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CASE NOTES:

- Inhalants Part 1 - Barnhill
  Case of Butane Overdose (Smith and Jacobs)
  An Unusual Case Of DFSA Using Aromatic Solvents (Martínez and Ballesteros)
  Chloroform Assisted Suicide (Simons et al)
  Case report: Accidental Exposure to Toluene and Methanol in a Paper Money Factory (Bernal et al)
  Two Inhalant Case Studies (Anderson)
  A Fatality Involving Isoflurane (Garg et al)

- Proposed SOFT Position Statement on the Use of Volume of Distribution Calculations for Drugs in Postmortem Cases

- President's Message

- Drugs in the News: Mason

- Elmer Gordon Open Forum

- Professional Calendar

- SOFT/AAFS Guidelines Committee Suggestions

- Drugs & Driving Committee Update

- 2005 Meeting Information:
  Update - Preliminary Program - Registration Worksheet

- INSERTS: 2005 SOFT Directory (members only)
  2005 SOFT Meeting Fun Run registration form

SOFT 2005 Annual Meeting
NASHVILLE, TENNESSEE (MUSIC CITY, USA)
October 17-21, 2005
Host: Louis Kuykendall
SITE: Renaissance Nashville Hotel

**IMPORTANT: ABSTRACT DEADLINE EXTENDED**

ABSTRACTS: JULY 1
ACCEPTANCE NOTIFICATION: AUGUST 31

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 to 5304 Widener Strip, Midland, TX 79707. Subscriptions expire each January.

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

NEXT DEADLINE: before AUGUST 1ST, 2005
PRESIDENT’S MESSAGE

Graham Jones, Ph.D., DABFT

This issue of ToxTalk contains several important announcements. Local meeting host Louis Kuykendall and his committee have worked hard to design a stimulating program for the October annual meeting in Nashville, and workshop chair Peter Stout has brought together a talented team of people to present 10 full or half-day workshops over two days. A very full program of platform and poster papers is planned, as well as an exciting social program. The preliminary program is enclosed but you are encouraged to check the SOFT website periodically for the latest details and any changes in deadlines as the summer progresses.

You will also find an announcement of proposed changes that Guidelines Committee chair Lee Hearn and his committee have drafted for a proposed 2006 Laboratory Guidelines revision. The original Guidelines were published in 1991, but with the intention that they be periodically updated to reflect changes in analytical toxicology and professional forensic practice. Since that time, several updates have been published, the last being in 2002. As with previous updates, the recommended changes are available for review as highlighted text in an Adobe PDF file posted on the SOFT website. Subject to recommendations from the membership, these changes will be voted on at the SOFT AGM in Nashville and the AAFT Toxicology Section meeting in Seattle (February 2005).

As I mentioned in the last issue of ToxTalk, a proposed position statement cautioning against the use of volume of distribution based pharmacokinetic calculations on postmortem drug levels has been drafted and is now presented for your consideration. The SOFT Board has voted to publish this to the membership only at this time, through ToxTalk and the membership area of the SOFT website. The introduction and draft statement are largely self-explanatory, but, briefly, we felt that publication of such a statement was overdue because of the appalling lack of understanding of the factors that affect postmortem toxicology results, and specifically, the apparent widespread misapplication of volume of distribution equations for the calculation of dose. After a discussion period and incorporation of any changes that may be necessary, and an affirmative vote of the membership at the business meeting in Nashville, it is proposed that the statement be published as an editorial in a suitable forensic journal.

The following case illustrates the "junk science" I am referring to. A middle-aged man was admitted to a local hospital with severe back problems and was prescribed fairly large doses of morphine. He had also been prescribed, and continued to receive, the tricyclic antidepressant trimipramine. After about two days in hospital he was found dead in bed. The cause of death was attributed to morphine intoxication. A civil suit eventually ensued with the plaintiffs medical experts saying that the patient was over medicated, and the defence medical experts saying that the prescribing was acceptable. However, the patient had received a prescription for 120 trimipramine capsules 2-3 days before he was admitted to hospital. One medical expert for the defence decided to perform some pharmacokinetic dose calculations based on the published volume of distribution for trimipramine and the postmortem blood concentrations. After doubting the calculated dose to "adjust" for his assertion that trimipramine is only distributed into plasma (it is not; trimipramine is also extensively distributed into erythrocytes), the expert calculated that the body of the deceased patient conveniently contained about 125 doses of trimipramine, and that therefore he must have overdosed on the trimipramine between the time he was last seen at night and when he was found dead the next morning. (That being the case, any discussion of elevated morphine levels would be irrelevant). Of course, I wrote a blistering rebuttal stating that the trimipramine could be easily accounted for by postmortem redistribution, and the matter went to trial. I was called by the plaintiff, duly gave my testimony and then sat at the back of the courtroom to hear the defence's expert. On being cross examined by the plaintiff's attorney, the expert admitted to being aware of the prescription for trimipramine, and the probability (in his opinion) that the patient overdosed on it. "Ah" said the plaintiff's attorney, "you must be referring to this. Whereupon the lawyer put his hand in his pocket and pulled out the full bottle of trimipramine capsules that had been prescribed to the patient prior to his hospitalisation. The expert looked somewhat confused, and not a little deflate. Apparently the patient's wife had retained custody of the medication since her husband's death. The foregoing was summarised from a real case. It is examples like this that prompted us to draft the position statement. Please review the proposed position statement and submit comments you may have to me or any board member.

Well, the spring flowers started to emerge in the tentatively warm Alberta sunshine, only to be slammed with high winds, snow and bitter cold. Spring is such a tease... Have a great summer! 

DON'T FORGET TO CHECK THE SOFT WEB SITE  www.soft-tox.org

for the latest information regarding SOFT activities

INCLUDING MEETING REGISTRATION AND INFORMATION

Unauthorized access or printing is protected by copyright laws.
The SOFT 2005 Annual Meeting is just around the corner, and it's time to start the registration process. Here are a few things you will need to know.

First, a registration worksheet will accompany this issue of ToxTalk to assist with your online registration for the meeting (there is no mail in registration.)

Secondly, the Nashville Renaissance can be accessed through the SOFT website or Renaissance Hotel registration site. The conference rate is $149.00 single/double. In either case, you will need to use our group code: SFTSFTA. Please make your hotel reservation early, as the downtown hotels fill up quickly since the Titans are playing that weekend. This will also help us to better predict overflow.

Additionally, please see the Preliminary Program for the layout of the week's events, including workshops, committee meetings, and plenary sessions, as well as the social agenda. Remember these important deadlines:

** *** "CALL FOR PAPERS" DEADLINES EXTENDED *** 
Abstract Submission: JULY 1 Notification of Acceptance for Presentation: AUGUST 31
See www.soft-tox.org for details

Early Registration: September 2nd, 2005 (souvenir t-shirt!)
Online Registration: October 7th, 2005 (no t-shirt, extra $100!)
Refund Request: September 3rd, 2005

On the lighter side: The Fun Run route winds through downtown Nashville, across the scenic Cumberland River on a pedestrian bridge, and around the Tennessee Titans Coliseum. It promises to be a terrific walk/run! We have a very big social calendar planned to complement the meeting with the usual Welcome Reception, Exhibitor Happy Hour, and President's Reception, but we have a few surprises in store for attendees too - you'll just have to come and see. Our big night out will be on the famous showboat, The General Jackson. This three-hour river cruise will paddle its way up the Cumberland River as we dine on world class cuisine and enjoy the Broadway style theatre show SING. Bring your significant others and let them enjoy the many offsite day trips and tourist attractions just a stone's throw from the hotel. In fact, come in on Saturday and take in the Titans game against the Bengals. There is so much to do you may wish to stay over a few extra days, so we have made a deal with Nashville Renaissance Hotel to extend the meeting rates through October 25th for anyone wishing to have a little more time in Music City.

Finally, share the work and the fun - become a meeting volunteer. Please contact John Harrison (Labor Force Chair) at 615-744-4466 or John.Harrison@state.tn.us.

VENDORS AND ACCOMPANYING PERSON POLICY: Vendors, as well as accompanying persons who desire access to the scientific sessions and all the perks and benefits offered with a full meeting registration except the abstract book, are offered a reduced registration fee. Full registrants bringing a "SO-SOFT" may choose to only purchase additional reception tickets but must register by October 7th. ("SO-SOFT" = persons who accompany their Significant Others to SOFT meetings and for whom this is solely a social event.)

AIRPORT SHUTTLE: GreyLine Airport Shuttle Service. $12.00 one way; $18.00 round trip ($15.00 round trip for groups of 4 or more). Shuttle schedule: from the airport - 6:00am-11:00pm every 15 min. / from the hotel - 4:00am - 7:00pm on the hour & half hour.

REGISTRATIONS - ON THE WEBSITE ONLY No pre-registration accepted after October 7th.

