

ToxTalk

The official publication of the SOCIETY OF FORENSIC TOXICOLOGISTS, INC.

VOLUME 24, No. 1

MARCH 2000

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SOFT 2000 Milwaukee

Launching thirty years of forensic toxicology into the next millennium

Hyatt Regency October 2-6, 2000



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ToxTalk is mailed quarterly (bulk mail) to members of the Society of Forensic Toxicologists, Inc. It is each member's responsibility to report changes of address to the SOFT mailing address (Mesa, AZ - above). Non-members may now receive ToxTalk for \$15 per calendar year. Make your check payable to SOFT and mail it directly to the ToxTalk Editor.

DEADLINES: Feb. 1, May 1, Aug. 1, and Nov. 1. NEXT DEADLINE: May 1, 2000

PRESIDENT'S MESSAGE by J. Robert Zettl, B.S., M.P.A.

The New Millennium is upon us. Or is it? There are some that expose a theory that the new millennium does not actually start until 01-01-01. What I do know is that by some quirk of voting at the annual meeting in Puerto Rico I became your new president on 01-01-00 and look forward to the coming year.

1999 was a great year due to the leadership of Dr. Huestis and the support of many others who spent considerable time behind the scenes performing work for your organization. I want to thank the incoming officers for their dedication, commitment and continued support to SOFT and offer a very special thank you to those Board Members and Committee Chairs who completed their terms and can now sit back and enjoy.

In struggling with what to say in my first President's Message, I thought it might be appropriate to provide you with a look at your organization. Some of you know who represents you because you read the cover of ToxTalk. However, I expect the majority have never had the occasion to come into contact with, or need the services of, your elected and appointed officials.

How many of you know what is really required to get ToxTalk out on time, keep the SOFT web site up to date, host an annual meeting, invest SOFT's funds wisely, or take and prepare meticulous notes of all the meetings? Just who are those people who continue to make SOFT the premier toxicology organization whose annual meeting is the source of some of the most interesting and stimulating information in the field of forensic science?

At its grass roots, SOFT has only one part-time employee, Bonnie Fulmer, an Administrative Assistant who mans the SOFT office in Mesa, Arizona. Bonnie makes sure your dues are paid, keeps the SOFT data base and directory updated and takes care of any other communication needs the board might have. Bonnie is many things but she is no mind reader, so if you have a change of address, phone number(s), e-mail, or whatever, please FAX or mail it to the SOFT Administrative office so Bonnie can update your directory information. Up-to-date information is the key to SOFT effectively communicating with you and you to us.

SOFT uses many volunteers in representing your organization nationally and internationally. Most people volunteer to help out because they enjoy promoting SOFT and its mission. The names of your elected officers and some of the other volunteers can be found on the front page of ToxTalk. Others, such as the group putting together this year's annual meeting in Milwaukee, you may not have had the privilege of meeting - yet. However you should know that hundreds of hours are spent in making sure the annual meeting is a scientific and social success.

Three commitments are required of volunteers who wish to become a SOFT officer, Director, committee chair or member, or host of an annual meeting: time, money and energy. Time: The board officially meets twice a year, but additional time commitment is needed to take care of business. Monetary Resources: SOFT does not pay its officers or any of its volunteers. Energy: That falls under sitting through a six-hour board meeting. So join in. Volunteer to be an assistant moderator, man the registration booth, be a ticket taker, write an article for ToxTalk, or contact any officer, board member, o committee chair and offer your help.

So what's in store for 2000? The staff of the Center for Human Toxicology, Salt Lake City, Utah, coordinated by Dennis Crouch will be the Special Issue Editor(s) for the Journal of Analytical Toxicology. They actually volunteered!

Not wishing to make change for change's sake, the standing committee chairs and Ad Hoc committees established by Dr. Huestis will be continued barring last minute resignations. Dr. Christine Moore's Ad Hoc Committee on Continuing Education will be promoting courses for SOFT members. Dr. Barbara Manno will be soliciting ERA nominees. Dr. Joseph Saady may tap you for his Visioning group. Marc Le Beau will be continuing the Drug-Facilitated Rape and Sexual Assault Committee, and Dr. Jeanne Beno and her committee has taken on the difficult task of dealing with some ethical issues.

H. Chip Walls is still SOFT's point person for the DUID Committee and has done the bulk of the work over the years setting up workshops. I hope he will be around (and willing!) for many more years to come. This SOFT/AAFS group may or may not be long-lived. If Chip and Laurel Farrell continue to do all the work, I would consider suggesting that SOFT "go it alone," similar to the situation with JCETT.

The board has commitments for annual meeting sites out to the year 2005 and is looking to the SOFT membership for additional recommendations. If you would be willing to host an annual meeting please contact Laurel Farrell. At the request of Dr. Huestis, Laurel put together a Meeting Host Guidelines document to assist those wishing to host an annual SOFT meeting. Once you have reviewed the document and wish to continue, the board will set up a time for you to address them as to your selected site. A SOFT annual meeting attempts to incorporate a sense of family by blending social activities in and around its workshops and annual meeting.

SOFT is your organization. You make it what it is. As President I am here to assist you in promoting your organization.

PRESIDENT ZETTL WELCOMES YOUR INPUT! e-mail him at jrzettl@ecentral.com

ON DECK FOR JUNE: A CLOSER LOOK AT THE S.O.F.T. MEMBERSHIP COMMITTEE submitted by Secretary Amanda Jenkins



Launching thirty years of forensic toxicology into the next millennium

Hyatt Regency October 2-6, 2000



Greetings from the Scientific Committee for SOFT 2000 Milwaukee!

