



SAT Newsletter

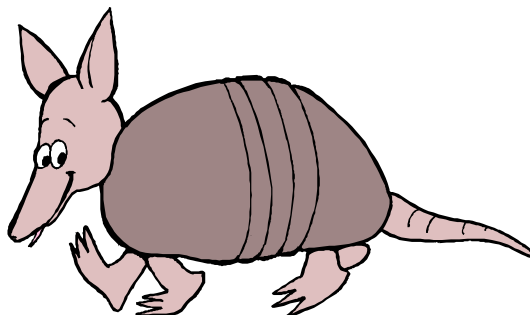
News of the Southwestern Association of Toxicologists

Volume 25, Number 2

Fall 2003

**SOUTHWESTERN ASSOCIATION OF TOXICOLOGISTS
2003 FALL MEETING
November 6-8, 2003**

Austin, Texas



The Fall 2003 meeting of SAT will be held November 6-8 in Austin. It has been a few years, and we have enjoyed the hospitality of many other SAT venues, so we are looking forward to hosting the meeting again. The meeting will be held at the Hilton Austin North, located near Highland Mall in north central Austin. A map and driving directions are provided in the newsletter.

The focus topic for the meeting is "Quantification – How Good Are Your Numbers?" We will address all aspects of quantifying compounds in biological specimens. Your numbers are only as good as the standards you use to prepare your calibrators. Sooo, it only seemed appropriate to take a field trip to see the new Cerilliant facilities in Round Rock on Friday afternoon.

To relax, after a mentally draining day of science, we are continuing from Round Rock to the little town of Coupland for some great Bar-B-Q and two step dancing at the local saloon. Put on your armadillo skin boots and COME ON DOWN!

Texas DPS and Travis County Labs

Hilton

Austin North

DRIVING DIRECTIONS

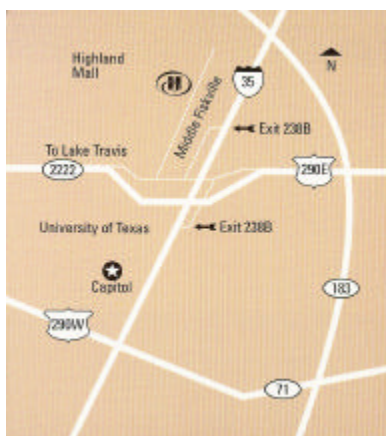
From Austin-Bergstrom International Airport: Turn left (West) onto Highway 71. Take Highway 71 to Highway 183 North. Turn right onto Highway 183 North and go to Highway 290 West. Turn left (West) onto Highway 290 West. Take the Airport Road Exit off Highway 290 and immediately get into the far right lane. Then turn at the first right onto Middle Fiskville Road (this turn is just beyond the Greyhound Bus Station). The Hilton Austin North is located on the left side (west) of Middle Fiskville Road.

From Dallas: Take IH-35 South to the 238A Exit (Houston/2222). At the first stop light turn right onto 2222. Then turn at the second right onto Middle Fiskville Road (this turn is just beyond the Greyhound Bus Station). The Hilton Austin North is located on the left side (west) of Middle Fiskville Road.

From San Antonio: Take IH-35 North to the 238A Exit (Houston/2222). At the second stop light turn left onto 2222. Then turn at the second right onto Middle Fiskville Road (this turn is just beyond the Greyhound Bus Station). The Hilton Austin North is located on the left side (west) of Middle Fiskville Road.

From Houston on 290: Take Highway 290 West into Austin. Take the Airport Road Exit off Highway 290 and immediately get into the far right lane. Then turn at the first right onto Middle Fiskville Road (this turn is just beyond the Greyhound Bus Station). The Hilton Austin North is located on the left side (west) of Middle Fiskville Road.

From Houston on Highway 71: Take Highway 71 West into Austin to Highway 183 North. Turn right onto Highway 183 North and go to Highway 290 West. Turn left (West) onto Highway 290. Take the Airport Road Exit off Highway 290 and immediately get into the far right lane. Then turn at the first right onto Middle Fiskville Road (this turn is just beyond the Greyhound Bus Station). The Hilton Austin North is located on the left side (west) of Middle Fiskville Road.



