



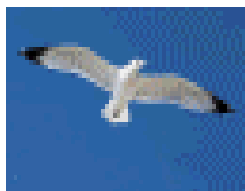
# *SAT Newsletter*

News of the Southwestern Association of Toxicologists

Volume 24, Number 2

Fall 2002

## *Galveston, Texas*



I would like to invite you to join us in Galveston, Texas for our 2002 Fall Meeting of the Southwestern Association of Toxicologists. The meeting is November 7-9 and will take place at the Hilton Galveston Island Resort.

The room rates are \$89/night single/double (plus tax) and the deadline to reserve rooms at this rate is **October 7<sup>th</sup>**. Be sure to mention any options for your room when making your reservation and that you will be attending the SAT meeting. The Hilton is located across from the beach and has shuttle service to both Moody Gardens and The Strand in downtown Galveston. Both sites offer entertainment and fun activities. The shuttle runs at all hours to and from the Hilton and is complimentary. The Hilton is located at 5400 Seawall Boulevard, Galveston, TX 77551, (800) ISLE FUN, [www.galvestonhilton.com](http://www.galvestonhilton.com). To find out more information about what Galveston has to offer check out their web site at [www.galvestoncvb.com](http://www.galvestoncvb.com) or call 1-888-GAL-ISLE.

## Travel Information

Galveston Island is located at the southernmost end of I-45 and is about 45 minutes south of Houston. The closest major airport is Houston-Hobby in south Houston and if you are flying in and think you need transportation from the airport be sure to contact me or notate as such on your registration form. If there is enough interest, we may be able to make accommodations for transportation from Houston-Hobby. The Hilton is on Seawall Boulevard which follows along Galveston Island on the Gulf of Mexico side of the island.

**?Questions?:** Contact Lori Speaker (aka Flores) at (254) 759-7156 or 7180 or email me at [Lori.Speaker@txdps.state.tx.us](mailto:Lori.Speaker@txdps.state.tx.us).



The focus at this meeting will be on the regional toxicology in the area. Galveston and the surrounding areas offer a wide variety of toxicological and biological studies and we hope to extract from the local resources unique and interesting discussions. If there are any topics of interest that someone wishes to discuss at this meeting, please contact Lori Speaker at (254) 759-7156. More details to follow, so watch your email or sign up on the email list if you have not done so. (To sign up, see points of reference on page 11 in this newsletter)

Join everyone at the President's Reception on Thursday night from 6:00p.m.-8:30p.m. to get this meeting started off on a good note. We will have food and beverages.

# SOUTHWESTERN ASSOCIATION OF TOXICOLOGISTS

2002 Fall Meeting  
November 7-9, 2002

Hilton Galveston Island Resort  
Galveston, Texas

## TENTATIVE MEETING SCHEDULE

### Thursday, November 7, 2002

12:00p.m. – 2:00 p.m.	SAT Board Meeting
3:00 p.m. – 6:30 p.m.	Registration
6:00 p.m. – 8:30 p.m.	President's Reception
8:30 p.m.	Dinner & Entertainment on your own

### Friday, November 8, 2002

7:30 a.m. – 8:30 a.m.	Continental Breakfast
8:00 a.m. – 9:00 a.m.	General Business Meeting
9:00 a.m. – 9:30 a.m.	Break
9:30 a.m. – 10:30 a.m.	Scientific Sessions
10:30 a.m. – 11:00 a.m.	Break
11:00 a.m. – 12:00 p.m.	Scientific Sessions
12:00 p.m. – 1:30 p.m.	Lunch (Italian Buffet)
1:30 p.m. – 3:00 p.m.	Scientific Sessions
3:00 p.m. – 3:30 p.m.	Break
3:30 p.m. – 5:00 p.m.	Scientific Sessions

Entertainment and Dinner on Your own

### Saturday, November 9, 2002

8:00 a.m. – 8:30 a.m.	Continental Breakfast
8:30 a.m. – 10:00 a.m.	Scientific Sessions
10:00 a.m. – 10:30 a.m.	Break
10:30 a.m. – 12:00 p.m.	Scientific Sessions and Meeting Closing