MEETING REGISTRATION AND ALL OTHER MEETING INFORMATION GO TO WWW.SOFT-TOX.ORG

FOR INFORMATION ON MANY NASHVILLE ATTRACTIONS GO TO WWW.MUSICCITYUSA.COM
PRELIMINARY PROGRAM

Saturday, October 15, 2005
Pre-Conference Tours available
NSC Alcohol & Other Drugs (noon – 8:00pm)

Sunday, October 16, 2005
Registration (noon – 7:00pm)
National Safety Council Executive Board (10am – 2pm)
NLCP Inspectors Directors Workshop (2 – 6pm)

Monday, October 17, 2005
Registration (7:00am – 4:00pm)
Cont. Breakfast (7:00am – 8:30am)
ABFT Exam (8am – 12pm)
ABFT EXAM COMM. (8am – 12pm)
ABFT Accreditation Committee (10am – 12pm)
ABFT Board Meeting (12pm – 6pm)
Workshop #10a (8am – 5pm) Case Studies in DUID: Numbers, Signs, Symptoms and Beyond
Workshop #8 (8am – 5pm) The Postmortem “Blood Drug Screen”: Analytical and Managerial Approaches
Workshop #2 (8am – 12pm) Interpretive Pharmacogenomics and Proteomics for Forensic Toxicology
Workshop #4 (1:30pm – 5pm) Receptor Site Theory and Drug Interactions
Workshop #3 (8am – 12pm) Blood Alcohol Concentration Extrapolation Workshop
Workshop #6 (1:30pm – 5pm) From “Sample to Signal, Practical LC/MS”
SOFT/AAFS Drugs and Driving Committee (5:00pm – 6:00pm)

Tuesday, October 18, 2005
Registration (7:00am – 7:00pm)
Cont. Breakfast (7:00am – 8:30am)
SOFT Board Meeting (8:00am – 1:00pm)
Workshop #10b (8:00am – 5:00pm) Case Studies in DUID: Numbers, Signs, Symptoms and Beyond
Workshop #9 (8:00am – 12:00pm) Post Mortem Interpretation
Workshop #7 (8:00am – 5:00pm) Forensic Toxicology Update
Workshop #1 (8:00am – 12:00pm) Forensic Toxicology of Pesticides
Workshop #5 (1:30pm – 5:00pm) Oral Fluids – Research and Application
Exhibitor set up (12:00pm – 5:00pm)
Exhibitor Workshops (5:00pm – 6:30pm)
Drugs & Driving Committee (5:00pm – 6:30pm)
FTCB Board Meeting (5:00pm – 6:30pm)
Exhibits open (6:30pm – 8:00pm)
Exhibitor’s Welcome Reception (6:30pm – 8:00pm)
Elmer Gordon Forum (9:00pm – 11:00pm)

Wednesday, October 19, 2005
SOFT FUN RUN (6:30am – 8:00am)
Registration (7:00am – 6:00pm)
Cont. Breakfast (7:00am – 8:30am)
Exhibits open (9:30am – 4:00pm)
Bob Bost Consultant’s Breakfast (7:am)
Plenary/Scientific Session #1 & #2 (8:30am – 12:00pm)
Poster Session #1 (10:00am – 1:00pm)
Lunch with Exhibitors and Posters (12:00pm – 1:30pm)
Scientific Session #3 (1:30pm – 3:00pm)
Poster Session #2 (1:30pm – 3:00pm)
Soft Business Meeting (3:30pm – 5:30pm)
Happy Hour with Exhibitors (5:30pm – 6:30pm)
General Jackson River Boat & Dinner Theater (7pm – 10pm)
Night Owl Reception (10:30pm – Midnight)

Thursday, October 20, 2005
Registration (7:00am – 7:00pm)
Cont. Breakfast (7:00am – 8:30am)
Exhibitor Feedback Meeting (8:00am – 9:30)
Scientific Session #4 & #5 (8:30am – 12:00pm)
Poster Session #3 (10:00am – 1:00pm)
Lunch with Exhibitors and Posters (12:00pm – 1:30pm)
Exhibits open (9:30am – 1:30 pm)
Exhibitor breakdown (1:30pm – 3:30pm)
Scientific Session #6 (1:30pm – 3:00pm)
Poster Session #4 (3:30pm – 5:00pm)
ABFT Certificate Ceremony (5:00pm – 6:00pm)
AAFS Steering Committee (6:00pm – 8:30)
DFSA Committee (5:00pm – 6:30pm)
President’s Reception (7:00pm – 10:00pm)

Friday, October 21, 2005
Registration (7:00am – 10:00am)
Cont. Breakfast (7:00am – 8:30am)
Closing Scientific Session #7 & #8 (8:30am – 12:00pm)
Closing Poster Session #5 (10:00am – 12:00pm)
Post Conference Tours available

This information subject to change
Please check the SOFT Web-site www.soft-tox.org regularly for updated information
# SOFT 2005 Annual Meeting

**NASHVILLE, TENNESSEE**  
Renaissance Nashville Hotel

Use this worksheet to complete your ONLINE - ONTIME registration at the SOFT WEBSITE - www.soft-tox.org

On-site registration only after October 7th

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**MEETING REGISTRATION:**

<table>
<thead>
<tr>
<th>MEETING REGISTRATION (Late Fee Applies after 9/02/05)</th>
<th>Member</th>
<th>Non-Member</th>
<th>Qty.</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FULL MEETING REGISTRATION</strong></td>
<td>$195</td>
<td>$295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Includes: Admission to scientific sessions, Abstract Book, SOFT Pack, shirt, Coffee Breaks, Continental Breakfasts, Welcoming Reception, Luncheons, Tuesday Happy Hour, Elmer Gordon Forum, and President's Reception</td>
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<tr>
<td><em>Enter shirt size online</em></td>
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<tr>
<td><strong>LATE REGISTRATION</strong> 9/03/05 TO 10/07/05 (on-site registration only after 10/07)</td>
<td>$295</td>
<td>$395</td>
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<tr>
<td><strong>ON-SITE REGISTRATION</strong> (only option after 10/07)</td>
<td>$295</td>
<td>$395</td>
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<tr>
<td><strong>FULL-TIME STUDENT</strong> (Proof of full-time status required)</td>
<td>$95</td>
<td>$95</td>
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<tr>
<td>Admission to scientific sessions - NO abstract book, SOFT pack, Welcoming Reception or President's Reception</td>
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<tr>
<td><strong>ACCOMPANYING PERSON (ea.) with full meeting registrant only before 9/02</strong></td>
<td>$175</td>
<td>$275</td>
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<tr>
<td>Includes all the above except Abstract Book <em>Enter shirt size online 9/03 - 10/07</em></td>
<td>$275</td>
<td>$375</td>
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## OPTIONAL TICKETS: not available after Oct. 7, 2005

- President's Reception (Thurs)  
  - $70  
- Welcome Reception - General Jackson Dinner Showboat (Wed)  
  - $95

## OPTIONAL WORKSHOPS:

- **Workshop #1:** Forensic Toxicology of Pesticides. (1/2 day) - Tues a.m.
  - $60
- **Workshop #2:** Interpretive Pharmacogenomics and Proteomics for Forensic Toxicology. (1/2 day) - Mon (am)
  - $60
- **Workshop #3:** Blood Alcohol Concentration Extrapolation. (1/2 day) - Mon a.m.
  - $60
- **Workshop #4:** Receptor Site Theory & Drug Interactions. (1/2 day) - Mon p.m.
  - $60
- **Workshop #5:** Oral Fluids - Research and Application. (1/2 day) - Tues p.m.
  - $60
- **Workshop #6:** From "Sample to Signal; Practical LC/MS"*: An introduction to fundamental LC/MS/MS technologies and practical practices in forensic Toxicology. (1/2 day) - Mon p.m.
  - $60
- **Workshop #7:** FTCB - Forensic Toxicology Update. (Full day) - Tues
  - $120
- **Workshop # 8:** The Postmortem "Blood Drug Screen": Analytical and Managerial Approaches. (Full day) - Mon
  - $120
- **Workshop # 9:** Post Mortem Interpretation. (1/2 day) - Tues a.m.
  - $60
- **Workshop # 10:** Cases Studies in DUID: Numbers, Signs, Symptoms, and Beyond. (1st Full day) - Mon
  - $120
- **Workshop #10b:** Case Studies in DUID - Continued. (2nd Full day) - Tues
  - $120

## ID BADGE WILL BE REQUIRED FOR ALL FUNCTIONS.

**TICKET REQUIRED FOR PRESIDENT'S RECEPTION.**

**TOTAL**

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**LATE FEE applies for all registrations received after Friday, September 2, 2005.

Deadline for registration online at http://www.soft-tox.org is Friday, October 7, 2005. Payment via the SOFT Registration website, a secure site, which accepts most major credit cards or payment though routing of checks drawn on a US bank or International Bank.

**IMPORTANT - Refund policy:** Refunds will be honored upon written request prior to 09/03/05 minus a $100 fee. NO refunds after 09/03/05.

The Group Code for the Renaissance Nashville Hotel is: SFTSFTA

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*ToxTalk Volume 29 No. 2 2nd Quarter 2005*
2005 SOFT MEETING COMMITTEE

Hosting a meeting the size and scope of SOFT is an arduous challenge. The Meeting Committee relies on SOFT members for assistance, so contact someone below and offer your help.

Host/Chair: Louis Kuykendall (louis.kuykendall@state.tn.us)
Treasurer: Mike Lyttle (Mike.Lyttle@state.tn.us)
Scientific Chair: Dr. Kenneth Ferslew (ferslew@etsu.edu)
Workshop Chair: Dr. Peter Stout (prls@tds.net)
Conference Secretary: Dawn King
Social Chair: Jeff Crews
Materials Chair: Kelly Hopkins
Volunteer Coordinator: John Harrison
615-744-4466 or John.Harrison@state.tn.us
So-SOFT Chair: April Hagar

ATTN: Vendors interested in participating in the SOFT 2005 Annual Meeting in Nashville, TN contact Lisa O'Dell at NomadLee9@aol.com for details.

A.B.F.T NEWS

Submitted by Yale Caplan, Ph.D., DABFT, President, American Board of Forensic Toxicology

Certificant Reception and Certificate Presentations:
This year, instead of the annual breakfast, the ABFT will hold a reception for all Certificants on at the SOFT annual meeting on Thursday, October 20th, from 5:00 to 6:00 p.m. Light refreshments will be provided along with a brief overview of current ABFT activities and the presentation of certificates to new and requalified Certificants. Over 50 Certificants scheduled for re-qualification this year, so be sure to attend. There will not be any charge and more information will follow.

Directors:
At the ABFT annual meeting in February, the following were elected or reelected to a three-year term as a Director of the Board - Yale H. Caplan, Ph.D., DABFT, Michael Peat, Ph.D., DABFT, Daniel Isenschmid, Ph.D., DABFT, and Joseph Manno, Ph.D., DABFT. After many years of dedicated service as a Director and Chair of the Examination Committee, Al Poklis, Ph.D., DABFT will be leaving the Board when his term ends this year. Many thanks to Al.

Officers Elected:
The Board's officers were reelected to one-year terms - Yale H. Caplan, Ph.D., DABFT, President; Marina Stajic, Ph.D., DABFT, Vice-president; Daniel Isenschmid, Ph.D., DABFT, Secretary; Bruce Goldberger, Ph.D., DABFT, Treasurer

Laboratory Accreditation Program:
17th Laboratory Accredited (National Medical Services, Inc., Willow Grove, Pennsylvania
Robert Middleberg, Ph.D., DABFT, Laboratory Director, effective March 1, 2005). Laboratories Re-accredited: (Effective November 1, 2004) Albany Medical Center Hospital and College Forensic Toxicology Laboratory, Albany, NY, Thomas G. Rosano, Ph.D., DABFT, Director; Armed Forces Institute of Pathology, Forensic Toxicology Division, Rockville, MD, Aaron Jacobs, Ph.D., DABFT, Director; (Effective March 1, 2005) Office of the Chief Medical Examiner Toxicology Laboratory, New York City, NY, Marina Stajic, Ph.D., DABFT, Director; Department of Laboratories and Research Forensic Toxicology Laboratory, Westchester County, NY, Elizabeth Spratt, M.S., DABFT, Director.