**SOUTHWESTERN ASSOCIATION OF TOXICOLOGISTS
2003 FALL MEETING
November 6-8, 2003
AUSTIN, TEXAS**

TENTATIVE MEETING SCHEDULE

Thursday, November 6th

12:00 N - 05:00 PM	Board Meeting	Magnolia
06:00 PM- 06:00 PM	Exhibit Setup	Hill Country A
05:30 PM- 06:30 PM	Registration	Lobby Hill A
06:30 PM- 08:30 PM	Reception	Elm

Friday, November 7th

08:00 AM- 08:30 AM	Breakfast	Hill Country A
08:00 AM- 03:30 PM	Exhibits	Hill Country A
08:00 AM- 03:30 PM	Meeting	Hill Country B
12:00 N - 01:00 PM	Lunch	Elm
04:00 PM- 06:00 PM	Cerilliant Trip	Round Rock
07:00 PM- 10:00 PM	Dinner/Dance	Coupland

Saturday, November 8th

08:00 AM- 08:30 AM	Breakfast	Hill Country A
08:00 AM- 10:30 AM	Exhibits	Hill Country A
08:00 AM- 12:00 AM	Meeting	Hill Country B

SOUTHWESTERN ASSOCIATION OF TOXICOLOGISTS

**2003 Fall Meeting
November 6-8, 2003**

**Hilton Austin North
Austin, 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, 2003 to avoid late fees! Registration includes admission to all scientific sessions, workshops, exhibits, and the President's Reception.

	Member	Non-member	Student	Total
Prior to October 7th:	\$60.00	\$70.00	\$35.00	_____
After October 7th:	\$70.00	\$80.00	\$45.00	_____
Extra Lunch Tickets	\$15.00 x _____			_____
Extra Copeland Tickets	\$30.00 x _____			_____

TOTAL ENCLOSED: _____

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

**Eddie Padilla MSC0460
Texas DPS Crime Laboratory
PO Box 4143
Austin, TX 78765**

HOTEL INFORMATION:

**Hilton Austin North
6000 Middle Fiskville Road
Austin, Texas 78752
Reservations: 1-800-347-0330 (512-451-5757)
www.austinnorth.hilton.com
Special Rate: single/double \$89 + tax
Specify group: "Southwestern Association of Toxicologists"
Deadline for special rate: October 16, 2003**

SOUTHWESTERN ASSOCIATION OF TOXICOLOGISTS

**2003 Fall Meeting
November 6-8, 2003
Hilton Austin North
Austin, 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, 2003.

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:

Rod McCutcheon
Travis County ME's Office
PO Box 1748
Austin, TX 78767

512-854-9861
512-854-9044
email Rod.Mccutcheon@co.travis.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:

Phil Kemp, Ph.D.

Office of Chief Medical Examiner

901 N. Stonewall

Oklahoma City, OK 73117

Phone: 405-239-7141

Fax: 405-239-2430

Email: p_kemp@ocmeokc.state.ok.us

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:
2003-2004
Chris Heartsill
Dallas County Institute of Forensic Sciences
(214) 920-5966
cheartsill@dallascounty.org

President-Elect:
2003-2004
Phil Kemp, Ph.D.
Office of Chief Medical Examiner
(405) 239-7141
p_kemp@ocmeokc.state.ok.us

Past President:
2003-2004
Mike Frontz
Bexar County Forensic Science Center
(210) 335-4031
mefron@co.bexar.tx.us

Secretary:
2003-2005
Monica Lopez
Dallas County Institute of Forensic Sciences
(214) 920-5809
mlopez@dallascounty.org

Treasurer:
2002-2004
Robert G. Schoenfeld, Ph.D.
(505) 884-4997
rgs6565@aol.com

Councilor:
2002-2004
Brad Hall, Ph.D.
Travis County Medical Examiner Laboratory
(512) 854-9861
brad.hall@co.travis.tx.us

Councilor:
2003-2005
John Tarver, MS, MBA, DABFT
Accuchem Laboratories, Inc.
(469) 330-3013
tarverhome@panaband.com;
jtarver@accuchemlabs.com

President's Message:

May 17, 1975. Although I do not remember specifically what I was doing, I am pretty sure that it had to do with figuring out what I was going to do on my summer break between kindergarten and first grade. Other people were gathering in Dallas for the first meeting of the Southwestern Association of Toxicologists. This meeting was the absolute farthest thing from my mind right out there with working for a living. For those that gathered in Dallas, a young boy in southern Oklahoma was the farthest thing from their minds. The two eventually met in 1994 and I am honored to serve as the President of SAT for 2003. To be nominated and elected President of this organization is a great honor for me primarily because I admire and respect its membership and its purpose.

