abstracts and Presentations" chaired by Dr. Alphonse Poklis. This particular committee is the direct result of many discussions as well as a motion made and passed at the last SOFT annual business meeting.

Speaking of business, I ask that you please forward (and encourage) submissions to *our* special edition of **JAT**. Manuscripts should be directed to Dr. Jeanne Beno. Please also encourage applications for the Educational Research Award (ERA) as well as SOFT membership. Information on ERA and application materials are available through the SOFT Admin Office.

Anticipation is mounting as arrangements for the 1994 TIAFT/SOFT Joint Congress are being finalized. It will be an exciting event, and I hope each SOFT member has marked the dates on his/her calendar. Your presence and participation are requested! Join us in the spirit of international science and personal camaraderie. Pack your enthusiasm (and a Halloween costume) -- **I'll see you in Tampa!**

CHEMICAL HAZARDS - RADIATION

submitted by: Amanda J. Jenkins, M.Sc., Chair of the SOFT Health and Safety Committee

Federal regulations regarding the use, safety measures, and transportation of radioactive substances are published in the Code of Federal Regulations by the Nuclear Regulatory Commission (NRC). The relevant sections of the code are 10CFR Parts 19 and 20, which are notices, instructions, reports to workers and inspections, including requirements for posting notices to workers; the necessity of informing individuals about the storage, transfer or use of radioactive materials in the workplace; and the conduct of inspections and violations. Part 20 details the standards for protection against radiation, including permissible doses and exposure levels in air in restricted and non-restricted areas. Precautionary procedures such as surveys, personnel monitoring and caution signs and levels are included. Regulations for collecting, receiving and opening packages, instruction of personnel and waste disposal are listed. Part 29 also describes the regulations regarding record keeping, especially records of surveys, reports of theft or loss of licensed materials, notification of incidents and reports of overexposures.

Facilities which handle radioactive substances must be licensed and inspected. The NRC inspects all federal installations and utilities such as power plants. Approximately 40 states have "Agreement State Status", recognizing equivalency with the federal program and thus permitting the states to perform their own inspections. The Department of the Environment is the agency in each state that typically administers the programs. Therefore, it is possible that a facility may be inspected by both federal and state teams.

Licensing requirements are necessary if facilities are handling radioactive substances above a certain activity level. The majority of forensic toxicologists working in laboratories are exposed to radiation from reagents in radioimmunoassay kits, most commonly Iodine-125 (^{125}I). The regulations are enforced for ^{125}I if the activity exceeds 1 microcurie (μCi). Since the reagents in immunoassay kits typically have activities up to 10 μCi , forensic toxicology laboratories must be licensed.

Iodine-125 emits gamma and X-rays with low penetrability and high volatility. Iodine-125 has a radiological half-life of 60/2 days and a biological half-life of 120 days. It accumulates in the thyroid gland and, thus, the bioassay performed for detection of possible exposure is thyroid count. Since ^{125}I has low penetrability, lead foil (1/64-1/32 inches thick) shielding is sufficient exposure control protection. A thin window sodium iodide survey meter is the instrument of choice for inspecting an area for contamination. Personnel working in this radioactive environment should wear film badges.

Laboratories should have written radiation safety plans based upon their licensing agreements and the applicable state and federal regulations. The plan should aim to keep external doses of radiation "as low as reasonably achievable, ALARA" and should minimize the production of radioactive waste. The plan should include a list of personnel permitted access to the radioactive restricted area and details of training, with documentation, that individuals who use radioactive substances have been instructed in safety precautions. The laboratory safety plan should specify the use, transfer and storage of radioactive materials, waste disposal, clean up of contaminated areas, instructions of required action in an emergency and conduct of personnel while working in the hazardous environment.

The SOFT Health and Safety Committee is in the process of compiling a bibliography for use in the preparation of laboratory safety manuals. We shall include references on radiation hazards and regulations. If anyone has a source of information which they have found useful for the preparation of the safety program in their laboratory, please send the citation to:

Amanda Jenkins, Toxicology Laboratory
Office of the Chief Medical Examiner
111 Penn Street, Baltimore, MD 21201

Editor's note: The SOFT Health and Safety Committee has committed to the following articles:

June: Formaldehyde and other solvents (John Cody)
September: Carcinogens (Daniel Isenschmid)