**SOUTHWESTERN ASSOCIATION OF TOXICOLOGISTS**

**2002 Fall Meeting  
November 7-9, 2002**

**Hilton Galveston Island Resort  
Galveston, Texas**

**REGISTRATION FORM**

Name (As it will appear on badge) \_\_\_\_\_  
Phone: \_\_\_\_\_ FAX: \_\_\_\_\_ Email: \_\_\_\_\_  
Title: \_\_\_\_\_  
Agency: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

SAT Member: \_\_\_\_\_ Non-Member: \_\_\_\_\_

**MEETING REGISTRATION:**

**Please register by October 7th, 2002 to avoid late fees! Registration includes admission to all scientific sessions, workshops, exhibits, and the President's Reception.**

	<b>Member</b>	<b>Non-member</b>	<b>Student</b>	<b>Total</b>
<b>Prior to October 7th:</b>	<b>\$45.00</b>	<b>\$50.00</b>	<b>\$20.00</b>	_____
<b>After October 7th:</b>	<b>\$50.00</b>	<b>\$60.00</b>	<b>\$30.00</b>	_____
<b>Extra Meal Tickets</b>	<b>\$15.00</b>	x _____		_____

**TOTAL ENCLOSED:** \_\_\_\_\_

I will need transportation from Houston-Hobby to the Hilton Yes [  ] No [  ]

Flight arrival (date, airline and time): \_\_\_\_\_  
Flight departure (date, airline and time): \_\_\_\_\_

**Please make payment by check or money order, payable to SAT, and mail to:**

**Lori Speaker  
Texas Department of Public Safety  
Crime Laboratory  
1617 E. Crest  
Waco, TX 76712**

**HOTEL INFORMATION:**

**Hilton Galveston Island Resort  
5400 Seawall Boulevard  
Galveston, Texas 77551  
Reservations: 1-800-ISLE FUN  
www.galvestonhilton.com**

**SOUTHWESTERN ASSOCIATION OF TOXICOLOGISTS**

**2002 Fall Meeting  
November 7-9, 2002**

**Hilton Galveston Island Resort  
Galveston, Texas**

**CALL FOR PAPERS**

Please complete the following form and submit along with a copy of your abstract (200 words or less). Please submit form and abstracts prior to October 18, 2002.

Please Print or Type:

Author(s): \_\_\_\_\_

Title: \_\_\_\_\_

Agency: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

AV Equipment Required:     35 mm Slide Projector  
                                   Overhead Projector  
                                   LCD Projector (Power Point PC Presentation)  
                                   Other (please specify)

Time slots will be 20-30 minutes unless otherwise requested.

Is this presentation to be considered for an SAT meeting grant?    ( ) Yes    ( ) No

Please return completed form and abstracts to:

Glenn Harrison  
Texas Department of Public Safety  
PO Box 4143 MSC0460  
Austin, TX 78765

512-424-2105  
512-424-2869 (FAX)  
email [Glenn.Harrison@txdps.state.tx.us](mailto:Glenn.Harrison@txdps.state.tx.us)

**Southwestern Association of Toxicologists**  
**Meeting Grants Application**

**The SAT Meeting Grant (\$300.00 plus meeting registration) may be awarded to two individuals per meeting (at the approval of the board). It may be applied toward the current meeting or one of the next two meetings.**

Guidelines for Meeting Grant:

- SAT Member in good standing.
- Presenting paper at meeting.
- Non-supervisory position.
- Sponsoring letter from laboratory or section manager.