Among the attendees at the first meeting in 1975 was one J. Rod McCutcheon. Rod has served this organization in a grand fashion through the years and once again will host the upcoming meeting in Austin. I am sure that you are looking forward to this meeting as much as I am. It is always fun to travel to Austin and participate in the life of a college town. Even more enjoyable is the time that is spent visiting with old friends, meeting new ones, and exchanging information in an informal setting. That is the true value of an SAT meeting.

The founders of SAT has several goals in mind: 1) providing an opportunity for more basic communication among individuals in the field of toxicology than usually available at national meetings; 2) mutual assistance with problems in the area of analytical toxicology; and 3) to be largely oriented toward the bench level analyst. The bench level analyst part is where I come in. I have benefited from this organization in so many ways but the opportunity to learn in an intimate setting directly from some big names in toxicology is at the top of my list. I would like to thank all of those who have taken the time to attend meetings, host meetings, present papers, and discuss toxicology and especially thank those people who in the early 1970's thought it would benefit us all to start this organization.

I understand that most budgets are tight right now but it is my hope that you will make an attempt to attend the SAT meeting in Austin. If you have not been to an SAT meeting in a while I think you would be pleasantly surprised and if you regularly attend you know what you will miss. I know that everyone had a great time in Albuquerque and it had to be one of the most substantial meetings yet. Thanks goes out to Dr. Schoenfeld, Mike Frontz, CAT, and all who helped put it on. I would like to thank Rod for taking time to host the upcoming meeting and I hope to see you there.

Chris Heartsill
SAT President, 2003

Past President's Message

This past year has seen some important milestones for our organization. I know that many of you attended our meeting in Galveston, (the site of the second S.A.T. meeting) and also our first joint meeting in a while with our California cousins. Thanks to all of you who pitched in and contributed, whether by hosting, presenting, talking to vendors, loaning laptops, buying shirts, or just making the effort to attend (several paying their own way.) Financially speaking, our Albuquerque joint meeting was a resounding success. We also benefited from a cadre of speakers normally not associated with our group, and with the exception of a few technical issues, probably the best program we have had privilege to attend in some time.

I have enjoyed the challenges and responsibilities associated with the hot seat, but I must remark that much of the actual legwork was done by members (and non-members) who don't mind sacrificing a little of their time for our purposes. To all of those folks, I extend hearty and heart-felt congratulations for a job well done. You made it a smooth ride. With Chris on deck, I'm sure that we will continue to see more opportunity and growth from our membership.

-Mike Frontz

Job Opportunities

Responses to the following Job openings can be addressed to:

George Tanen
Prestige Search Consultants
345 W Central
Franklin MA 02038
508 520 2077
gtanen@prestigeesc.com

Director of Toxicology- Arkansas
Full Relo

This position requires an individual with significant experience in designing, conducting and reporting GLP compliant nonclinical studies and managing/supervising scientific as well as technical personnel. In addition to managing the scientific staff at the facility, this position will be responsible for providing appropriate scientific guidance and mentoring in the preparation and review of study protocols and reports for scientific content and interpretation of results, and ensuring strict compliance with appropriate regulatory requirements.

The ideal candidate will possess a Ph.D. and D.A.B.T. and have at least 10 years of experience in the pharmaceutical, biotechnology or contract research industries. Excellent communication and problem solving skills are required.

Job Opportunities (cont.)

Toxicology Lab Manager- Arkansas
Full Relo

Responsibilities and essential functions include providing leadership and management to the technical operations department. This position is responsible for oversight and mentoring of the research staff, which includes Supervisors, and other technical team members, other responsibilities include generation/review of operational Sops, and interaction with interdepartmental management teams, in order to improve and maintain overall quality and efficiency. Must counsel staff on performance and career development, and provide feedback for subordinates. Provide training for supervisory and technical duties, and coordinate study assignments.