Certificants:
Mark Lewis and Charles L. Winek were approved as Emeritus Diplomates. There are presently 138 Diplomates, 20 Forensic Toxicology Specialists and 24 Emeritus Diplomates recognized by the ABFT.

Nominating Committee (2005-2006):
The nominating committee is chaired by Secretary Dan Isenschmid, Ph.D., DABFT. The members serving staggered terms are: Joseph Monforte, Ph.D., DABFT, Bradford Hepler, Ph.D., DABFT, Richard Shaw, B.S., DABFT, Barry Levine, Ph.D., DABFT, and Michael Smith, Ph.D., DABFT.
SOFT/AAFS GUIDELINES COMMITTEE SUGGESTIONS

Submitted by: W. Lee Hearn, Ph.D., Chairman, Joint SOFT/AAFS Forensic Toxicology Guidelines Committee

The current SOFT/AAFS Guidelines were approved by the SOFT and AAFS Toxicology Section membership when they were revised in 2002. Over the past year, the Guidelines Committee has drafted several changes to reflect the advances in the practice of forensic toxicology since 2002. This draft document is available for review as an Adobe PDF file on the SOFT website (http://www.soft-tox.org). There is an index to the changes on the first page of the document. Deletions are indicated by "strikeout" text, and additions by yellow highlighting. Any necessary changes in paragraph numbering will be updated, once changes to the text have been approved.

For those who do not have Internet access, or for whatever other reason are unable to view the draft Guidelines, a copy may be obtained from the committee Chairman, Dr. Lee Hearn, Miami-Dade county Medical Examiner Department; Number One on Bob Hope Road; Miami, Florida 33136-1133; phone 305-545-2454; fax 305-545-2452; e-mail: whl@miamidade.gov.

Comments and suggestions are welcome. It is hoped that the new Guidelines can be adopted by SOFT members at the business meeting in Nashville, October, 2005, and by AAFS Toxicology Section members at the business meeting in Seattle, February, 2006.

~

DRY T-SHIRT CONTEST

The Annual SOFT Fun Run has featured some great t-shirts in the past. There is a contest to design this year's t-shirt and the winner will receive a free Fun Run registration and t-shirt. Send your design to Vickie Watts at toxilady@aol.com.

FUN RUN REGISTRATION FORM INSERTED IN THIS ISSUE OF ToxTalk

A COLLEAGUE LOST – A FRIEND NOT FORGOTTEN

IN MEMORIAM: THOMAS MANNING, Ph.D., DABFT

Submitted by Jesse Bidaseth, Ph.D., DABFT

SOFT has lost another of its outstanding members. Thomas Manning had appeared to be winning his battle against bladder cancer when his status suddenly changed and, within weeks, he lost the struggle.

I first met Tom in the late '60s. After graduating from Manhattan College, he achieved a Masters of Science in Biology from Adelphi University in 1968 then became a research chemist with Ciba-Geigy Chemical Corporation. During a visit to the Nassau County Medical Examiners Office toxicology laboratory, he expressed the desire for a forensic toxicology career and, in 1972, joined the staff as a forensic toxicologist. Encouraged by Dr. Vincent Lynch at St. John's University and Dr. Leslie Lukash, the Chief Medical Examiner of Nassau County, Tom joined Joe Balkon as the first of many forensic toxicologists to graduate from the St. John's program. In three years, while holding a full-time job, Tom was able to complete coursework and a doctoral thesis. Some may remember that his research involved the study of the "myocardial depressing factor" and its role in lingering deaths. Tom eventually became the Chief Toxicologist for Nassau County. Additionally, he was the consulting toxicologist at South Oaks Hospital in their alcohol and drug rehabilitation program, an inspector and team leader in the NLCP, and a laboratory inspection consultant in the US military drug testing program.

Dr. Manning's professional associations included charter membership in SOFT, serving as treasurer from 1976-1978 and a member of the Board of Directors from 1999 to 1992; a Fellow in the American Academy of Forensic Sciences Toxicology Section since 1976; a Diplomate in the American Board of Forensic Toxicology, first certified in 1980; an Inspector for the ABFT Laboratory Certification Program; and, when it was NY's turn to host a SOFT meeting, Tom and his wife Judy were always there - remember them in the mystery skit at the Huntington, Long Island meeting?

Addendum by Pat Monforte: Tom Manning was often found in a group; he liked people and they liked him. There was a lot to like. A devoted family man, Tom spoke well and often of his family; wife Judy, children Donna and Keith, and grandsons “TJ” and Conner were the center of his life. He was a man of strong faith and generous spirit, willingly sharing himself with his many ends. He was the kind of guy who really cared about other people. We were blessed to call him our friend, “Tommy.”

NEW ABSTRACT DEADLINE FOR SOFT MEETING PAPERS: JULY 1. See website for details.
Submitted by Graham Jones, Ph.D., DABFT, SOFT President

Several experienced forensic toxicologists have expressed concerns about the misuse of pharmacokinetics to back-calculate the dose of a drug ingested using postmortem blood concentrations and a published volume of distribution. The assumptions made in performing such calculations are usually unjustified and the results frequently misleading. Most important, the calculations lack an adequate scientific foundation. The most obvious reason why such calculations are misleading is that the plasma concentration of most drugs at the time of death is not known with any degree of certainty. For example, the extent of any postmortem redistribution is usually not known or its impact often grossly underestimated. For these reasons, the SOFT Board feels that publication of the proposed statement is in the best interest of the SOFT membership, the professional in general and, not least, the public interest.

What prompted this statement? Several of us have been concerned for years about being confronted with "experts" from inside and outside our profession who profess to be able to make estimates of the dose of a drug consumed, based on a postmortem blood concentration. This concern was highlighted in 2003 by statements made in the press regarding the high profile death of a UK weapons scientist, where "experts" claimed the person may have been murdered, based in part on their interpretation of a postmortem blood concentration they said proved an overdose had to have been involuntarily given. Clearly, the clinical professionals were ignorant of the concept of postmortem redistribution.

How would publication of the statement impact individual members who chose to perform dose calculations? Publication of the statement would simply indicate that SOFT as an organization does not endorse the use of such calculations for drugs in postmortem cases. The proposed position statement does not prohibit a SOFT member or anyone else from performing any such calculations. However, if a person chose to perform a dose calculation based on the postmortem blood concentration of a substance, it would be incumbent on that person to clearly state the assumptions that are made, and the potential error or uncertainty in the calculated dose or dose range.

What about "alcohol"? Isn't it generally accepted that dose calculations for ethanol can be made providing the caveats are stated? Yes, and this is addressed in the statement. The pharmacokinetics of ethanol has been extensively studied in humans and there is a better understanding of the errors involved with dose calculations for ethanol than for drugs. However, toxicologists should still be very mindful of the errors encountered in postmortem cases that affect the reliability of a blood alcohol concentration in a cadaver. For example, potential errors may be due to postmortem fermentation, or postmortem diffusion from the stomach and other areas, or under or over estimation of the volume of distribution for the subject. The assumptions made must still be stated.

What will happen to the Statement? The Statement being published in ToxTalk and in the membership area of the SOFT web site for comment. Subject to the comments made and subsequent review by the Board, the Statement will be put to a vote of the Members present at the annual business meeting in Nashville this fall. If the Statement is adopted, the Board will seek to publish it in a reputable forensic journal such as the Journal of Forensic Sciences or Journal of Analytical Toxicology.
SOFT Position Statement on the Use of Volume of Distribution Calculations for Drugs in Postmortem Cases

It is the position of the Society of Forensic Toxicologists that estimation of the dose of drugs in postmortem cases using pharmacokinetic equations based on blood drug concentrations and the volume of distribution lacks a valid scientific foundation in most circumstances.

The most commonly used pharmacokinetic equation that is misused is:

\[
\text{Dose} = Wt \times C \times V_d
\]

where \( D = \) dose (mg), \( Wt = \) body weight (kg), \( C = \) drug plasma concentration (mg/L) and \( V_d = \) volume of distribution (L/kg).

Volume of distribution is a measure of the extent to which a drug is distributed in the body outside of the plasma. More specifically, it is the theoretical volume of fluid required to contain the total drug in the body, if it were at the same concentration as in the plasma. Volume of distribution is usually expressed in liters per kg. In clinical pharmacokinetic studies, \( V_d \) is estimated by measuring serial plasma concentrations following a known single dose of a drug, and extrapolating to time zero.

Use of this and similar equations for the estimation of dose in postmortem cases is unreliable for the following reasons.

1. \( V_d \) is almost never known for a specific individual and can vary several-fold for many drugs. \( V_d \) is directly dependent upon protein binding and lipid solubility and will therefore depend on body type (e.g. proportion of lean body mass), diet, state of health, and the co-administration of other drugs.

2. The plasma concentration of a drug is often not at steady state at the moment of death, and therefore the use of \( V_d \) is inherently invalid in postmortem cases where the time of drug ingestion is unknown and absorption or distribution incomplete. For example, the equation is often applied to cases where an individual has consumed or been given an overdose prior to death, and where the extent of drug distribution at the moment of death is unknown.

3. The plasma concentration of a drug at the time of death is rarely known with any degree of confidence, especially for those drugs that undergo postmortem redistribution. Postmortem redistribution can increase the concentration of a large number of drugs at least 2-fold, and for some 10-fold or more. Additional postmortem changes can occur due to related processes such as the diffusion of drugs from the stomach into the liver and central blood, as well as through agonal or postmortem aspiration.

4. The blood:plasma distribution of many drugs is unknown, and in any case may vary from one individual to another. Furthermore, for most drugs it is not known whether the blood:plasma ratio is stable after death in vitro, or even in vivo with increasing postmortem interval. Virtually all clinical studies (on which reference values for \( V_d \) are based) measure serum or plasma rather than blood concentrations. Virtually all postmortem laboratories measure whole blood drug concentrations.