Application for the SAT Meeting Grant should be forwarded to:

Chris Heartsill  
Dallas County Institute of Forensic Sciences  
5230 Medical Center Drive  
Dallas, TX 75235

Phone: (214) 920-5966  
email: cheartsill@dallascounty.org

Applicant's  
Name: \_\_\_\_\_  
Position: \_\_\_\_\_  
MailingAddress: \_\_\_\_\_  
\_\_\_\_\_  
Phone: \_\_\_\_\_  
Sponsor: \_\_\_\_\_ Title: \_\_\_\_\_

**NOTE: Title and abstract must be received by program chair prior to application.**

Applicant Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Date Application received: \_\_\_\_\_ SAT member verified: \_\_\_\_\_

Recommendation of committee: \_\_\_\_\_ Approve \_\_\_\_\_ Disapprove

Action of Board: \_\_\_\_\_ Fund \_\_\_\_\_ Do Not Fund Date: \_\_\_\_\_

**Southwestern Association of Toxicologists  
Board of Directors:**

President: 2002-2003	Mike Frontz Bexar County Forensic Sciences Center 7337 Louis Pasteur Dr. San Antonio, TX 78229 (210) 335-4031
President-Elect: 2002-2003	Chris Heartsill Dallas County Institute of Forensic Sciences 5230 Medical Center Drive Dallas, TX 75235 (214) 920-5966
Past President: 2002-2003	Lori Speaker (Flores) Texas Department of Public Safety 1617 E. Crest Waco, TX 76705 (254) 759-7156
Secretary: 2002-2003	Kathy Erwin Texas Department of Public Safety P.O. Box 4143, MSC 0460 Austin, TX 78765 (512) 424-2105
Treasurer: 2002-2004	Robert G. Schoenfeld, Ph.D. 7204 Aztec Road, N.E. Albuquerque NM 87110 (505) 884-4997
Councilor: 2002-2004	Brad Hall, Ph.D. Travis County Medical Examiner Laboratory PO Box 1748 Austin, TX 78767 (512) 854-9861
Councilor: 2001-2003	Phil Kemp, Ph.D. Office of Chief Medical Examiner 901 N. Stonewall Oklahoma City, OK 73117 (405) 239-7141
Membership Chair:	Brenda Snodgrass 519 Fleetwood Dr. Norman, OK 73072 Hm. (405) 360-6103 wk. (405) 522-5440

## President's Message:

*When a man assumes leadership, he forfeits the right to mercy.*

**-Gennaro Anguilo, Boston organized crime boss**

When I first joined S.A.T. in 1996, I was encouraged by the friendliness and sincerity of the membership as we gathered to discuss our little corner on a fascinating and dynamic field. All of us have made investments in our occupation in various ways, and it is refreshing to have an audience of peers that realizes and respects that effort. Our organization fills a niche for the bench chemist, and provides a forum that is unmatched by some of our larger cousins. I consider it a privilege to be your voice, and I hope that I might receive just a little mercy anyway.

You may have noticed the youthful color in the current board members, and I feel that just drives my point home about respect and willingness to embrace (or merely tolerate) energy even if there may be an experience void. Some of the more senior members of S.A.T. are just as energetic and passionate about their endeavors, and their contributions are the cornerstone of our organization. I want to thank those of you who might consider yourselves in that senior category; it is to you whom many eyes and ears turn for guidance. If you haven't made it to an S.A.T. meeting for a while, please consider taking the time to share your experiences with a younger member at our Galveston meeting.

In the past, I have tried to incorporate my various dabbling in occupation-peripheral work into the fabric of S.A.T. The electronic mailing list serves a convenient resource to link many of us together. There is much room for growth in the use of this medium and I intend to continue to promote it and expand its functionality. The use of PowerPoint and other electronic presentation media is also an interest of mine and adds a little extra to our meeting times. Let it be a lesson to our newest members, though, that if you plan on making any contributions to the group, however insignificant you may believe them to be, you too might wind up writing this column someday.

We should continue to strive to make S.A.T. a valuable resource for all of our members, as well as a fun and energetic meeting ground. That is my hope for the remainder of my board tenure. I look forward to seeing you in Galveston.