Education, Experience/Skills: A bachelor's degree or equivalent experience preferred with five to ten years of technical and two years of management experience in a nonclinical laboratory is considered a minimal requirement. Strong organizational, written, verbal, and interpersonal skills along with a track record of successful management of staff are required. Experience must include supervising preclinical studies and staff in a research environment, including the conduct of GLP nonclinical studies, LAT certification required; LATG certification preferred.

=====

Sr Director Toxicology- MA

Full Relo

Sr. Director Toxicology

The selected candidate will actively participate on drug development teams, including toxicology program and study design, dosage selection, study initiation and monitoring, report review and finalization. Responsible for leading risk assessments and for regulatory interactions. Also responsible for literature reviews, critical evaluations of in-licensing opportunities, and data summaries and presentations. Determine toxicology studies needed to support development projects. Initiate studies at approved contract facilities following appropriate processes for protocol development, contract implementation, test article procurement, and timeline commitments. Monitor studies for accuracy and timely completion, and review draft reports for completion and consensus of opinions. Prepare verbal and written summaries of study reports for internal discussions and for regulatory submissions. Coordinate tasks across departments for efficiencies and synchronization to support team objectives. Anticipate problems and opportunities and raise issues and suggested resolutions to supervisor or appropriate team leader. Management of staff at multiple contract facilities must be carefully addressed in order to ensure the timing requirements of the internal project teams. Contributions to, and cross-functional review of, various regulatory documents requires careful time management, mature communication and diplomacy skills, and attention to continuing improvements in existing processes. Position may include supervisory responsibilities.

Requirements:

Ph.D. or equivalent in Toxicology, Pathology, Pharmacology, Chemistry, or related health science field. Board Certification (e.g. DABT, ACVP) desired but not essential. Ten or more years of experience in pharmaceutical nonclinical safety evaluation required, with at least 3 of those years including responsibilities for risk assessments, FDA interactions and project decision making. Working knowledge of GLP regulations, ICH guidance documents and experience conducting and monitoring toxicology studies essential. Strong oral communication skills and demonstrated proficiency at technical writing are essential. Working knowledge of drug metabolism and/or kinetics would be a plus. Demonstrated leadership/supervisory strengths desired. extensive interactions across departments and external study monitoring responsibilities require solid time management and effective communication skills. This position requires an individual with excellent organizational, written and oral communication skills, high degree of self motivation, and effective problems solving skills in addition to time management, task management and mature communication and team skills are essential. As all studies are conducted externally, a fair amount of traveling (e.g. 10-20%) could be expected, depending upon project assignments.

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 Nancy.Gowen-Kropp@Genzyme.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
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
Austin, TX 78765

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

Monica Lopez (214) 920-5809
Dallas Co. Institute of Forensic Sciences
5230 Medical Center Drive
Dallas, TX 75235
mlopez@dallascounty.org

-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.
- 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. 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.
- 6. To view the e-mail list server website, go to 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: Rod McCutcheon, Kathy Erwin, Mike Frontz, Glenn Harrison, and Cris Heartsill.

Nancy Gowen Kropp (editor)

SAT Business Meeting
The Sheraton Old Town
Albuquerque, New Mexico
May 3, 2003
Minutes taken by Kathy J. Erwin, Secretary

I. Call to Order and Welcome

The meeting was called to order by President Mike Frontz at 8:37 AM on May 3, 2003. He welcomed everyone to the Joint Meeting of SAT with the California Association of Toxicologists (CAT) and introduced our host, Bob Schoenfeld. Bob welcomed everybody to Albuquerque, told us about a few of the local eating places and attractions, and mentioned that there were about 120 people in attendance.

II. Reports of Officers

A. Secretary's Report

John Tarver made a motion to accept the minutes from the Galveston meeting as written in the newsletter. It was seconded by Chris Heartsill and approved. Kathy Erwin reported that the election ran smoothly (74 out of 169 ballots were returned with 2 of those invalid).

B. Treasurer's Report

Treasurer Robert Schoenfeld presented his report. As of April 29, 2003, our total net worth is \$15,606.00 with the Bank Book Balance at \$8,481.00 and the Fidelity Funds Balance at \$7,125.00. There was very little activity from last meeting to this one. Possibly in the next 2-3 years we will go to an electronic newsletter in order to save money. Bob has obtained an IRS 501-c-3 status for the organization, which means we are tax exempt (we can request exemption from state taxes). John Tarver made a motion that we accept the treasurer's report. Rod McCutcheon seconded the motion, and it was approved.