Even if all of the variables were to be known, dose calculations using \( V_d \) usually estimate the total body burden of the drug. It is often forgotten that even with normal, therapeutic, multiple dosing, drugs with medium to long half-lives tend to accumulate until steady state is reached. Therefore, even after normal dosing, at steady state, the body may contain the equivalent of several doses of the drug, especially where the \( V_d \) is large.

Similarly, simplistic calculations of dose give absolutely no information about the time when a dose may have been taken. For example, if drugs accumulate due to abnormally slow metabolism (e.g. genetically caused enzyme deficiency and/or drug-drug interactions), or impaired clearance (e.g. due to renal or hepatic insufficiency), the total estimated body burden, even if approximately correct, may erroneously lead to an inference that the amount was consumed in a single dose.

Notwithstanding these concerns, it is recognized that some substances, such as ethanol, have been sufficiently well studied that estimation of dose may be useful in some circumstances, providing that the assumptions made are clearly stated. The stated assumptions should include the volume of distribution range used and the dosing (e.g. drinking) pattern assumed, at a minimum. In calculating the dose of alcohol in postmortem cases, toxicologists should, where appropriate, acknowledge the possibility of neo-formation or redistribution after death.
CALL FOR CASE NOTES:
INHALANTS – Part 1

Editorial Staff: Matthew Barnhill, Ph.D.  mbarnhilljr@worldnet.att.net

Case of Butane Overdose

Michael L. Smith, PhD, and Aaron J. Jacobs, PhD, Division of Forensic Toxicology, Office of the Armed Forces Medical Examiner, Rockville, MD 20850

A 21-year-old male was observed drinking beer and inhaling butane at 1915 h. He later started gagging, passed out, was given CPR immediately and then transported to the emergency room where he was pronounced dead at 2022 h. Autopsy was performed at 1400 h the next day and generalized congestion was the only remarkable finding. Toxicology results (determined by 10th Medical Laboratory, Landstuhl, Germany) were:

Ethanol: Cardiac Blood 10 mg/dL; vitreous humor 10 mg/dL; brain 9 mg/100 g; gastric contents 300 mg/dL.

Lidocaine: Liver-present mg/L or mg/Kg

<table>
<thead>
<tr>
<th>Tissue</th>
<th>Propane</th>
<th>Iso-butane</th>
<th>Butane</th>
</tr>
</thead>
<tbody>
<tr>
<td>blood (aorta)</td>
<td>6.4</td>
<td>3.8</td>
<td>15.9</td>
</tr>
<tr>
<td>blood (r. atr.)</td>
<td>5.8</td>
<td>3.1</td>
<td>12.1</td>
</tr>
<tr>
<td>blood (fem. vein)</td>
<td>5.6</td>
<td>2.8</td>
<td>10.6</td>
</tr>
<tr>
<td>vitreous humor</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>urine</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>brain</td>
<td>29.7</td>
<td>40.5</td>
<td>59.6</td>
</tr>
<tr>
<td>heart</td>
<td>14.8</td>
<td>19.9</td>
<td>24.9</td>
</tr>
<tr>
<td>liver</td>
<td>8.3</td>
<td>18.1</td>
<td>24.0</td>
</tr>
<tr>
<td>lung</td>
<td>36.7</td>
<td>33.4</td>
<td>49.6</td>
</tr>
<tr>
<td>kidney</td>
<td>5.4</td>
<td>15.5</td>
<td>24.0</td>
</tr>
<tr>
<td>spleen</td>
<td>18.6</td>
<td>27.8</td>
<td>48.6</td>
</tr>
<tr>
<td>psoas muscle</td>
<td>&lt; 1</td>
<td>2.9</td>
<td>13.6</td>
</tr>
<tr>
<td>fat (peri-renal)</td>
<td>20.9</td>
<td>6.2</td>
<td>14.9</td>
</tr>
<tr>
<td>fat (abdominal)</td>
<td>&lt; 1</td>
<td>ND</td>
<td>1.8</td>
</tr>
<tr>
<td>gastric contents</td>
<td>1.4</td>
<td>5.0</td>
<td>9.8</td>
</tr>
<tr>
<td>bile</td>
<td>8.0</td>
<td>11.6</td>
<td>3.1</td>
</tr>
</tbody>
</table>

ND = none detected

Cause of death was intoxication due to hydrocarbon inhalation.

Death from inhalant abuse is not prevalent, e.g. 0.3% of deaths in Virginia males ages 13-22 between 1987 and 1996 (Bowen et al, Drug Alcohol Depend. 1999;53:239-45). When it occurs, about half the cases in this age group are from butane or propane inhalation. Most of butane that is absorbed and circulates in the blood is eliminated from the body via the pulmonary route, and a small amount is metabolized to butanol and excreted. Postmortem blood concentrations have been reported and ranged from 1.8 – 39 mg/L with higher concentrations in brain and liver (Ago et al., Leg Med, 2002;4:113-118). Trying to establish a toxic concentration, however, is difficult primarily due to loss of the volatile substance from blood after death.

A mixture of butane, iso-butane and propane are common hydrocarbon components in butane lighters. Individuals inhale the gas mixture to experience euphoria, and when death occurs it is often the result of oxygen deprivation or ventricular fibrillation. In this case, the toxicology results confirmed the presence of hydrocarbons in the deceased, which assisted in determining the cause of death and also demonstrated the relative hydrocarbon concentrations in various fluids and tissues of an individual who died shortly after inhaling the gas.
An Unusual Case Of DFSA Using Aromatic Solvents

Maria A. Martínez and Salomé Ballesteros. Instituto Nacional de Toxicología y C. Forenses. Ministerio de Justicia. C/Luis Cabrera 9, 28002-Madrid, Spain. mariamart@terra.es

Drugs used for drug-facilitated sexual assault have one or more of the following properties: cause sedation, cause amnesia, are odourless and tasteless, dissolve readily in alcoholic or other beverages, and are rapidly absorbed after oral administration. Although the short-acting benzodiazepines probably come closest to the so-called “ideal” properties, the reality is that a wide range of other drugs have been used to “drug” potential sexual assault victims. Alcohol is the most common substance as well as other products readily available to the perpetrator of the assault.

Toluene, benzene and xylenes are aromatic petroleum hydrocarbons that have many commercial and industrial applications as solvent mixtures. They are present in paints, paint thinners, glues, and other products likely to be found in the household. Traditionally toluene and other solvents have been abused for their intoxicating effects by teenagers who inhale the vapours. They are rapidly absorbed and the systemic effects of acute exposure are CNS depression mimicking those of ethanol inebriation. The main effects of toluene observed in humans consist of hallucinations with blood levels of 2.5-10 mg/L and unconsciousness with levels greater than 10 mg/L.

The victim was a 13-yr-old female who went to the police department looking dazed. She had been kidnapped 4 hours before and spent a few hours unconscious in a room. Two individuals with their faces covered put a solvent-soaked cloth on her mouth. The girl awakened semi-nude in the street with memory loss. Her clothes were destroyed, and the kidnappers had left her a cellular phone. The medical examiner did not see any lesions after the gynaecological exam. He took a blood sample to investigate chloroform or similar anaesthetics. After a comprehensive toxicological screening analysis including alcohol and other volatiles, abuse drugs, pharmaceuticals, and solvents, these were the toxicological findings:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Blood concentration (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>24.8</td>
</tr>
<tr>
<td>Benzene</td>
<td>7.6</td>
</tr>
<tr>
<td>Xylenes (mixture of isomers)</td>
<td>0.6</td>
</tr>
<tr>
<td>Diazepam</td>
<td>0.02</td>
</tr>
<tr>
<td>Nordiazepam</td>
<td>None detected</td>
</tr>
</tbody>
</table>

As far as we know, this is the first DFSA reported case in which this mixture of compounds was involved. Inhalants are not commonly used since they involved the use of violence. As a summary, we want to alert about new or unexpected products that should be taken into account when the surreptitious use of substances is suspected.

References

Chloroform Assisted Suicide


A 21-year-old white male was discovered in his residence with a plastic trash bag over his head and tightened around his neck with a leather belt. The body was sent to the Coroner’s Office for examination with the trash bag still intact and in place. During the autopsy, the bag was cut open to reveal an open and empty bottle labeled “Laboratory Grade Chloroform.” Time of death was estimated at three days prior to discovery.

Initial toxicological screening indicated positive results for ethanol by GC Headspace and Amphetamine/Methamphetamine by FPIA. Confirmations determined the presence of ethanol at 0.04 GM% and 0.06 GM% in cavity blood and brain, respectively, and β-phenethylamine; both are chemicals commonly associated with decomposition. An Extended Volatile procedure was carried out and chromatographically identified chloroform as present in cavity blood.

A further method was implemented to confirm the presence of chloroform. With the help of the onsite crime laboratory, an Ignitable Liquids Analysis was used. This required the utilization of a DFLEX® charcoal strip that absorbed the volatile compound from a specimen after it was sealed in a metal can and heated 1. The volatile compound was then desorbed with carbon disulfide and injected into a GC/MS for confirmation. Chloroform was positively identified by retention time and a mass spectral library match in cavity blood, brain, and lung tissue.

The death investigation indicated that there had been previous suicidal ideations on behalf of the decedent. It was also determined that the belt was not tight enough for strangulation, but merely a means to hold the plastic bag in place. The cause of death, as ruled by the coroner, was due to asphyxia resulting from the plastic bag over the head with contributory factors of chloroform intoxication.

A 39-yr-old man was found dead at a paper money factory inside a 4 meter x 4 meter hydraulic platform he had previously been sent to repair. At autopsy, performed ten hours after the corpse was discovered, external examination revealed the presence of blood exuding from the nose and a burn (apparently caused by chemical exposure) with skin detaching and extending over the chest, back and upper right arm. Internal examination revealed that the esophagus and the trachea were unobstructed, but their mucous membranes were found to be eroded and hyperemic. The brain was edematous, the lungs were swollen and the viscera were congested. The pancreas was hemorrhagic, and this was determined to be the cause of death. A blood sample was submitted for alcohol and volatiles analysis, and blood, liver and gastric contents were submitted for drug analysis.