JOURNAL CLUB

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

1. Dennis E. Drayer. **PHARMACODYNAMIC AND PHARMACOKINETIC DIFFERENCES BETWEEN DRUG ENANTIOMERS IN HUMANS: AN OVERVIEW.** *Clinical Pharmacology & Therapeutics* vol. 40:2, August 1986.
2. Barbalas, M.P. and Garland, W.A. **A COMPUTER PROGRAM FOR THE DECONVOLUTION OF MASS SPECTRAL PEAK ABUNDANCE DATA USING STABLE ISOTOPES.** *Journal of Pharmaceutical Sciences.* vol. 80:10, October 1991.
3. Chast, F., Bardin, C., Sauvageon-Martre, H., Callaert, S., and Chaumeil, J. C. **SYSTEMATIC MORPHINE PHARMACOKINETICS AFTER OCULAR ADMINISTRATION.** *Journal of Pharmaceutical Sciences.* vol. 80:10, October 1991.
4. Harlin, Karen S. and Bordson, Gary O. **PETS, POISONS, AND PESTICIDES - THE USE OF CHROMATOGRAPHY IN A VETERINARY TOXICOLOGY LABORATORY.** *LC-GC* vol. 9:4
5. Bonelli, Ernest J., Knight, James B., Skinner, Ronald F., and Taylor, Dennis M. **THE APPEARANCE OF MASS SPECTRA AND ITS RELATIONSHIP TO COMPUTERIZED SPECTRA SEARCH ROUTINES.** *Finnigan Spectra* vol. 3:2, July 1973.
6. Heinz Sorer (Ed.) **ACUTE COCAINE INTOXICATION: CURRENT METHODS OF TREATMENT.** *NIDA Research Monograph 123*, 1992.
7. Ikebuchi, J., Proudfoot, A. T., et al. **TOXICOLOGICAL INDEX OF PARAQUAT: A NEW STRATEGY FOR ASSESSMENT OF SEVERITY OF PARAQUAT POISONING IN 128 PATIENTS.** *Forensic Science International* 59(1993) 85-87.
8. Yonemitsu, K. and Pounder, Derrick J. **POSTMORTEM CHANGES IN BLOOD TRANYLCYPROMINE CONCENTRATION: COMPETING REDISTRIBUTION AND DEGRADATION EFFECTS.** *Forensic Science International* 59(1993) 177-184.
9. Bælum, J. Mølhave, L., Hansen, S., and Døssing, M. **HEPATIC METABOLISM OF TOLUENE AFTER GASTROINTESTINAL UPTAKE IN HUMANS.** *Scand J Work Environ Health* 19:55-62, 1993.
10. Streisand, James B., Bailey, Peter L., et al. **FENTANYL-INDUCED RIGIDITY AND UNCONSCIOUSNESS IN HUMAN VOLUNTEERS. INCIDENCE, DURATION, AND PLASMA CONCENTRATIONS.** *Anesthesiology* 78:629-634, 1993.
11. Portenoy, Russell K., Southman, Mary A., et al. **TRANSDERMAL FENTANYL FOR CANCER PAIN. REPEATED DOSE PHARMACOKINETICS.** *Anesthesiology* 78:36-43, 1993.
12. Twersky, Rebecca S., Hartung, John, et al. **MIDAZOLAM ENHANCES ANTEROGRADE BUT NOT RETROGRADE AMNESIA IN PEDIATRIC PATIENTS.** *Anesthesiology* 78:51-55, 1993.
13. Nierenberg, David W. **TEACHING CLINICAL PHARMACOLOGY: A PROCESS OF 'LIFELONG LEARNING'.** *J Clin Pharmacol* 1993;33:311-315.
14. Goode, Michelle A. and Gums, John G. **THERAPEUTIC DRUG MONITORING IN AMBULATORY CARE.** *The Annals of Pharmacotherapy* vol. 27:503-505, April 1993.
15. Krenzelok, Ed. **FACILITY ASSESSMENT GUIDELINES FOR REGIONAL TOXICOLOGY TREATMENT CENTERS.** *Clinical Toxicology*, 31:2, 211-217 (1993).
16. Bayer, Marc J. and Rumack, Barry H. (Eds.) **POISONING & OVERDOSE.** Aspen Publications, Aspen Systems Corporation, Rockville, MD. London 1983.
17. Proudfoot, Alexander T. **DIAGNOSIS AND MANAGEMENT OF ACUTE POISONING.** Blackwell Scientific Publications, 1982.
18. Goode, Erich. **DRUGS IN AMERICAN SOCIETY THIRD EDITION.** Alfred A. Knopf, New York.
19. Somogyi, A., Nation, R., et al. **PLASMA CONCENTRATIONS AND RENAL CLEARANCE OF MORPHINE, MORPHINE-3-GLUCURONIDE AND MORPHINE-6-GLUCURONIDE IN CANCER PATIENTS RECEIVING MORPHINE.** *Clin. Pharmacokinet.* 24:5, 413-420, 1993.
20. Reetze-Bonorden, P., Böhrler, J., and Keller, E. **DRUG DOSAGE IN PATIENTS DURING CONTINUOUS RENAL REPLACEMENT THERAPY.** *Clin. Pharmacokinet.* 24:5, 362-379, 1993
21. Coe, John I. **POSTMORTEM CHEMISTRY UPDATE EMPHASIS ON FORENSIC APPLICATION.** *The American Journal of Forensic Medicine and Pathology.* 14:2, 91-117, 1993.
22. Freedman, Michael D. and Somberg, John C. **PHARMACOLOGY AND PHARMACOKINETICS OF AMIODARONE.** *J Clin Pharmacol.* 31: 1061-1069, 1991.
23. Gjerde, H. and Mørland, J. **A CASE OF HIGH OPIATE TOLERANCE: IMPLICATIONS FOR DRUG ANALYSES AND INTERPRETATIONS.** *Int J Leg Med* (1991) 104:239-240.
24. Green, Wayne H. **CHILD AND ADOLESCENT CLINICAL PSYCHOPHARMACOLOGY.** Wilkins & Wilkins, 1991.
25. Currier, Cefali, and McLean. **VSTRGRSN: A LOTUS 1-2-3 SPREADSHEET FOR VARIANCE-STABILIZED LINEAR REGRESSION APPLIED TO THE ANALYSIS OF DRUGS IN BIOLOGICAL FLUIDS.** *Journal of Pharmaceutical Sciences* vol. 80:10, October, 1991.
26. Binder, Louis and Fredrickson, Lauren. **POISONINGS IN LABORATORY PERSONNEL AND HEALTH CARE PROFESSIONALS.** *American Journal of Emergency Medicine* vol. 9:1, 11-15, January 1991.
27. Kintz, P., Godelar, B., and Mangin, P. **GAS CHROMATOGRAPHIC IDENTIFICATION AND QUANTIFICATION OF HYDROXYZINE: APPLICATION IN A FATAL SELF-POISONING.** *Forensic Science International.* 48(1990) 139-143.
28. Garriott, James C. **SKELETAL MUSCLE AS AN ALTERNATIVE SPECIMEN FOR ALCOHOL AND DRUG ANALYSIS.** *Journal of Forensic Sciences*, vol. 36:1, Jan. 1991.
29. Suzuki, T., Masukawa, Y., and Misawa, M. **DRUG INTERACTIONS IN THE REINFORCING EFFECTS OF OVER-THE-COUNTER COUGH SYRUPS.** *Psychopharmacology* (1990) 102:438-442.
30. Cassady, S.L., Lympny, J.A., and Henry, J.A. **LIPID SOLUBILITY OF A SERIES OF THE DRUGS AND ITS RELEVANCE TO FATAL POISONING.** *J Pharm. Pharmacol.* 1988, 40:130-132.