III. Committee Reports

A. Meeting Grants

Chris Heartsill reported that no meeting grant applications were received. Chris solicited ideas for different forms in which the award could be given. Award ideas mentioned during the discussion were a stipend, gift certificate, Palm Pilot, etc. Members who work for government agencies generally have to turn over a cash award to their agency. Question is--what is the intent of the award? To defray meeting expenses or to honor the individual for presenting? Rod mentioned that we should research agencies to see what kind of awards are permitted. Mike solicited ideas to encourage grant applications.

B. Membership

Councilor Brad Hall presented the report. Brenda Snodgrass and the two councilors, Phil Kemp and Brad Hall, who make up the Membership Committee, recommended that the board present the following two applicants to the general membership for approval. They are:

Ryan Black, Arkansas State Crime Lab, Little Rock, AR
Wendell Riddle, Arkansas State Crime Lab, Little Rock, AR

John Tarver moved that we accept both applicants for membership. It was seconded and approved by acclamation.

C. Communication Committee

Kathy Erwin reported that Glenn Harrison wanted someone to obtain the powerpoint presentations, which Mike agreed to do. Glenn also wanted abstracts for the website for the CAT presentations. The SAT directory is now on the Yahoo groups web site in PDF format. In addition, powerpoint presentations from the last meeting are also on the Yahoo web site.

D. Awards Committee

Chris Heartsill reported that we have not received any nominations for the Charles Tripp Award for this year and opened the floor for nominations. Previous winners have been Ken Peck, Rod McCutcheon, and Bob Schoenfeld. A candidate was nominated and will be announced at the fall meeting.

Regarding the award for sponsoring new members, Kathy Erwin made a motion that 1) SAT present an award to the person who has the most sponsorships for new members, 2) the award would be free registration at a meeting, 3) in case of a tie, we will go back to the previous year to see if they sponsored any new members, and 4) it will be the board's discretion whether to make an award. The motion was seconded, but before a vote was taken, Brad Hall clarified that the award should be free registration at the next meeting. The motion was amended to include that wording. It was then seconded and approved.

E. Audit Committee

The committee, consisting of Monica Lopez, Don Riddle, and Lori Speaker, examined the Treasurer's books and found everything in order. John Tarver made a motion to accept the Audit Committee's report. Rod McCutcheon seconded the motion, and all approved.

F. Teller Committee

Justin Schwane reported that he and Elizabeth Zbranek-Taylor counted all the votes independently of each other and reached the same totals. There were 72 votes for each office. The new officers are:

President-elect (2003-2004): Phil Kemp
Secretary (2003-2005): Monica Lopez
Councilor (2003-2005): John Tarver

IV. Old Business

A. Membership Directory

This item was discussed under the Communications Committee report.

B. Newsletter Postage

This item was touched on briefly during the Treasurer's report. This will not be an issue much longer. We will try to go to an electronic newsletter in the next 1-2 years.

C. LCD Projector

Mike Frontz announced that Bexar County Forensic Science Center's Toxicology group has offered the indefinite use of their LCD projector as a back-up for SAT meetings if the group will purchase one spare projector bulb, which the board approved. No spare bulb has been needed as of yet, so one has not been purchased.

D. Officer Responsibilities

Mike Frontz reported that Lori Speaker is trying to put together job descriptions for new board members. 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. This information hopefully will be available online. Lori hopes to have these ready by July when new board members take office. This should not require any by-law changes.

V. New Business

A. Future Meetings

A tentative future meeting schedule is as follows:

1. Fall 2003 - Travis County Medical Examiner/TX DPS-Austin
2. Spring 2004 - Ken Peck, College Station, TX
3. Fall 2004 - Oklahoma City
4. Spring 2005 - Dallas/Fort Worth (tentative)
5. Fall 2005 - San Antonio (tentative)
6. Spring 2006 - Houston (tentative)
7. Fall 2006 - Austin (joint meeting with SOFT)

Rod McCutcheon mentioned that he had brochures for the Austin Hilton North and for some Austin attractions for the Fall 2003 meeting. He mentioned that Cerilliant would like to host a tour of their new facility in Round Rock.

