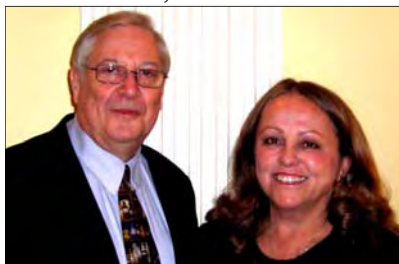




TOXTALK

ToxTalk Editors

Yale Caplan, Ph.D., DABFT
Vickie Watts, M.S.



Section Editors

Dan Anderson, M.S., FTS-ABFT
Matthew Barnhill, Ph.D., DABFT
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TOXTALK GOES ELECTRONIC

Effective with this issue, *ToxTalk* will be distributed to the membership by email and will shortly become available on the website. President Hepler explains the reasons for the change in this issue's President's Message. *ToxTalk* has been published quarterly without interruption for 33 years. Jesse Bidanset was the first editor (1977-1982) followed by Yale Caplan and Marina Stajic (1983-

1987). Yale Caplan and Joseph Monforte (1988-1990), Joseph Monforte (1991-2006), Yale Caplan and Vickie Watts (2007-2009) and continuing for the electronic version.

It is a sad passing, but SOFT members can look forward to a bright future with innovation. Members' comments are always welcome. See later pages for membership survey results about *ToxTalk*.

SOFT 2010 ANNUAL MEETING RICHMOND, VIRGINIA OCTOBER 18-22, 2010 40TH YEAR ANNIVERSARY SPECIAL EVENT!

This 2010 annual meeting will be a special event, as it is the celebration of SOFT's 40th year as an organization.

Visit Richmond, Virginia during the colorful fall, and explore the rich American history of the region. The SOFT meeting hosts, Michelle Peace and Lisa Moak have planned many festivities for attendees to enjoy.

Look up the website frequently (www.soft2010.org) for up-to-the-minute information on the meeting agenda, the workshops, the scientific program, registration, tours, and the best places to eat around town!

Since SOFT will be celebrating its history as an organization, come prepared with your sto-

ries and pictures! If you have something special to share with the group, please contact the hosts!

Several hotels have been contracted with easy access to restaurants, shopping and historical sites. A shuttle will run daily for quick and easy transportation to the conference center. Make plans now!





PRESIDENT'S MESSAGE

Submitted by Bradford Hepler, Ph.D., DABFT

Changing Times:

Progress is important, it can be exciting, it can be challenging and it usually is a reflection of the times. The 21st century is upon us and with it as you can see a change in format. The good news is that we are, after all, in the "electronic age", and with that, all the benefits that come with it are evident.

ToxTalk is as important to the future of our organization, as it has been in our past. It is a record of our history. The good news is that now because it is in an electronic format, it can be cataloged, accessed and put into a very useful searchable medium. This means that it will be much easier to access our past and find that small detail that you thought was out there in one of the past issues. Your Board of Directors in collaboration with the *ToxTalk* Editor and SOFT Webmaster has worked hard to determine the best way in which to work through the transition from print to digital medium. As you can see, access to what you are currently reading, however abrupt the change may seem, was straightforward and represents a new way of doing business. This process will continue to evolve as we determine the best manner in which to manage the past and present the future, we hope that you will enjoy this wonderful benefit.

Why the transition? If you did not read the material presented along with the recent survey relative to the importance of *ToxTalk* in SOFT's life, and how it is delivered as a benefit to the membership, then a short recap is in order. It is fairly clear that

difficult personal and professional budgetary issues remain a fact of life, as the fallout from the housing mortgage / banking crisis continues to drive the economy. Unfortunately in this regard SOFT, as an organization has not remained immune from these problems. Your SOFT Board of Directors (BOD) has the responsibility of fiscal oversight in keeping SOFT living within its means. To that end, the BOD has been hard at work on budget plans for 2010. The budget process is fairly simple; income comes from dues and projected meeting proceeds, while organization expenses come primarily from fixed costs that are relatively predictable.

With centralization, increased efforts to improve organizational accounting practices, monitoring and oversight audit requirements, efforts in providing more educational opportunities to our membership and the general community, as well as, concerns about having a voice in the ever increasing government involvement (wanted or unwanted) in the state of forensic sciences, fixed costs have predictably risen. This year's budget analysis indicated that at the rate of current expected income and expenses there would have been a budget shortfall. It would also appear that the current constraints and budget issues, whether we like it or not, will continue into the foreseeable future.

It seemed at the outset, the one best way to address this problem was to cut costs. Several remedies existed. One was to move *ToxTalk* into a more efficient and use-

ful electronic format. In this regard, the line item cost savings removed from the budget (seen in another section of this publication) are those external to the preproduction and postproduction costs of producing the print version of *ToxTalk*. Specifically, the savings come from the cost involved with printing the newsletter, and the cost of the stamp on the envelope. These costs once removed amounted to a 2/3 reduction in the originally projected shortfall. For purposes of the current year (2010) budget, other reductions in various fixed cost line items not having impact on the educational, and oversight mandates of the organization, will be made in the short term working to bring the budget back into balance.

What about the change to an electronic format, how does the membership feel about this idea? What did the web based survey on *ToxTalk* and the potential use of an electronic format demonstrate? The good news is that although 75-76% of the membership was satisfied with the consistency of the postal service delivery method, 83% indicated that they would be very willing to use an on-line PDF version of our newsletter delivered by an e-mail linked document process. Seventy one percent of our membership responders were satisfied with the importance of the content of the publication, 66% satisfied with the completeness of the content, 67% satisfied with relevance of the content to their profession, 71% with the timeliness of the information and ~70% with the layout/format in which its presented. Less than 50%

PRESIDENT'S MESSAGE (CONTINUED)

(47%) appreciated the usefulness of the publication in hardcopy format. Less than 4% favored any fee for delivery of hardcopy issues in any form or number. So it was pretty clear to the BOD that our membership would be willing and able to appreciate and use *ToxTalk* in a more readily accessible and searchable electronic format.

How about additional areas of budget cost cutting? What other areas of cost savings did the BOD consider? Following this year's midyear meeting at the AAFS event in Seattle, general attendance for the Toxicology Section was noted to be ~90 members. The fact of this trend was and has not been lost on your BOD; lower attendance (i.e. fewer SOFT member attendees) at this event over the past several years and especially this year (dipping below 100 people) makes it very difficult to justify spending SOFT organizational funds in support of "SOFT Night Out" at this meeting with less than 10% of SOFT membership in attendance.

Therefore, it was decided that this line item expense would be eliminated from future annual budgets.

So bottom line, is transitioning to an all-electronic *ToxTalk* version a good thing? *ToxTalk* is an important and longstanding means of communication to the membership of our organization. Its educational and informational utility to the membership is essential and that will not stop. Historically (the last century), due to lack of computer knowledge and availability, this may have been a harder change for the membership to endure, however, the continuing improvement, reliance and familiarity of modern society with electronic media and gadgets, has become quite evident and common over the last several years. The advantages, besides those of cost savings, to receiving a broadcast e-mail with linkage to the www.soft-tox.org website where the electronic version of the current version of *ToxTalk* has been made available for online reading or downloading for printing as needed

(minimizing printed copies being tree friendly), has given us the ability to provide the same product directly into membership hands with a much shorter postproduction turnaround-time.

It also gives the *ToxTalk* Editor the option of considering longer articles and/or varying the size and frequency of publications, where practical constraints historically have limited the number of pages, and the options available for format change in enhancing the presentation of certain types of material has been limited. With the electronic version, these restraints disappear. The advent of an electronic version provides the ability to set up on-line searchable archives and increasing access to historic material.

We hope you enjoy this new direction, and appreciate the potential it brings to a new and improved *ToxTalk*.

Bradford R. Hepler,
President, SOFT

MEMBERS CONTRIBUTE TO ERA/YSMA IN 2010 THANK YOU FOR YOUR GENEROSITY !

Anderson, William	Fochtman, Frederick	Mathews, Samuel	Simon, Robert
Andrenyak, David	Fretthold, David	Mayer, Joel	Slade, Michael
Appel, Timothy	Gordon, Ann Marie	McCutcheon, Rod	Slawson, Matt
Apple, Fred	Hepler, Bradford	McGee, Michael	Spiehler, Vina
Baird, Cheri	Howard, Larry	Mertens-Maxham, Diane	Spratt, Elizabeth
Bath, Raymond	Howe, Susan	Mitchell, John	Stout, Peter
Baylor, Michael	Hughes, John	Montgomery, Madeline	Sutheimer, Craig
Boehme, Dea	Kraner, James	Negrusz, Adam	Turk, Robert
Bush, Donna	Kupiec, Tom	Osiewicz, Robert	Van Berkom, Lowell
Childs, Paula	Lambing, Matthew	Pinder, Richard	Vondrak, Susan
Cone, Edward	LeBeau, Marc	Pizzo, Pat	Wang, Wen-Ling
Costantino, Anthony	Lemos, Nikolas	Rehberg, Michael	Watts, Vickie
Dal Cortivo, Leo	Levine, Barry (of MD)	Robb, Jeffery	White, Robert
Duer, Wayne	Marker, Elizabeth	Rollins, Doug	Winecker, Ruth
Eastly, Timothy	Martinez, Maria	Ross, Wayne	Winek, Charles
Farrell, Laurel	Mason, Andrew	Saferstein, Richard	Winek Jr., Charles

SOFT ANNUAL MEETING

WELCOME TO RICHMOND, VIRGINIA!

We believe this is the perfect city to host the 2010 meeting and celebrate our 40th Anniversary! What better place to contemplate our own past and plan for our future than in a city that has played a critical role in the transformational periods in the history of our nation?!

History is marked by its leaders – people who get indelibly attached to events or causes because of strength, conviction, vision, steadfastness, or a combination of all of these. Come to Richmond prepared to celebrate our history and tell the stories of those who have lead us here!

In order to help you easily visit the “Must Sees”, a tour bus will run on Monday and Tuesday! Otherwise, plan your visit on the weekends, because you don’t want to miss the festivities and celebration of science! The wide variety of workshops will include a historical review of medicine from the American Revolution to the Civil War.

Planes, Trains, & Automobiles

- ◆ Richmond’s airport code is RIC, and is located 15 minutes east of downtown. The airport in Norfolk, one hour east of Richmond, may be cheaper and a viable option if you plan on renting a car and/or visiting the Historic Federal Triangle on either weekend.
- ◆ Downtown Richmond is in the intersection of I-64 and I-95.
- ◆ Richmond is serviced by two Amtrak stations. The Main Street Station is downtown and a quick taxi from the hotels and convention centers.

OCTOBER 18-22

CELEBRATING 40 YEARS

www.SOFT2010.org

Home Away From Home

The conference will be held between the Richmond Marriott and the Greater Richmond Convention Center. For your convenience, we have contracted with 4 hotels in the Richmond Downtown District. We will run a shuttle to the 2 hotels furthest from the conference space so that you can get to the meeting quickly and easily. Those 2 hotels are most easily accessible to one of Richmond’s best night-life and restaurant districts. See the website for more information!

Greater Richmond Convention Center: 403 N. 3rd St.
 Richmond Marriott: 500 East Broad St., 800.228.9290
 Hilton Garden: 501 East Broad St., 804.344.4300
 Crowne Plaza: 555 East Canal St., 804.788.0900
 Omni Richmond: 100 South 12th St., 804.344.7000

What To Pack

Average temps in October are 65-70°F, with a fall crisp in the evenings. It’s typically sunny and we’re usually in the peak of fall colors. Our website has the 3-day forecast! I suggest “pack for layers!”

******* ABSTRACT DEADLINE: JULY 2 *******

HOSTS: Michelle Peace/ Lisa Moak (mrpeace@vcu.edu/ltarnai@aol.com)

TREASURER: Sue Brown (Dr.SueBrown@ameritox.com)

WORKSHOPS: Carl Wolf (Chair)/Dick Crooks/Sarah Kerrigan/Dan Anderson (cewolf@vcu.edu)

SCIENTIFIC PROGRAM: Julia Pearson/Justin Poklis (pearsonjm@hillsboroughcounty.org/jlpoklis@vcu.edu)

SSEP: Al Poklis (Chair)/Les Edinboro (apoklis@vcu.edu)

EXHIBITOR LIAISONS: Jeri Ropero-Miller/Peter Stout (jerimiller@rti.org/pstout@rti.org)





SOFT 2010 ANNUAL MEETING

RICHMOND, VIRGINIA

OCTOBER 18-22, 2010

HOSTS: MICHELLE PEACE & LISA MOAK

TREASURER: SUE BROWN

SITE: RICHMOND MARRIOTT & GREATER RICHMOND CONVENTION CENTER

* * ** *
CELEBRATING
40 YEARS
* * ** *

PRELIMINARY PROGRAM

Sunday, October 17, 2010

- Registration Opens (9a – 6p)
- FTCC (10a-12p)
- NLCP Inspector/Director Training (2p-6p)
- SSEP (8a-8p)
- Young Forensic Toxicologists Meeting (5p-9p)

Monday, October 18, 2010

- Continental Breakfast (7a-8:30a)
- Registration (7a – 6pm)
- SWG-Tox Cmte Meeting (8a-5p)
- FTCB Board Meeting (5p-6:30p)
- SOFT/AAFS Drugs & Driving Cmte (5p-7p)
- Workshops (8a – 5p)
- Tour buses (10a – 7p)
- Dinner on your own
- Evening Receptions Hosted by Tier I Sponsors

Tuesday, October 19, 2010

- Continental Breakfast (7a – 8:30a)
- Registration (7a – 6p)
- SOFT Board Meeting (7:30a-12:30p)
- SAT Meeting (5p-6p)
- ABFT Exam (8a-12p)
- ABFT Accreditation Cmte (9a-12p)
- ABFT Board Meeting (12p-6p)
- Workshops (8a – 5p)
- Tour buses (10a – 7p)
- Exhibits Open (5:30p – 7p)
- Sunshine Rieders Silent Auction Opens 5:30p
- Welcoming Reception with Exhibitors (5:30p - 7p)
- ABFT Certificate Reception (7p-8p)
- Elmer Gordon (8:30p-10:30p)

Wednesday, October 20, 2010

- Continental Breakfast (7a – 8:30a)
- Registration (8a – 6p)
- Bob Bost's Consultants' Breakfast (7a-8:30a)
- FTCB Examination (8a-12p)
- NSC Executive Board (10a-1p)
- Exhibits Open (8a – 3:30p)
- Silent Auction (8:00a – 3:30p)
- Opening Ceremony - Plenary Session (8a)
- Scientific Session (9a – 12p, 1:15pm – 3p)
- SWG-Tox Update (Afternoon Session)
- Lunch with Exhibitors (12:15p – 1:15p)
- SOFT Business Meeting (3:30p-5:30p)
- Exhibitor's Happy Hour (5:30p – 6:30p)
- Dinner with Exhibitors (6:30p – 8:00p)
- Medicine Show Festival (8:30p-10p)
- Night Owl (10p-12a)