An EMIT Solaris system was used to perform drug analysis for benzoylcegonine, cannabinoids, benzodiazepines, barbiturates and amphetamines. A Model 4890 Hewlett-Packard gas chromatograph with split/splitless injection and an FID detector, coupled to an HP-7694E headspace injector was used to perform the volatile substance analysis using a 30 meter DB-624 capillary column with an internal diameter of 0.32 mm and a film thickness of 1.8 μm. The initial oven temperature was 85 degrees, held for 2 minutes then ramped at 30 degrees/minute to a final temperature of 120 degrees, and held for 2 minutes. The injector temperature was 200 degrees, and the detector temperature was 250 degrees.

Results and Conclusions: None of the samples tested positive for the drugs listed, but the blood was positive for methanol at a concentration of 297 mg/100 ml and toluene at a concentration of 27 mg/100 ml. Both results were well above the toxic concentrations (20 mg/100ml for methanol and 1 mg/ml for toluene) and either of them could be attributed as the cause of death. However, the normal onset of symptoms for methanol intoxication is 8 to 36 hours [1], and in this case the elapsed time between exposure and death would not have allowed the toxic effects of methanol to occur. Thus the cause of death was related mainly to inhalation of toluene in a work-related accident. Because the amount of toluene found in blood was high and because of the chemical burns found on the body, it can be assumed that the amount of toluene inside the hydraulic platform at the moment of death was considerable, and that it was in the form of a hot vapor. Realizing that the place where the body was found was very small, it can be assumed that the death occurred suddenly.

The presence of inhalants in cases at the Forensic Medical Service of Mexico City is relatively common, but most involve recreational use and the people died because of other reasons, usually violently. Accidental exposures, such as this case, are less common and are usually related to painting activities performed in poorly ventilated places where the proper precautions were not followed.


Acknowledgment: The authors would like to thank Mr. Adrian Waldo for his help in the elaboration of this manuscript and his valuable commentaries.

**Two Inhalant Case Studies**

**Case 1: So Much for a Good Time!** In late December 2003, a 43-year-old black male was found unresponsive by his girlfriend. She stated that she attempted CPR and transported him to the hospital, but he was DOA. The decedent had a history of chest pains and ulcers, but did not abuse drugs or alcohol. Foul play was not suspected. The autopsy was unremarkable and he appeared to be a healthy 214 pound, 68 inch male. Toxicology specimens were submitted and the cause of death was pending for toxicology. Volatiles, drugs of abuse and prescription medication panel were conducted with the following results:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amitriptyline</td>
<td>0.53 ug/ml</td>
</tr>
<tr>
<td>Nortriptyline</td>
<td>0.53 ug/ml</td>
</tr>
<tr>
<td>Fluoxetine</td>
<td>0.81 ug/ml</td>
</tr>
<tr>
<td>Norfluoxetine</td>
<td>0.81 ug/ml</td>
</tr>
<tr>
<td>Chloroethane</td>
<td>Present</td>
</tr>
</tbody>
</table>

With the unusual finding of chloroethane, the death was reinvestigated to determine if the hospital used the substance as a topical anesthetic or if the decedent was huffing prior to his death. Attempts to locate the girlfriend were extremely difficult. She was eventually located months later and relayed the following information: The decedent and she went to a Mexican restaurant for dinner, went back to the residence to have sexual relations, but just before this encounter, sprayed “Maximum Impact” onto a towel and inhaled for more stamina. The two of them went to bed, and he never woke. The cause and manner of death was ruled Chloroethane Intoxication, accident. (cont. next page...
Case 2: Death by Mistake

In late December 2003, a 12-year old black male’s death was reported to this department from a hospital. The boy had a history of asthma that required an occasional use of an inhaler and was very active in sports. Three days prior to his death, he was sent home from school with a fever and was suffering from eye pain and headaches. His eyes were red from rubbing them and his mother had just made an appointment to see a Doctor. While watching television, a 5-year brother witnessed the decedent grab his chest and fall onto a small plastic inflatable chair. The autopsy was unremarkable and appeared to be a healthy 12-year old boy (125 pounds, 4’9”). Toxicology specimens were submitted and the cause of death was ruled for toxicology. The pathology was negative with the exception of a volatile substance, Difluorochloromethane (Freon). Questions arose about hospital intervention, postmortem production, and possible huffing by the decedent and friends. Further investigation into the death revealed that the father repaired ice machines and kept freon tanks in the garage. The mother was asked by the investigator to talk to his friends to determine if they were experimenting with the tanks. What transpired was the “Teenage Mutant Ninja Turtle” inflatable chairs that were Christmas presents were filled with the freon tanks. Apparently one of them had a slow leak and over the course of several days, the boy would re-inflate them by mouth, and unintentionally and unknowingly, inhale the freon gas. The manner of death was accidental with the cause of death ruled as effects of Difluorochloromethane inhalation.

A Fatality Involving Isoflurane

Uttam Garg, Ph.D., C. Clinton Frazee, III, B.S., Gerry Huber, MT (ASCP), Leonard Johnson, B.S., The Children’s Mercy Hospital, Toxicology Laboratory, and Thomas Young, M.D. and Thomas Gill, M.D., Jackson County Medical Examiner’s Office, Kansas City, MO.

Case History: The decedent, a 47-yr-old white male, was described to have a history of sleep apnea and cocaine abuse. As reported by his girlfriend, the decedent was under a lot of stress (cause unknown) and had been suffering from financial problems. However, no past suicidal ideations were indicated.

The decedent was found in his secured apartment, located above an animal hospital where he worked as an aide. There were no signs of injury or foul play. Numerous empty medicine bottles including Cephalexin, Baytril, Diphenoxylate Hydrochloride, Atropine Sulfate and Rimadyl were found throughout the apartment. None of these drugs were prescribed to the decedent. A brown bottle labeled “Isoflurane” was found in the same room as the decedent, and the bottle was noted to be ¾ empty. Two other empty isoflurane bottles were found under the subject’s bed. Upon moving the body, two small plastic tubes were found beneath the body.

Autopsy Findings: No remarkable finding was noted on autopsy.

Postmortem Toxicology: The samples for toxicological analysis were received in head space vials. Comprehensive drug testing was performed using EIA for drugs of abuse, GC for volatiles and GC-MS for comprehensive drug screening, and the following results were obtained.

<table>
<thead>
<tr>
<th>Femoral Blood</th>
<th>Liver</th>
<th>Brain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzoyl-Metadine, 125 ng/mL</td>
<td>Isoflurane 110 µg/g</td>
<td>Isoflurane 29 µg/g</td>
</tr>
<tr>
<td>Egonine methyl ester, 40 ng/mL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cocaine, undetected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carboxy-THC detected, 19 ng/mL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isoflurane 1.8 µg/mL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isoflurane 110 µg/g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isoflurane 29 µg/g</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion: We describe a fatal case of intentional isoflurane overdose. Isoflurane (Forane) is a volatile anesthetic which, due to a low blood:gas solubility coefficient, confers the advantage of both a rapid induction and quick recovery from anesthesia. More than 99% of an inhaled dose of isoflurane is excreted unchanged in the expired breath (1). At normal anesthetic doses isoflurane has been associated with hypotension, dysrhythmias, seizures, nephrotoxicity, hepatotoxicity, neurolepetic malignant syndrome, and respiratory depression. Overdose may result in hypotension, coma, respiratory depression, apnea and seizures.

There are only a few fatal cases of isoflurane abuse or intentional overdose reported in the literature (2-4). However, hepatic necrosis and failure seem to be the most common cause of death reported in medical use cases (5-7). In our case, the autopsy revealed no significant hepatic findings. The liver levels (110 µg/g) of isoflurane found in our case are higher than the 2 cases (3) in which reported levels were 31 µg/g and 97 µg/g, and lower than one case (4) in which reported level was 1000 µg/g. However, the brain and blood concentrations found in our case are lower than the reported levels in all three reported cases. Other drug findings in our case seem insignificant to the cause of death.

References:
Access to Pseudoephedrine Restricted. Submitted by Andrew P. Mason, Ph.D., ToxicoLogics, Ltd., Boone, NC. forn6tox@aol.com

Numerous states are now contemplating laws similar to Oklahoma’s that restrict sales of pseudoephedrine (PE). The law was enacted as a measure to reduce the availability of the most common precursor for clandestine methamphetamine (MA) synthesis. Oklahoma’s law (enacted April 2004) classified PE as a Schedule V drug and required it to be dispensed by a pharmacist. The sale had to be recorded (logged), a picture ID with date of birth was required, sale was restricted to individuals older than 18 years, and stocks of PE had to be stored either in locked cabinets or behind the pharmacy counter, in areas inaccessible to the public. A maximum of 9 g could be purchased in a 30-day period, but materials obtained under prescription are exempt. Tablets containing “combinations of products” were subject to the restrictions, while liquids, liquid capsule, or “gel capsule” forms were exempt, providing PE was not the only ingredient. The law has apparently had a significant impact on MA synthesis, as clandestine MA laboratory seizures in OK plummeted after the law was enacted (see Microgram, Vol. XXXVII, No. 8, August 2004, www.usdoj.gov/deaJprograms/forensicsci/microgram/mg0804.html).

Similar laws are now being considered in Colorado, Kansas, Illinois, Michigan, Minnesota, North Carolina, Tennessee, and Washington (Asheville NC Citizen-Times, 04/26/05). The bill introduced into the North Carolinas Senate (S888, find it at www.ncleg.net) is modelled after Oklahoma’s. It has passed the NC Senate, and is now on its way to the NC House for consideration. Oregon’s Board of Pharmacy recently ordered that all PE-containing products be placed behind pharmacy counters.

In other news on this topic, at least three major retailers have voluntarily restricted access to PE. Target Corp. announced (April 18, 2005) that it will move all PE products behind the pharmacy counter, in addition to previously initiated restrictions on the number of boxes that can be purchased. Wal-Mart and the grocery chain Albertsons, Inc., quickly announced similar self-imposed limitations. These restrictions will be implemented over the next several months.