Rod also mentioned that he did not think it would be possible to have a joint meeting with SOFT in 2006 where the two organizations split the finances. It might be more like a co-meeting where SAT members attend the SOFT meeting. A suggestion was made that SAT members who are not members of SOFT be able to register at the SOFT rate. Rod will take that back to SOFT.

B. Knit Shirts

Mike Frontz proposed that we have shirts with the SAT logo on it made for our members. A lot of members seem to be in favor of the idea.

C. ABFT Certification Exam

One person is sitting for the exam offered at this meeting. Rod McCutcheon described the application process and the exam itself. SAT will attempt to offer the exam again at a future meeting.

VI. Adjournment

A motion to adjourn the meeting was made by Phil Kemp, seconded, and approved.



**SOUTHWESTERN ASSOCIATION OF TOXICOLOGISTS
2003 SPRING MEETING
ALBUQUERQUE, NEW MEXICO
JOINT MEETING WITH CAT -THE CALIFORNIA ASSOCIATION OF
TOXICOLOGISTS**

On Friday, a workshop was presented on "Interpretive Toxicology: Unraveling the Mystery". This workshop featured the following presentations:

- Are Postmortem Blood Drug Concentrations Reliable Indicators of Toxicity and Should They be Admissible in Court?
Steven Karch, MD, Office of the Chief Medical Examiner, San Francisco, CA
- Interpretation of Postmortem Toxicology Results: They Do Usually Mean *Something...*
Graham Jones, PhD, Office of the Chief Medical Examiner, Edmonton, Alberta
- A Symbiotic Relationship Between the Toxicologist and the World of Numerology
Daniel Anderson, LA County Department of the Coroner
- Drugs and Driving; "What BAC Is That Equivalent To?" And Other Unlikely Questions
Barry Logan, PhD, Washington State Patrol
- Cannabis Effects on Human Performance and Behavior
Marilyn Huestis, PhD, National Institute on Drug Abuse
- Driving Under the Influence of UFO's, Demons and the Hot Tamale Defense: Case Presentation of Drug Impaired Drivers from New Mexico
Sarah Kerrigan, PhD, New Mexico Department of Health

Dr. Karch and Dr. Jones spoke about some of the pitfalls and complications in interpreting postmortem toxicology results. Dan Anderson presented some fentanyl case studies and involved the audience in interpreting results from several cases. Dr. Logan described some of the toxicological challenges of testifying in drug impaired driving cases. He also talked about the roles of both the DRE and the toxicologist in a drug impaired driving prosecution. Dr. Huestis' presentation covered cannabinoid pharmacology, pharmacokinetics, interpretation of forensic cannabinoid levels, estimation of time of drug exposure, and cannabis effects on driving performance. Dr. Kerrigan talked about drug impaired driving in New Mexico and whether a toxicologist can provide an opinion about impairment based on the toxicology report alone. She then presented case studies and asked the audience if they could render an opinion of impairment due to drugs.

Evaluation of Urine Adulterant Test for Oxidants: Positive Results Obtained from Microbial Contaminated Urine

Eugenia Brazwell, PhD, DABFT, Michael Crossey, William Christensen, and Marie Chavez
Tricore Reference Laboratories, Albuquerque, NM

A study of twenty random urines, collected for the purpose of examining the validity of the Syva® oX Perfect© assay, was conducted. We collected 16 specimens from women and four specimens from men. The specimens were analyzed within 12 hours after collection. All 16 specimens analyzed for oxidants by oX Perfect© assay or Adultcheck 6 showed no indication of an oxidant being present.

However, when we examined urine specimens that were several days old and contained significant bacterial contamination (cultured positive for E Coli), positive results for oxidants were obtained by oX Perfect© and by Adultcheck 6. To further examine this issue, we inoculated four originally oxidant negative specimens, two from males and two from female donors with an E Coli positive urine specimen. One of the specimens from a female donor obtained a positive result for oxidants by oX Perfect© and Adultcheck 6 after 3 days and remained positive for the entirety of the seven-day test period. The other specimen, from a female donor, was just under the cutoff value for the oX Perfect© assay but did test positive by Adultcheck 6 for oxidants. The two specimens obtained from male donors remained negative for oxidant during the entirety of the study period by both oX Perfect© and by Adultcheck 6.

The results from our initial study indicate that urine specimens containing E. Coli would suggest the addition of an oxidizing adulterant when in actuality no adulterant was added to the specimen. The consequences for taking disciplinary action in such a scenario would be grievous error. Additional studies involving other commonly encountered microbial contaminants will be discussed.