Thursday, October 21, 2010

- SOFT Fun Run/Walk (6:30a – 8a)
- Continental Breakfast (7a – 8:30a)
- Registration (8a – 6p)
- Exhibits open (8a – 1p)
- AAFS Steering Cmte (7:30a-9a)
- Silent Auction Last Day (8a – 12:30p)
- Scientific Session (8a – 12:15p, 1:30p – 5p)
- Lunch with Exhibitors (12:15p – 1:15p)
- DFSA Cmte (4p-5:30p)
- Exhibitor Feedback Meeting (4p-5p)
- President's Cocktail Hour (6p-7p)
- President's Reception (7p-12a)

Friday, October 22, 2010

- Continental Breakfast (8a – 9a)
- Scientific Session (9a – 12p)



SOFT 2010 FEATURED WORKSHOPS

Workshop #	Title	Time / Length
1	Marijuana Pharmacology - Practical Applications for the Forensic Toxicologist	Full Day
	According to a 2007 roadside survey by NHTSA, 16.3% of randomly stopped drivers tested positive for drugs. Of that total, marijuana was generally the most common drug class across all the regions both in daytime (3.9%) and nighttime (6.1%) samples. The drug impaired driving case poses several challenges for law enforcement and toxicology communities. This SOFT/AAFS Drugs & Driving Committee sponsored workshop will look at marijuana, the most prevalent drug found in impaired driving cases. Providing the toxicologist with the mechanism of action of marijuana, the interpretive challenges in the chronic versus acute user, actual case histories and how to prepare not only themselves but attorneys for trial.	
2	The Tools for DIY Methods Validation!	Full Day
	In light of the National Academy of Science report on forensic science and the many laboratories striving for accreditation, the requirement for complete and thorough methods validation is becoming imminent. For this reason, this workshop is designed to provide attendees with an overview of the validation process. Experienced instructors will provide detailed lectures regarding the importance of validating a method and its relevance to the accreditation process. Further topics to be discussed include the parameters commonly associated with methods validation, current MSMS guidelines as related to forensic analysis, and level of uncertainty with regard to analytical measurements. After the fundamental concepts are presented, instructors will focus on the various validation steps required for analytical techniques, specifically immunoassay and LCMSMS. Attention will also be directed towards the validation of alternative matrices. To conclude, the future of Forensic Toxicology in terms of accreditation will be discussed with the hopes of generating questions and input from attendees.	
3	Use of Pharmacogenetics in Personalized Pain Management	1/2 Day
	Opioids and NSAIDs are the primary pharmacological tools for pain management. Opioids or NSAIDs (alone or in combination) are used to treat a wide spectrum of pain intensities. Clinically useful opioids are capable of producing a wide variety of desired effects, and severe side effects involving the respiratory system, gastrointestinal tract, cardiovascular system, and mental processes. This workshop will focus on the postoperative pain management using opioids, and the role of genetic variations in metabolism and clinical efficacy of opioids will be discussed. Emphasis will be on codeine and hydrocodone as two of the most popular analgesics used clinically.	
4	Tips, Tricks and Methods from Current Practitioners of LCMS in Toxicology	Full Day
	The last few years we have seen a large increase in the presentation of applications of Liquid Chromatography – Mass Spectrometry (LC/MS) to forensic toxicology. This workshop is intended to supply the participants with proven information and applications on LC/MS uses in the toxicology field by knowledgeable toxicologists. The participants will walk away with proven LC/MS techniques and applications that they can return to their laboratories and apply.	
5	A Stroll through the Cannabinoid Field: Pharmacology, Therapeutics and Untoward Effects	1/2 Day
	This workshop will focus on the pharmacology of Cannabis sativa, D ⁹ -tetrahydrocannabinol the primary psychoactive constituent of this plant, and other naturally occurring and synthetic cannabinoids. Basic scientists with expertise in cannabinoid pharmacology from the Department of Pharmacology and Toxicology at Virginia Commonwealth University will present an overview of the pharmacology of marijuana; medical marijuana versus various plant derived, endogenously produced, and synthetic cannabinoids; pre-clinical investigation of cannabinoids; and untoward effects of cannabinoids.	
6	Elemental Analysis and Interpretation of Findings	1/2 Day
	Elements are ubiquitous in the environment and some play critical roles in the maintenance of proper physiologic function. At times, element(s) is suspected in causing either an illness or a death. To best evaluate this type of circumstance from a toxicological perspective it is important to understand and consider the factors that are involved when processing and interpreting cases of this type. This workshop will provide an introduction to elemental analysis and review some commonly utilized analytical techniques. Best specimen collection and handling practices, signs and symptoms associated with exposure and/or poisoning will be discussed in conjunction with the interpretation of analytical findings. Postmortem cases and occupational and environmental exposures will be considered, the workshop will conclude by discussing some case examples.	

SOFT 2010 WORKSHOPS (CONTINUED)

Workshop #	Title	Time / Length
7	Drug Recognition Expert Program - Principles and Practice	1/2 Day
	The Drug Recognition Expert (DRE) program is coordinated by the International Association of Chiefs of Police with support from the National Highway Traffic Safety Administration and the U.S. Department of Transportation. The program was designed to train law enforcement officers with the knowledge and skills to determine if an individual is under the influence of drug(s), and identify the broad category(ies) of drugs inducing the observable signs and symptoms of impairment. The ability of a toxicologist to understand the components of a DRE examination and how to interpret the DRE matrix can assist in directing their analyses. In addition, these observations are often used to support the toxicology results in court.	
8	Getting the Most from ELISA: Tips and Tricks for the Professional Toxicologist	1/2 Day
	ELISA testing for drugs in various biological matrices is carried out by the majority of forensic laboratories. While the principles of ELISA are well known by professional laboratory personnel, the utility of cross reactivity, understanding discriminatory points, and the manipulation of sensitivity to create robust assays are areas which have not been well targeted. The workshop will provide the attendee with tips and tricks for the laboratory which will improve routine assays and allow personnel to troubleshoot batch failures by systematically evaluating potential problems.	
9	The Historical Practice of Medicine in Virginia	1/2 Day
	With the rich early American history that Richmond Virginia has to offer it was only appropriate that SOFT 2010 will host a historical workshop. This workshop will be based on the medicinal, medical and surgical procedures of the Colonial period through the Civil War. Resources from Williamsburg and Jamestown to the Battlefield Parks of Richmond will be represented in this half day workshop	
10	Piperazines, Designer Amphetamines and Tryptamines	1/2 Day
	Piperazines, new designer amphetamines and tryptamines are of growing concern among forensic toxicology laboratories in the United States. This workshop will highlight the prevalence and scheduling of these substances by the Drug Enforcement Administration, and attempt to highlight the drugs of greatest concern. The workshop will provide an overview of the toxicology of these emerging drugs and discuss analytical approaches for detection in toxicological samples.	
11	DFSA Applications and Interpretations	1/2 Day
	This case-oriented workshop will focus on how toxicologists apply pharmacological and toxicological principles in drug facilitated sexual assault cases. Challenges and solutions in DFSA-related casework will be presented. Pre-registered attendees will receive a complementary copy of the January 2010 Issue of Forensic Science Review on Drug-Facilitated Sexual Assault.	
12	"To Err is Human... to Identify it is Divine"	1/2 Day
	The dichotomy of the forensic industry goes something like this... there is no room for error, yet human error is inevitable. The way to balance this reality is to have a strong quality assurance program. Laboratory must first set a strong foundation through comprehensive training programs and well written SOPs. then implement monitoring processes, ranging from daily QC tracking to annual self assessments, to identify and prevent problems. When problems are discovered, the laboratory must be prepared to handle them quickly and effectively. This workshop will assist laboratories in developing and strengthening their QA program using a variety of tools from ISO guides, accreditation programs, and forensic labs with successful quality assurance programs. This will better prepare laboratories for accreditation and also maintain accreditation, and provide customers with the utmost confidence in their product.	

MEET THE NEW YFT COMMITTEE

Submitted by Teresa Gray, YFT Committee Chair

The Young Forensic Toxicologist (YFT) Committee will host exciting, new activities during the 2010 SOFT annual meeting in Richmond, VA. The first annual Young Forensic Toxicologist Forum will be held on Sunday, October 17 from 5-9 pm. The forum, targeted to those aged 40 and younger, will include a guest lecturer and an open discussion on our role in the future of forensic toxicology. Please join us for an evening filled with fun, friends, and forensic toxicology. More details and a registration link will be available on the SOFT 2010 meeting webpage.

The YFT Committee will also sponsor an award for the best poster presentation given by a young forensic toxicologist. Start putting together your best data and submit an abstract for the meeting! For details on submitting an abstract, award eligibility and judging criteria, check out the SOFT 2010 meeting webpage.

The inaugural YFT Committee consists of six:

Teresa Gray, M.S. (Chair)



Doctoral Candidate,
National Institute on
Drug Abuse,
Baltimore, MD

David Schwope, M.S.



Predoctoral Fellow,
National Institute on
Drug Abuse,
Baltimore, MD

Tim Grambow, B.S., D-FTCB



Senior Criminalist/
Toxicologist, South
Carolina Law En-
forcement Division,
Columbia, SC

Jayne Thatcher, B.S.



Doctoral Candidate,
Pharmaceutics Dept,
Univ. of Washington,
Seattle, WA

Erin Karschner, B.A.



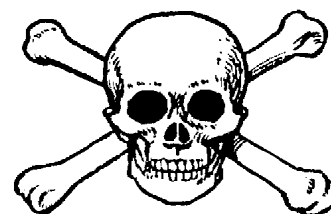
Doctoral Candidate,
National Institute on
Drug Abuse,
Baltimore, MD;
Recipient of the
2010 June K. Jones
Award

Your suggestions or questions are welcome! Anyone interested in participating in SOFT YFT activities can reach us at softyft@gmail.com or by visiting our Facebook page (search: SOFT YFT). We look forward to seeing everyone in Richmond!

Michele (Shelly) Merves, Ph.D.



Assistant Labora-
tory Director-
Toxicology,
Pinellas County
Forensic Labora-
tory, Largo, FL



SPECIAL ISSUE OF JAT

"TESTING AND INTERPRETATION IN SPORTS"

SPECIAL ISSUE EDITORS: DENNIS CROUCH AND YALE H. CAPLAN

The dynamic and expanding nature of drug use in competitive and non-competitive sports warrants a review of target drugs, including steroids, and the ever-changing analytical methods evolving to accommodate use patterns. Focus is also on interpreting and understanding the complex metabolism of these

agents and their role in defining drug use and the mechanisms for abuse.

Manuscripts to be considered for publication in this issue should be submitted online via <http://mc.manuscriptcentral.com/jat>

Please be sure to select "special issue" on the dropdown menu and indicate that your submission is for the Sports Special Issue in your cover letter.

The deadline for submission: July 1, 2010

TREASURER'S REPORT

Submitted by Marc LeBeau, Ph.D. (marclebeau@verizon.net)

In the last issue of ToxTalk, you were informed of the many changes that have taken place in securing our financial records and more efficiently tracking our income and expenses. The results of our independent, certified audit of the 2008 financial statements were provided and all of the recommendations from the audit have now been fully implemented. As such, I am happy to provide a detailed record of the end-of-year balances of all SOFT accounts in Table 1.

The SOFT Board of Directors is also determined to ensure that the membership has easier access to the financial information of the organization. Enclosed with this issue of ToxTalk are copies of the *2009 Budgeted vs Actual Spending* report, as well as the *2010 SOFT Budget*. Please review these documents and let me know if you have any questions or concerns about how the SOFT Board has planned to spend the organization's money in the coming year.

Finally, I would like to point out that while SOFT is financially secure at this time, we continue to encounter increasing expenses that we did not face just a few years ago. For example, we are now a member organization of the Consortium of Forensic Science Organizations (CFSO) which costs the organization \$10,000 each year. At the recommendation of the certified auditors, we have significantly increased the liability insurance for our SOFT Officers. We have seen increased costs in the leasing of the SOFT office, securing space for the mid-year BOD meeting at the American Academy of Forensic Sciences, and services provided for various organizational activities. Despite a recent dues increase, our income has barely been able to cover these added expenses. In 2009, we were able to avoid operating in the red only because of the success of the annual meeting in Oklahoma City which was able to net over twice the budgeted pro-

ceeds. With this in mind, the SOFT Board has taken a thorough look at where we can cut our expenses to try to avoid another dues increase. The most obvious solution was to convert ToxTalk to an electronic-only publication, thus saving the organization over \$18,000 compared to last year. The Board has also decided that the annual SOFT Night Out during the American Academy of Forensic Sciences is an expense that benefits too few of SOFT members, so this event will likely be discontinued or significantly modified starting in 2011. As you review the *2010 SOFT Budget*, you'll notice that we have cut our planned expenses for the year by over \$25,000 compared to 2009. We will continue to look at ways to best control our spending as we move forward in the coming years. As always, if you have any questions about the finances of SOFT, please do not hesitate to contact me at marclebeau@verizon.net.

Table 1: Comparison of End-of-Year Account Balances for 2008 and 2009

Account Name:	Balances		
	12/31/2008	12/31/2009	Net Increase/(Decrease)
Operational Account	\$56,493.81	\$120,502.37	\$64,008.56
Reserve Account	\$100,845.01	\$100,197.94	(\$647.07)
ERA Account	\$180,913.40	\$187,229.33	\$6,315.93
Online Dues Account	\$865.00	\$500.00	(\$365.00)
Annual Meeting - Checking	\$14,546.06	\$5,000.00	(\$9,546.06)
Annual Meeting - Merchant	\$43,394.27	\$425.00	(\$42,969.27)
TOTALS:	\$397,057.55	\$413,854.64	\$16,797.09

S.O.F.T. 2010 BUDGET

*Submitted by
Marc LeBeau, Ph.D.*

INCOME	2009 ACTUAL	2010 PLANNED
SOFT Application Fees	1,530	1,500
SOFT Membership Dues	51,598	56,000
Late Fees (Dues)	360	400
ERA Donations	981	1,000
Annual Meeting Net Income	85,366	35,000
Mugs/Shirts/Memorabilia Sales	1,681	1,700
Postage Revenue	13	25
Reimbursed CE Seed Money	4,350	4,400
ToxTalk Subscription	60	60
Silent Auction Proceeds	4,415	4,200
Interest Earned - ERA Account	1,822	1,800
Interest Earned - Reserve Account	996	1,000
TOTALS	153,173	107,085
EXPENSES	2009 ACTUAL	2010 PLANNED
AAFS Midyear BOD Meeting Expenses	880	1,500
AAFS SOFT Night Out	7,200	6,000
Bank and Credit Card Service Fees	3,302	3,385
<i>AMEX Account Maintenance Fees</i>	60	60
<i>BankCard Account Maint. Fees</i>	2,827	2,850
<i>Discover Account Maint. Fees</i>	0	25
<i>Bank Service Charges</i>	415	450
Appreciation Gifts	1,096	1,000
CFSO Membership	6,000	10,000
Contract Labor	0	200
ERA/YSMA Awards	18,000	8,000
Internet Account Maintenance	495	500
Insurance	651	2,100
JAT Meeting Issue Expenses	8,060	8,000
Lease: SOFT Office Space	5,833	6,070
Future Meeting Expenses	10,973	2,500
<i>2011 Annual Meeting</i>		2,000
<i>2012 Annual Meeting</i>		500
Merchant Services	50	50
SOFT Office Equipment	214	200
SOFT Office/General Admin Expenses	730	700
SOFT Office Supplies	4,638	4,500
Payroll Expenses	30,225	30,000
Postage/Shipping Expenses	1,147	800
Professional Fees: Accounting	7,448	2,500
QuickBooks Online	459	650
SOFT Logo'd Item Expenses	2,058	1,200
SOFT Officer/Committee Expenses	5,348	3,000
SOFT CE Seed Money	2,792	3,000
Young Toxicologists Committee/SSEP	4,626	4,500
Software/Website Programing	0	5,000
State of Delaware: Incorporation Expenses	127	130
Survey Monkey	200	200
Telephone	806	900
ToxTalk	18,863	0
Website Hosting Expenses	495	500
TOTALS	142,715	107,085
NET INCOME	10,458	0