The Scientific Advisory Board and the Scientific Committee, supported by the Organizing Committee, has reached an agreement with the Journal of Analytical Toxicology to publish, after peer review, accepted meeting abstracts and plenary lectures. This process imposes a different timeline than used for previous meetings. Consequently, the deadline for abstracts is May 15, 2000. Upon receipt, two members of the Scientific Advisory Board will review each abstract. Minor editorial corrections might be needed in order to conform to the Journal style and to adhere to acceptable scientific standard. We anticipate this process will be completed by July 15, at which time all notifications will be forwarded. This will allow ample time for colleagues to process pre-approval for travel and other matters. The accepted abstracts and plenary lectures will be published in a spring 2001 issue of JAT. As a result, we envision the outreach of the scientific content beyond the attendees and SOFT members.

Both the Scientific and Organizing Committees have devoted considerable effort in ensuring the high standard of the annual SOFT meetings. More than 25 colleagues from around the country have graciously agreed to help. With their inputs, plenary topics and speakers have been identified, as shown by the preliminary program. The Organizing Committee is greatly indebted for their inputs. We plan to present a scientific program that will address some of the rapid advances in our field. The Committee appreciates your understanding and support in the process.

IMPORTANT DEADLINE CHANGE: ABSTRACTS NOW DUE MAY 15th

so they may be published in the JAT SOFT Special Issue

Detailed information on the exciting 30th anniversary meeting of SOFT, October 2-6, 2000, is included as an insert in this issue of ToxTalk. The meeting will be held at the newly renovated Hyatt Regency Hotel in the heart of downtown Milwaukee. The planning committee has already been hard at work and encourages you to contact them If you have any questions.

		Phone	<u>Fax</u>	E-mail
Co-chairs:	Steven Wong, Ph.D.	414-223-1227	414-223-1237	shwong@execpc.com
	Susan Gock, M.S.	414-223-1228	same	sgock@execpc.com
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Treasurer:	Jim Oehldrich	414-382-7500		jim_oehldrich@email.msn.com

MEETING AT A GLANCE:

Sunday	Oct. 1	CAP inspector workshop, registration, optional tours
Monday	Oct. 2	Registration, ABFT examination, Workshops 1-4, ABFT board meeting, NLCP inspector workshop
Tuesday	Oct. 3	Fun run/walk, Workshops 5-8, SOFT board meeting, exhibit set up, welcoming reception
Wednesday	Oct. 4	Registration, poster set up, scientific/plenary sessions, exhibits, posters, SOFT business meeting,
		President's Reception, Elmer Gordon Open Forum, FTCB board meeting/exam
Thursday	Oct. 5	Registration, ABFT breakfast, scientific/plenary sessions, exhibits, posters, farewell dinner and dance
Friday	Oct. 6	Scientific/plenary sessions, picnic luncheon, optional tours

SOFT LAST CALL FOR E.R.A. CANDIDATES FOR YEAR 2000

Students pursuing an advanced degree (Ph.D. or M.S.) with research in an area relevant to forensic toxicology are encouraged to apply for an Educational Research Award funded by the Society of Forensic Toxicologists. An award for travel expenses and registration fees for the 2000 SOFT Annual Meeting in Milwaukee (October 2-6) is available to successful candidates. Awardees are given an opportunity to present their research at the SOFT Annual Meeting.

For information contact Barbara R. Manno, Ph.D., SOFT ERA Chairman, LSU Medical Center, 1541 Kings Hwy, P. O. Box 33932, Shreveport, LA 71130-3932 (e-mail bmanno@lsumc.edu) before the May 1, 2000, deadline.

CASE NOTES:

SINGLE FLUNITRAZEPAM USE CAN BE REVEALED BY HAIR ANALYSIS!

Submitted by Adam Negrusz, Ph.D., Forensic Science Program, College of Pharmacy, University of Illinois at Chicago, Chicago, II

Sexual abuse of both men and women while under the influence of so-called "date-rape" drugs has been the focus of many investigations, Reported "date-rape" drugs include flunitrazepam (FN), clonazepam, diazepam, oxazepam, GHB, ketamine, and many others (1). FN has been banned in the United States because of its alleged use in such situations. The majority of rape victims do not report the incident sometimes several days after the event. The reason for this is a combination of emotions, including embarrassment, fear, rejection, denial, mistrust in authorities and often amnesia caused by the drug. It is not unusual for a urine or blood analysis to provide a negative result because of the likelihood of a low dose single ingestion, urine dilution and the length of time since the alleged incident. Hair provides a solution to this historical aspect of testing, in that basic drugs such as FN and, especially, its major metabolite,7-aminoflunitrazepam (7-AFN), tend to incorporate into hair and remain there for longer periods of time than either urine or blood. With specific regard to the use of FN in rape cases, the "Drug-Induced Rape Prevention and Punishment Act of 1996" was created, punishing the person who with criminal intent distributes a controlled substance to an individual without that individual's knowledge, with up to 20 years in prison.