Ban on Ephedra Sales Partially Overturned. Submitted by Andrew P. Mason, Ph.D., ToxicoLogics, Ltd., Boone, NC. forn6tox@aol.com

A federal judge in Salt Lake City, UT, partially overturned (04/14/05) the FDA’s ban on the sale of dietary supplements containing ephedra (also known as ma huang), which contain ephedrine as an active ingredient. Use of supplements containing ephedra, most commonly as a weight-loss aid, was linked to increased risks of stroke, “heart attack” and numerous “sudden deaths.” The final regulation banning their sale was published by the FDA on February 6, 2004 (see Federal Register 69 FR 6788), and went into effect on April 12, 2004. In this latest action, a Utah supplement manufacturer (Neutracetical) filed suit and argued that the FDA could not show that low doses of ephedra (less than 10 mg of ephedra or “ephedrine alkaloids”) were unsafe. The FDA argued that no “safe” level of ephedra has been determined. The Judge ruled that this did not meet the Government’s burden under the law, ordered that the FDA could not prevent Neutracetical from selling products containing less than 10 mg of ephedra, and referred the matter back to the FDA so that safe versus dangerous doses of ephedra could be determined. Under the 1994 Dietary Supplement Health and Education Act or DSHEA, supplements are treated as foods and are presumed to be safe. The burden of proof falls on the regulating agency to show that the drug is unsafe before its sales may be restricted. In contrast, manufacturers must show that drugs are both safe and effective prior to being marketed.

Swiss Laws Change: Reduced “Per Se” Alcohol Limit and Blood Drug Limits Proposed. Submitted by Don Kippenberger, Ph.D., Deputy Program Manager for Forensic Toxicology, United States Army Medical Command (MEDCOM), Fort Sam Houston, TX. Donald.Kippenberger @us.army.mil

Swiss traffic laws were revised effective January 1, 2005. The limit for alcohol in blood was lowered from 0.80 parts per thousand (ppt) to 0.50 ppt. Thomas Briellmann of Basel and Thomas Sigrist, of St. Gallen, report that the Select Committee on Traffic for the Swiss Department of Legal Medicine (SGRM) proposes the following analytical limit values for whole blood: THC at 1.5 µg/L, and the following drugs, all at 15 µg/L: morphine, cocaine, amphetamine, methamphetamine, MDMA, and MDEA. Apparently these limits, if adopted, will establish national “per se” limits for the presumption of impairing effects. (Editor’s Note: The above is based on information translated from Swiss-German and may reflect our abilities in that reg. Because of this, we ask for your understanding and consideration, and your pardon if we got it wrong. We invite our Colleagues from “across the big pond” to provide clarification and additional commentary. A.M.).
Suicide by Cop: Man Attacks Police with Chain Saw, had 0.495 % BAC. Submitted by Troy Merrick, Chemist, Cuyahoga County Coroner's Office, Cleveland, OH. Uab98dc96@yahoo.com

A 40-yr-old Luzerne County (PA) man with a history on mental illness summoned police to his residence by placing a false "911" call, saying that he was having a heart attack. When police arrived, he "relentlessly pursued" them with a chain saw. He was pepper sprayed, but laughed and continued his aggressive actions. He struck one State Trooper with the saw (the trooper's injuries were not reported - A.M.) and was "shot three times, but then regrouped and attacked again." Police reported that nearly 40 bullets were fired at Henkle, and that he was hit 15 times during the incident. No illegal drugs were detected in post-mortem blood or urine specimens (National Medical Services, Inc., Willow Grove, PA). The State Police labelled the incident "Suicide by Cop", and the County District Attorney's Office ruled that the death was a justifiable homicide. Found at www.citizensvoice.com, on 03/30/05, and at www.zwire.com/site/news.cfm?newsid=1425746&BRD=2259&PAG=461&depUd=55154&rfi=6.

"Marijuana Industry Booming in Canada." Submitted by Andrew P. Mason, Ph.D., ToxicoLogics, Ltd., Boone, NC. form6tox@aol.com

Police in Canada report that marijuana growers are increasingly relying on indoor "grow house" operations that use hydroponic and other sophisticated technologies to produce highly potent marijuana, much of it destined for export to the US. Police believe that it now represents one of Canada's biggest exports to the US, worth as much as $4 billion to $7 billion (US) annually. Once found predominantly in the west, these operations are now found increasingly in eastern Canada, and are moving from rural toward more urban locations. Ontario Police report a 250% increase in indoor marijuana growing operations in the past four years. Stronger penalties for growers are being considered. Found at: Christian Science Monitor, 03/11/05, www.csmonitor.com/2005/0311/p01s03-woam.html

Drugs and Driving Committee Update

Submitted by Sarah Kerrigan

The Drugs and Driving Committee was assigned a number of important tasks in the NSC/NHTSA draft report entitled "Priorities and Strategies for Improving Investigation, Toxicology and Prosecution of Drug Impaired Driving Cases". Because of the large size of the committee, and the distinct projects that were assigned, three subcommittees were established to address each of the goals as follows:

- **Training & Outreach Subcommittee** - Responsible for: Coordination of committee-sponsored training at both SOFT and AAFS meetings in the form of workshops, special sessions or other formats; regional training opportunities; liaison with the SOFT Continuing Education Committee; identification and coordination of other educational opportunities as needed; collaboration with other stakeholders; distance learning projects; other activities as determined by the subcommittee. Members: Ann Marie Gordon, Chester Flaxmayer, Chuck Hayes, David Benjamin, Don Frederick, Fiona Couper, Michael Corbett, Michael Wagner, Michelle Spirk, Robert Bost, Vickie Watts, Wayne Jeffery, Yale Caplan.

- **Laboratory Guidelines** - Responsible for: DRE survey data; liaison with labs performing DRE casework; model practices for labs; other activities as determined by the subcommittee. Members: Ashraf Mozayani, Barry Logan, Bob Zettl, Denny Crouch, James Kramer, Jennifer Limoges, Laura Liddicoat, Laurel Farrell, Marilyn Huestis, Olaf Drummer, Peter Stout.

- **Internet & Resource Subcommittee** - Responsible for: Identification and coordination of DUID resources for use on a dedicated DUID website; other activities as determined by the subcommittee. Members: Alain Verstraete, Chip Walls, Kurt Dubowski, Sarah Kerrigan, Werner Bernhard.

The committee is sponsoring two upcoming events: "Case Studies in DUID: Numbers, Signs, Symptoms and Beyond", Monday Oct 17- Tuesday Oct 18, 2005. This two-day workshop at the SOFT meeting in Nashville will have an interpretive focus. An audience response system will be used by the workshop attendees to obtain live feedback on actual cases and opinions. A Special Session on DUID is also planned for Thursday Feb 23, 2006 at the AAFS meeting in Seattle. During this half-day session, a number of DUID case studies will be presented.

As a reminder, the Drugs and Human Performance Fact Sheets (DOT HS 809 725) can be downloaded from the NHTSA website at http://www.nhtsa.gov/people/injury/research/jobsdrug/index.htm. The next committee meeting will be at the SOFT Annual Meeting in Nashville on Monday October 17th at 5pm. The meeting is open to all SOFT members. Check the Program for the meeting location.

*** CALL FOR PAPERS DEADLINES EXTENDED ***

Abstract Submission: JULY 1 Notification of Acceptance for Presentation: AUGUST 31

Go to www.SOFT-TOX.org for details and meeting updates
The Annual Business meeting of the Society of Forensic Toxicologists, Inc. (SOFT) was held on September 1, 2004, at the JW Marriott Hotel in Washington, D.C. President Daniel Isenschmid requested that the Secretary establish a quorum. A quorum of at least 113 full members was present. President Isenschmid called the meeting to order at 3:20 pm and reminded the membership that only full and retired members of SOFT are eligible to vote. Upon a motion duly made, seconded and passed, the agenda was approved with no corrections. By a motion duly made, seconded and passed, the minutes of the annual business meeting of the Society of Forensic Toxicologists, Inc., of October 22, 2003, as published in ToxTalk, were approved by acclamation.

President's Report: Daniel Isenschmid, Ph.D., DABFT
President Isenschmid reported that the affairs of the society were in good order. He thanked the officers and the various committee members for their excellent work over the past year. President Isenschmid made special mention of the 4 Educational Research Awards and 4 Young Scientist Meeting Awards that will be presented during this annual meeting. He noted SOFT's continued commitment to education and training in forensic toxicology and thanked the Awards Committee and Student Education Committee for their efforts. President Isenschmid recognized the outstanding efforts of Marc LeBeau and this year's organizing committee for the organization of an outstanding annual meeting. Their efforts will be formally recognized at the closing ceremonies for this annual meeting. President Isenschmid also expressed his hope that the members had the opportunity to visit with the exhibitors during the meeting and thanked all vendors for their support of SOFT. He particularly thanked Lisa O'Dell for her special efforts on behalf of SOFT to coordinate exhibitor functions and financial sponsorship of SOFT activities, and indicated she would be presented with a special token of SOFT's appreciation during this meeting. President Isenschmid then gave his special thanks to Dr. Bruce Goldberger for his outstanding efforts in enhancing and maintaining the SOFT Website this year.

President Isenschmid then reflected upon the factors which influenced his own desire to enter the field of forensic toxicology and acknowledged several key mentors, including Drs. Jesse Bidanset and Yale Caplan for their inspiration in the early stages of his toxicology career. His training experiences in both forensic and clinical toxicology helped to broaden his understanding of both post-mortem toxicology and drugs abuse. He reflected on the evolution of strict quality assurance and quality control guidelines for drug testing laboratories which are now also influencing operations of post-mortem toxicology laboratories. Today, many of these laboratories are certified by ABFT, ASCLD-LAB or ISO-17025. New analytical and interpretive challenges face forensic toxicologists. He noted his concerns about the administrative and technical minutiae, such as which now detract from our fundamental role as interpretive scientists. President Isenschmid concluded his remarks by asking the members to personally reflect upon the basic question "Is this really where we want to go?"

Secretary's Report: Diana G. Wilkins, Ph.D.
Secretary Wilkins thanked the Society for the opportunity and privilege of serving as Secretary during this year. She reported on progress with respect to registration of the official SOFT logo for educational purposes with the U.S. Patent and Trademark Office. The law office of Pate, Pierce and Baird has been retained to assist in the application process; the application was filed in early August 2004. Initial feedback should be received from the U.S. Patent and Trademark Office in approximately 6 months. Secretary Wilkins noted that the attorneys have directed SOFT to use the "TM" symbol with the SOFT logo (lower, right-hand corner) whenever it is used for official SOFT activities. A (PDF) file is available for members from either the Secretary or WebMaster upon request.