INCOME	2009 PROPOSED	2009 ACTUAL	DIFFERENCE
AMEX Account	\$1,000.00	\$0.00	(\$1,000.00)
BankCard Account	\$13,000.00	\$0.00	(\$13,000.00)
Discover Card Account	\$1,000.00	\$0.00	(\$1,000.00)
SOFT Application Fees	\$3,000.00	\$1,530.00	(\$1,470.00)
SOFT Dues & Subscriptions	\$50,000.00	\$51,598.47	\$1,598.47
Late Fees (Dues)	\$500.00	\$360.00	(\$140.00)
ERA Donations	\$1,000.00	\$981.00	(\$19.00)
Meeting Proceeds	\$50,000.00	85,366.14	\$35,366.14
2008 Annual Meeting:		\$7,496.97	
2009 Annual Meeting:		\$77,869.17	
Mailing Labels Provided	\$500.00	\$0.00	(\$500.00)
Mugs/Shirts/Memorabilia Sales	\$1,000.00	\$1,681.00	\$681.00
Postage Revenue	\$100.00	\$13.00	(\$87.00)
Reimbursed CE Seed Money	\$5,000.00	\$4,350.00	(\$650.00)
ToxTalk Subscription	\$100.00	\$60.00	(\$40.00)
Silent Auction Proceeds	\$1,500.00	\$4,415.27	\$2,915.27
Interest Earned ERA Fund	\$3,500.00	\$1,821.99	(\$1,678.01)
Interest Earned Reserve Fund	\$2,000.00	\$995.87	(\$1,004.13)
TOTALS	\$133,200.00	\$153,172.74	\$19,972.74
EXPENSES	2009 PROPOSED	2009 ACTUAL	DIFFERENCE
AAFS Midyear BOD Meeting Expenses	1,200.00	879.71	(\$320.29)
AAFS SOFT Night Out	7,000.00	7,200.00	\$200.00
AMEX Account Maintenance Fees	100.00	59.85	(\$40.15)
BankCard Account Maintenance Fees	300.00	2,827.11	\$2,527.11
Discover Card Account Maintenance Fee	100.00	0.00	(\$100.00)
Bank Service Charges	100.00	414.63	\$314.63
Contract Labor	500.00	0.00	(\$500.00)
ERA/YSMA Awards	10,000.00	18,000.00	\$8,000.00
Internet Account Maintenance	500.00	494.89	(\$5.11)
Insurance	750.00	651.03	(\$98.97)
JAT Meeting Issue Expenses	10,000.00	8,060.00	(\$1,940.00)
Lease: SOFT Office Space	5,600.00	5,833.20	\$233.20
Meeting Expenses	15,000.00	10,973.12	(\$4,026.88)
2008 Annual Meeting:		7,087.03	
2010 Annual Meeting:		3,886.09	
Office Supplies	4,500.00	4,638.06	\$138.06
Payroll Expenses	25,000.00	30,225.01	\$5,225.01
Postage/Shipping Expenses	200.00	1,147.17	\$947.17
Professional Fees: Accounting	8,000.00	7,447.87	(\$552.13)
SOFT Logo'd Item Expenses	1,000.00	2,057.60	\$1,057.60
SOFT Officer/Committee Expenses	5,000.00	5,347.81	\$347.81
SOFT CE Seed Money	5,000.00	2,792.10	(\$2,207.90)
SOFT Student Education (SSEP)	5,000.00	4,626.23	(\$373.77)
Software Programing	2,500.00	0.00	(\$2,500.00)
State of Delaware: Incorporation Exp.	100.00	126.50	\$26.50
Telephone	750.00	806.10	\$56.10
ToxTalk	20,000.00	18,863.02	(\$1,136.98)
Website Expenses	5,000.00	494.99	(\$4,505.01)
Unbudgeted Expenses:		8,763.33	\$8,763.33
Appreciation Gifts:		1096.43	
CFSO Membership:		6,000.00	
Office Equipment:		213.96	
Office/General Admin Expenses:		729.33	
QuickBooks Online:		459.16	
Merchant Services:		49.75	
Office Photocopying Expenses:		14.70	
Survey Monkey:		200.00	
TOTALS	133,200.00	142,729.33	\$9,529.33
NET INCOME	0.00	10,443.41	\$10,443.41

S.O.F.T. 2009 BUDGET Vs. ACTUAL

*Submitted by
Marc LeBeau, Ph.D.*

2009 ANNUAL BUSINESS MEETING MINUTES OF THE SOCIETY OF FORENSIC TOXICOLOGISTS, INC.

Submitted by Sarah Kerrigan, Ph.D., SOFT 2008-2009 Secretary

The annual Business Meeting of the Society of Forensic Toxicologists, Inc. was held on October 22, 2009 at the Renaissance / Cox Convention Center in Oklahoma City. The following meeting minutes are published for member review.

Call to Order

The SOFT Business Meeting was called to order at 3:35 PM by President Tony Costantino. Secretary Sarah Kerrigan verified that a quorum was present.

Approval of Agenda

President Costantino asked if any corrections were needed to the meeting's agenda. With no corrections proposed, the agenda was approved.

Approval of the October 2008 Annual Business Meeting Minutes

President Costantino asked for any corrections to the 2008 Annual Business Meeting Minutes. With no corrections suggested, the minutes were approved.

President's Report

President Costantino acknowledged that it had been an intense and challenging year for forensic science as a whole. He thanked the Board and Executive Board for their assistance and the membership for allowing him to serve as President. President Costantino commented on the many issues facing our science as a result of the NAS Report in February of 2009 such as the need for certification and accreditation. He commented that we lack a voice at the legislative level, and for that reason, both SOFT and ABFT joined the Consortium of Forensic Science Organizations (CFSO). Peter Stout (SOFT) and Yale Caplan (ABFT) were appointed to serve as CFSO representatives, working with senate judicial committees on Capitol Hill and reporting back to the executive boards of both organizations. In an effort to better communicate the combined efforts of both organizations, the

Forensic Toxicology Council (FTC) was developed. The FTC serves as a way to rapidly communicate issues to SOFT, ABFT and the Toxicology Section of the AAFS to promote the development of quality forensic science throughout the nation. President Costantino discussed the need to develop a Scientific Working Group (SWG) for Toxicology (SWGTOX) and participate in Interagency Working Groups (IWGs). He urged the membership that now was the time for effective leadership and participation. President Costantino also commented on other notable events this year such as Melendez-Diaz and high profile celebrity deaths. He reported on the success of the independent audit, the approval of a Young Forensic Toxicologists Committee to be chaired by Teresa Gray. President Costantino reminded the members of Jim Garriott's passing in September, and Vince Papa provided a brief overview of Garriott's extraordinary accomplishments and contributions to our field. President Costantino then recognized the Oklahoma meeting hosts Phil Kemp and Dennis McKinney, together with Jeri Roper-Miller and Pete Stout for their assistance with exhibitors.

Secretary's Report

Secretary Kerrigan commented on the overall health of the organization, whose membership now stands at 974. So far in 2009 a total of 57 new applications were received and 55 were approved. There are now a total of 677 Full, 210 Associate, 31 Student, 28 Retired, 14 Charter and 14 Charter Retired members. Secretary Kerrigan thanked the members of the Membership Committee (Jeri Roper-Miller, Rebecca Jufer and Bob Osiewicz).

Treasurer's Report

Treasurer LeBeau reported that the organization's funds total \$387K. Income in 2009 was 133K, with an anticipated

\$113K in expenses. He reported on a number of unanticipated expenses this year, including \$10K to join the Consortium of Forensic Science Organizations (CFSO) and a penalty that was paid for not meeting a contractual obligation due to last minute room cancellations and early departures at the 2008 annual meeting. Treasurer LeBeau reported that all record keeping was now in QuickBooks Online, with measured benefits to both the SOFT Office and the Board of Directors. In accordance with recommendations of the Strategic Planning Committee, the SOFT Office had been updated to include a new scanner and PC, nightly backups and remote access. A certified audit of 2008 records and finances by Osborne, Parsons and Rosacker, LLP had determined that financial practices of SOFT were sound and supported by adequate documentation. Recommendations of the auditor to increase liability insurance and provide the Treasurer with oversight of all activity (including web and meeting accounts) via QuickBooks were being implemented.

Vice-President's Report

Vice-President Hepler called for committee reports as follows:

A. Bylaws

Yale Caplan was absent. Brad Hepler reported that there was no current activity for this committee.

B. Budget, Finance, and Audit

Bob Turk reported that the committee completed its review of the 2008 SOFT Budget and Financial Reports and that all was in order. He thanked the Board for proceeding with the certified audit.

C. Membership

Sarah Kerrigan reported that the Membership Committee had updated the Membership Information section of the application form.

ANNUAL BUSINESS MEETING MINUTES (CONTINUED)

D. ToxTalk

Yale Caplan was absent and Brad Hepler read the report into the record. The contributions of Dan Anderson, Matt Barnhill, Dwain Fuller, Bob Zettl and Bonnie Fulmer were acknowledged.

E. Publication

Brad Hepler read the report into the record in the absence of the JAT Special Issue Editor, Jennifer Limoges, who had left the meeting early due to ill health. A total of 30 manuscripts were submitted and 27 were accepted (20 full manuscripts, 2 technical notes and 5 case reports). There were a total of 13 eligible manuscripts for the EDIT award. Amanda Jenkins, Ed Cone and Hans Maurer agreed to serve as judges.

F. Education Research Award

Phil Kemp reported that this was a good year for the committee with a total of 9 awards (6 ERA and 3 YSMA).

G. Meeting Resource Committee

2010 – Richmond (Michelle Peace) Michelle Peace promoted the SOFT 40th Anniversary Meeting in Richmond, VA (October 18-22, 2010) and gave a comprehensive presentation on the meeting and location highlights.

2011 – San Francisco (Nik Lemos) Nik Lemos reported on the joint SOFT/TIAFT meeting to be held in San Francisco, CA. The meeting will be held earlier than usual (August 26 - Sept 2, 2011) at the San Francisco Marriott Hotel at Union Square. Nik Lemos thanked the members of the organizing committee and encouraged members to attend.

2012 – Boston (Michael Wagner) Michael Wagner was absent and the report was read into the record by Brad Hepler. The theme for the meeting was being evaluated and formal committee members are being identified. Brad Hepler encouraged members to volunteer their time and talent to assist the meeting hosts.

2013 – Orlando (Bruce Goldberger)

In the absence of Bruce Goldberger, Brad Hepler reported that the 2013 meeting was scheduled for the Buena Vista Palace Hotel and Spa in the Walt Disney Resort (Oct 26-Nov 3, 2013).

H. Forensic Tox. Lab Guidelines

Lee Hearn reported no new activity other than pending business to incorporate the MS-MS guidelines (under development) into the Lab Guidelines once they have been finalized.

I. Drugs and Driving

Brad Hepler read the report into the record in the absence of Chair, Jennifer Limoges. The committee was hosting a drugs and driving special session Friday morning (coordinated by Amy Co-chems). Development of the DUID website was still underway.

J. Policy and Procedures

Bill Anderson reported that the Policy and Procedure Manual was in the process of being updated and would be available for review by the interim Board of Directors meeting in February 2010.

K. Web Site

In the absence of Bruce Goldberger Brad Hepler reported that the implementation of the new website had been delayed to allow it to work with a new content management system.

L. Continuing Education

Ann Marie Gordon reported on the success of the recent DUID workshop in Houston, TX. Two more workshops are proposed: "Pharmacobasics" in New York and a regional DFSA workshop is also in the planning stages.

M. Drug-Facilitated Sexual Assault

Marc LeBeau reported that the fact sheet had been finalized and was now available online via the SOFT website. The committee is working on a regional DFSA workshop in collaboration with the CE Committee, developing standardized procedures for labs that will serve as an analytical resource, and preparing manuscripts for an upcoming issue of Forensic Science Review (Jan. 2010).

N. Ethics

Aaron Jacobs reported no ethics violation investigations by the committee. The committee added two new members and has drafted two potential documents to be considered as SOFTs Code of Ethics.

O. Nominating

Christine Moore presented the slate of candidates as published in ToxTalk:

Brad Hepler, Ph.D, DABFT
President - (one year term)
Sarah Kerrigan, Ph.D.,
Vice President (one year term)
Dan Anderson, M.S., FTS-ABFT
Secretary - (two year term)
Jeri Roper Miller, Ph.D., DABFT
Director (three year term)

P. MS/MS Guidelines

Denny Crouch reported on the progress of the MS-MS guidelines. The committee has addressed chromatographic, spectroscopic and validation parameters including retention time criteria, product ion ratio acceptance, numbers of product ions and acceptance criteria. These guidelines exist in draft form at present.

Q. Strategic Planning

Marc LeBeau reported that the recommendations of the certified auditor had been implemented (see Treasurer's report).

R. CFSO Update

Peter Stout outlined the activities of the White House National Science and Technology Council (NSTC) Committee on Science, Subcommittee on Forensic Science. An overview from the co-chairs of the subcommittee was presented at the Oklahoma meeting. An overview of current legislative activities was provided with respect to the Senate Judiciary Committee. Members were encouraged to participate and engage in this process.

S. Liaison Reports

Tim Rohrig reported on a change in leadership at NAME, with additional details to be reported in February.

ANNUAL BUSINESS MEETING MINUTES (CONTINUED)

Announcements

President Costantino asked for announcements to be provided and the following were given:

AAFS

Marilyn Huestis encouraged as many members as possible attend the upcoming 2010 AAFS Annual Meeting in Seattle, WA due to current activity and interest in forensic science at the moment.

TIAFT

Dan Isenschmid promoted the 2010 TIAFT Annual Meeting hosted by Hans Maurer in Bonn, Germany.

Midwest Association of Toxicology and Therapeutic Drug Monitoring

Laureen Marinetti reported that the MATT Annual Meeting will be April 29 - 30 in Milwaukee, WI and feature tours of the Miller Brewery.

CAT

John Hughes announced that the next CAT meeting would be hosted by Bill Anderson, Nov 6-7th in Reno, NV. The spring meeting would be in Sacramento, CA and feature an impairment workshop.

International Association of Therapeutic Drug Monitoring and Clinical Toxicology

Loralie Langman reported that the recent 2009 IATDMCT Meeting in Montreal, Canada was hugely successful. Meetings take place every two years and the next meeting is scheduled for Stuttgart, Germany.