The aim of this NIJ-funded¹ project conducted in collaboration with Christine Moore, Ph.D. Teri Stockham, Ph.D., Philip Janicak, M.D. and Mauli Verma, M.D., was to study how long after administration of a single 2 mg dose of Rohypnol® (FN), 7-AFN and FN can be detected in hair and urine, using previously developed solid-phase extraction and highly sensitive NCI-GC-MS (2) with two ions used for identification. Ten healthy volunteers (8 women and 2 men), age 21-49 years old, participated in the study. Hair and urine samples were collected up to one month after FN administration. One hair and one urine sample was

collected from each subject prior to FN administration. Urine samples were positive for 7-AFN two weeks after FN administration. We are currently continuing the analysis of hair samples. 7-AFN was found in hair 24 hours after FN administration and it was present in hair throughout the entire study period. All measured concentrations were above the limit of quantitation (500 fg/mg). Hair samples collected before FN administration were negative for 7-AFN. FN and 7-AFN presence in hair after chronic FN administration was reported several times (2,3,4). This is the first study which reveals incorporation of 7-AFN into hair after a single dose of the drug. The study is ongoing and complete results will be reported shortly.

References:

- LeBeau M, et al. Recommendations for toxicological investigations of drug-facilitated sexual assaults. J Forensic Sci 1999;44:227-29.
- Negrusz A, Moore C, Deitermann D, Lewis D, Kaleciak K, Kronstrand R, et al. Highly sensitive micro-plate immunoassay screening and NCI-GC-MS confirmation of flunitrazepam and its major metabolite 7-aminoflunitrazepam in hair. J Anal Toxicol 1999;23:429-35.
- Cirimele V, Kintz P, Mangin P, Determination of chronic flunitrazepam abuse by hair analysis using GC-MS-NCI. J Anal Toxicol 1996;20:596-598.
- Cirimele V, Kintz P, Staub C, Mangin P. Testing human hair for flunitrazepam and 7-amino- flunitrazepam by GC/MS-NCI. For Sci Int 1997;84:189-200.
- Points of view in this paper are those of the authors and do not necessarily represent the official position of the U.S. Department of Justice. \$

SOFT / AAFS Forensic Laboratory Guidelines Proposed 2000 Revision

Submitted by Graham R. Jones. Ph.D., DABFT, Chairman, Joint SOFT/AAFS Forensic Toxicology Guidelines Committee

The SOFT/AAFS Guidelines were approved by the SOFT and AAFS Toxicology Section membership when they were introduced in 1991. In 1997, the Guidelines were redrafted to include both the main Guidelines document and the material originally published as the Appendix - and again approved by the SOFT and AAFS Toxicology Section memberships at their respective business meetings. Our goal has been to make the document easier to use and refer to, and to facilitate updating the document. As a further step in that process, the Guidelines Committee (Professional Standards and Accreditation Committee) undertook the task of redrafting the document in numbered "point" style, similar to that of the ISO documents. No major changes have been made to the document, although some minor wording and other changes have been made to accommodate the new format. (continued on page 5...)

CASE NOTES:

DETECTION OF DISULFOTON, AN ESOTERIC PESTICIDE, IN AN UNEXPLAINED DEATH

Submitted by: Robert A. Middleberg, Ph.D., DABFT, DABCC-TC, George F. Jackson, Ph.D., DABFT and Judy Vinosky National Medical Services (NMS), 3701 Welsh Rd., Willow Grove, PA 19090

This case demonstrates the need for forensic toxicologists to think "outside the drug box." It also makes one wonder! In January of 1998, a middle-aged woman was found dead in a motel room lying partially naked in bed. The motel room door had been locked from the inside. No materials identifying the woman were found in the motel. At autopsy, nothing remarkable was apparent but for a gastrointestinal tract full of "sand." consequence, the unidentified woman was initially nicknamed "Sandy." Blood, urine and gastric contents were submitted for toxicological analysis. toxicological analysis for alcohol, drugs of abuse and therapeutic agents demonstrated no substances of toxicological significance. Additional analyses for cyanide, fluoride, metals and metalloids did not demonstrate the presence of toxicologically-significant concentrations of these compounds. At this point, the "sand" became a likely suspect. A portion of the gastric contents was centrifuged and decanted. The coarse material was air-dried overnight in a fume hood. Microscopic examination of the tancolored material did not reveal characteristics of sand (no crystalline structure, etc.). Indeed, the material more resembled pebbles.

An acid/base/neutral extraction of the coarse material followed by GC/MS revealed the presence of disulfoton (0.0-diethyl S-[2-(ethylthio)ethyl] phosphorodithoate), an organophosphate pesticide. This rather odd finding became not so odd upon further research into the substance. Disulfoton is sold by several companies under brand names such as Disyston® and Frumin AL®. It is a systemic insecticide-acaricide and is used as a seed treatment in the control of such buggies as aphids, mealybugs, spider mites and other sucking insects in cereal, cotton, potatoes and other vegetables1. It is available as a dry seed dressing, emulsifiable concentrate and granule. The compound is classified as one of the more "toxic" organophosphate pesticides with a lethal dose estimated to be 0.5 to 4 g in a 70 Kg individual. In humans, it is apparently metabolized to at least two sulfoxides and two sulfones. The metabolites are also inhibitors of cholinesterase2. Several cases of disulfoton exposure, including deaths, have been reported in the literature^{2.5}. Reported methods of analysis for disulfoton and metabolites in biological matrices include GC (FPD; NPD); TLC; and, GC/MS^{2,4-6}. Prominent El mass spectral

peaks include m/z 88 (base peak), 97, 60, 274 (molecular ion), 142 and 186.