With Arsenic, Things Are Not Always What They Seem

Ernest D. Lykissa Ph.D., Loretta M. Anderson CHMM, REM, Carlos A. Gonzalez, Bradley M. Frink B.S., and Barry F. Uretsky, M.D.
ExperTox, Inc., Deer Park, TX

A male subject inquired for analysis of his body fluids and various condiments from his house pantry suspecting criminal intent by his estranged girlfriend. The ICP-MS measurements of his blood, urine, hair, sebum, and fingernail clippings were all consistent with arsenic poisoning. Upon close examination of the subject's arms, the characteristic skin discoloration of arsenic was noted. The table salt from his house was also contaminated with arsenic but not the sugar, flour, or cereal. Upon extensive sampling from multiple sites in his beachfront house, extensive arsenic residue contaminating the whole house was uncovered.

Upon consultation with the law enforcement criminal investigators on the case, and based on the distribution of arsenic in the home sites of our samplings, we concluded that the arsenic intoxication of our subject was not due to criminal intent but rather due to environmental causation.

A Rapid Screening Procedure for Acidic, Neutral, and Polar Drugs in Biological Specimens

R.G. Rodriguez, M. E. Frontz, G.W. Kunsman, and J.L. Castorena
Bexar County Medical Examiner's Office, San Antonio, TX

A relatively simple extraction method for the comprehensive screening of acidic, neutral, and low molecular weight polar drugs is described. The method involves a single buffered micro extraction into ethyl acetate for the isolation of target compounds. No back extraction or cleanup steps are required. One-microliter portions of the micro extract are injected on a DB/HP-1 column and analyzed by gas chromatography using a flame ionization detector. All positives are confirmed by GC/MS. Polar compounds are enhanced by converting to TMS derivatives using a single step derivatization technique. More than 60 components have been detected and identified in blood by the procedure. Quantitation is achieved and precision is maintained through the use of two internal standards (barbital/5-methyl salicylic acid) carried through the procedure. The procedure can be used as a routine screen in clinical or forensic toxicology cases with results available within two hours.

Determination of Warfarin in Postmortem Specimens by LC/MS/MS

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Warfarin is a commonly prescribed anticoagulant used for the prevention and treatment of thromboembolic conditions. It is also used as the active ingredient in some rodenticides. Oral doses for adults are normally 2-10 milligrams per day. Steady state plasma concentrations after 10-milligram daily doses have been shown to range from 1.4 to 3.5 mg/L. A recent medical examiner case involving a suspected overdose of an anticoagulant prompted the development of an assay for warfarin in biological specimens.

Warfarin and p-chloro-warfarin, as the internal standard, were isolated from acidified postmortem fluid and tissue homogenate by extraction with n-butyl chloride. The n-butyl chloride fraction was extracted into base, acidified, extracted back into n-butyl chloride and evaporated to dryness. The residue was reconstituted in mobile phase for analysis by LC/MS/MS. Liquid chromatography was performed by using an Agilent 1100 with Phenomenex Luna C18(2) column. The column was 50mm by 2mm with 5 micron particle size. The mobile phase was an isocratic mixture of acetonitrile (42.5%), methanol (42.5%) and water (15%) with 30 mmol ammonium acetate. The LC flow (0.25

ml/min) was directed into an electrospray ionization source and mass spectral analysis was performed with an API 2000 triple quadrupole mass spectrometer (Applied Biosystems).

Qualitative identification of warfarin was established by monitoring three transition ion pairs, m/z 309.0 250.9, m/z 309.0 162.8, and m/z 309.0 146.9. Quantitative analysis monitored the peak areas of the m/z309.0/250.9 transition for warfarin and the 343.2/285.0 transition for p-chloro-warfarin. A five point curve from extracted blood calibrators, ranging from 0.01 to 0.20 mg/L, was generated, $r^2 = 0.9997$. The established limit of quantification and limit of detection was 0.01 mg/L with a s/n of 135:1 for the 250.9 product ion.

In the case of suspected warfarin overdose, the following postmortem concentrations were determined: heart blood (1.3 mg/L), vitreous humor (0.02 mg/L), and liver (1.1 mg/kg).

Does Going Over-The-Counter, Get You Over Your Misery?