REPORT OF THE JOINT SOFT/AAFS LABORATORY GUIDELINES COMMITTEE

The joint SOFT/AAFS Forensic Laboratory Guidelines Committee undertook the task of outlining a process that could be used for the evaluation, inspection and accreditation of forensic toxicology laboratories performing postmortem forensic toxicology and/or human performance toxicology. This report is in two parts. First, the draft accreditation proposal and second, a recommendation for an Accreditation Body.

It is stressed that this proposal is being presented as a document for discussion, only, at this stage. It is being published so that the membership of SOFT, of the Toxicology Section of the AAFS, and other toxicologists who might be eligible for accreditation under such a program, will offer suggestions and comments to the committee.

DRAFT OF PROPOSED ACCREDITATION PROGRAM FOR FORENSIC TOXICOLOGY LABORATORIES

Accreditation Standards The standards and process to be used for evaluating laboratories are to be based on the report of the joint SOFT/AAFS Forensic Laboratory Guidelines Committee (March 21, 1991 and subsequent revisions) and additional recommendations of the Guidelines Committee outlined below.

Accreditation Criteria The actual criteria to be applied in deciding whether a laboratory meets the minimum requirements necessary for accreditation to be granted, would be determined at a later time by the Accrediting Body.

However, it is important to differentiate the Forensic Toxicology Laboratory Guidelines, which were set out as a goal for laboratories to strive towards, from the minimum professional standards which must be met before a laboratory can be accredited. There is, and should be, a difference. The Preamble in the Guidelines states: "*These suggestions do not necessarily reflect our opinions about the minimum requirements of any laboratory, and have no regulatory purpose; rather, they are intended to assist laboratories engaged in the practice of forensic toxicology in achieving future goals*".

Cost It is hoped that for most laboratories, the accreditation process will cost not more than about \$5000, payable over 2 years. This will cover one on-site inspection by two toxicologists (prior to initial accreditation and every 2 years thereafter), all evaluation and review processes prior to initial accreditation and at the end of the first year of accreditation. It is recommended that a non-refundable fee (eg. \$250) be required for processing and reviewing the initial application.

Application Process The Application Form will include a request for Laboratory Vitae, a completed Self-Evaluation Checklist, Litigation Package (including positive results for both alcohol and drugs) and copies of Proficiency Test Summary Reports for acceptable alcohol and other drug related programs.

When all requested information has been received by the Accrediting Body, the application will be forwarded to a Review Committee. If approval of the Review Committee is unanimous, the laboratory will be contacted and invited to request an inspection date. It is recommended that a non-refundable fee (eg. an initial sum of \$2500) be payable prior to commencement of the inspection.

If approval of the application is not unanimous, the Review Committee will try to resolve open issues directly with the applicant laboratory. However, if the disagreement within the Review Committee cannot be resolved, the application will be referred for review (eg. by mail or fax) by the entire Accrediting Body Board. A two-thirds majority of the Accrediting Body Board vote would carry, otherwise the application will be returned to the laboratory for clarification and/or corrective action.

Proficiency Testing It is recommended that acceptance of an application and subsequent successful passing of an inspection be contingent upon successful performance in one alcohol and one non-alcohol (drug) proficiency testing program.

Suggested alcohol proficiency testing programs include: DOT blood alcohol, CAP whole blood alcohol and CAP serum alcohol programs.

Acceptable non-alcohol proficiency testing programs could include: FAA forensic toxicology program, CAP toxicology program, CAP forensic urine drug testing program, NLCP forensic urine drug testing program, CAP toxicology program (T-series).

"Acceptable performance" will need to be determined at a later time.

Selection of Inspection Team After an application has been approved, the laboratory notified, and it is confirmed that the required inspection fee has been received by the Accrediting Body, the chairman of the Review Committee will appoint an inspection team leader; (the) other team member(s) will be appointed jointly by the team leader and the Accreditation Committee chair. All inspection team members would be ABFT certified. Appropriate consideration will be given to geographic location and any potential conflict of interest.