Treasurer's Report: Timothy Rohrig, Ph.D., DABFT
Treasurer Rohrig reported that SOFT is in good financial condition with assets totaling over $380,000 inclusive of reserve account and the ERA fund. The $50,000 reserve fund cannot be used for general operating expenses; only for special unanticipated expenses. The principal balance of the ERA fund has been increased to provide stable funding for future educational awards. The bulk of funding for this increase to the ERA fund came from last year's annual meeting profits ($63,000) which were directed specifically for educational activities only. Therefore, SOFT has sufficient funds for general operational expenses. Treasurer Rohrig reported that the SOFT BOD is currently considering placing some funds in high-interest-bearing bonds. He also noted that the Board of Directors has established a new procedure whereby signatures of two Board Members will be required whenever funds in excess of $25,000 are to be expended for SOFT activities or operations. Treasurer Rohrig then indicated that the Audit Committee will assist in monitoring financial transactions which occur via the SOFT Website. Finally, the Board is also exploring the acquisition of bonding insurance for those Officers with signatory responsibility for additional protection of SOFT assets.

Vice President's and Committee Reports: Graham Jones, Ph.D., DABFT
Vice President Jones called on the committee chairs to give their reports:

A. Bylaws, Yale Caplan, Ph.D., DABFT
Dr. Caplan reported that there were two issues to be presented to the membership at this time. First, a proposed amendment to the SOFT By-Laws that the SOFT WebMaster...
be added to the Board of Directors as an ex-officio (non-voting) member. This requires a vote by the membership. The SOFT Board approved this change to facilitate communication between the Board and the WebMaster in the efficient performance of key SOFT web-based activities. An amendment is proposed to Chapter 2, Section 2 of the By-laws to reflect this addition to the Board. The issue will be brought for a vote under “New Business”.

Dr. Caplan then indicated that the By-Laws Committee will also undertake a systematic review of Policies and Procedures over the next year to evaluate whether new By-Laws changes may be required.

B. Budget, Finance, & Audit, Bob Turk, Ph.D., DABFT

Dr. Turk reported results of their review of the Treasurer’s records for 2003 and through early August 2004. The records were found to be clear, concise and in good order. All debits and credits were reviewed with a final balance of $330,378.99. Dr. Turk thanked the members of his committee for their efforts in reviewing these financial records.

C. Membership, Diana G. Wilkins, Ph.D.

Dr. Wilkins informed the membership that the Membership Committee has had an encouraging year with respect to growth in SOFT Membership. As of this date, SOFT Membership totaled 711, with 15 pending applications at this time. Membership is inclusive of 545 Full members (including 20 Charter), 120 Associate members, 31 Retired members (including 14 Charter), and 15 Student members. Application and promotion forms are available on the SOFT website.

Secretary Wilkins indicated that the Board discussed the application process at its most recent meeting and determined that some revision to the membership application process was appropriate. She reported that an application fee of $50 will be required at the time of application for SOFT membership. This fee will also serve as the first year’s SOFT dues payment. Secretary Wilkins reported that it is hoped that this process will increase the efficiency in evaluation of membership applications and receipt of the first year’s dues (required for membership activation). She also noted that completed application files are currently evaluated on a monthly basis by the Committee.

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

Dr. Monforte thanked the editorial board for their assistance over the past year. He reported that Drs. Andy Mason and Matthew Barnhill were added to the Editorial Board this year and recognized them for their outstanding contributions. A special appeal was made for continued submission of case notes and other papers; for publication in ToxTalk. Dr. Monforte also reported that pictures will continue to be published in ToxTalk; members are welcome to submit photographs from SOFT meetings. Vice President Jones thanked Dr. Monforte for his considerable efforts and dedication as ToxTalk editor over the past year.

E. Publications Committee, Peter Stout, Ph.D., DABFT

Special Issue Editor Peter Stout thanked the reviewers for their hard work in getting the issue ready despite the accelerated schedule for the early meeting this year. Each member received a copy of the Special JAT Issue with their registration materials for the Annual Meeting. JAT publisher Tinsley Preston then presented a plaque to Dr. Stout in recognition of his work.

F. Awards Committee, Philip Kemp Ph.D., DABFT (Education Research Award and Young Scientist Meeting Award)

Dr. Kemp reported that the Committee awarded 4 Educational Research Awards and 4 Young Scientist Meeting Awards. Recipients of the ERA included: Dawn Parker, Robin Choo, Danyel Tacker, and David Burrows. Recipients of the Young Scientist Meeting Awards included: Yan Chang, Michelle Sandberg, Kelly McGrath, and Shawn Vorce. Dr. Kemp recognized the awardees for their achievements and indicated that the formal presentation of awards will occur at the Thursday night banquet. Dr. Kemp also thanked Drs. Tom Kupiec and Vina Spiehler for their assistance in selecting awardees and meeting accelerated review timelines.

G. Meeting Resource Committee, Graham Jones, Ph.D.

2004 Washington DC Co-host Marc LeBeau

Marc LeBeau provided an update on the Registration for this annual meeting. A total of 558 members have registered, including 253 SOFT-only members; 184 TIAFT-only members, and 121 joint SOFT/TIAFT members. The total number of attendees, including exhibitors and accompanying person attendees, is 1,229. A few announcements were made with respect to the reception to be held at the Smithsonian Museum of Natural History, the Tour Mobile for sightseeing, and the President’s Banquet and Reception. President Isenschmid thanked Mr. LeBeau and his committee for their outstanding efforts as host of the 2004 annual meeting.

2005 Nashville, TN - Louis Kuykendall

Louis Kuykendall thanked the Board for the opportunity to host the 2005 Meeting and presented the progress of planning for the meeting. A video presentation about the Nashville venue was viewed by the membership. Mr. Kuykendall then discussed plans for a Monday-Friday meeting; workshops to be held Monday and Tuesday, and scientific program on Wednesday-Friday. He encouraged everyone to attend the 2005 meeting. Dr. Jones thanked the Nashville Organizing Committee for their planning efforts.

Future meeting sites and hosts are:

2006 Austin, TX - Rod McCutcheon
2007 Chapel Hill, NC - Ruth Winecker/Jeni Ropero Miller
2008 Phoenix, AZ - Vickie Watts
2009 Oklahoma City, OK - Philip Kemp

H. Laboratory Guidelines, Graham Jones, Ph.D.

Dr. Jones reported that the Guidelines Committee met in February and again just prior to the SOFT annual meeting. Some revisions have been proposed and these will post on the SOFT Website along with pertinent explanations. Proposed final changes will be voted upon by the SOFT Membership at the next annual meeting. Changes to the Guidelines must be agreed upon by both organizations to become effective.
I. Drugs and Driving Committee, Fiona Couper, Ph.D.

Dr. Couper reported that FACT Sheets have been published and are available on the NHTSA Website. The Committee is hoping to sponsor a workshop at next year’s Academy of Forensic Sciences 2005 annual meeting. Dennis Crouch and Laurel Farrell will co-chair the workshop which will focus on human factors in performance and transportation safety. It was also reported that a meeting was held in Seattle in May to discuss integrating practices and testimony of DRE, police and forensic toxicologists in DUI trials. This meeting was coordinated by Dr. Barry Logan and a summary of findings from this meeting should be published this year. Finally, the short course on Effects of Drugs on Driving (Borkenstein Center) will be held in September 2004. For more information, members may contact Dr. Barry Logan.

J. Policies and Procedures, William Anderson, Ph.D.

Dr. Anderson reported that the Policies and Procedures electronic database has been updated and the Policies and Procedure Manual reviewed. The committee has developed and adopted new operating procedures to enhance the efficiency of its internal operating procedures.

K. Website, Bruce Goldberger, Ph.D.

Dr. Goldberger thanked SOFT for the opportunity to assist in the development of the Website. He reported that the SOFT website continues to be very popular. For example, in July alone the site had bandwidth of 1.6 gigabytes, including 19,000 visits to the Website and over 300,000 downloads. A ToxTalk archive (past 2 years) is now available on the Website for download by SOFT members. One of the most requested pages includes the Employment Exchange. This year, the Website has facilitated on-line dues payments and on-line meeting registration. Future activities for the upcoming year include major modifications and improvements to the SOFT website. Vice-President Jones thanked Dr. Goldberger for his efforts in support of this important SOFT resource.

L. Continuing Education Committee, Rebecca Jufer, Ph.D.

Dr. Jufer reported that two Forensic Toxicology Review seminars are in preparation. The first will be a one-day seminar on stimulants to be hosted by Dr. Chris Chronister in Orlando, Florida. It is tentatively scheduled for January 7, 2005. The second will be a one- to two-day on Forensic Toxicology Review to be hosted by Dr. Anne Marie Gordon in Washington State. This seminar is tentatively scheduled for late May 2005. The committee has asked the SOFT Board to consider sponsorships for attendees at these seminars. Dr. Jufer also reported that the Committee would also like to sponsor an evening session at the annual meeting for local students and scientists. Finally, the committee would like to add an area to the Website for SOFT members to inquire about seminars and suggest possible topics for future seminars.

M. Drug Facilitated Sexual Assault Committee, Marc LeBeau, M.S.

Marc LeBeau reported that the committee met earlier in the day and has made considerable progress. Core committee members presented twelve DFSA training sessions to local communities this year.

Letters regarding availability of this training have been sent to various sexual assault agencies. The committee is currently updating training presentations for SOFT members into modules so that SOFT personnel can present appropriate training to toxicologists, clinical or law enforcement audiences. A draft survey was proposed to the committee to gain statistical data on what is being observed “in the field” with respect to DFSA. Once the survey has been approved by the committee, it will be distributed to the laboratories. Marc also reported that the committee is finalizing the update on proposed cutoffs for screening of DFSA cases.

N. Ethics Committee, Aaron Jacobs, Ph.D.

The mission of the committee is to develop, implement and maintain an ethics program that provides the SOFT membership with guidance, fairly assesses complaints and ensures documented, timely resolution of reported issues. Dr. Jacobs reported that the Ethics Committee Policies and Procedures have been finalized and approved by the SOFT Board. No other issues were presented to the Membership at this time.

O. Student Education, Joseph Monforte, PhD.

The Student Education Committee is an ad hoc committee that was appointed last year. Dr. Monforte reported that the committee has proposed a program to take place at the next annual meeting in Nashville. The program is intended to foster an interest in forensic toxicology among local high school students.