Mike Frantz  
President 2002-2003





## Past President's Message

It has been a joy and a great experience to have served as President this past year. I want to thank everyone who has helped me along the way and I am excited to see what is in SAT's future. We have a great group of people serving on the Board and I know they are doing their best in the interest of our organization.

I thoroughly enjoyed the meetings in San Antonio and Wichita and look forward to our future meeting sites. Mike Frontz will serve everyone well as our President and I ask everyone to support him in this next year. Once again, thank you and here's to another great year!

Lori Flores





### *ABFT Certification in Forensic Toxicology Update*

By Rod McCutcheon, B.S., DABFT

Why would a person volunteer to fill out a long application form, find references to say nice things, and then pay money so you can take a comprehensive test that requires a significant study-time investment? Good question. Apparently approximately 175 forensic toxicologists have decided it is worth the effort. That is the number of individuals currently certified as “Diplomates” or “Forensic Toxicology Specialists” by the American Board of Forensic Toxicology (ABFT).

Certification is more than getting to put some letters behind your name and bolstering your credibility in court. Certification is an acknowledgement, by leaders in your profession, that you have the education, experience and knowledge to practice your chosen profession competently.

Currently, examinations are held two times a year; at the Society of Forensic Toxicologist (SOFT) meeting and the American Academy of Forensic Sciences (AAFS) meeting. The next SOFT meeting will be in the Detroit area, October 13-17, 2002. The next AAFS meeting will be in Chicago, February 17-22, 2003. I am continuing to try to have an examination scheduled for the SAT/CAT joint meeting in Albuquerque.

When you are weighing the merits of certification, click over to [www.abft.org](http://www.abft.org) and look at the online directory of certificants. You will see names of toxicologists that have pioneered and molded the field of forensic toxicology: Dr. Kurt Dubowski, Dr. Irving Sunshine, Mr. Robert Cravey, Dr. Yale Caplan, and Dr. James Garriott and others. Think about having your name inserted in that list.

The website is also a good source of information on requirements and procedures for application. Of course I will be happy to discuss any question you have. See you in Galveston.

**POINTS OF REFERENCE**

1. To submit information, newsletter articles, want ads, or answers and discussion for the current Toxicology Exchange Topic:

Nancy Gowen Kropp (405) 271-8184  
 Genzyme Glycobiology Research Institute [krop@qns.com](mailto:krop@qns.com)  
 800 Research Parkway, Suite 200  
 OKC, OK 73104

2. Web page address: <http://www.sat-tox.org/>  
 Web page email: [webmaster@sat-tox.org](mailto:webmaster@sat-tox.org)  
 Web Page administrator:

Glenn Harrison (512) 424-2105 (ph)  
 TX Dept of Public Safety (512) 424-2869 (fax)  
 PO Box 4143, MSC0460 [glenn.harrison@txdps.state.tx.us](mailto:glenn.harrison@txdps.state.tx.us)  
 Austin, TX 78765

3. To Update addresses, phone numbers, employment, and email addresses for member records:

Kathy Erwin (512) 424-2105 (ph)  
 Texas Department of Public Safety (512) 424-2869 (fax)  
 P.O. Box 4143, MSC0460 [kjerwin@ev1.net](mailto:kjerwin@ev1.net) or [kathy.erwin@txdps.state.tx.us](mailto:kathy.erwin@txdps.state.tx.us)  
 Austin, TX 78765

*-Change of address form-*

Name: _____				
Last	First	Middle		
Home Address: _____				
Street	City	State	Zip	
Firm Name: _____				
Title: _____				
Address: _____				
_____				
Business Phone: _____			FAX: _____	
Home Phone: _____			email: _____	

4. To post a message to the e-mail list, send your message to [sat-tox@yahoogroups.com](mailto:sat-tox@yahoogroups.com).

5. To subscribe to the list server, choose one of the following:

- a. Web-method (preferred): The email list has its own website, which is [www.groups.yahoo.com/group/sat-tox](http://www.groups.yahoo.com/group/sat-tox). If you go to this website, you will be prompted to either convert your existing status with the old list from e-groups to a Yahoo! Account, or you can simply go through the join process if you are not currently a member or if you are not sure.
- b. Email only method: Send a blank email to [sat-tox-subscribe@yahoogroups.com](mailto:sat-tox-subscribe@yahoogroups.com).