Conflict of Interest Residence in the same state as the laboratory being inspected should not necessarily bar a potential inspection team member from consideration. Conflicts of interest could include such considerations as employer/employee relationship or consulting relationship within the past two years, or very close personal or professional relationship with a member of the laboratory staff. The laboratory director will be notified of the names of the inspectors and given an opportunity to object to their appointment to that inspection if there is a conflict of interest.

Size of Inspection Team The inspection team will normally be comprised of at least two inspectors. It is anticipated that this will be the usual inspection team size. If a laboratory is very large (eg. technical staff >10 full time equivalents [FTE]), a third team member may be included.

Scheduling The team leader would be responsible for coordinating selection of an inspection date with the laboratory and the other team member(s).

Duration of Inspection The on-site inspection should be a minimum of one full day (eg. 8.00 a.m. - 5.00 p.m.). For medium to large size laboratories (eg. > 5-10 FTE's) the inspection should be extended.

Inspector Remuneration Inspectors will serve on a strictly voluntary basis. Lodging and travel will be reimbursed at actual receipted cost (or mileage rate for private vehicle, to a maximum of any applicable airfare). It is recommended that meals and other incidentals be covered by a flat-rate (eg. \$100) per inspection day (i.e. days where on-site inspection of the laboratory is occurring).

Travel Arrangements The Accrediting Body Review Committee will coordinate travel arrangements once the inspection date has been set and team members appointed. This will be done, as necessary, in consultation with the team leader and the additional team member(s).

Inspection Process The inspection will be a coordinated process under the direction of the team leader. While, for the sake of convenience, individual checklists may be used by the inspectors, the sole checklist submitted to the Accrediting Body Review Committee will be a composite checklist prepared by the team leader. This checklist will reflect the factual findings and, where necessary, the consensus opinion of the entire team.

The Checklist The checklist to be used for the inspection would be a modification of the self-evaluation checklist originally drafted by the Laboratory Guidelines Committee. However, in addition, summary sheets would be provided at the end of each individual section. These sheets should be used to summarize the findings of the inspection team. These can be divided into sections which (1) list general comments, (2) list deficiencies which need addressing at some point before or after accreditation, and, (3) list professional advice which the inspectors may wish to give, but which should be mandatory requirements at initial certification, or later. [The Accrediting Body Accreditation Committee could later subdivide the listed deficiencies into those which (a) should be addressed prior to approval of accreditation, and, (b) should be addressed within twelve months and (c) non-mandatory recommendations suggested by the inspection team, for improvement of laboratory operation].

Critical Checklist Questions Certain questions on the checklist should be marked as being more important than others. All such questions should be satisfactorily addressed prior to granting accreditation. (Designation of these questions would be determined at a later time).

Exit Interviews The inspection team will always conduct an exit interview with key laboratory staff. The exact format of the meeting and number of laboratory staff invited to attend should be at the discretion of the inspection team leader. The exit interviews will be conducted in a manner within the spirit of being helpful to the laboratory and improvement of professional standards. The inspection team should not discuss or otherwise indicate what their final recommendation will be to the Accrediting Body Review Committee, as to whether the laboratory has "passed or failed".

Final Inspection Report The final inspection report will be prepared by the team leader, and will be a composite of the entire team's findings. This would be a full and complete copy of the checklist, inclusive of the summaries at the end of individual sections and a final executive summary. Any recommendations or other indications the team may have documented regarding whether the laboratory has "passed" or "failed", must be restricted to the final executive summary. Such recommendations would specifically be excluded from the summaries following each section. It is recommended that copies of the final composite section summaries prepared by the team leader be sent to the laboratory at the same time that the laboratory is notified of the outcome of the inspection (whether or not the laboratory has "failed", "passed" or whether that decision is pending corrective action by the laboratory).

Inspection Report Review The inspection report, the original application and any additional correspondence would be reviewed by the Review Committee and a unanimous recommendation forwarded to the Board of the Accrediting Body. If the recommendation of the committee is not unanimous (despite efforts to reach an unanimous opinion, even after further dialogue with the laboratory and receipt of verifying of corrective action material), the documentation would be forwarded to all Accrediting Body Board members for review and decision.

Possible responses are:

1. Granting of accreditation, if necessary with additional correspondence suggesting or requiring corrective action prior to the next review.
2. A request for follow-up corrective action, and supporting documentation, upon satisfactory receipt of which accreditation may be granted.
3. Recommendation of a re-inspection, following extensive corrective action (upon receipt of estimated expenses for the reinspection, plus administrative costs (eg. \$500).
4. Denial of accreditation, due to several major deficiencies and the extensive nature of corrective action required. The laboratory would be eligible to reapply for accreditation after a period of 6 months.

In the case of items 1 or 4, notification will be via the Secretary of the Accrediting Body, otherwise correspondence would be between the Review Committee chair and senior laboratory staff.

On-Site Re-inspections

It is recommended that re-accreditation inspections occur once every two years.

Period of Accreditation

It is recommended that accreditation be granted for a period of one year (twelve months) after successful completion of the inspection and review process. This would be effective from the date notification is sent to the laboratory from the Secretary of the Accrediting Body, or expiration of previous accreditation, whichever is sooner.