In the current case, disulfoton was detected and measured in blood, urine and gastric contents with concentrations of 0.10 mcg/mL, 0.15 mcg/mL and 160 mcg/mL, respectively. Metabolites were not measured. Postmortem blood cholinesterase was 3700 IU/L (typical postmortem blood values approximately 3000 - 5000 IU/L7). This latter finding may possibly be explained as follows: a rapid affect on red cell cholinesterase with associated toxicity before serum cholinesterase was affected to a significant degree; effects on other enzyme systems; and/or, postmortem artifact. In another attributed disulfoton fatality, a postmortem blood disulfoton concentration of 0.40 mcg/mL was reported4. In a nonfatal suicide attempt, blood and gastric admission specimens had concentrations of disulfoton of 0.026 mcg/mL and 33 mcg/g, respectively2. In the current case, the cause of death was attributed to disulfoton toxicity and the manner of death was listed as suicide.

References:

- Farm Chemicals Handbook '99. Meister Publishing Co., Willoughby, OH.
- Yashiki, M., et.al. Determination of disulfoton and its metabolites in the body fluids of a Di-Syston® Intoxication Case. For. Sci. Int., 48, pp. 145-154 (1990).
- Felsenstein, W.C., et al. Acute Demeton Poisoning in a Child. Arch. Environ. Health, 31, pp. 266-269 (1976).
- Hattori, H., et al. Identification and Quantitation of Disulfoton in Urine and Blood of a Cadaver by Gas Chromatography/Mass Spectrometry. Jpn. J. Legal Med., 36, pp. 411-413 (1982).
- Brokopp, C.D., et al. Dialkyl Phosphates in Urine Samples from Pesticide Formulators Exposed to Disulfoton and Phorate. Bull. Environm. Contam. Toxicol., 26, pp. 524-529 (1981).
- Grant, D.L., et al. Gas-Liquid and Thin-Layer Chromatography of Phorate, Disulfoton and Five of Their Oxidation Products. J. Chromatog., 44, pp. 67-74 (1969).
- 7. National Medical Services data. &

(... Continued from page 4)

The new draft Forensic Toxicology Guidelines is now available for review. However, rather than circulate another draft document to all SOFT and AAFS section members, it suggested that it be posted on the SOFT web site. Please address any comments or questions to the committee Chairman, Dr. Graham Jones, Office of the Chief Medical Examiner, 7007 - 116 Street, Edmonton, Alberta, Canada T6H 5R8; phone 780-427-4987; fax 780-422-1265; e-mail: graham.jones@just.gov.ab.ca. It is hoped that the new Guidelines can be adopted by AAFS Toxicology Section members at the upcoming business meeting in Reno, February 23, 2000, and by SOFT members at the business meeting in Milwaukee, 2000.

"DRUGS IN THE NEWS"

IBOGAINE - THE CONTROVERSY submitted by Vincent M. Papa, Ph.D., Air Force Drug Testing Laboratory, Brooks AFB, Texas 78258

Recently, the Associated Press reported that a drug addiction cure was claimed using a drug extracted from an African shrub – ibogaine. Even though over 150 papers have been published over the last 30 years, the question of the effectiveness of ibogaine remains a matter of controversy. Ibogaine is illegal in the United States but it is available at \$1500/treatment. Clinics in the Netherlands have claimed that ibogaine halts or reduces drug cravings that can occur with drug addiction for weeks and months. However, there have been a number of deaths associated with ibogaine treatment in Europe and the United States.

Ibogaine is a Schedule 1 compound extracted from the roots of Tabernanthe iboga, a shrub indigenous to French equatorial Africa. Ibogaine was purified at the turn of the century, and low doses were sold in France from 1939 to 1970 as a tonic for fatigue and depression. Doses of 500 to 1000 mg have been used in clinical investigations (1). Doses of 20 mg or higher lead to dilatation of pupils and an increase in blood pressure with no effect on temperature, pulse rate or respiratory rate (2). At 150 mg, some difficulty in sleeping and perception of colored lights may be experienced. With a 300-mg dose, slight nausea, dizziness and lack of muscular coordination may be experienced. In humans, single oral doses of 5-25 mg/kg lead to the onset of central nervous system and cardiovascular effects in 15 to 40 minutes. In 25-30 minutes, objects begin to vibrate. There are usually four to eight hours of fantasies like floating in space or fast forward reviews of one's life. The visions end abruptly. It is usually at this stage that proponents of the therapeutic use of ibogaine say that addicts can ponder the meaning of the visions to promote staying free from drug use. This is followed by 6-8 hours of a high-energy state with flashes of light occurring. Between 26 and 36 hours, stimulation diminishes and subjects fall asleep. Ibogaine produces selective degeneration of the Purkinje cells in the cerebellum. This has been associated with the alleged anti-addictive effect (3).

The kinetic parameters associated with ibogaine have been derived from animal studies. These studies and others show that the 24-hour recovery of unchanged ibogaine in urine is less than 5 % of the dose. An indole metabolite accounts for 15 % of the dose (4). This metabolite has been shown to bind at an opiate receptor site. The half-life of ibogaine is 38 hours. Overall, the status of ibogaine remains controversial in the scientific and research community.

References

- 1. Ellenhorn Matthew. Medical Toxicology: Diagnosis and Treatment of Human Poisoning, Second Edition, 1997, 935-936.
- Isbell H. Preliminary trials with ibogaine. Personal communication to Ciba. USPHS Hospital, Addiction Research Center, Lexington, KY, November 1956.
- O'Hearn EO, Molliver ME. Degeneration of Purkinje cells in parasagittal zones of cerebellar vermis after treatment with ibogaine. Neuroscience 1993; 55-: 363-370.
- Dihair HI. A comparative study of the toxicity of serotonin. Indiana University, University Microfilms International, 71-25-34, 1971.