6. To view the e-mail list server website, go to [www.groups.yahoo.com/group/sat-tox](http://www.groups.yahoo.com/group/sat-tox) and log in using your Yahoo! Account username and password. You will be able to view and retrieve archived list messages, other files, polls, and databases. You will also be able to upload information such as unknown spectra that you wish for other members to view.

**ACKNOWLEDGEMENTS**

This newsletter is published biannually for the benefit of the members of the Southwestern Association of Toxicologists.

The publishing of this newsletter was made possible with the help of the following: Lana Goodson, Kathy Erwin, Lori Speaker, Mike Frontz, and Rod McCutcheon.

Nancy Gowen Kropp (editor)

**SAT Business Meeting**  
Wichita, KS, Spring Meeting at The Hotel at Old Town  
April 4-6, 2002  
Minutes taken by Kathy J. Erwin, Interim Secretary

**I. Call to Order**

The meeting was called to order by President Lori Flores at 8:35 AM on April 6, 2002. Lori welcomed everyone to Wichita and thanked our hosts, Lana Goodson and Connie Huber.

**II. Secretary's Report**

A motion was made to accept the minutes from the San Antonio meeting as written in the newsletter. It was seconded and approved. Kathy Erwin also reported on the election: 85 out of 192 members who were mailed ballots returned them, a 44% return.

**III. Treasurer's Report**

Treasurer Robert Schoenfeld presented his report. As of March 27, 2002, our total net worth is \$20,508.00 with the Bank Book Balance at \$7,006.00 and the Fidelity Funds Balance at \$13,502.00. Brenda Snodgrass moved that we accept the treasurer's report. It was seconded and approved.

**V. Committee Reports**

**A. Meeting Grants**

Lori Flores reported that one meeting grant application was submitted by Phil Kemp for Linda Harty, who is presenting a paper on "Postmortem Distribution of Gamma-hydroxybutyrate: 2 cases from Oklahoma". Brenda Snodgrass moved that Linda Harty be granted the standard \$300 award for being in a nonsupervisory position and presenting a paper. It was seconded and approved.

**B. Membership**

Brenda Snodgrass presented the report. There are seven applicants recommended for membership to SAT:

Jim Burris, Texas Department of Public Safety, Austin, TX  
Aria McCall, Southwestern Institute of Forensic Sciences, Dallas, TX  
Rusty Nicar, Ph.D., Diagnostic Systems Laboratories, Webster, TX  
Justin Schwane, Southwestern Institute of Forensic Sciences, Dallas, TX  
Elizabeth Zbranek-Taylor, Southwestern Institute of Forensic Sciences,  
Dallas, TX  
Scott Proctor, Sedgwick County Forensic Science Center, Wichita, KS  
Kim Fox, Sedgwick County Forensic Science Center, Wichita, KS

The committee (Brenda, Chris Heartsill, & Phil Kemp) recommends that the board present these applicants to the general membership for approval. Bob Schoenfeld moved that we accept all seven applicants for membership. It was seconded by John Tarver and approved.

C. Awards

The Charles Tripp Award will be presented at the fall meeting.

D. Teller Committee

Lori Flores presented the report from the teller committee (Phil Kemp & Linda Harty). The election results are as follows:

President-elect (2002-3)	Chris Heartsill
Treasurer (2002-4)	Bob Schoenfeld
Councilor (2002-4)	Brad Hall
Secretary (2002-3)	Kathy Erwin

There was one invalid vote for no signature and 4 invalid votes with more than one selection for Councilor. Five ballots did not have a vote for every position, so those positions that did have a vote were counted. Rod McCutcheon moved to accept the election results. It was seconded and approved.