Accreditation Extension

Upon successfully completing the requirements, a laboratory will ordinarily be accredited for a period of one year (twelve months). Towards the end of the laboratory's initial accreditation period, they will be sent an application form for extension of their accreditation, to be completed by the Laboratory Director and sent to the Accrediting Body Accreditation Committee. Upon payment of a fee (eg. \$2500: unless full payment of \$5000 has already been paid at start of year one) and successful review of the application (which will include a **Self Evaluation Checklist**, copies of applicable **Proficiency Test Summaries** for the previous twelve months and **documentation of mandatory corrective action** requested at the previous inspection) accreditation may be extended for a second twelve month period without an inspection.

[The suggested fee of \$2500, chargeable at the time of application extension, is proposed as a way of "amortising" the overall cost of the inspection over a two year period, rather than charge a fee of, say, \$5000 in the first year, with little or no charge in the second year].

The purpose of this re-application process would be to provide the opportunity to review any significant changes which may have occurred since the last inspection (eg. staffing, major changes in laboratory protocols).

RECOMMENDATION OF ACCREDITING BODY

It is recommended that the American Board of Forensic Toxicology (ABFT) be the accrediting body, subject to the agreement of SOFT, the Toxicology Section of AAFS and the Board of Directors of the ABFT.

It is also recommended that, if an accreditation program is established, the joint SOFT/AAFS Forensic Laboratory Guidelines Committee, continue to function in an advisory capacity to the Accrediting Body, with respect to this Accreditation program.

RECOMMENDATIONS FOR FUTURE ACTION

Should it be decided that the proposed accreditation program be developed further for future implementation, it is recommended that several (eg. 5-20) mock inspections take place as a means of evaluating criteria which might eventually be set. This could possibly be arranged in conjunction with an upcoming SOFT or AAFS meeting, or for a laboratory in a high population area, where an inspection could be arranged during the year at minimal expense (eg. New York or other East coast area).

As implied at the beginning of this document, decisions about the final criteria and processes to be used in any accreditation program must, by necessity, be made by the accrediting organization. However, the recommendations made by the Forensic Toxicology Laboratory Guidelines Committee, with input from the membership of SOFT, AAFS and any other sponsoring organizations, should serve as the basis of such a program.

Graham R. Jones, Ph.D, DABFT

Chair, SOFT/AAFS Forensic Toxicology Laboratory Guidelines Committee

Report submitted to SOFT Board of Directors meeting February 14, 1994.

CASE NOTES

BLACK PILLS FOR ARTHRITIS *submitted by Greg Grinstead, Ph.D., Toxicologist, Marshfield Laboratories, Marshfield, WI 54449*

Recently, a family practice physician sent several hard, round black pills to our laboratory for analysis. Many people in central and northern Wisconsin apparently use these pills as a treatment for osteoarthritis and general aches and pains. The pills are available by mail from a Los Angeles distributor. The typewritten package literature touts the product as being effective for "rheumatism, obstetrical rheumatism, headache, anemohbia, paralysis, back neuralgia, bone pain, acute or chronic neuralgia and other pains caused by rheumatism, . . ." The ingredient list includes 21 different Chinese herbs. The insert states that the pills "do not contain any drug but natural herbs," and promises "no harmful side effects" and "an improvement in general health and a restoration of energy levels."

We crushed a pill, extracted the powder using Toxi-Tubes A and B (Toxi-Lab, Inc., Irvine, CA), dried the extracts under nitrogen, redissolved in ethyl acetate, and injected into an HP 5890 GC with 5970 MSD. We programmed the instrument for full scan acquisition with a mass range of 40- 500 amu. We identified three compounds based on mass spectra and relative retention times: diclofenac and mefenamic acid (both nonsteroidal antiinflammatory drugs) and diazepam.

Shortly thereafter, we received a call from a medical review officer who was investigating a positive benzodiazepine result on a workplace urine drug testing specimen analyzed in our laboratory. The specimen had given a positive Syva EMIT II immunoassay screen for benzodiazepines at a cutoff of 200 ng/mL. GC/MS with selected ion monitoring confirmed nordiazepam and oxazepam, respectively. The subject denied taking any drugs, but did admit to taking several "little round black herbal pills that look like rabbit turds" to help her sleep at night. The subject had obtained the pills by mail from the L.A. distributor.

Medical review officers and workplace drug testing laboratory personnel should be aware that persons recently taking these "black arthritis pills" could have a confirmed positive urine drug test for benzodiazepines. ☹

There may still be an opportunity to submit your abstract for the

SOFT / JAT SPECIAL ISSUE

Call Dr. Jeanne Beno at 716-274-7970 today!

BENZOYLECGONINE EXCRETION STUDY IN A NEONATE *submitted by H. Chip Walls, Tox Lab - Rm 706, 600 S State St, Syracuse, NY 13202*

SPECIMEN	DATE	TIME	EMIT	TIME DIFF.	RESULTS
#1	11/07/93	18:00	93 (1:3)		~5,000 ng/mL
#2	11/08/93	13:45	65	19 hr 45 min	844 ng/mL
#3	11/09/93	19:00	35	05 hr 15 min	548 ng/mL
#4	11/09/93	02:30	55	07 hr 30 min	718 ng/mL
#5	11/09/93	18:00	-22	15 hr 30 min	99 ng/mL
#6	11/09/93	21:30	-17	03 hr 30 min	93 ng/mL
#7	11/10/93	05:30	-29	08 hr	~66 ng/mL
#8	11/10/93	08:30	-25	03 hr	~42 ng/mL

EIA was run on a Hitachi 705 using SYVA EMIT II cocaine reagents, the 300 ng/mL calibrator is set to read out as "0". Time difference refers to the time between the specimens. ☹

DETECTION OF SODIUM AZIDE BY CAPILLARY ELECTROPHORESIS *submitted by C.A. Robinson, M.A. Hall, R.M. Brissie, S.K. Day and G. Hortin, Dept. of Pathology, Div of Lab medicine and Forensic Pathology, University of Alabama at Birmingham, Birmingham, AL*

Sodium azide, a highly toxic chemical, is used in many biochemical laboratories to inhibit bacterial growth. Azide has a number of biological effects similar to cyanide, including inhibition of cytochrome oxidase, cardiovascular and CNS effects.