ABFT

Dan Isenschmid announced that there were two new Diplomates and two new specialists. He also reported that AIT Labs and the Franklin County Coroner's Toxicology Laboratory had recently received ABFT accreditation.

FTCB

Amanda Jenkins reported there were a total of 29 Diplomates to date. She also reported on an upcoming meeting in San Antonio, TX to be hosted by

FTCB and the addition of a new chair, Mark Fondren.

Unfinished Business.

President Costantino asked for any unfinished business or announcements.

There were none.

New Business:

Awards

Phil Kemp announced and acknowledged the 2009 Educational Research Award recipients:

Xiaoyun Liu
Jillian Yeakel
Jayne Thatcher
Teresa Gray
Huda Hassan
Erin Karschner

and the 2009 Young Scientist Meeting Awardees:

Oscar Pleitez
Mary Jeanette Aiken
Nichole Bynum

Recognition of Meeting Hosts and Volunteers

President Costantino recognized meeting hosts Phil Kemp, Dennis McKinney and their team of dedicated coordinators, chairs and volunteers (John Soper, Jesse Kemp, Jeri Roper-Miller, David von Minden, Thomas Kupiec, Peter Stout, Jared Cooper, Laurel Farrell, Frank Wallace, Deborah Denson, Laurie Tobler, Don Frederick, Linda Harty and Robert Bost)

EDIT Award

President Costantino announced the EDIT award recipient for 2009 was Abe Tsadik. Marilyn Huestis received the award on his behalf and gave an emotional tribute, highlighting his many professional and personal accomplishments.

Recognition of Outgoing Officers

President Costantino recognized outgoing Vice President (Brad Hepler), Secretary (Sarah Kerrigan) and Director (Dan Anderson). Brad Hepler recognized Tony Costantino for his contribution as 2009 SOFT President.

Elections

The following members were elected as indicated:

Brad Hepler, Ph.D, DABFT
President - (one year term)
Sarah Kerrigan, Ph.D.
Vice President (one year term)
Dan Anderson, M.S., FTS-ABFT
Secretary - (two year term)
Jeri Roper Miller, Ph.D., DABFT
Director (three year term)

Incoming President's Remarks

Brad Hepler thanked the membership for the opportunity to serve in such interesting times. He reminded the membership that when the Lieutenant Governor opened the meeting he talked about standards and practice: Details matter and have consequences. He urged the membership to remain engaged in the activities of the executive and legislative branches of government. He encouraged the members to be vocal about our work and why it is so important. He commented that SWGTOX was an important investment in our future and that continued advancement within the field was imperative to our success. Finally, he encouraged the membership to support the newly created Young Forensic Toxicologists Forum. Incoming President Hepler then announced the 2010 JAT Special Issue Editor, Laureen Marinetti.

Additional Announcements:

Michael Shaffer requested that the Board review the \$200 late meeting registration fee.

Nik Lemos announced that the National Association of Medical Examiners (NAME) had introduced a new membership category specifically for toxicologists.

Adjournment

President Costantino adjourned the 2009 SOFT Annual Business Meeting at 5:15 PM.

Respectfully Submitted,
Sarah Kerrigan, Ph.D.
SOFT 2008-2009 Secretary

GUIDING PRINCIPLES OF PROFESSIONAL RESPONSIBILITY FOR SOFT MEMBERS AND/OR AFFILIATES¹ (SOFT “CODE OF CONDUCT”)

Introduction:

In 2009, the Society of Forensic Toxicologists Ethics Committee was asked to draft a SOFT “Code of Conduct” by then President, Tony Costantino. The Committee presented two proposals to the SOFT Board of Directors in October 2009. In February 2010 the SOFT BOD selected the “Guiding Principles of Professional Responsibility for SOFT Members and/or Affiliates”, which appears below. The Guiding Principles, which would serve as the SOFT Code of Conduct, is being circulated for public comment among the membership. Please review this important document and send your comments directly to the SOFT Office at office@soft-tox.org.

Preamble

These Guiding Principles are written specifically for forensic scientists and laboratory management. The concepts presented here have been drawn from other professional codes and suggestions made by leaders in the forensic community¹. The Guiding Principles have been vetted and adopted by the Society of Forensic Toxicologists (SOFT) Board of Directors with the hope that forensic toxicologists and forensic toxicology laboratory management will use them in training sessions, performance evaluations, disciplinary decisions, and as guides in other management decisions. It is also important that all laboratory personnel, including forensic toxicologists and other laboratory employees who assist forensic toxicologists in their work, are equally aware of these Guiding Principles and support forensic scientists and managers by incorporating the principles into their daily work.

These Guiding Principles provide a framework for describing ethical and professional responsibilities in the forensic laboratory community. While not all inclusive, they describe key areas and provide some specific rules to supplement existing codes of eth-

ics adopted by other professional organizations and individual laboratories. The Guiding Principles are designed to increase public confidence in the quality of laboratory services, whether or not the laboratory is accredited by any accrediting body.

SOFT has adopted other guidelines for forensic toxicology laboratory management practices, many of which have been incorporated into the accreditation standards for laboratories and their employees. Those practices provide for management support of the guiding principles set forth below and are intended to create a culture of ethical behavior and professional responsibility within the laboratory. The SOFT practices should be implemented and followed to give practical meaning to the Guiding Principles of Professional Responsibility.

Professionalism

The ethical and professionally responsible forensic toxicologist and forensic toxicology laboratory manager:

1. Are independent, impartial, detached, and objective, approaching all examinations with due diligence and an open mind.

2. Conduct full and fair examinations. Conclusions are based on the evidence and reference material relevant to the evidence, not on extraneous information, political pressure, or other outside influences.
3. Are aware of their limitations and only render conclusions that are within their area of expertise and about matters which they have given formal consideration.
4. Honestly communicate with all parties (the investigator, prosecutor, defense, and other expert witnesses) about all information relating to their analyses, when communications are permitted by law and agency practice.
5. Report to the appropriate legal or administrative authorities unethical, illegal, or scientifically questionable conduct of other laboratory employees or managers. Laboratory management will take appropriate action if there is potential for, or there has been, a miscarriage of justice due to circumstances that have come to light, incompetent practice or malpractice.
6. Report conflicts between their ethical/professional responsibilities and applicable agency policy, law, regulation, or other

SOFT "CODE OF CONDUCT" (CONTINUED)

legal authority, and attempt to resolve them.

7. Do not accept or participate in any case on a contingency fee basis or in which they have any other personal or financial conflict of interest or an appearance of such a conflict.

Competency and Proficiency

The ethical and professionally responsible forensic toxicologist and forensic toxicology laboratory manager:

8. Are committed to career-long learning in the forensic disciplines which they practice and stay abreast of new equipment and techniques while guarding against the misuse of methods that have not been validated. Conclusions and opinions are based on generally accepted tests and procedures.
9. Are properly trained and determined to be competent through testing prior to undertaking the examination of the evidence.
10. Honestly, fairly and objectively administer and complete regularly scheduled:
 - relevant proficiency tests;
 - comprehensive technical reviews of examiners' work;
 - verifications of conclusions.
11. Give utmost care to the treatment of any samples or items of potential evidentiary value to avoid tampering, adulteration, loss or unnecessary consumption.
12. Use appropriate controls and standards when conducting examinations and analyses.

Clear Communications

The ethical and professionally responsible forensic toxicologist and forensic toxicology laboratory manager:

13. Accurately represent their education, training, experience, and area of expertise.
14. Present accurate and complete data in reports, testimony, publications and oral presentations.
15. Make and retain full, contemporaneous, clear and accurate records of all examinations and tests conducted, and conclusions drawn, in sufficient detail to allow meaningful review and assessment of the conclusions by an independent person competent in the field. Reports are prepared in which facts, opinions and interpretations are clearly distinguishable, and which clearly describe limitations on the methods, interpretations and opinions presented.
16. Do not alter reports or other records, or withhold information from reports for strategic or tactical litigation advantage.
17. Support sound scientific techniques and practices and do not use their positions to pressure an examiner or technician to arrive at conclusions or results that are not supported by data.
18. Testify to results obtained and conclusions reached only when they have confidence that the opinions are based on good scientific principles and methods. Opinions are to be stated so as to be clear in their meaning. Wording should not be such that inferences may be drawn

which are not valid, or that slant the opinion to a particular direction.

19. Attempt to qualify their responses while testifying when asked a question with the requirement that a simple "yes" or "no" answer be given, if answering "yes" or "no" would be misleading to the judge or the jury.

¹ The Guiding Principles of Professional Responsibility for SOFT Members and/or Affiliates is based upon the ASCLD/LAB Guiding Principles of Professional Responsibility for Crime Laboratories and Forensic Scientists. The Guiding Principles were reviewed by more than thirty forensic science organizations, including the Society of Forensic Toxicologists prior to adoption by ASCLD/LAB.

CALL FOR PAPERS -
ABSTRACT SUBMISSION
FOR SOFT 2010
DEADLINE IS JULY 2

The SOFT 2010 Scientific Committee is asking for abstracts on all forensic toxicology topics. Scientific papers selected for presentation will be divided into two groups: 15 minute platform presentations and poster presentations. The 2010 Scientific Program Committee will select appropriate abstracts from those submitted by the July 2, 2010 deadline. Specific requirements and instructions can be found in the "Call for Papers" pdf at the meeting website (soft2010.org)



NEW DRUGS

Submitted by Section Editor, Dan Anderson, M.S., FTS-ABFT

NEW “OLD” DRUG: Phenazepam (Fenazepam)

Submitted by: **Bill Johnson, FTS-ABFT**, wj@mail.slh.wisc.edu - Wisconsin State Laboratory of Hygiene

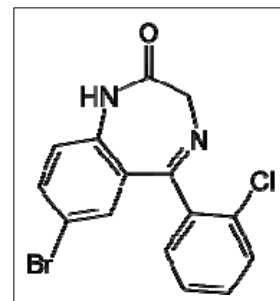
Phenazepam was developed in Russia circa 1979 as a “new domestic tranquilizer with benzodiazepine structure”. It was part of a joint venture between Odessa University and the Academy of Medical Sciences of the USSR. It is currently produced in Russia and other CIS (Commonwealth of Independent States) countries for the treatment of epilepsy, alcohol withdrawal syndrome, insomnia and anxiety (esp. surgical procedures). It is structurally similar to other 1-4 benzodiazepines like diazepam, nordiazepam, lorazepam, oxazepam, and temazepam, with the addition of bromine. Phenazepam is not regulated or scheduled in the United States or UK, but is labeled a narcotic in Norway. As such, there is little information relevant to dosage, metabolism, elimination, impairment and toxicity. Recent casework revealed blood phenazepam in drivers between 380 – 500 ng/mL, with CNS impairment observed. An analytical standard was purchased from Lipomed (PHZ-904-FB).

General Information

IUPAC name:	7-bromo-5-(2-chlorophenyl)-1,3-dihydro-1,4-benzodiazepin-2-one
Common name:	Phenazepam, Fenazepam, BD98
Appearance:	White crystalline powder
Chemical formula:	C ₁₅ H ₁₀ BrClN ₂ O
Molecular weight:	349.61
CAS number:	51753-57-2
Rx dosage:	0.5 mg 2-3 times daily (10 mg daily maximum)
Recreational dose:	0.5 – 2.0 mg (online user states 1 mg phenazepam = 5 mg diazepam in effect)
Availability:	Internet sales: 100 mg – 100 Grams bulk powder

Pharmacology (limited information)

Half-life:	Up to 60 hours (1 citation)
Absorption:	C _{max} reached within 4 hours of administration
Elimination:	Assume hepatic metabolism via P450 enzymes
Mechanism of action:	Acts on the GABA _A receptor to produce CNS depression

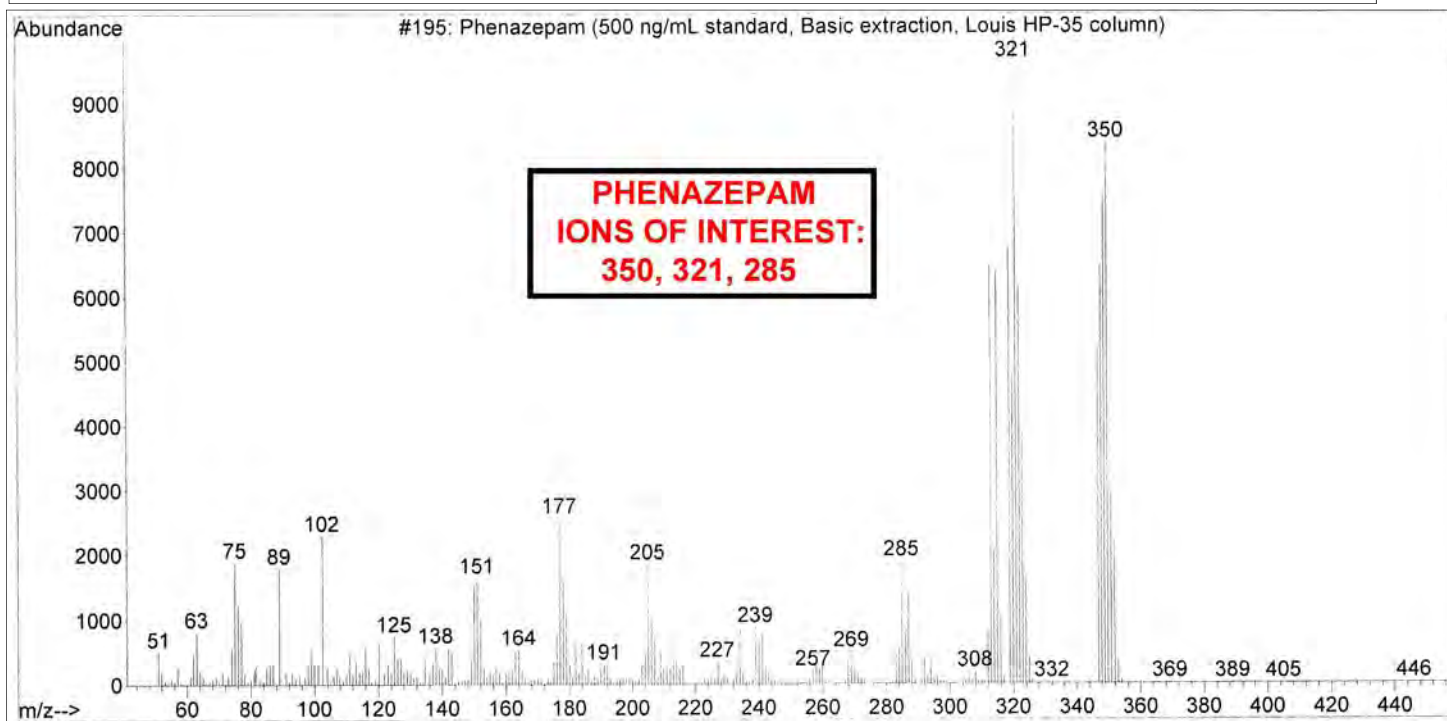
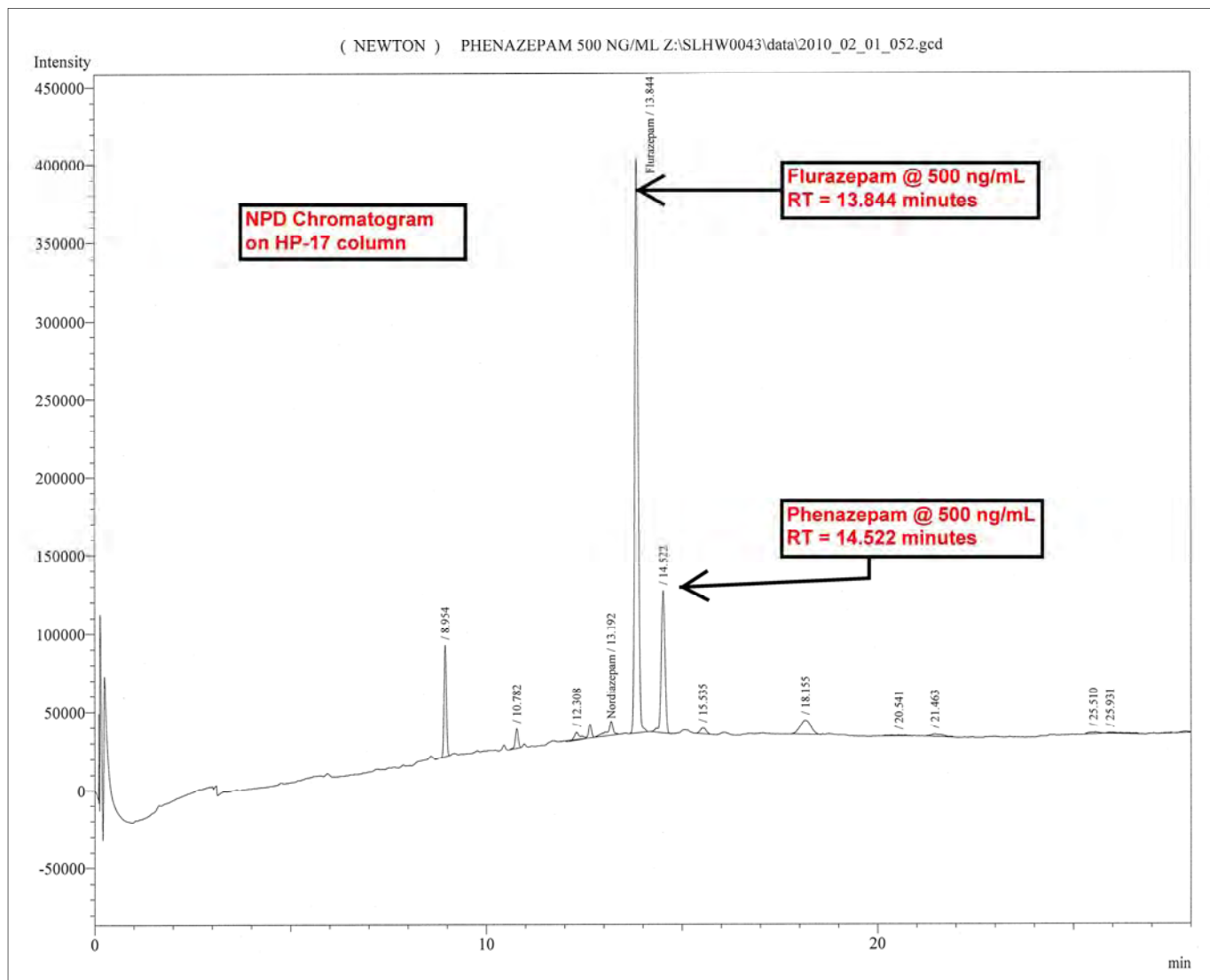