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Over the last ten years, the Food and Drug Administration has approved numerous prescription antihistamines safe for over-the-counter distribution. Antihistamines are a broad class of drugs, frequently taken to offer symptomatic relief from colds, sinus congestion, and allergies. Based on their physiological effects, antihistamines can be grouped into two categories. The first generation, sedating drugs, are H1 receptor antagonists and include diphenhydramine. The newer, second generation, non-sedating drugs are H1 receptor blockers such as desloratadine.

Diphenhydramine, chlorpheniramine, doxylamine, promethazine, hydroxyzine, and meclizine are commonly detected at The Los Angeles County Department of Coroner (LACDOC) Laboratory. In the past three years, diphenhydramine was the most prevalent antihistamine detected. Approximately 8% (41 of the 471) of the diphenhydramine cases exemplified toxic or lethal blood levels. In comparison, doxylamine was seen far less with 11% (11 of the 99) of the positive doxylamine cases being toxic or lethal. Promethazine and chlorpheniramine are also frequently encountered antihistamines, but the blood levels were rarely significant. The newest generation antihistamine, desloratadine, is being detected in casework; however, interpretation is yet to be determined.

Several LACDOC toxicology cases involving acute antihistamine poisoning will be presented.

CASE REPORT: A Sexual Predator and Serial Killer

Kristina Fritz

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For centuries, sexual predators have been a threat to society. Recently, the drug use by sexual abusers during attacks has increased and the term "drug-facilitated sexual assault" has been used to describe those cases. While agents such as Rohypnol® and GHB have been associated with date rape, the drug of choice by many attackers is often limited to what is readily available. Occasionally, death is the indirect result of the sexual assault and sometimes it is the direct result of the drugs utilized for the assault.

This case report illustrates the use of the anti-depressant amitriptyline in a series of cases involving sexual abuse and homicide in Southern California. Four murders occurred between April 2000 and April 2001. The victims, two females and two males, were initially invited for consensual sex. They were then drugged, sexually abused, bound with ligatures, and ultimately killed. Details of the murders will be presented along with criminalistics evidence and postmortem toxicology data.

Blood Alcohol Method Optimization by Balanced Pressure Headspace/Gas Chromatography

Timothy D. Ruppel

Sr. GC Product Specialist, Perkin-Elmer LAS

Instrumental and chromatographic parameters will be compared to develop a headspace/GC method optimized for reproducibility and rapid throughput. Each autosampler parameter involved in balanced pressure headspace extraction will be discussed. Several types of GC columns will be compared by stationary phase and physical diameters ranging from 0.18 mm ID to 0.53 mm ID and some packed columns. Three different column connection techniques will be discussed. All discussions will revolve around the total instrumental optimization of the Blood Alcohol Method.

Investigation of Propofol in Post-Mortem and Ante-Mortem Specimens by GC/MS and LC/MS

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The recent observation of an extremely high level of propofol in a specimen submitted during the course of an intoxication manslaughter investigation led to the refinement of an established GC/MS method for determining acidic and neutral drugs in biological matrices. A review of case histories and comparisons with previously obtained results led to the determination of at least three post-mortem cases in 2002 that involved this IV sedative-hypnotic agent. In addition, a fatal propofol intoxication case is presented.

Charles Tripp Appreciation Award



Nomination Form

Candidates Name: _____

Organization: _____

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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:

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.

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Thank you for your interest in the Southwestern Association of Toxicologists. We are a regional scientific organization, serving primarily the states depicted in our logo above. All of our members are actively engaged in forensic, clinical, or environmental toxicology, or are students with an interest in toxicology.

New members of S.A.T. must:

- ❖ Be actively engaged in the field of toxicology, or be an undergraduate or graduate student interested in chemistry, toxicology, or the forensic sciences
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- ❖ Enclose non-refundable \$30 application fee (this will serve as your first year's dues should you be accepted)

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Day Phone: _____ Fax: _____

E-mail: _____

Job Title: _____ Organization: _____

EDUCATION

College or University	Dates Attended (mm/yy)		Degree Earned	Major Field
	From	To		

Dissertation Title (if applicable): _____

Dissertation Advisor (if applicable): _____

PROFESSIONAL EXPERIENCE

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

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

Applicant's Signature

Date

SPONSOR #1

SPONSOR #2

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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