We recently had two intentional fatal overdoses with azide. We were able to quantitate azide using microdiffusion and capillary electrophoresis. Case No. 1 was discovered at home dead. A bottle of sodium azide was on the stove. Case No. 2 phoned a friend and told him he had taken sodium azide. He died after 30 minutes in the local E.R. The vital signs for Case 2 were as follows:

Time	Pulse/min	Pressure	Respiratory rate/min
2240	164	118/70	20
2245	160	118/palpable	20
2255	86	76/29	12
2300	intubated		
2325	coded		
2346	pronounced		

METHODS: Whole blood, azide standards, azide free blood, and gastric contents were added to the outer wells of microdiffusion plates containing 0.1 N H₂SO₄. The center wells contained 0.05 N NaOH. The reaction was carried out for two hours at room temperature. The contents of the center wells were collected, neutralized, and electrophoresed using a Quanta 4000 system (Waters Corp.). Separations at 20 kV were in an electro-osmotic flow modifier, 5mmol/L sodium chromate. Anions, including azide, were detected spectrophotometrically at 254 nm by displacement of strongly absorbing chromate ions.

RESULTS:	Blood Azide mg/L	Gastric Content	Bile mg/L
Case No. 1	3.4	1.2 gm/TV	110
Case No. 2	7.0	374 mg/TV	23

Our results indicated that capillary electrophoresis is useful to determine azide concentrations in biological fluids. ♀

 **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 2.0) may be mailed to:

Joseph R. Monforte, Ph.D., DABFT, ToxTalk Editor
SOFT Administrative Office, 1013 Three Mile Dr., Grosse Pointe Park, MI 48230-1412
- or - c/o SOFT Mail Service, 8503 North 104th Avenue, Peoria, AZ 85345

Or you may FAX articles to: 313-884-4718.

Other items of interest to SOFT members are also welcome.

Next deadline: MAY 1, 1994

Technical Notes: BLUTALKOHOLKONZENTRATION No. 4

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

ELIMINATION OF ALCOHOL IN A PATIENT WITH LIVER DISEASE AND PORTACAVAL SHUNT by G. Leube and H.G. Mallach; *Blutalkohol* 17:15-25, 1980.

German Title: Zur Alkoholelimination bei einem Leberkranken mit Portocavalem Shunt

A case report of a 41-year-old male alcoholic who had progressive cirrhosis of the liver for over ten years and eventually had undergone liver surgery (portacaval shunt).

He was involved in a motor vehicle accident at 4:50 p.m. A blood sample was taken at 6:25 p.m., and the BAC as determined by the GC and ADH methods was 0.338 g/100mL. He stated that he consumed only 2 glasses of beer and 1 glass of schnapps between 4:15 p.m. and 4:45 p.m. Medical evidence suggested that due to his dysfunctional liver he may have a much lower rate of alcohol elimination than normal which caused his high BAC at the time of the accident. Testing was conducted on the man to determine his rate of elimination.

On two different occasions, after breakfast, the subject consumed 2 bottles of beer and 8 oz. of vodka within 30 minutes. Blood samples were taken every 30-60 minutes for 7 hours. The BACs were determined by the ADH and GC methods. The rate of elimination was determined to be 0.014 g/100mL/h and 0.015 g/100mL/h respectively.

The authors conclude that not all patients with liver shunt exhibit a significant retardation of alcohol elimination as a consequence of surgical intervention. ☼

S.O.F.T. ADMITS 17 NEW MEMBERS IN 5 MONTHS

Since recognizing new members in the September, 1993, issue of *ToxTalk*, the following new members have been admitted to the Society:

September 1 - December 31, 1993

583 Full	Melvin Kaufman, Ph.D.
584 Full	Donald Kirk, Jr., B.A.
585 Full	Gary Branum, Ph.D.
586 Full	Jack Kalin, Ph.D.
587 Full	Luz E. Droz, B.S.
588 Full	Flor Mattos, B.S.
589 Full	Brian Brunelli, M.S.
590 Full	Kent Johnson, B.S.

January 1 - February 28, 1994

591 Associate	George Keller, P.D., M.Sc.
592 Full	Thomas Camporese, M.S.
593 Student	Carol O'Neal
594 Full	Fred House, B.S.
595 Full	Donald Kippenberger, Ph.D.
596 Full	J. Rod McCutcheon, B.S.
597 Associate	Brenda Snodgrass, B.S.
598 Full	Wen-Lin Wang, Ph.D.
599 Full	Alex Novak, Ph.D.

Application materials are available from the Administrative Office by phone or FAX (313-884-4718, or mail via:

SOFT Administrative Office, 1013 Three Mile Drive, Grosse Pointe Park, MI 48230-1412
- or - SOFT Mail Service, 8503 North 104th Avenue, Peoria, AZ 85345

SOFT members who are interested in changing their membership status must also request appropriate forms from the Administrative Office.