Note: Opinions above are those of the author are not intended to represent those of the Department of the Air Force or the Department of Defense. 🙎

CALL FOR CASE NOTES

We need your contribution! This need not take much time.

Your case note should be about 1/2 page in length, no more than a full page.

Material and/or a disk (preferably using Microsoft Works/Word 6.0) may be submitted to:

Joseph R. Monforte, Ph.D., DABFT, ToxTalk Editor, 42408 N. Sombrero Rd., Cave Creek, AZ 85331-2821
Or fax: 480-595-MONF (6663). PLEASE remember, Arizona is now 3 hours behind the east coast.

The e-mail address is: DrMonforte@aol.com -or-monfortej@juno.com
Other items of interest to SOFT members are also welcome.

Next ToxTalk deadline: May 1, 2000

TECHNICAL NOTES: BLUTALKOHOLKOZENTRATION No. 26

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

Survival of alcohol intoxication with extremely high blood alcohol concentrations. L. Neoral, M. Frankova, L. Matousek and J. Ryznar., Z Klin Med 41:1539-1540, 1986.

German title: Zur Frage de Uberlebens bei Ethanolintoxikation mit extrem hohem Blutalkoholwert

Between 1976 and 1985, of the 8,000 to 10,000 routine BAC determinations conducted each year at Olomouc, in only 3 cases was a BAC >0.525 g/100mL detected and the person survived. The alcohol concentrations were measured by a GC method and a modified Widmark method.

The first case involved a 30-yr-old female alcoholic who weighed 55 kg and was admitted to hospital in an unconscious state due to alcohol intoxication. Her admission BAC was 0.545 g/100mL and UAC was 0.745 g/100mL. The patient was treated with glucose, insulin, vitamins and sodium bicarbonate IV. The patient recovered uneventfully. Her apparent rate of alcohol elimination from multiple blood samples was 0.032 g/100mL/h.

The same person was admitted to hospital again later in the year and her admission BAC was 0.527 g/100mL and UAC was 0.752 g/100mL.

The third case involved a 29-yr-old female psychiatric patient who was admitted to hospital in a deep coma approximately 1.5 hours after consuming 1.7 L of liquor (50% v/v alcohol) in a suicide attempt. Her admission BAC was 0.833 g/100mL and UAC was 0.852 g/100mL. Nine hours after admission second blood and urine samples were collected, and the BAC was still 0.833 g/100mL and the UAC was 0.860 g/100mL.

The authors suggest that tolerance to high BACs may in some ways be related to the formation of a Grehant plateau, which occurred in the second patient. \$

ELMER GORDON OPEN FORUM AN OPPORTUNITY FOR INFORMAL DIALOGUE

Send items for this section to ToxTalk or fax Editor Joseph Monforte at 480-595-6663.

Editors notes: Our apologies for the delay in receiving this issue of ToxTalk. As many of you know, Pat was the unfortunate victim of a traffic accident. Although she is on the mend, her shoulder injury has not been healing as well as we had hoped, and this inhibited her ability to do many things, including ToxTalk. We regret any inconvenience this may cause.

Also, Editor Joseph Monforte is considering changing his e-mail service, so if you cannot contact him by e-mail, please fax to the above number, call 480-595-6646 or e-mail to monfortej@juno.com (no attachments).

WINNERS OF 1999 MEETING "BEST" ANNOUNCED

A committee consisting of Lee Hearn, Vina Spiehler, Randy Commissaris, Dan Isenschmid, Bruce Goldberger, Graham Jones and Chip Walls diligently reviewed the platform and poster presentations at the 1999 SOFT Annual Meeting held in Puerto Rico, and they deemed the following to be "the best."

Platform presentation # 4: Disposition of [3H] Cocaine, [3H] Nicotine and [3H] Flunitrozepam in Mouse Hair Melanosomes after Systemic Administration by Peter R. Stout and James A. Ruth, University of Colorado Health Sciences Center, Molecular Toxicology and Environmental Health Sciences, SOP, Denver, CO

Platform presentation #10: Case Study: Duragestic Patch Postmortem Tissue Distribution of Fentanyl in Twenty-five Fatalities by Daniel T. Anderson and Joseph J. Muto, Los Angeles County Department of Coroner, Los Angeles, CA.

Poster presentation #15: Ricin: A Case of Nonfatal Poisoning by Leo Walter, George Ludwig, Cynthia Rossi and Tamar Lewis, Royal Canadian Mounted Police Forensic Laboratory, Edmonton, Canada and U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, MD.

Poster presentation #21: Rapid Immunoaffinity Extraction of LSD from Blood and Urine by Sarah Kerrigan and Donald Brooks, California Department of Justice, Toxicology Laboratory, Sacramento, CA and Department of Pathology and Laboratory Medicine, University of British Columbia, Vancouver, B.C.

CAREER OPPORTUNITIES

Positions available are listed for the consideration of SOFT members. There is no fee for this service. The information will be repeated in the next issue only if the person who submitted it confirms the information. If you have a job position available, FAX (480-595-6663) or E-MAIL (DrMonforte@aol.com) to ToxTalk or mail to: Dr. Joseph Monforte, ToxTalk Editor, 42408 N. Sombrero Rd., Cave Creek, AZ 85331-2821.