Chemical Structure of Phenazepam

Toxicology

EMIT blood screen:	Positive benzo result at ≥ 50 ng/mL (calibrator is lorazepam = 40 ng/mL)
Extraction:	Recovered by routine n-butyl chloride liquid:liquid basic drug extraction, including acid back extraction.
Detection:	Seen by GC/NPD and GC/MS. SIM Quantitation via GC/MS (flurazepam ISTD), Linearity 10 – 1000 ng/mL (quadratic). GC/NPD quantitation has not been evaluated.
Elution order:	Nordiazepam, midazolam, flurazepam, olanzapine, phenazepam , zolpidem

NEW DRUGS (CONTINUED)





DRUGS IN THE NEWS

Submitted by Section Editor, Dwain C. Fuller, D-FTCB, TC-NRCC

Original news item submitted by Troy Merrick

CAPSAICIN AND COCAINE LETHALITY:
CORRELATION, CAUSATION, OR COINCIDENCE?

Send interesting "Drugs In The News" to Section Editor, Dwain Fuller, (Dwain.Fuller@va.gov)

"It is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts."—Sherlock Holmes

I try to refrain from criticizing the work of others. The whole "Judge not that thou be not judged" thing, however, there are times that I feel that silence may be seen as tacit agreement. Such is the case with a recent article published in the journal, Forensic Toxicology, the official publication of the Japanese Association of Forensic Toxicology. The article is entitled, ***Capsaicin, an active ingredient in pepper sprays, increases lethality of cocaine.*** In this article the authors correlated intraperitoneal injections of capsaicin in mice with an increased lethality of coadministered intraperitoneal cocaine. The ultimate purpose of this experiment was to investigate whether the use of pepper spray on cocaine-intoxicated individuals may contribute to their death.

Oleoresin capsicum (OC) spray, also known as pepper spray, contains the primary ingredient, capsaicin and has been in use by police for almost two decades. OC spray is but one of the "less-than-lethal" techniques employed by police for subduing and restraining violent and/or uncooperative individuals.

When I first read the media accounts alleging a connection be-



tween cocaine, capsaicin and increased cocaine lethality, I was skeptical; the news media seldom gets these things right. As I read the actual article, that skepticism became a palpable discomfort. If you have not read the article yourself, I encourage you to do so. I do not wish to sound overly critical; I do not know the authors of this article nor do I have any reason to question their motives, these are my opinions, so please bear with me.

The authors of the article conducted an experiment on mice to determine if the intraperitoneal coadministration of cocaine and capsaicin would result in increased lethality above the expected additive effects of each compound. The experiment seems to have been conducted in a relatively reasonable manner, with the notable

exception that the capsaicin and cocaine were administered intraperitoneally rather than a dermal or respiratory exposure of capsaicin, which would have better represented the type of exposure one would expect by being sprayed with OC spray. Be that as it may, the authors found that an intraperitoneal injection of 10 mg/kg of capsaicin increased the lethality of a coadministered dose of cocaine at 60 mg/kg from 13% to 53% ($P < 0.01$) and from 53% to 90% ($P < 0.001$) at a dose of 75 mg/kg.

What was troubling was the second part of the article in which the authors performed a retrospective analysis of 26 cases involving human males who died after being sprayed with OC spray. The mere inclusion of this analysis, which has no connection to the experimental data, suggests that there is a

DRUGS IN THE NEWS (CONTINUED)

clear extrapolation from intraperitoneally injected mice to dermal and respiratory OC spray exposure in humans. The authors even make the statement, "The animal experiments together with the retrospective analysis support the idea that exposure to OC spray in cocaine-intoxicated individuals potentiates cocaine lethality."

While the authors make some disclaimers later in the paper, they return to their assertions in the next-to-last paragraph with even greater fervor, this time including methamphetamine, in the statement, "Although mostly safe, reports of sudden death following OC exposure in people intoxicated on cocaine or methamphetamine suggest (along with our animal study) a pharmacological interaction between capsaicinoids and psychostimulants."

Of further concern is how these 26 subjects for retrospective analysis were selected. Rather than gleaning cases to be considered from medical examiner or other files using some non-biased scientific selection criteria, the source of these subjects was the American Civil Liberties Union (ACLU) of Southern California. No other qualifying criteria are stated in the article. In fact, a Mr. John Crew of the American Civil Liberties Union of Northern California is acknowledged in the paper. Mr. Crew, according to an internet search, is the Director of the Police Practices Project for the ACLU of Northern California.

Of these 26 subjects, six had cocaine alone, nine had methamphetamine alone, three had both cocaine and methamphetamine, and one had "potentially

toxic levels of pseudoephedrine." Of the 26 individuals, no drugs were detected in two individuals and one individual's drug status was unknown. Strangely, one individual died as the result of a suicidal gunshot wound just after being sprayed with OC spray, which begs the question as to how one comes to be included in the ACLU's selection of cases. This information was not provided. Based on the breakdown of toxicology results, only the six cocaine-alone cases could even remotely be connected to the subject of this article, that being increased lethality of cocaine by capsaicin.

Of further interest are the levels of stimulants found in these individuals postmortem. The mean blood cocaine level in the cocaine positive individuals was $3.29 \mu\text{g}/\text{mL} \pm 7.06$, $n=6$, and the mean plasma methamphetamine level was $13.8 \mu\text{g}/\text{mL} \pm 12.0$, $n=12$. Some of these individuals were positive for ethanol as well.

One is made to wonder, how many of these individuals would have died without being sprayed with OC? Or further, how many stimulant intoxicated individuals, who were not included in this study because they were not sprayed with OC subsequently died? I think we know the answer to some degree. These are the deaths that are, or have been, attributed to choke holds, positional asphyxia, police brutality, and most recently Tasers; those not associated with these police interventions go down as simply drug overdose deaths.

Although the paper says, "Blood toxicology results were available for all decedents", only 20 results were included in the toxicol-

ogy breakdown, presumably these 20 cases represent the cases that were autopsied. No case by case data were presented to allow the reader to determine if the six excluded cases would have been significant to the conclusions reached by the authors.

Do some people needlessly die at the hands of the police? Of course; it would be foolish to claim this never happens. However, I believe that what this retrospective analysis shows us most clearly is, one, people who are intoxicated by stimulants and are violent and uncontrollable often have encounters with the police. Two, when the police must deal with violent and uncooperative individuals, it often does not end well for the offender. Three, people who progress through steps one and two, sometimes die from their stimulant intoxication, their altercation with the police, a combination of both, or none of the above.

In my opinion, the authors should have entitled the paper, "Intraperitoneal injection of capsaicin, an active ingredient in pepper sprays, increases lethality of cocaine in mice" and stopped right there.

References:

Capsaicin, an active ingredient in pepper sprays, increases lethality of cocaine. Forensic Toxicology, DOI: 10.1007/s11419-0079-9, Published online October 2, 2009

John M. Crew, <http://www.cahro.org/html/policingthecomm.html>

The opinions expressed herein are solely the opinions of the author and do not necessarily reflect the opinions of the Society of Forensic Toxicologists, Inc.



CASE NOTES & COMMENTARY

Section Editor, Matthew Barnhill, Ph.D., DABFT

Send interesting "Case Notes" to Section Editor, Matthew Barnhill (mbarnhilljr@worldnet.att.net)

CASE NOTES #1: GABAPENTIN CAUSES FALSE POSITIVES WITH METHADONE IMMUNOASSAY

*Submitted by: Amanda J. Jenkins, Brian Johnson, Doreen Olivieri and Paul White**

*Clinical Toxicology, Dept. of Hospital Labs., UMassMemorial Medical Center, Worcester, MA, and
Precision Testing Labs., Sturbridge, MA

Methadone immunoassays, marketed for use on automated chemistry analyzers are reportedly quite specific for methadone, exhibiting low cross reactivity with methadone metabolites or LAAM. Recently, a client observed that several patient urine specimens were positive for methadone [Microgenics Corporation, Fremont, CA, DRI®, cut-off=300 ng/mL]. These samples were negative for methadone or metabolites upon subsequent confirmation [liquid/liquid extraction at pH 8-10, followed by GC/MS, limit of detection= 50 ng/mL].

Review of patient history noted the only common medication

was gabapentin. No metabolites of gabapentin have been described in the literature, with the majority of unchanged drug excreted in urine. Urine concentrations of gabapentin have not been reported. Data from 98 specimens analyzed by LCMSMS at NMS Labs., Willow Grove, PA, for gabapentin revealed 29 [29.6%] positive samples with concentrations ranging from 3.2-3400 mcg/mL [minimum reporting limit = 0.1 mcg/mL].

Gabapentin [1mg/mL in methanol] was purchased from Cerilient Corporation [Round Rock, TX] diluted and spiked at increasing concentrations in drug free urine. These

samples were assayed on the Olympus AU400e instrument utilizing Microgenics methadone DRI® assay. Gabapentin triggered a positive response at concentrations > 1000 mcg/mL. This data means that 3 of 29 positive samples or 10% of positives from the NMS study would give a positive result on the methadone immunoassay using a 300 ng/mL cutoff concentration. Laboratorians providing screening services should be aware of these findings and educate their clients accordingly.

The authors thank Dr. Robert Middleberg of NMS Labs., Willow Grove, PA for the gabapentin confirmation data.

COMMENTARY: MORPHINE— ON BEING RECEPTIVE; A WESTERN ADVENTURE

Submitted by: Steven B. Karch, MD, FFFLM, FFSSoc

In 2008, a large hospital in the Western United States was sued for allegedly having caused the wrongful death of a patient. One morning in 2005, a 30 year-old man underwent surgery for a peri-rectal abscess. The surgery was completed and he was shortly back on the floor, receiving appropriate doses of morphine and Percocet when he was suddenly found dead. Postmortem toxicology testing showed that he had smoked a marijuana cigarette shortly before he died. The decedent was an obese man, with a concentrically

enlarged heart. He had a history of stimulant abuse, and microscopic examination of the heart disclosed an impressive degree of myocardial remodeling (cellular hypertrophy, interstitial fibrosis, and early small vessel disease). Ephedrine was detected in his urine, suggesting recent methamphetamine abuse (The FDA withdrew ephedrine in 2001 and ephedrine can often be detected in confiscated samples of methamphetamine).

Patients conforming to this description are increasingly common.

But, even by frontier standards, grounds for this particular lawsuit were particularly novel. The plaintiff charged that the decedent had died because of narcotic-induced respiratory depression. Fair enough, except that the levels of morphine and oxycodone in the blood of the deceased were below limits of quantitation; the concentration of THC was 5.5 ng/mL.

The expert for the plaintiff knew how to explain this conundrum: How can you have narcotic-induced respiratory depression when no nar-

COMMENTARY: MORPHINE (CONTINUED)

cotic is detectable? According to the expert the answer was simple. In his deposition he stated that even though "*Morphine is cleared from the blood very rapidly but remains at its active sites in the brain much longer.*" Put another way, there might not have been enough narcotic in the blood to measure, but concentrations in the brain were sufficiently high to cause respiratory depression and death. Or so the argument went.

There is an element of truth in the argument, but an even greater amount of pure nonsense. Anyone acquainted with the postmortem toxicology of heroin deaths (who also has some extra time and money in their budget) knows that concentrations of free morphine in brain homogenates may well exceed concentrations measured in whole blood. However, the mere presence of free morphine in the brain cannot be responsible for on going respiratory depression. The statement may come as a surprise to some, and an explanation may be in order, though I would hope that most young toxicologists have a far better understanding of receptor physiology than the expert in this particular case.

Opiates exert their effects at specific receptor sites, and there are many different types. Whatever the type of receptor (for abused drugs, for hormones, for catecholamines, etc), the receptor is located outside of the cell. Once a drug combines with a receptor, the receptor changes shape, and this change, in some way, acts to carry a signal into the cell so that the cell can react appropriately. The target receptor for almost all abused drugs, and even catecholamines, such as epinephrine, is classified a "seven separate domains G-linked" receptor.