MEMBERSHIP STATISTICS: In 1993, 36 new members were approved and admitted; 3 members were promoted to "Full" member status; and 2 members were granted "retired" status. As of February 28, 1994, SOFT currently has 406 members, including 24 excluded from the mail list for non-payment of 1994 dues. ☼

1994 S.O.F.T. OFFICERS AND DIRECTORS

During the 1993 annual business meeting in Arizona last October, the members present unanimously accepted the slate of candidates presented by the Nominations Committee (and published in the September, 1993, issue of ToxTalk). The full Board of the Society of Forensic Toxicologists includes:

President:	Mark B. Lewis, B.S., DABFT
Vice President:	Vina Spiehler, Ph.D., DABFT,
Secretary:	Vickie W. Watts, M.S.
Treasurer:	Joseph J. Saady, Ph.D., DABFT
Additional Directors:	Ronald C. Backer, Ph.D., DABFT (to 12/31/94)
	H. Chip Walls, B.S. (to 12/31/94)
	W. Lee Hearn, Ph.D. (to 12/31/95)
	Barry S. Levine, Ph.D., DABFT (to 12/31/95)
	Marilyn A. Huestis, Ph.D. (to 12/31/96)
	Alphonse Poklis, Ph.D., DABFT, <i>ex officio</i> (immediate past president)
	Joseph R. Monforte, Ph.D., DABFT, <i>ex officio</i> (ToxTalk editor)

PRESIDENT LEWIS APPOINTS '94 COMMITTEES

NOMINATING: Alphonse Poklis, Ph.D. (Chair), members to be appointed

MEMBERSHIP: Vickie Watts, M.S. (Chair), Robert Osiewicz, Ph.D. (thru 1994), Teri Stockham, Ph.D. (thru 1995), Andrew Mason, Ph.D. (thru 1996)

BY-LAWS: Kurt Dubowski, Ph.D. (Chair)

BUDGET, FINANCE AND AUDIT: James Valentour, Ph.D. (Chair), Stuart Bogema, Ph.D., and Robert Zettl, M.P.A.

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

PUBLICATIONS: Jeanne Beno, Ph.D. (Chair/JAT Special Issue Editor)

EDUCATIONAL RESEARCH AWARD (ERA): Joseph Saady, Ph.D. (Chair, thru 1994), David Moody, Ph.D. (thru 1995), Daniel Isenschmid, Ph.D. (thru 1996)

MEETING RESOURCE COMMITTEE: Vina Spiehler, Ph.D. (Chair), Vickie Watts, M.S. (1993 Meeting Host), Marilyn Huestis, Ph.D. (1994 Meeting Co-host), Yale Caplan, Ph.D. (1995 Meeting Host)

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

HEALTH AND SAFETY: Amanda Jenkins, M.S. (Chair), John Cody, Ph.D., Daniel Isenschmid, Ph.D., Laurel Farrell, B.A.

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

CONTINUING EDUCATION: W. Lee Hearn, Ph.D. and Vickie Watts, M.S. (Co-chairs) Represent SOFT on the Joint Committee on Education and Training in Toxicology (JCETT)

EDUCATION AND CAREER OPPORTUNITIES: Jane Speaker, Ph.D. (Chair), Edward Cone, Ph.D., Peggy Kelly Doig, Ph.D., Berry Levine, Ph.D., and Teri Stockham, Ph.D.

LIABILITIES AND INSURANCE: C. Nicholas Hodnett (Chair)

ADVISORY COMMITTEE ON ABSTRACTS AND PRESENTATIONS: Alphonse Poklis, Ph.D. (Chair)

EDUCATIONAL RESEARCH AWARDS

The Society of Forensic Toxicologists is dedicated to continuing effective education in the field and actively supports research projects which advance the foundations of the science in academic settings. Awards are generally 0 to \$1,000 but may be greater. Awardees may reapply for additional funding.

ELIGIBILITY: Awards will be made to students pursuing advanced degrees in the fields of chemistry,, pharmacology, toxicology, or other related disciplines whose research projects are consistent with the needs of forensic toxicologists. It is necessary that an appropriate authorized representative approve the application on behalf of the institution.

APPLICATION INSTRUCTIONS: To apply, an application packet containing the following should be submitted by the applicant's research director:

1. A curriculum vitae describing the activities of the student
2. A research proposal describing the proposed research with appropriate literature references, experimental protocols, and budgetary needs
3. A 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.

Five (5) copies of the material requested should be sent to: E.R.A. CHAIRMAN
c/o S.O.F.T. Mail Service
8503 North 104th Avenue, Peoria, AZ 85345

The Educational Research Award (ERA) program is supported by interest generated by funds specifically identified for the ERA fund. The ERA fund is financed by individual contributions, usually when paying annual dues, and annual meeting profits when so designated by the Board of Directors. ♪

1994 ERA CONTRIBUTORS

The Society of Forensic Toxicologists wishes to acknowledge the following SOFT members who have contributed to the ERA fund when they paid their dues:

PIRL, JEORG
DOVENSKY, WILLIAM
XU, ALLAN
CAPLAN, YALE
SUNSHINE, IRVING
ANDERSON, WILLIAM
LEVINE, BARRY
OTTINGER, WILLIAM
SCHAFER, MICHAEL
BLOODWORTH, MARSHA