F. Communication Committee

Glenn Harrison presented the report. We now have a number of e-mail addresses for individuals. Mike Frontz will be sending out an invitation to those individuals for them to sign up for the Yahoo Mail List. Up to now, there has not been much participation. Associated with the Yahoo Mail List, we have an extra web site ([www.groups.yahoo.com/group/sat-tox](http://www.groups.yahoo.com/group/sat-tox)), which is restricted, where we could place power point presentations, mass spectra, the membership directory, etc., but to access the extra web site, you need to join Yahoo. The SAT web site itself has just been renewed for 2 years. It will have a new design shortly after the meeting--frames. Glenn will be placing meeting abstracts on the site. E-mail addresses for presenters will be included for contact, if desired. Rod McCutcheon reminded everyone that their abstracts could be reviewed by anyone in the world on the web site. There was also a suggestion to put a meeting template on the Yahoo site.

**VI. Old Business**

A. Membership Directory

Secretary Kathy Erwin plans to have the directory published in May or June of this year. Everyone who voted in the election returned their updated directory information. A copy of the constitution will be included in the directory.

B. ABFT Certification

The ABFT Certification exam will hopefully be offered at the joint CAT-SAT meeting. The ABFT board is working toward standardizing the exams. If you want to take the exam, applications need to be in at least 6 months in advance. Gary Kunsman's San Antonio certification workshop might be put on Yahoo. There is some interest in continuing the ABFT Certification Workshop at Galveston in order to review for the exam.

C. Board Member Duties

President Lori Flores is trying to put together job descriptions for board members before July. Objectives for doing this are to provide incoming officers with guidelines for doing their jobs plus to make sure certain tasks are not inadvertently overlooked.

D. Constitution Amendments

Lori Flores will update the constitution revising the amendments that were voted on recently. It was suggested that a separate revision history be attached to keep track of historical changes.

**VII. New Business**

A. Future Meetings

Bob Schoenfeld, after presenting membership statistics and meeting profit/loss figures, suggested that we keep our meetings in Oklahoma City, Dallas, Austin, San Antonio, and Houston with the option of having other sites from time to time. This would make a two and a half year rotation between cities. A major advantage is ease/less cost of travel to these cities for most members. He also suggested that we keep the same hotel in each of these cities after we find one that fulfills our needs. He also suggested that we go ahead with the idea of having a vendor liaison chairperson to coordinate vendors for all meetings. Based on these suggestions, a tentative future meeting schedule is as follows:

1. Fall 2002-Lori Flores, Galveston
2. Spring 2003-Bob Schoenfeld/Sarah Kerrigan (CAT), Albuquerque, New Mexico
3. Fall 2003-Austin?
4. Spring 2004-Ken Peck, College Station, TX
5. Fall 2004-Oklahoma City?
6. Spring 2005-Dallas/Fort Worth
7. Fall 2005-San Antonio
8. Spring 2006-Houston
9. Fall 2006-Austin (in combination with SOFT)

B. Hosting Meetings

John Tarver moved to approve the board's appointment of Paola Rodriguez as Vendor Liaison (non-board member). It was seconded and approved.

**VIII. Adjournment**

President Lori Flores thanked everyone for their help this past year. A motion to adjourn the meeting was made by Brenda Snodgrass and seconded.

## **Huffing: Effects, Abuse, and Toxicity**

Kim Fox, Mary Dudley, M.D., Corrie May, M.D. and Bill Dietze  
Sedgwick County Regional Forensic Science Center, Wichita, KS

Abuse of inhalant substances (often with volatile hydrocarbons) will be highlighted, as well as the origination and demographics of "huffing." Information presented from the NIPC (National Inhalant Prevention Coalition) showing the chronic and other long term effects, such as central nervous system damage and other significant damage to the respiratory system. Two post-mortem case studies involve halogenated-hydrocarbon inhalant deaths, and one post-mortem case involving toluene. The first case study is about a stenographer's assistant found dead, with a suspect "white chalky residue" stain on hands and legs. The second case study is a vagrant found dead in a gravel pit, clutching a bag with interior coated in shiny paint. The third, takes another element into the inhalant case studies, and presents a man found with a bag tied around his neck. Near his bedside, a Halon extinguisher is found. Through GC-Headspace analysis, the volatile hydrocarbons are revealed.