Each domain is composed of folded chains of DNA. A domain refers to the fact that the receptor is formed out a strand of folded DNA that pierces the cell membrane seven times. Other types of receptors, such as the GABA_A receptor cross only five times. The unique feature about 7-transdomain receptors is that they are coupled to something called a "G protein," short for the amino acid guanine. The G proteins constitute a large family of different proteins connected to the trans-membrane receptors. Their function is to sense that new molecules have arrived and are located outside of the cell; the message must be internalized in order to activate pathways in the interior of the cell. This is where it gets complicated, or at least too complicated for the plaintiff's expert, but hopefully not for our readers.

When morphine binds to a receptor on the outside of a cell it causes the receptor to change shape. This change activates G protein (guanine) on the inside of the cell. In other words, the receptor and the G protein are interconnected. G proteins act as a molecular switch that inactivates receptors as soon as an agonist, like morphine, binds to the receptor. Once the receptor has been activated it is turned (its shape is distorted and no new agonist will fit. The cell doesn't even know morphine is present. How does this occur?

G proteins are composed of two parts – one called alpha and one called beta-gamma. A molecule called guanosine diphosphate (GDP) is connected to the alpha unit, and its presence keeps the internal messaging system turned off. When the receptor on the outside is activated by morphine, the receptor changes shape and causes guanosine triphosphate (GTP) to attach to the alpha unit instead of GDP.

This substitution causes alpha to separate from beta-gamma, carry the message into the cell that morphine is present, producing analgesia and respiratory depression.

When asked to explain this apparent paradox, the plaintiff's expert told the jury "*Morphine is cleared from the blood very rapidly but remains at its active sites in the brain much longer.*" When asked, "*how long does the drug act on those receptors?*" the expert replied "*I can't give you a precise answer to that, but several hours.*" Which is, in a sense true. Morphine may still be present within the internal structure of a receptor, but the receptor itself is inactive, having been turned off by the G protein. What the plaintiff expert either did not understand, or did not want the jury to know, is that receptor stimulus is a one-time event. Once morphine binds to a receptor it turns that receptor off, the internal signaling system mechanism has been turned off, and the receptor inactivated.

This process occurs when a molecule called arrestin slides into the place occupied by G protein, thereby preventing the receptor from being reactivated. Picture it as a sort of door jam. Once the alpha unit (remember the alpha unit?) has separated from the beta and gamma subunits, it acts as an enzyme, turning GDP to GTP. This conversion allows the three parts of the subunit to reform, allowing the morphine receptor go back to its normal shape so it can react with another morphine molecule. Unlike the "Old West," agonists only get one shot. There would be cellular chaos if the system functioned in any other way. In fact, the dose-response relationship would cease to exist.

COMMENTARY

URINE DRUG TEST RESULTS AND THE ABILITY TO INFER IMPAIRMENT:
SCIENCE AND ETHICS

Submitted by David M. Benjamin, Ph.D.

Background

Toxicologists who work for the government and those who work for the defense often have very different philosophies regarding the use of forensic toxicology results. However, science, like the famed statue of justice should be blind, and practitioners for prosecution and defense both should strive to convey truthful and generally accepted interpretations of scientific data to the jury, regardless of which side has retained you. At a recent SOFT/AAFS Drugs & Driving Committee meeting one attendee suggested that testimony can be offered to the effect that positive urine drug tests can be used to infer that a DUID defendant was impaired while driving. Can the use of urine drug tests support a finding of impairment while driving? In my opinion, they cannot, and here is why.

Discussion

The significance of urine drug testing results has been addressed by several authoritative sources in the past. Publication 73, Urine Testing for Drugs of Abuse, 1986 (NIDA), p. 80 says:

As for urinalysis, drug concentrations in the urine are further complicated by other factors such as urine flow and pH. Even if a specific method is used for the quantitation of a specific drug (the active species, not the inactive metabolite), interpretation in forensic samples to predict time of drug use or impairment is not possible, except within broad time periods, because of the variations in urine drug concentration as well as the limited knowledge available about the dose or the route of administration.

And, on page 87, Publication 73 reminds us that, "A single positive urine test does not mean that the person was under the influence of marijuana at the time the urine specimen was collected."

Urinary pH plays a large role in the fraction of amphetamine excreted into the urine. According to Publication 73, page 95, as little as 2% of amphetamine will be excreted into an alkaline urine, while up to 68% of ingested amphetamine will be excreted with an acidic urine (time interval not specified). Thus the ingestion of Vitamin C or Sodium Bicarbonate will affect the detection of prior amphetamine ingestion and the ability to detect each in the urine. Variability and error rates are too high to use urine drug test data to determine amounts excreted in urine as a gauge for CNS impairment.

In 1988, a conference entitled, "Scientific Consensus Conference: Clinical Pharmacologic Implications of Urine Screening for Illicit Substances of Abuse," sponsored by the American Society for Clinical Pharmacology and Therapeutics and its Committee on Substance Abuse concluded, "While the confirmed presence of a drug in the urine indicates past drug exposure and may suggest past pharmacologic effect it does not prove current or past impairment." Clinical Pharmacologists have no "agenda" in obtaining convictions or acquittals, they are dedicated to studying the correlation between pharmacokinetics and pharmacodynamics, and researching and disseminating reliable information on drugs.

According to the DOT, even blood levels may not be a reliable indicator of impairment. Quoting from their conclusions as published in, "State of Knowledge of Drug Impaired Driving" DOT HS 809 642 (2003):

Current research does not enable one to predict with confidence whether a driver testing positive for a drug, even at some measured level of concentration, was actually impaired by that drug at the time of crash. This is in sharp contrast to alcohol where BAC measurements can provide a good estimate of impairment.

Additionally, there is an article by Marcelline Burns, one of the originators of the DRE program in California, called "Sobriety Tests for the Presence of Drugs" (Alcohol Drugs and Driving, 1978;3(1):25-29). In this article, the author compares the DUI model for ethanol to a similar model for drugs, writing:

In contrast to the correlation of peak BAC and peak impairment, the relationship between drug concentration and the level of performance frequently is unknown or unpredictable. Further, interpretations are complicated by the effects of pharmacologically active metabolites, by the potential for performance enhancement by certain drugs at certain doses, and by issues of individual sensitivity and tolerance.... Alcohol does not provide an acceptable model for other drugs. It is unlikely either that meaningful "numbers" will be forthcoming for most drugs, or that efforts to establish presumptive or per se levels will be productive. (Id at 26).

At the risk of stating the obvious, as all competent forensic toxicologists know, urine drug tests for cocaine and marijuana don't even test for the active parent compounds. In the case of cocaine, urine drug tests look for

COMMENTARY (CONTINUED)

benzoylecgonine (BE), a non-psychoactive metabolite, and in the case of marijuana, urine drug tests look for the carboxylic acid derivative (THCA) of THC, also a non-psychoactive metabolite. It would be an obvious misrepresentation to assert that a urine test for BE or THCA should be interpreted as evidence of impairment to either cocaine or THC.

Ethical Issues and “The Oath”

Testimony offered by responsible toxicologists should represent generally accepted scientific principles held by the scientific community and reflected in the peer reviewed literature. Using drug urine test results, even confirmed results, to assist in “proving” impairment is not generally accepted in the forensic toxicology community, and certainly is not generally accepted in the clinical pharmacology community, from which most of our knowledge about drugs has come.

In his article, “What is Truth?” published in the 2008 Academy News, Professor James Starrs gave the example of a ballistics expert who testified that a bullet had “rifling characteristics consistent with having been fired from a .32 caliber Smith and Wesson pistol” but failed to disclose that “those same rifling markings would appear on any bullet fired from any .32.” Of course, it just so happens that the defendant on trial was known to have a .32 caliber Smith and Wesson pistol. Professor Starrs asked rhetorically, if that testimony violated the last portion of the oath, “to tell the truth, the whole truth, and **nothing but the truth**” by taking an opportunity “to deceive the jury by *suggestio falsi*?” (Ambrose Bierce in 1909) Well, I’ll answer that rhetorical question by asserting that adding extra information to your testimony that deliberately misleads the jury is an intentional violation of the oath and that adding “Smith and Wesson” in the above example is the same as saying “positive urine test” for drugs means impaired while driving.

Moreover, when you testify on direct examination in court as a forensic toxicologist, you must offer your opinions with reasonable scientific certainty. Since a person smoking one marijuana cigarette for the first time may test positive in the urine for THCA for 1-3 days (Publication 73) and the biosphere of THC’s impairing effects last 1-2 hours, urine tests for THCA cannot correlate with impairment with reasonable certainty, and so the requisite degree of certainty is lacking. A similar analogy can be drawn for cocaine whose half-life averages approximately 1 hour in blood but is metabolized to BE with an average half-life of 7.5 hours (Ambre). The biosphere of cocaine stimulation may be less than 30 minutes, although residual rebound depression may ensue. Once again, a poor correlation between urinary metabolite excretion and CNS activity.

Everyone who has ever testified in court recognizes that the legal system is a foreign environment to experts, and run by lawyers and judges, not scientists. Prosecutors have the burden of proof and must prove their case, the defense does not have to prove anything. Overzealous prosecutors frequently approach their forensic witnesses and try to “stretch them out” saying, “If you don’t say the person was impaired, we can’t win.” Being a defense expert is easy, all you have to do is find lab errors or recognize erroneous testimony and point such out to the jury. However, the lawyers’ duties are to their clients and that duty is zealous advocacy, which is frequently described as “winning at all costs.” On the other hand, the expert witnesses’ duty is to the court and the oath that you took before you testified. If you make a hybrid of your duty and the retaining attorney’s duty and feel that you must “help” win the case for the “team,” you have stepped over the line and are on thin ice, both scientifically and ethically. While lab accreditation and board certification are good things in themselves, they do not assure ethical conduct on the witness stand.

Quo Vadamus?

For these reasons, I ask the profession to develop a set of ethical and performance guidelines for forensic toxicologists regarding testifying in court. Perhaps not a list of Do’s, but more a list of Don’ts. Those of us who have read the NAS report know that professional organizations are being encouraged to “explore mechanisms of enforcement for those forensic scientists who commit serious ethical violations.” Although the SOFT Ethics Procedures describe the development of “Rules of Professional Conduct,” and lists in section 2.2.2.1, the following as areas for complaints: Falsification of data or evidence; perjury; and public statements which appear to represent the position of the SOFT. These areas do not explicitly state misleading the jury, but they do imply it indirectly. Have we come to a time when monitors or peer reviewers will be needed in the courtroom? Peer review of expert testimony is currently being used by some courts, and I know of at least one organization that does this (primarily on physician testimony) on a full time basis.

Where do we draw the line?

Judge William G. Young of the US District Court in Boston, MA has written and lectured extensively on epistemology, the nature and grounds of knowledge, with special reference to its limits and validity. In many cases, the limitations of our knowledge and capacity to answer certain questions about prior drug ingestion and impairment, injury or death far outweigh what we do know. Factors like the variability in the pharmacogenetic metabolism of drugs, differences in volumes of distribution, post-mortem redistribution, use patterns, drug sensitivity and tolerance are frequently not known to us when we are asked, “Was s/he impaired?” The mark of a truly ethical and competent expert is not what s/he knows, but knowing what s/he does not know and not speculating on it to the jury.



TOXICOLOGY - BITS & PIECES

Section Editor, J. Robert Zettl, MPA (jrzettl1@msn.com)

AAFS NEWS - TOXICOLOGY SECTION

Submitted by Phil Kemp, Ph.D., DABFT

The hard work and diligent preparations for the AAFS meeting in Seattle resulted in a good program for the Toxicology Section in 2010. Ruth Winecker (Workshop Chair) and her team arranged two informative workshops:

- “Assessment and Interpretation of Toxicology in Neonatal, Pediatric, and Geriatric Deaths”, chaired by Barry Logan and Laura LaBay;
- “Navigating the World of Forensic Journals & Forensic Information”, chaired by Barry Logan and A.W. Jones.

Phil Kemp (Program Chair) and the program committee put together a collection of 37 oral presentations and 20 posters for the scientific sessions. Special sessions included Drugs & Driving, Postmortem Pediatric Toxicology, and two multidisciplinary sessions with Jurisprudence and Pathology/Biology.

Peter Stout and Christine Funk moderated the Melendez-Diaz session with Jurisprudence and Jeffery Hackett and Brad Hall hosted the Pathology/Biology special session. The Annual Lectureship was presented by Dr. Caleb Banta-Green and Dr. Jennifer Field who presented their findings on municipal wastewater as a means of studying the epidemiology of drug use. All of the ses-

sions and workshops were well attended and received high praise from attendees.

There were special awards handed out at the meeting this year to those who have made significant impact on the field of forensic toxicology through outstanding scientific contributions and leadership. The Alexander O. Gettler award was presented to **Dr. Lee Hearn**, introduced by Chip Walls. The Rolla N. Harger Award was awarded to **Dr. Barry Logan**, introduced by Dr. Rob Middleberg. The June K. Jones Award was presented to **Erin Karschner**, introduced by Dr. Marilyn Huestis. Congratulations on these well-deserved awards!

Congratulations also go to the new section officers and appointees. Toxicology Section officer elections were held at the business meeting. The following members were elected to the indicated positions: Dr. Ken Ferslew, Toxicology Section Chair; Dr. Phil Kemp, Secretary; Dr. Ruth Winecker (winecker@ocme.unc.edu) 2011 Program Chair. Dr. Loralie Langman (langman.lorealie@mayo.edu) was appointed to be the 2011 Workshop Chair. Drs. Kent Johnson and Chris Chronister were appointed to the Nominating Committee.

The 2010 Program Committee wishes to express their heartfelt thanks to the numerous volunteers who contributed so

much to make the meeting a success. Thanks to Dr. Peter Stout who graciously filled in for a cancelled presentation when needed. The moderators did a fantastic job of keeping us on time while allowing the speakers to present their work. In addition, special thanks go to our excellent exhibitors who were able to provide funds to sponsor breaks and social events in difficult financial times.

Drs. Winecker and Langman would love to hear from you regarding your ideas for next year's program. We hope to see everyone in Chicago for 2011!

AAFS / SOFT JOINT DRUGS & DRIVING COMMITTEE

Submitted by Jennifer Limoges, M.S.

The SOFT/AAFS Drugs & Driving Committee is working on content for a Workshop and a Special Session at the 2010 SOFT Annual Meeting in Richmond. The workshop will be co-chaired by Amy Cochems and Fiona Couper, and will focus on marijuana issues in DUI cases. Topics will include interpretative challenges with chronic versus acute users, DUI case histories, and trial preparation techniques. The Drugs & Driving Special Session will be coordinated by Mike Wagner.

TOXICOLOGY - BITS & PIECES (CONTINUED)

NATIONAL SAFETY COUNCIL— COMMITTEE ON ALCOHOL AND OTHER DRUGS

Submitted by Laura Liddicoat, B.S.