RTI's Center for Bioorganic Chemistry has immediate openings for qualified scientists in the following positions: The Forensic Analytical Toxicologist (#60694) responsibilities will include assisting senior staff in developing certification activities for laboratories that analyze for abused drugs and other duties as assigned. This position requires a BS or higher in chemistry or related scientific discipline with experience in forensic drug testing to include knowledge of immunoassay and GC/MS testing for drugs of abuse. Knowledge/experience with LC/MS/MS or GC/MS/MS considered a plus. The Research Forensic Analytical Toxicologist (#60708) position requires a Ph.D. in chemistry or related scientific discipline. Candidates with DABFT will be given first consideration. Extensive experience in forensic drug testing to include detailed knowledge of immunoassay and GC/MS testing for drugs of abuse and excellent communication and scientific writing expertise is required. Knowledge/experience with LC/MS/MS or GC/MS/MS is highly desirable.

Candidates for both positions should possess knowledge and experience in: Urine drug testing; drug testing in hair, sweat, and/or oral fluids; and excellent communication and record keeping skills. Please apply using our on-line application by visiting our web-site at: www.rti.org (please refer to job #). Candidates without internet access please visit our Office of Human Resources at 3040 Cornwallis Rd., Research Triangle Park 27709 to complete an application. For further information regarding RTI and the positions, please contact Gerry Collins at gwc@rti.org or (919) 541-6200. AA/EOE/M/F/H/D \$

Don't forget to check the SOFT Web site for current career openings: www.soft-tox.org

PROFESSIONAL CALENDAR

SOFT MEETING: SOFT 2000 "Launching thirty years of forensic toxicology into the next millennium" October 2-6, Hyat Regency, Milwaukee, WI Co-chairs: Dr. Steven Wong 414-223-1227 (shwong@execpc.com) and Sue Gock 414-223-1228 (sgock@execpc.com)

Future meetings:

2001 - New Orleans, LA - Pat Pizzo

2002 - Detroit, MI - Dan Isenschmid /Brad Hepler

2003 - Portland, OR - Kent Johnson

Northeastern Association of Forensic Scientists (NEAFS) annual meeting: October 11-14, 2000, Saratoga Springs, NY. Contact Christopher Montagna – fax 207-287-6832, e-mail foren-tech@pivot.net, or phone 207-287-2727 for further information.

Midwestern Association of Toxicology and Therapeutic Drug Monitoring (MATT) annual meeting: May 4-6, 2000, Kansas City, MO. Contact Michael Peat at 913-577-1668 or e-mail mike.peat@labone.com

The Robert F. Borkenstein Course on Alcohol, Drugs and Highway Safety: Testing, Research and Litigation. May 14-19, 2000. Contact Darlena Lindsay at 812-855-1783 or dlinsay@indiana.edu or visit their Website: www.borkenstein.com.

California Association of Toxicologists: 5/2000 Call Bob Taylor and Dan Anderson, Los Angeles, CA (213) 343-0530; 8/2000 Call Bill Phillips, Sacramento, CA (916) 227-3620.

Society of Hair Testing "Workshop 2000 on Ha : Analysis", June 18-20, 2000, Kreischa, Germany. Contact Dr. Detlef Thieme via e-m. i at det.thieme@t-online.de \$

All members and others are encouraged to contribute to ToxTalk. Please mail your contribution to:

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

42408 N. Sombrero Rd, Cave Creek, AZ 85331-2821

Telephone: 480-595-6646 Fax: 480-595-6663 -after 11 a.m. E.S.T. please E-mail: Dr.Monforte@aol.com

NOTICE

A NEW PILOT PROFICIENCY TESTING PROGRAM FOR DRUGS OF ABUSE IN HAIR, SWEAT, & ORAL FLUIDS

The National Laboratory Certification Program is considering the establishment of proficiency/performance (PT) testing programs for laboratories that test for drugs of abuse in hair, sweat, and oral fluids. Initially, it is anticipated that a pilot proficiency testing program will be established for each of these matrices, as follows:

- 2 or 3 successive cycles of approximately 20 samples each
- Cycles will contain drug positive and drug negative, single blind samples
- Results will be provided to each participating laboratory
- Anticipated start date is about 1 April 2000
- · Cost to participating laboratories will be minimal.

Laboratories desiring to participate in one or more of these pilot PT programs should notify the NLCP of their interest. Please contact Mr. Andy McDaniel at (919) 541-7223, or write to the NLCP at the following address:

National Laboratory Certification Program
Research Triangle Institute
P.O. Box 12194
3040 Cornwallis Road
Research Triangle Park, NC 27709

SOFT 2000

October 2-6 Milwaukee, Wisconsin

Launching thirty years of forensic toxicology into the next millennium





Society of Forensic Toxicologists Milwaukee, Wisconsin October 2-6, 2000



MEETING INFORMATION

Registration Information

The basic meeting registration includes admission to all scientific sessions, abstract book, Welcoming Reception, Elmer Gordon Forum, Farewell Dinner & Dance, Luncheons Wed-Fri. and all coffee breaks. Each workshop has an additional fee. Registration is encouraged prior to July 1st, 2000 to include a free jacket with the SOFT 2000 logo. After July 1st, the jacket must be ordered at \$20.00 each. Accompanying persons require tickets for all meals and social events. Prices are noted on the registration form.