BUSH, DONNA
LAPPAS, NICHOLAS
BLANKE, ROBERT
FARRELL, LAUREL
SUTHEIMER, CRAIG
DUNN, WILLIAM
MARKER, ELIZABETH
SERRANO, LEO
ZEBELMAN, ARTHUR
LEWIS, MARK

CASSEL, KATHLEEN
MERIGIAN, KEVIN
BOGEMA, STUART
GOLDBERGER, BRUCE
TURK, ROBERT
HOWARD, LARRY
MCGEE, MICHAEL
SPIEHLER, VINA
FORNEY, JR, ROBERT
SOLOMONS, EVERETT

COHN, RICHARD
MCGARRY, RICHARD
BRESS, WILLIAM
PINDER, RICHARD
SLADE, MICHAEL
ISENSCHMID, DANIEL
MONFORTE, JOSEPH
RAO, N.G.S.
TURK, JOHN
ZETTL, J ROBERT

Thank you.

Call for Papers and Grant Announcement: Researchers working on standards and technology development in the science of hair testing for drugs of abuse are requested to submit their papers for a NIDA research monograph entitled "*Hair Testing for Drugs of Abuse: International Research on Standards and Technology.*" **Stated deadline: March 31.** Researchers may also be interested in contacting NIDA for a copy of PA-92-18, "Research on Hair Testing for Drugs of Abuse," under which NIDA supports a broad spectrum of research on the topic. Contact Beth Babecki at 301-443-1887 for further information.

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. A file on available positions is also maintained at the SOFT Administrative Office exclusively for member reference.

TOXICOLOGIST to head drug testing dept of private lab; Ph.D. in natural science or comparable training/experience, min 5 yr experience in analytical forensic toxicology and specific applications. Contact Osborn Laboratories, Inc., Human Resources Dept. - Toxicologist, 14901 W. 117th St., Olathe, KS 66062 or phone 913-764-5555.

FORENSIC TOXICOLOGIST: Ph.D. or equivalent with UDTL technical direction experience including data review, QC, CoC, etc. To work in NLCP reviewing inspection reports and related materials, preparing inspection documents, making certification recommendations, and other certification-related activities, eventual supervision of NLCP post-inspection activities. Contact. Research Triangle Institute, Office of Human Resources, P O Box 12194, Research Triangle Park, NC 27709-2194 or telephone Kenneth Davis at 919-541-6709.

POSTDOCTORAL FELLOWSHIP IN FORENSIC TOXICOLOGY: Ph.D., prefer experience with bioanalytical toxicology laboratory methods and appreciation of the unusual requirements of forensic toxicology casework. Private lab, competitive salary, benefits. Mail CV to National Medical Services, Inc., ATTN: Dr. Mason, P.O. Box 433A, Willow Grove, PA 19090-0437. ☺

PROFESSIONAL CALENDAR

California Association of Toxicologists (CAT) quarterly meetings and workshops. For information contact Vickie Watts at 602-831-8091, FAX 602-644-2478.

American Academy of Forensic Sciences (AAFS) annual meeting: Contact Brenda Papke, 719-636-1100. Future AAFS meetings: 2/13-18/95 Seattle; 2/19-24/96 Nashville; 2/17-22/97 New York City.

Southwestern Association of Toxicologists (SAT): April, 1994, Dallas. Contact Allen C. Ray, Ph.D., President, 405 Fairway, Bryan, TX 77801 (telephone: 409-845-3414).

"Forensic Toxicology" short course: April 6-8, 1994, sponsored by Armed Forces Institute of Pathology and American Registry of Pathology, at Vienna, VA. Contact: AFIP, Washington, DC 20306-6000 (Phone: 301-427-5231; FAX 301-427-5001)

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.

Professional Practice in Toxicology: A Review: June 19-23, Cincinnati, OH, AACC & NACB, \$375-475. Contact Clair House, AACC, 800-892-1400 (FAX 202-887-5093)

SOFT CONFERENCE ON DRUG TESTING IN HAIR: October 29-30, 1994. Immediately preceding TIAFT/SOFT Joint Congress. SOFT and TIAFT members specifically invited. Registration: approx. \$60 SOFT & TIAFT members; \$100 others. See meeting packet for hotel registration information or contact CDM Group, Inc. 301-654-6740 (Jerome Thompson). *Pre-registration required; deadline September 30, 1994.*

TIAFT/SOFT Joint Congress (The International Association of Forensic Toxicologists and Society of Forensic Toxicologists: Oct. 31 - Nov. 4, 1994, Tampa, FL. First joint TIAFT/SOFT meeting! Contact **TIAFT-SOFT 1994, P.O. Box 10856, Tampa, FL 33679-0856.** SOFT Co-hosts: Drs. Horton McCurdy and Marilyn Huestis.

CSFS/NAFS Joint Meeting (Canadian Society of Forensic Science and Northwest Association of Forensic Scientists): Oct. 31 - Nov. 5, 1994, Vancouver, BC. Contact Jeffrey Caughlin at 604-264-3507, FAX 604-264-3499.

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).

1996 S.O.F.T.: MEMBERS INTERESTED IN HOSTING THE 1996 ANNUAL S.O.F.T. MEETING SHOULD SEND AN OFFICIAL LETTER TO THE ADMINISTRATIVE OFFICE. We are looking for another southwestern site. You must have a major airport, affordable hotel, and willingness to do a lot of time-consuming work. ☺