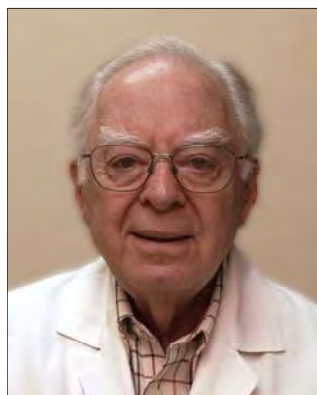
The Executive Board of the NSC-CAOD met Sunday afternoon, February 21, 2009 at the American Academy of Forensic Sciences meeting in Seattle, Washington. The full committee of the NSC-CAOD met Monday morning, February 22, 2009. Officers for the coming year are:

Chair - Mack Cowan

Vice Chair - Dr. Dennis Canfield

Secretary - Laura Liddicoat

This year's meeting marked **Dr. Kurt Dubowski's** 60th year



Dr. Kurt M. Dubowski

with the CAOD. Mack Cowan presented Dr. Dubowski with a plaque from the National Safety Council to honor his many years with the Committee. The plaque reads:

"National Safety Council recognizes Kurt M. Dubowski, Ph.D. on this 22nd day of February, 2010, for his 60 years of unparalleled and dedicated service to the National Safety Council and its Committee on Alcohol and Other Drugs. Dr. Dubowski is the Committee's longest serving

member and his energy, enthusiasm, unsurpassed knowledge and expertise has made him a world leader in the scientific community and the consummate National Safety Council volunteer."

The 19th Robert F. Borkenstein Award was conferred upon **Dennis Canfield, Ph.D.** on Monday evening. Dr. Dubowski presented the award and relayed the many aspects of Dr. Canfield's career to the attendees.

Dr. Canfield is an internationally recognized forensic scientist, researcher and administrator for the Civil Aerospace Medical Institute of the FAA in Oklahoma City. His laboratory is one of only three in the federal government that conducts research and performs case work in forensic toxicology. He has served on the Forensic Science Advisory Board of the University of Central Oklahoma.



Dr. Dennis V. Canfield

The RFB Award is given to one who has a minimum tenure of 25 years of active service in the area of alcohol, drugs and traffic

safety, has contributed to that field to a degree that his/her achievements are nationally recognized and has a minimum of 10 years of active and productive involvement as a volunteer with the National Safety Council.

The next joint meeting of the NSC-CAOD Committee and Executive Board will be held at the SOFT meeting in Richmond, Virginia on Friday October 22, 2010. To access CAOD policies, previous Borkenstein Award recipients or learn more about the committee go

**CALIFORNIA
ASSOCIATION OF
TOXICOLOGISTS (CAT)
SPRING WORKSHOP**
Submitted by Dan Coleman

The California Association of Toxicologists (C.A.T.) Spring Workshop will be "Sleep and Driving Under the Influence". The workshop will be held Friday May 14 & Saturday May 15 in Sacramento, California. The goal of this workshop is to provide basic information on sleep and its effect on the body, what effects may be seen, whether or not these effects are discernible from pharmacological effects, how common the effects are (i.e. how much sleep or lack of sleep is needed before detrimental effects are seen), and finally, how sleep may affect drug interactions (including alcohol). Speakers will include faculty of the Stanford Sleep Center and the FAA. For more information and registration forms please go to the C.A.T. website at www.cal-tox.org.

UPDATES FROM THE FORENSIC TOXICOLOGY COUNCIL (FTC),
SCIENTIFIC WORKING GROUP ON FORENSIC TOXICOLOGY (SWG-Tox),
AND THE CONSORTIUM OF FORENSIC SCIENCE ORGANIZATIONS (CFSO)

Forensic Toxicology Council
(FTC)

Submitted by

Barry K. Logan, Ph.D., DABFT

The FTC and SWG-Tox convened in Seattle to begin the exciting and daunting process of developing new standards for our profession. The heavy lifting for this is to be done by the SWG-Tox and its co-chairs, and we detail below the work done by Rob Middleberg, Bruce Goldberger and Dan Isenschmid as co-chairs of the working group.

As a reminder, the members of the FTC are either elected office holders in ABFT, SOFT or AAFS, or the designated CFSO representatives for these organizations, and it is not our intent to become a separate organization with its own agenda, but rather a means to focus the collective interests and concerns of the represented organizations, and ensure that none of these organizations is overlooked in the opportunity to contribute to the national debate on the future of forensic science and toxicology.

The membership of the FTC rotates as the officers in its member organizations change, and I'm pleased to welcome Phil Kemp to the FTC in his capacity as AAFS Toxicology Section Secretary, and to thank Jeri Roper-Miller for her leadership as the outgoing AAFS Section Chair. Jeri was key in establishing the relationship with NIJ to provide initial funding for the inaugural SWG-Tox activities which took place in Seattle.

The FTC's meeting in Seattle focused on three major activities going forward. These include providing a better venue to collect and share news reports of the contributions of forensic toxicology to public safety and the criminal justice system, and to discuss controversies or new issues. The current venue for this is through a Forensic Toxicology Group on LinkedIn.com. Membership in this unmoderated group is open to all with an interest in Forensic Toxicology. Google "LinkedIn" and "Forensic Toxicology" to find how to join. Secondly, the FTC will continue to pursue long term funding for the activities of SWG-Tox, and will continue to meet regularly by conference call to keep up to date with congressional and White House activities regarding forensic science legislation and funding. Finally, the FTC will work on building a list of contacts in laboratories performing forensic toxicology in the United States so that there is a means to quickly communicate with all labs that might be affected by legislation or which might have funding opportunities.

Scientific Working Group on
Toxicology (SWG-Tox)

Submitted by

**Robert A. Middleberg, Ph.D.,
DABFT, DABCC**

The Scientific Working Group in Toxicology (SWG-Tox) held its first set of meetings in coordination with the 2010 AAFS meeting in Seattle. A one hour general

meeting, open to all AAFS attendees, gave a brief overview of the purpose, objectives and structure of the SWG-Tox. The slides used during the presentation can be found on the SWG-Tox website (www.swg-tox.org). After a question and answer period, the members of the individual committees and subcommittees within SWG-Tox held closed-door sessions. The following represents a synopsis of the outcomes of the SWG-Tox committees/subcommittees meetings as defined by the areas of concern suggested for study by the Interagency Working Groups (IWGs) in the forensic sciences:

1. **Standards, Practice and Protocols (SPP).** This subcommittee is chaired by Rob Middleberg, Ph.D. and has a number of Members, Advisors and Consultants representing both national and international expertise. These individuals represent interests of governmental and private laboratories as well as accrediting bodies. Discussions on subcommittee process led to the formation of "task groups" to address individual areas of responsibility. To start, it was determined that two areas would be the focus of two separate task groups – Method Validation (led by Marc LeBeau, Ph.D.) and QA/QC (led by Loralie Langman, Ph.D.). Other members of the SPP will assist in generating outlines for each task group followed by a document of practice for review.

FTC, SWG-TOX, AND CFSO UPDATES (CONTINUED)

2. **Accreditation.** Graham Jones, Ph.D., chairs this subcommittee. The sub-committee on laboratory accreditation met and outlined the scope of work that should be covered. Topics included the definition of "forensic", whether accreditation should be mandatory, whether the underlying basis of accreditation should be ISO 17025 (or equivalent such as ISO 15189) or other standard, the length of the accreditation cycle and whether interim documented self-audits should be required, whether the scope of forensic toxicology accreditation should be further defined (e.g. postmortem, DUID, DFSA etc), proficiency test requirements (initial and ongoing), qualifications and training of potential inspectors and whether the accrediting body itself should be accredited.

3. **Ethics.** This subcommittee, chaired by Yale Caplan, Ph.D., is in the process of assembling materials related to ethics in general, and in particular, forensic toxicology. The subcommittee will be looking at ethics from both an individual practitioner perspective as well as in the laboratory.

4. **Education.** Sarah Kerrigan, Ph.D. and her subcommittee members are in the process of gathering data and determining the scope of its responsibilities. Stakeholders in forensic science education will be identified with specific consideration to forensic toxicology. The subcommittee

will be exploring accreditation processes for Ph.D. programs since none currently exists. Lastly, the subcommittee will consider educational requirements, initial training requirements for new employees, continuing professional development and available resources in forensic toxicology.

5. **Research, Development, Testing and Evaluation (RDTE).** As this area is currently undefined by the IWGs, this committee is still in the process of defining its scope and individual tasks.

6. **Certification.** The certification subcommittee chaired by Amanda Jenkins, Ph.D. did not meet in Seattle.

7. **Outreach.** The outreach subcommittee will be convened at a later time.

Two general outcomes arose from all committees / subcommittees:

1. The potential need for SWG-Tox by-laws to ensure that all groups act uniformly in respect to finished product and other elements needed for success of the working group.
2. The need for a general definition of "Forensic Toxicology" in respect to what sub-disciplines will be the focus of the working group.

These latter outcomes are the responsibility of the SWG-Tox

co-chairs, Bruce Goldberger, Ph.D., Dan Isenschmid, Ph.D. and Rob Middleberg, Ph.D.

Additional meetings of SWG-Tox will minimally occur at the annual meetings of SOFT and AAFS with additional meetings potentially occurring based on funding. This particular meeting was funded by the National Institute of Justice (NIJ) for which the SWG-Tox is very thankful.

Consortium of Forensic Science
Organizations (CFSO)

Submitted by

Peter Stout, Ph.D., DABFT

Since the last ToxTalk edition update, CFSO has been largely involved with topics outside of issues directly affecting toxicology. This has included issues addressing DNA processing, particularly rape kits.

The CFSO Board meeting was held at the Academy meeting and it was determined to let the contract lapse with the PR firm that CFSO had retained. Also, officers were re-elected and the makeup of the officers remains the same. Additional discussion has continued about the potential re-writing of the Coverdell grant mechanisms with a focus to make these grants less exclusively a State block grant, and to provide for more ability to award these grants directly to institutions. We will see what develops with this effort.

Comments and concerns about needs to be represented are encouraged. Be informed and be active.

AMERICAN BOARD OF FORENSIC TOXICOLOGY (ABFT) NEWS

Submitted by Marina Stajić, Ph.D., D-ABFT, ABFT President

At the ABFT annual meeting in February 2010, the following Directors were elected to a three year term (July 1, 2010 – June 30, 2013):

- Frederick W. Fochtman, Ph.D., D-ABFT
- Loralie Langman, Ph.D., D-ABFT
- Robert Middleberg, Ph.D., D-ABFT
- Theodore F. Shults, J.D., M.S, Public member
- Marina Stajić, Ph.D., D-ABFT

The above re-elected and newly elected Directors join the following Directors currently serving their respective terms:

- Yale Caplan, Ph.D., D-ABFT
- Bruce Goldberger, Ph.D., D-ABFT
- Daniel Isenschmid, Ph.D., D-ABFT
- Graham Jones, Ph.D., D-ABFT
- Barry Logan, Ph.D., D-ABFT
- Joseph Manno, Ph.D., D-ABFT
- Susan Mills, M.S., FTS-ABFT
- Jeri Roper-Miller, Ph.D., D-ABFT
- Elizabeth Spratt, M.S., D-ABFT

The Board officers elected in February 2010 to a one year term (July 1, 2010 – June 30, 2011) are:

- President, Marina Stajić, Ph.D., D-ABFT
- Vice President, Bruce Goldberger, Ph.D., D-ABFT
- Secretary, Daniel Isenschmid, Ph.D., D-ABFT
- Treasurer, Robert Middleberg, Ph.D., D-ABFT

Director McCutcheon will be leaving the Board on June 30, 2010, having indicated that he does not wish to be considered to serve another term. The Board joins me in expressing our gratitude to Mr. McCutcheon for many years of his dedicated service to the Board.

There are currently 25 laboratories accredited by the ABFT Accreditation Program. That number is likely to approach 30 by the end of this year, creating an increasing burden for a purely volunteer group. The Board of Directors has therefore entered into a contract with the Center for Forensic Science at Research Triangle Institute to provide the much needed administrative support starting in 2010, an arrangement that will likely be continued and perhaps widened for subsequent years. ABFT will retain the con-

trol of the scientific content of the program and will continue to control the scientific and professional aspects of the ABFT accreditation program. The contracted assistance is expected, among other things, to improve the turn around time for processing applications and inspection reports. On the other hand, these services come at a cost currently set at an average of \$1000 per year per laboratory. ABFT will absorb the cost of that increase for 2010. However, effective January 1, 2011, all accredited laboratories will be required to submit an annual accreditation fee of \$3500 regardless of whether it is a mid-cycle or on-site inspection year. A separate application fee will no longer be required from accredited laboratories.

There are currently 198 forensic toxicologists certified by ABFT (129 Diplomates and 69 Forensic Toxicology Specialists).



CONGRATULATIONS to our colleagues who have successfully met all the requirements and joined the ranks of ABFT Certificants since December 2009:

- Shaohan Zhao, Ph.D., D-ABFT
- Christopher Johnston, B.S., B.A., FTS-ABFT
- Asa Louis, B.Sc., FTS-ABFT
- Brianne O'Reilly, M.S., FTS-ABFT
- Robyn Sweeney-Blaise, M.S., FTS-ABFT
- Lucas Zarwell, MFS, FTS-ABFT

CONGRATULATIONS to the staff of the Forensic Toxicology Laboratory, Office of the Medical Examiner, Maricopa County, Phoenix, AZ on successfully meeting all the ABFT requirements for laboratory accreditation.

CONGRATULATIONS to Director, Barry Logan, 2010 recipient of the prestigious AAFS Toxicology Section Rolla N. Harger Award.

ABFT NEWS (CONTINUED)

ABFT REMINDERS:

- ▶ Effective January 1, 2010, all ABFT accredited laboratories will be required to subscribe to both the FTC (Toxicology) and the T-series proficiency tests of the College of American Pathologists (CAP). Laboratories will be required to complete all challenges for the FTC set for which the laboratory has established, validated methods. All of the laboratory's usual screening and confirmation tests will need to be completed for the T-series, plus those quantitative challenges for which the laboratory has routine methods. Results must be returned to CAP within the reporting period. In addition, laboratories must subscribe to the CAP AL1 Whole Blood Alcohol program or comparable program(s) with an equivalent number of challenges for ethanol and related volatiles. Laboratories are encouraged to continue participation in any other proficiency test programs to which they currently subscribe.
- ▶ ABFT Board of Directors has restructured the certification application, re-certification application and continuing education fees. Effective

January 1, 2009, a non-refundable fee of \$150 is applied to all new applications, replacing the previous \$ 300 fee. The re-certification fee of \$300 is no longer required every five years. Instead, a fee of \$ 100 is required with the annual submission of continuing education credits. Certificants will still need to submit a re-certification application every five years in order to remain in good standing.

- ▶ ABFT no longer has the USA/Canada residency requirement for certification. All other requirements remain the same. The examination is administered (in English only!) twice each year, at the American Academy of Forensic Sciences (AAFS) Annual Meeting and at the Society of Forensic Toxicologists (SOFT) Annual Meeting. Additionally, a candidate may request to have an examination administered at a different location under the direction of a member of the Board of Directors. We welcome and encourage our international colleagues to consider applying for ABFT certification. Please visit www.ABFT.org for more information.