Payment Deadlines

A late fee of \$50.00 will be charged on all registrations received after August 15, 2000. No mail registrations will be accepted after August 24, 2000. Payment must be made by credit card, check drawn on a USA bank, International Bank Check or Money Order. All funds must be paid in US dollars. If registration is cancelled, and a refund is requested, a \$50.00 fee will be deducted from the original payment. No refunds after September 5, 2000.

Hotel Registration and Transportation

Reservations for rooms should be made directly with the hotel. A reservation form is included in the packet. The meeting will be held at the newly renovated Hyatt Regency Hotel in the heart of downtown Milwaukee. The toll free number is 800-233-1234 or via the Internet – www.milwaukee.hyatt.com. For conference rates specify SOFT. Parking is available next to the hotel at the rate of \$9.00 per day.

For flights directly into Milwaukee use General Mitchell International Airport. The Milwaukee hotels shuttle departs every 20 minutes from 7:40 a.m. – 11:40 p.m. from the center island outside baggage claim #2. Tickets may be purchased at the red booth located in the baggage claim area for \$8.50. The approximate cost of a taxi from the airport to the hotel is \$20.00. Alternately, if flying into Chicago O-Hare Airport, it will take 2 ½ to 3 hours by ground shuttle from Chicago to the hotel, at an approximate cost of \$20.00. Several options are available. United Limo can be reached at 800-833-5555 or visit www.busville.com. For Bluebird non-stop service from Chicago to Milwaukee call 800-400-5500. Both of these services stop at the Amtrak station in downtown Milwaukee within one mile of the hotel. From there a taxi stand is available for the short ride to the hotel.

Tour Reservations

Pre- and post-conference tours must be booked directly with the company. The conference organizers take no responsibility for the tours. However, we would be happy to answer any questions that you have. Contact the social event coordinator, Jana Champion, at 414-382-7500 or at championil@doi.state.wi.us

Special Needs

The Hyatt Regency Milwaukee in conjunction with the SOFT 2000 organizing committee seeks to provide equal access to the programs, services and activities of this meeting to people with special needs. Special needs requests including dietary needs (ie. vegetarian, etc.) can be addressed to Susan Gock at 414-223-1228 or at <a href="mailto:sseecommons.org/seecommons.



Society of Forensic Toxicologists Milwaukee, Wisconsin October 2-6, 2000



PRELIMINARY MEETING SCHEDULE

SUNDAY, October 1, 2000

3:00 p.m.-9:00 p.m. 5:00 p.m.-8:00 p.m. CAP Inspectors Workshop

Registration Open

Pre conference tours available

MONDAY, October 2, 2000

7:30 a.m.-5:00 p.m. 8:00 a.m.-12:00 p.m. Registration

8:00 a.m.-12:00 p.m.

ABFT Examination

8:00 a.m.-12:00 p.m.

Workshop #1 Forensic

Applications of LC/MS at the Beginning of the 21st Century

8:00 a.m.-12:00 p.m.

Workshop #2 Automated Data Reduction of HP GC/MS Analysis

via Macro Programming

12:00 p.m.-6:00 p.m.

ABFT Luncheon and Board

Meeting

1:30 p.m.-5:30 p.m.

Workshop #3 Benzodiazepines:

Pharmacology and Analytical

Challenges

1:30 p.m.-5:30 p.m.

Workshop #4 Automation of

Micro-Plate Enzyme Immunoassay

Systems in Forensic Analysis

7:00 p.m.-11:00 p.m.

NLCP Inspector Workshop

WEDNESDAY, October 4, 2000

7:30 a.m.-5:00 p.m. 7:00 a.m.-9:00 a.m.

Registration Poster set up

8:00 a.m.-8:15 a.m.

Welcome and Opening of Scientific

Program

8:15 a.m.-12:00 p.m. 9:00 a.m.-3:30 p.m. Scientific/Plenary Session Exhibits and Posters Open

12:00 p.m.-1:00 p.m. Luncheon

1:00 p.m.-3:45 p.m. 4:00 p.m.-5:30 p.m. Scientific/Plenary Session SOFT Business Meeting

7:00 p.m.-10:00 p.m.

President's Reception and Elmer Gordon Forum

7:00 p.m.-10:00 p.m.

Exhibits Open

To be announced:

FTCB Board Meeting/Exam

THURSDAY, October 5, 2000

7:30 a.m.-12:00 p.m. 7:00 a.m.-8:30 a.m. Registration ABFT Breakfast Vendor's Meeting

8:00 a.m.-9:00 a.m. 8:00 a.m.-12:00 p.m.

Scientific/Plenary Session

9:00 a.m.-3:00 p.m. 12:00 p.m.-1:00 p.m. Exhibits and Posters Open Luncheon

1:00 p.m.-5:00 p.m.

Scientific/Plenary Session

6:00 p.m.-12:00 a.m.

Farewell Dinner and Dance with

Vendor Recognition

TUESDAY, October 3, 2000

6:30 a.m.-7:30 a.m.

SOFT Fun Run/Walk

7:30 a.m.-5:00 p.m.

Registration

8:00 a.m.-5:30 p.m.

Workshop #5 Marijuana Forensic

Symposium

8:00 a.m.-12:00 p.m.

Workshop #6 Pharmacology and Toxicology of Drugs Used in the

12:00 p.m.-6:00 p.m. 1:30 p.m.-5:30 p.m. Treatment of Infectious Disease SOFT Board of Directors Meeting Workshop #7 The Forensic

Toxicological Aspects of Chemical

Terrorism

1:30 p.m,-5:30 p.m.