P. Nominating Committee, Amanda Jenkins, PhD.

The Nominating Committee consisted of Dr. Amara Jenkins (chair), Dr. Vickie Watts and Dr. Robert Osiewicz. Dr. Jenkins reported that the committee utilized the guidelines developed under the direction of the previous Nominating Committee, chaired by Laurel Farrell. These Guidelines were approved by the SOFT Board. The committee submitted the following slate of Nominees for 2004:

- Graham Jones, Ph.D., DABFT - President
- Tim Rohrig, Ph.D., DABFT - Vice-President
- Christine Moore, Ph.D., DABCC - Treasurer
- Barry Logan, Ph.D., DABFT - Director 3-year Term
- Philip Kemp, Ph.D., DABFT - Director 3-year Term

Dr. Jenkins notified the members that since Dr. Moore is currently a Director, the remainder of her term must be filled in the event that she is elected to the position of Treasurer. The Nominating Committee has recommended to the Board that Dr. Ashraf Mozayani be appointed to the Board to fulfill the remaining 1 year of the term.

Liaison Reports: President Isenschmid

AAFS, Adam Negrusz, Ph.D.: Dr. Negrusz reported that the program for the 2005 AAFS meeting has been finalized and described the special sessions (Oral Fluids and Pediatrics; Pharmacology) that will presented at that meeting. Annual Lectureship has also been finalized and will focus on bioterrorism.
TIAFT, Marilyn Huestis, Ph.D.: Dr. Huestis (TIAFT President) thanked SOFT for the wonderful joint meeting and their hospitality this week. She also encouraged SOFT members to attend the next TIAFT meeting to be held in South Korea in 2005. Dr. Huestis then introduced the meeting host and future meeting details.

Huestis reminded members that the TIAFT business meeting will be held immediately following the SOFT business meeting.

California Association of Toxicologists (CAT), Sarah Kerrigan, Ph.D.: Dr. Kerrigan announced that next CAT meeting will be held on September 24-25, 2004. It will be hosted by the Arizona Dept. of Public Safety. Members were encouraged to attend.

Midwest Association for Toxicology and Therapeutic Drug Monitoring (MATT), Laureen Marinetti, M.S.: No new announcements.

American Board of Forensic Toxicology (ABFT), Yale Caplan, Ph.D.: Dr. Caplan thanked SOFT for continuing to sponsor ABFT. Dr. Caplan announced the new continuing education requirements for maintaining ABFT certification and identified the newly qualified Diplomates. He reminded members that the ABFT breakfast is slated for tomorrow morning. Dr. Caplan then reported on accreditation program for laboratories. Fifteen laboratories are currently accredited. Necessary information can be found on the ABFT Website (www.abft.org).

Forensic Toxicology Certification Board (FTCB), John Cody, D.: Dr. Cody invited anyone interested in the certification by FTCB to contact him, Robert Sears, or Amanda Jenkins for further information.

Southwest Association of Toxicologists (SAT), Phil Kemp, Ph.D.: The next meeting of the Southwest Association of Toxicologists will be held on Nov. 4-6, 2004.

Unfinished Business. President Isenschmid
President Isenschmid asked if there was any unfinished business. There was no unfinished business.

New Business, President Isenschmid
Proposed Revision to the SOFT By-Laws
The first order of new business was to vote upon the proposed change to the By-Laws as described by Dr. Caplan. A motion was made and seconded to amend the By-Laws to include the SOFT Webmaster as a non-voting member of the SOFT Board. The motion was approved by 2/3 majority; By-Laws will be amended accordingly.

Awards and Recognition
President Isenschmid thanked the outgoing officers and directors of SOFT and presented each of the following individuals with a plaque – Board of Directors: Michael Baylor, Ph.D., Anthony Costantino, Ph.D., and Christine Moore, Ph.D.; Treasurer, Tim Rohrig, Ph.D.; and Vice President, Graham Jones, Ph.D.

Other Business
Dr. Isenschmid announced that he and Dr. Huestis would like to invite members to attend the hospitality suite this evening, following the Smithsonian reception.

Nominations and Elections
No nominations for SOFT officers or directors were received from the floor. Motions were made and seconded to accept the nominations for each position, as submitted by the Nominating Committee. All officers and directors were elected by acclamation. The newly elected 2004 SOFT officers and directors are as follows:

Graham Jones, Ph.D., DABFT - President
Tim Rohrig, Ph.D., DABFT - Vice-President
Christine Moore, Ph.D., DABCC - Treasurer
Barry Logan, Ph.D., DABFT - Director 3-year Term
Philip Kemp, Ph.D., DABFT - Director 3-year Term

Incoming President's Remarks
Newly elected President, Dr. Graham Jones, presented a few remarks and thanked President Isenschmid for his tremendous work as President over the past year. A commemorative plaque on behalf of the members, in recognition of Dr. Isenschmid's service to SOFT, will be presented at the Closing Ceremony. Dr. Jones then reflected upon the international membership of SOFT and the rapidly changing nature of the organization. He also invited members to contact him with any concerns or suggestions on improving the organization of SOFT. Finally, Dr. Jones announced that the guest editor for the next SOFT JAT Special Issue will be Dr. Jeri Ropero-Miller.

Adjournment
The meeting was adjourned at 6.10 p.m.

Respectfully submitted
Diana G. Wilkins, Ph.D.
SOFT Secretary, 2004-2005

Minutes subject to final adoption at the 2005 SOFT Annual Business Meeting
Jeri Ropero-Miller has been very busy! Not only is Dr. Miller the 2005 SOFT JAT Special Editor, she gave birth on April 2nd. Joseph Anthony Miller was born 2 weeks early – you know how editors hate to miss a deadline! Congratulations to the family.

Dr. Thomas Duer Donahue, the co-founder and laboratory director of Omega Laboratories recently died. Dr. Donohue had over 25 years experience in clinical and forensic toxicology, including 15 years performing hair and urine testing. He successfully developed clinical and forensic hair testing methods for two of the three leading hair-testing laboratories. His experience, technical expertise, sharp intellect and wry sense of humor will be missed by friends and colleagues alike.

CAREER OPPORTUNITIES go to www.soft-tox.org

COMING UP IN THE NEXT ISSUE OF ToxTalk

CASE NOTES: INHALANTS Part 2
A Case Of Drug-Facilitated Sexual Assault Leading To Death By Chloroform Poisoning (Yvan Gaillard et al)
An Unusual Case of Driving under the Influence of Carburetor Cleaner (Pearson and Steiner)
A Case of Driving Under the Influence of 1,1-difluoroethane (Flammia, et al)

NEW DRUGS: Ropivacaine or Naropin @ - Some Analytical Information (Anderson and Sandberg)

NOMINATING COMMITTEE SLATE

SOFTWARE ANNOUNCEMENTS

ABSTRACT DEADLINE EXTENDED TO JULY 1 – see www.soft-tox.org for details

PROFESSIONAL CALENDAR

PREPARATIONS FOR FUTURE SOFT MEETINGS UNDERWAY

2006:
Tuesday, October 3 thru Saturday, October 7, 2006
(Delayed one day due to Yom Kippur on Monday)
Hilton Austin, 500 East 4th Street, Austin, TX
512-482-8000
Host: Rod McCutcheon, Chief Toxicologist, Bexar County
Office of the Medical Examiner, San Antonio, TX
210-335-4040 rmccutcheon@co.bexar.tx.us

2007:
October 14-19, 2007
Research Triangle Park, North Carolina
Co-hosts: Jeri Ropero-Miller and Ruth Winecker

2008: Phoenix, AZ – Vickie Watts

2009: Oklahoma City, OK – Phil Kemp

August 21-26: 17th Meeting of the INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES, Hong Kong, China. Call for papers. Submission Form and Details at www.iafs2005.com. For further inquiries, please contact Conference Secretariat Tel: (852) 2559 9973, Fax: (852) 2547 9528, email: info@iafs2005.com

Fall 2005: SOUTHWESTERN ASSOCIATION OF TOXICOLOGISTS (SAT), San Antonio, TX; Spring 2006 – Houston, TX; Fall 2006 Austin, TX (with SOFT). www.sat-tox.org

Oct 17-21: SOUTHWESTERN ASSOCIATION OF FORENSIC SCIENTISTS (SWAFS), Wichita, KS. swafs2005@swafs.us

AAMRO CONFERENCE: MRO training and certification program. Contact cferrell@aamro.com

ToxTalk Volume 29 No. 2 20 2nd Quarter 2005
# 9th ANNUAL TOX 'N PURGE 5K MUSIC CITY FUN RUN/WALK

**WHEN:**
2005 S.O.F.T. Meeting
Wednesday, October 19, 2005
6:30 AM

**WHERE:**
Renaissance Nashville Hotel
Nashville, Tennessee

**Registration Includes:**
9th ANNUAL TOX 'N PURGE T-Shirt
Prizes for 1st place (men and women) and random drawings after run for other prizes

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### S.O.F.T. TOX 'N PURGE 5K FUN RUN/WALK

Wednesday, October 19, 2005 • 6:30 AM • Entry Fee: $5 • Make checks payable to Vickie Watts (TOX 'N PURGE FUN RUN/WALK) • Mail to: Vickie Watts, Forensic Toxicology Consultant, 14427 S 140th Place, Gilbert, AZ 85296

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**Liability waiver must be signed before mailing**

I know that running a road race is a potentially hazardous activity and that I should not enter and run unless I am medically able and properly trained. I agree to abide by any decision of a race official relative to my ability to safely complete the run. I assume all risks associated with running in this event including, but not limited to: falls, contact with other participants, the effects of the weather, including high heat and/or humidity, altitude, traffic and the conditions of the road, all such risks being known and appreciated by me. Having read this waiver and knowing these facts and in consideration of your accepting my entry, I for myself and anyone entitled to act on my behalf, waive and release the organizers of the S.O.F.T. TOX 'N PURGE 5K FUN RUN/WALK and all other sponsors, their representatives and successors from all claims or liabilities of any kind arising out of my participation in this event or carelessness on the part of the persons in this waiver. Further, I grant permission to all of the foregoing to use any photographs, motion pictures, recordings, or any other record of this event for legitimate purposes.

Signature (parent or guardian if under 18) __________________________ Date ___________