## **The Identification of Capsaicinoids in Pepper Spray Residues**

Tracey M. Thompson and Timothy P. Rohrig, Ph.D.  
Sedgwick County Regional Forensic Science Center, Wichita, KS

The detection and identification of capsaicinoids lachrymator (pepper spray) was an integral part of a homicide investigation undertaken by our laboratory. The victim and suspect were reported to have had a verbal confrontation, with the victim allegedly sprayed with an unknown substance. The victim was then shot one time in the head and subsequently died. The unknown substance left an "orange" oily residue on the victim and the victim's vehicle, of which swabs were taken. The swabs were extracted with isopropanol and analyzed by GC/MS. The instrument parameters were as follows: Column: 30 m SPB-1, Oven Program: 125 °C (1) to 250 °C at 25 °C/minute, then 250 °C to 300 °C (5) at 5 °C/minute, Injector: 250 °C. The two major capsaicinoids of the Capsicum species, capsaicin and dihydrocapsaicin, were extracted and identified utilizing GC/MS. Capsaicin and dihydrocapsaicin were well resolved, with a total run time of less than 15 minutes. The physical and chemical findings were consistent with the reported history of the victim being "maced" with pepper spray.

## Postmortem Distribution of Gamma-hydroxybutyrate: 2 cases from Oklahoma

Linda Harty B.S. MT(ASCP), Phil Kemp, Ph.D.  
Office of the Chief Medical Examiner, Oklahoma City, Oklahoma

Gamma-hydroxybutyrate (GHB) continues to draw the attention of forensic toxicologists due to both abuse and its reputation as a "date rape" drug. Two cases of death due to GHB will be reported. The first is a 23-year-old white female found dead in her apartment with a suicide note. Ethanol and diazepam were suspected but no ethanol and only a trace of diazepam were detected in blood by routine screening. GHB abuse was suggested by history. The second case is a 25-year-old white female who arrived at a local hospital in full arrest and could not be resuscitated. The boyfriend stated they had used GHB. Only a 0.14% ethanol was detected in blood by routine screening. GHB testing in our laboratory was developed using a slightly modified previously published method that utilizes 2-hydroxy-3-methylbutyric as the internal standard and a rapid liquid-liquid extraction using acetonitrile and an 80:20 solution of N, N-dimethylformamide/2,2-dimethoxypropane. Following derivatization with N-(tert-butyl)dimethylsilyl)-N-trifluoroacetamide (MTBSTFA) + 1% tert-butyltrimethylchlorosilane (TBDMCS), the di-tert-butyltrimethylsilyl derivatives were analyzed by gas chromatography/mass spectrometry (GC/MS). The results from our 2 cases were as follows (fluids, mg/mL; tissues, mg/g):

	Heartblood	Femoral blood	Subclavian blood	Urine	Vitreous	Liver	Brain	Gastric
Case 1	1.04	--	0.93	0.13	0.20	0.18	0.07	0.16
Case 2	2.08	1.27	--	0.68	0.31	0.43	0.20	--

## OXYCODONE: An ELISA Method Validation

Connie L. Huber, Lana J. Goodson and Timothy P. Rohrig, Ph.D.  
Sedgwick County Regional Forensic Science Center, Wichita, KS