TOX QUIPS—THE NATURE OF POISONS

A man is lying on his deathbed. His wife sits at his bedside holding his hand and praying silently. He looks up and says

weakly, "I have something I must confess." "There's no need to," she replies. "No," he insists, "I want to die in peace. I slept with your sis-

ter, your best friend, her best friend, and your mother." "I know," she replies. "Now just be still and let the poison work."

CALL FOR PAPERS - ABSTRACT SUBMISSION FOR SOFT 2010 ANNUAL MEETING DEADLINE IS JULY 2, 2010

The SOFT 2010 Scientific Committee is asking for abstracts on all forensic toxicology topics.

Scientific papers selected for presentation will be divided into two groups:

- 15 minute platform presentations, and
- poster presentations

The 2010 Scientific Program Committee will select appro-

priate abstracts from those submitted by the July 2, 2010 deadline.

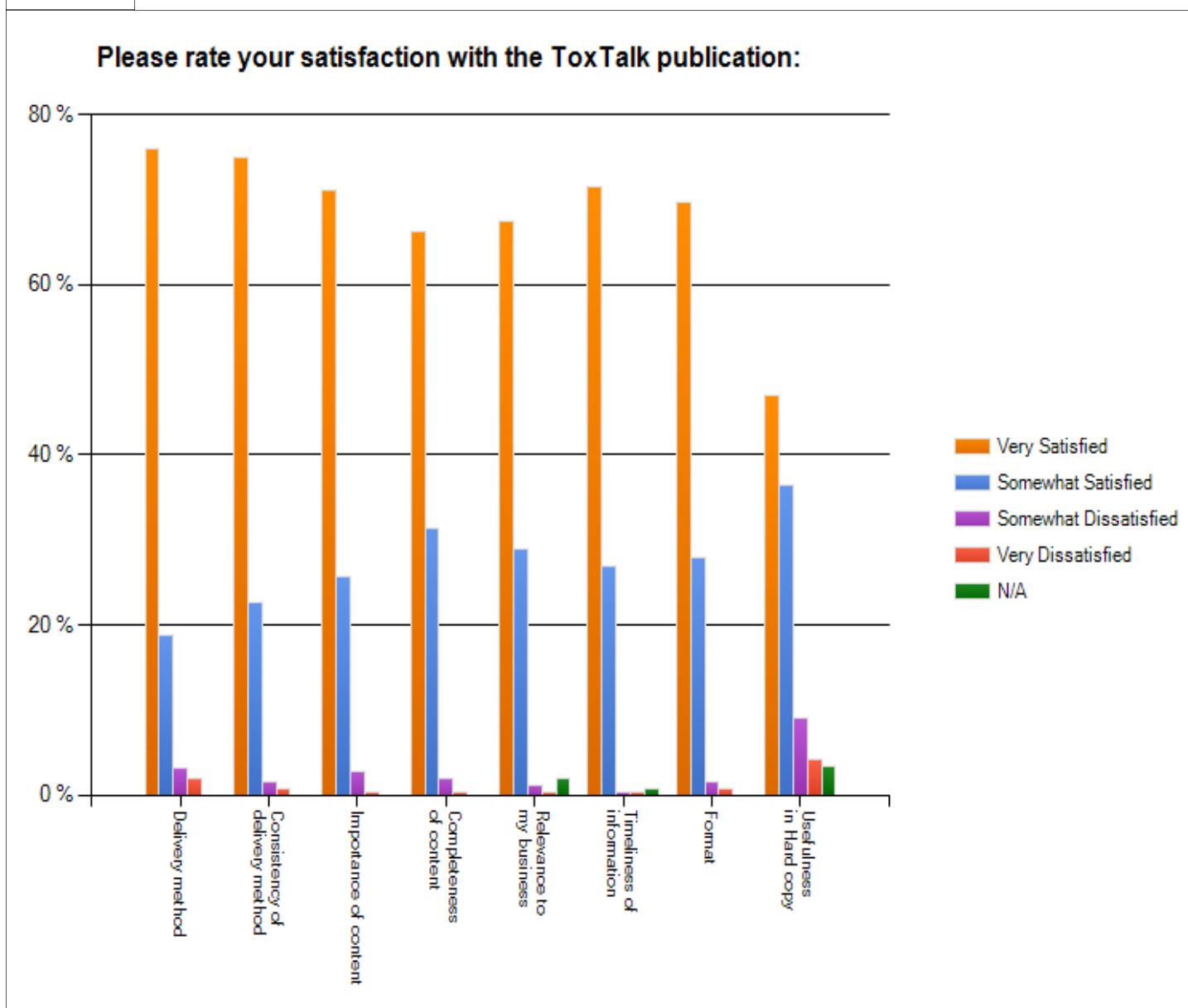
Specific requirements and instructions can be found in the "Call for Papers" pdf at the meeting website (soft2010.org).

RESULTS OF TOXTALK SURVEY

Recently we sent out a survey to gauge the needs of readers of ToxTalk and their interest in an electronic delivery mechanism for ToxTalk. In part, this question has arisen due to the need to look critically at the SOFT budget and find places where costs can be contained. ToxTalk has a substantial budget for printing and mailing of the hardcopy version of the newsletter. But cost is not the only consideration, an electronic version offers the potential for better archiving, searching and flexibility in ToxTalk.

The survey received 246 responses from the SOFT member population. Some questions were asked about how people currently use and perceive ToxTalk. In Figure 1 (below) you can see that ToxTalk is very well received and used by the membership. Of note though is the lower response to the question of how useful people find ToxTalk in hard copy.

Figure 1



RESULTS OF TOXTALK SURVEY (CONTINUED)

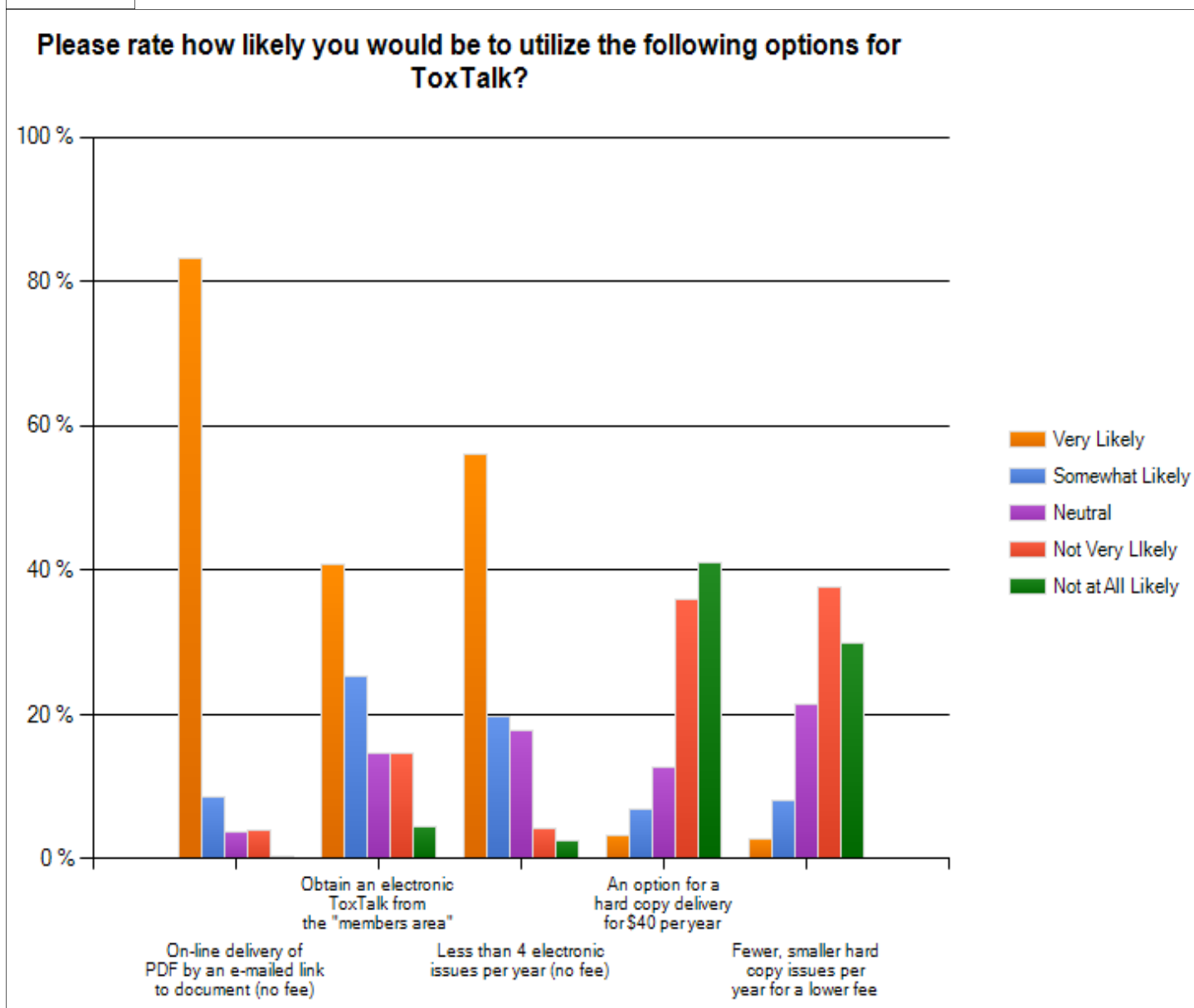
Also asked was how members would like to receive ToxTalk. We presented several options and Figure 2 (below) gives a summary of the responses.

From this survey, it is obvious that receiving ToxTalk in an electronic format that allows for both streaming access (being able to view the document without necessarily downloading it) and download access is the most preferred of the options. Many comments addressed the need to have some kind of e-mail notification of the availability of an issue.

Rather than trying to summarize the diverse comments obtained, the comments and the entire survey results can be viewed at: http://www.surveymonkey.com/sr.aspx?sm=ZWAUJWaiPaVamFmU1CP8dl2DHE-TYtfY0Qce2Mec2ReA_3d.

Thank you for your time in responding to the survey. Your answers helped the Board to be able to make a more informed decision on how to proceed.

Figure 2



MEMBER NEWS

**Congratulations to Barry K. Logan, Ph.D., DABFT
Recipient of the Rolla N. Harger Award, AAFS Toxicology Section**

Dr. Logan is a leading authority in forensic toxicology with specific interests in alcohol and drug impaired driving, and postmortem toxicology. He served for nineteen years as state toxicologist for the state of Washington, overseeing the State's forensic alcohol and drug testing programs, and crime laboratory system. In 2008 Dr Logan joined NMS Labs in Willow Grove, PA as Director of Toxicological and Forensic Services. Dr. Logan is Board Certified by the American Board of Forensic Toxicology, and serves on their Board of Directors. He has over 80 publications in the peer-reviewed literature including treatises on the effects of methamphetamine, cocaine, marijuana, alcohol, hallucinogens and depressant drugs on drivers. He has testified in civil and criminal cases in over 200 trials in eight states and in federal court. He has also served on the Boards of the National Safety Council's Committee on Alcohol and Other Drugs, the International Council on Alcohol, Drugs, and Traffic Safety (ICADTS), Society of Forensic Toxicologists (SOFT) and the editorial boards of the Journal of Forensic Sciences, and the Journal of Analytical Toxicology. He is a Fellow and Vice President of the American Academy of Forensic Sciences. Dr. Logan was the recipient of TIAFT's 2003 mid-career achievement award for excellence in forensic toxicology. Since 2001, Dr Logan has served as Executive Director of Indiana University's Center for Studies of law in Action, where he has hosted experts in alcohol and drug impairment from around the world as members of the faculty. The center celebrated its 50th anniversary in 2007, and received the prestigious Institutional Widmark Award from the International Council on Alcohol Drugs and Traffic Safety (ICADTS).

**Congratulations to William Lee Hearn, Ph.D.
Recipient of the Alexander O. Gettler Award, AAFS Toxicology Section**

Dr. Hearn is Laboratory Director at the Miami-Dade County Medical Examiner Department in Miami, Florida, a position that he has held for 23 years. His duties include representing the laboratory in court as well as technical and administrative oversight of the Toxicology Laboratory Division, which currently analyzes approximately 2500 postmortem toxicology cases annually. Prior to joining the staff at the Medical Examiner Department, he was Laboratory Director and co-owner of Toxicology Testing Service, Inc., a private laboratory in Miami, Florida, specializing in clinical and forensic toxicology (FUDT).

Dr. Hearn completed his B.S. degree with a major in Chemistry at the University of Maryland and earned a PhD. degree in Pharmacology from the University of Miami, School of Medicine. His research interests include drug metabolism, structure-activity relationships, pharmacokinetics and postmortem redistribution of drugs. He is a voluntary faculty member in the Chemistry Dept. at Florida International University serving in the Forensic Sciences program and on graduate research committees. He has previously held a voluntary faculty appointment at the University of Miami, School of Medicine.

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ToxTalk Deadlines for Contributions:

February 1 for March Issue
May 1 for June Issue
August 1 for September Issue
November 1 for December Issue

ToxTalk is the official publication of the Society of Forensic Toxicologists, Inc. It is published quarterly for its members. It is each member's responsibility to report change of address and email information to the SOFT Administrative Office. To submit articles, address and email changes, please email to ToxTalk@soft-tox.org.

Future S.O.F.T. Meeting Info

2010: Richmond, VA.....Oct. 18-22, 2010.....Michelle Peace, Lisa Tarnai Moak
2011: San Francisco, CA.....Aug. 29-Sep. 2, 2011.....Nikolas Lemos, Ann Marie Gordon
2012: Boston, MA.....June 30-July 6, 2012.....Michael Wagner
2013: Orlando, FL.....Oct. 26-Nov. 3, 2013.....Bruce Goldberger
2014: Grand Rapids, MI.....to be determined.....Ben Kuslikis, Michael Smith

VISIT RICHMOND!

SOFT 2010
www.soft2010.org

We're on the Web!
www.soft-tox.org



SOFT 2010 PLANNING COMMITTEE MEMBERS

2010 S.O.F.T. COMMITTEE CHAIRS

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ToxTalk Co-Editors.....Yale Caplan, Ph.D., DABFT
Vickie Watts, M.S.
Publications (JAT Special Issue)Laureen Marinetti, Ph.D., DABFT
Awards.....Philip Kemp, Ph.D., DABFT
Meeting Resource.....Sarah Kerrigan, Ph.D.
Laboratory Guidelines.....W. Lee Hearn, Ph.D.
Drugs & Driving.....Jennifer Limoges, M.S., DABC
Policy and Procedure.....William Anderson, Ph.D.
SOFT Internet Web-Site.....Bruce Goldberger, Ph.D., DABFT
Continuing Education.....Ann Marie Gordon, M.S.
Young Forensic Toxicologists.....Teresa Gray, M.S.
Drug Facilitated Sexual Assault.....Laureen Marinetti, Ph.D., DABFT
Ethics.....Aaron Jacobs, Ph.D.
Nominating.....Anthony Costantino, Ph.D., DABFT
MS/MS Guidelines.....Dennis Crouch, M.S.
Strategic Planning.....Marc LeBeau, Ph.D.
Consortium of Forensic Science Organ.....Peter Stout, Ph.D., DABFT

Committee Chair