Oxycodone abuse is on the rise with seizures and emergency department mentions increasing steadily. Oxycodone has been available for use since 1915 and available in its extended release form since 1996. Oxycodone is equipotent to Morphine but longer lasting and gives a high similar to Heroin. A need for a rapid simple screen for Oxycodone in blood was identified. Using the Immunalysis Oxycodone Direct ELISA Kit for Urine it was determined that low levels of Oxycodone can be detected. This Kit performed well in precision, linearity, and cross over studies. Confirmation was performed by GC/MS. The blood was extracted using a modified opiate extraction procedure with Oxycodone-D6 as the internal standard. An RTX-1 15m column was used, and acceptable chromatography obtained. A linearity study was performed with LOD of 5 ng/mL, LOQ of 10 ng/mL, and ULOL of 1000 ng/mL. Ten samples screened positive by ELISA and 8 of those confirmed positive by GC/MS. Seven samples screened negative by ELISA and all were confirmed negative by GC/MS. The Immunalysis Oxycodone Direct ELISA Kit for Urine is an accurate, precise, and reliable method for detecting low levels of Oxycodone in blood.

## **Ephedrine/Pseudoephedrine Toxicity**

Rod McCutcheon, B.S., DABFT  
Travis County Medical Examiner's Office P.O. Box 1748 Austin, TX 78767  
Rod.Mccutcheon@co.travis.tx.us

Ephedrine and pseudoephedrine are naturally occurring alkaloids found in several Ephedra plant species. Many dietary supplements contain an extract of ephedra alkaloids called "ma huang" which includes ephedrine and pseudoephedrine along with other alkaloids. The pure form of ephedrine is a sympathomimetic amine with peripheral and central nervous system (CNS) action. It has been used as a nasal decongestant and bronchodilator. Pseudoephedrine is also used as a nasal decongestant and bronchodilator, but has less CNS activity.

In the early 1990's the FDA began to receive numerous reports of adverse events associated with the use of ephedra-containing dietary supplements. These adverse events included nervousness, dizziness, tremor, alterations in blood pressure or heart rate, headache, gastrointestinal distress, chest pain, myocardial infarction, hepatitis, stroke, seizures, psychosis, and death.

The issue of ephedra related toxicity continues today with some studies indicating the potential and observed toxic effects of ephedra products and other studies indicating the safety and usefulness of these products.

Case histories of four deaths in which ephedrine was detected and ten deaths in which pseudoephedrine was detected will be presented. The potential role of ephedrine and/or pseudoephedrine in the cause of death will be discussed.

Charles Tripp Appreciation Award



Nomination Form

Candidates Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Position: \_\_\_\_\_

Years of SAT membership: \_\_\_\_\_

Please detail in the space below the contributions the above candidate has made in the field of Toxicology and in service to the Southwestern Association of Toxicology:

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The Board of the Southwestern Association of Toxicologists has established the Charles Tripp Appreciation Award to honor at least one member a year (at the discretion of the board) for outstanding service. Consider the following criteria:

- a. Professional contributions to the field of Toxicology
- b. Contributions and Service to SAT
- c. Years of membership
- d."Coming through in a Pinch"

Any member can submit the name of a deserving member to the board using the form above.



## PROFESSIONAL EXPERIENCE

Employer (most recent first)	City, State	Job Title	Dates		Supervisor
			From	To	

## ACHIEVEMENT AND DISTINCTION

Please list any publications, patents, certifications, honors or awards, etc. (attach extra sheets if necessary): \_\_\_\_\_

I certify that the above information is correct to the best of my knowledge.

\_\_\_\_\_  
Applicant's Signature

\_\_\_\_\_  
Date

### SPONSOR #1

### SPONSOR #2

Name (please print): \_\_\_\_\_ Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Signature: \_\_\_\_\_

Phone: \_\_\_\_\_ Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_ E-mail: \_\_\_\_\_

S.A.T. member:  Yes  No      S.A.T. member:  Yes  No

#### Additional Instructions:

If the applicant does not know two full members of S.A.T., the sponsors should be professional references. For those applicants, please include your curriculum vita along with this application. All applications are submitted to the Board of Directors at each semi-annual meeting (April and November). Pending acceptance, dues will begin with the next fiscal year (July).

Mail completed applications along with the non-refundable \$30 application fee to:

Brenda Snodgrass  
S.A.T. Membership Committee Chair  
519 Fleetwood Dr.  
Norman, OK 73072