Workshop #8 Pharmacology Reviews II: Selected

Cardiovascular Drug Toxicology & Update on Pharmacogenetics

2:00 p.m.-

Exhibit set up

6:30 p.m.-10:30 p.m.

Welcoming Reception at Milwaukee County Museum

FRIDAY, October 6, 2000

8:00 a.m.-12:00 p.m. 12:00 p.m.-1:30 p.m. Scientific/Plenary Session

12:00 p.m.-1:30 p.m. Picnic Luncheon 1:30 p.m.-3:30 p.m. Scientific/Closing

Scientific/Closing Plenary Session Post conference tours available

For further information contact:

Dr. Steven Wong Co-chair Phone: 414-223-1227 E-mail: shwong@mcw.edu

Sue Gock Co-chair

Phone: 414-223-1228 E-mail: SSGoc@aol.com

Christine Goodall Secretary

Phone: 608-263-7031 E-mail: er.goodall@hosp.wisc.edu

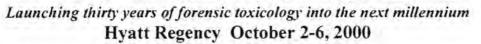
Jim Oehldrich

Phone: 414-382-7500

Treasurer

E-mail: jim oehldrich@email.msn.com







WORKSHOP PROGRAM ABSTRACTS

Workshop #1 Forensic Applications of LC/MS at the Beginning of the 21" Century - Adam Negrusz. Chair

Liquid chromatography-mass spectrometry (LC-MS) becomes increasingly popular in forensic toxicology due to better sensitivity, applicability to drugs difficult to analyze using GC-MS, simplicity and lower cost of instrumentation. This workshop will present practical applications of LC-MS in the forensic toxicology laboratory including forensic urine drug testing and analysis of postmortem samples. Attendees should gain theoretical and practical information regarding different types of instrumentation as well as analytical method development and validation issues.

Workshop #2 Automated Data Reduction of HP GC/MS Analysis via Macro Programming - Chip Walls, Chair

This workshop's first objective is to introduce and enhance the participant's knowledge of macro programming for automated data reduction and report output in the HP GC/MS Chemstation environment. This workshop is for users who would like to know more about macro programming, key commands and their use in data analysis. Example macros will be provided to illustrate features and functions of macros. The objective is to provide adequate information about macro programming so the participant may continue to write and use their own macros to solve specific requirements of their laboratory.

Every toxicologist needs to keep track of information: case histories, results, QC data and reports. We are all in search of easy but powerful tools for managing information. However, most of the commercially available LIMS systems often do not meet our needs, are too costly, or make you conform to system limitations. The second objective of this workshop is to address the use of "off the shelf" database software solutions in the management of a forensic toxicology laboratory. Practicing toxicologists will share their experiences in the adaptation of such software programs as Access® or Excel® in solving everyday needs of laboratory operations.

This workshop will be a success BECAUSE everyone is encouraged to bring examples of their HP macros or database experiences to share with fellow toxicologists. A SOFT computer users group could be the fallout from this workshop.

Workshop #3 Benzodiazepines: Pharmacology and Analytical Challenges - Michael Robertson, Chair

Benzodiazepines remain one of the most commonly prescribed family of medications. In addition, they are widely misused and abused psychoactive medications, frequently encountered by the forensic toxicologist. This workshop will review basic pharmacology and toxicology of old and new benzodiazepines and the implications on driving impairment, drug-facilitated sexual assault and benzodiazepine related fatalities. Each aspect will be case illustrated. Following this, a review of the legal and illegal benzodiazepine using population will focus on the reasons for use, with emphasis on illicit use and misuse. Of particular importance to the toxicologist are the analytical and interpretive challenges associated with benzodiazepines. A review of simple screening procedures and the rational limitations will be presented, followed by a review of practical GC and HPLC techniques with and without MS detection. Implications on actual cases will be presented. The workshop concludes with interpretation of results, especially those associated with impairment and death. Discussion of postmortem phenomena, such as postmortem stability and transformation, and how these may affect results will be described and illustrated by actual case examples.

Workshop #4 Automation of Micro-Plate Enzyme Immunoassay Systems in Forensic Analysis - Christine Moore, Chair

Micro-plate enzyme immunoassay systems are being used increasingly in the forensic laboratory for the analysis of toxicological samples including whole blood, urine, saliva and hair. This workshop will provide information on the automation of micro-plate systems in order to increase productivity and assay precision as well as reduce turnaround time. Commercially available automated systems will be discussed and, hopefully, demonstrated to workshop participants. Presenters will focus on the use of these automated units for the analysis of specimens of forensic interest to the attendees.

Workshop #5 Marijuana Forensic Symposium - Chip Walls. Chair

Marijuana continues to generate a great deal of interest in the field of forensic toxicology regarding its effects, particularly in the area of human behavior. The symposium will begin with an introductory presentation on the history of the psychotropic use of marijuana. This will be followed by a group of presentations dealing with the mechanisms of action of marijuana with discussions to include PET imaging, EEG findings. CNS and peripheral effects. The next section will present metabolism, pharmacokinetic aspects of marijuana including kinetic data from controlled clinical studies and interpretive relationships between biofluids/tissue concentrations of THC (and metabolites) with the observed effects following marijuana exposure. The third panel of presenters will review the chemistry and potency of marijuana. In addition, this panel will focus on the more recent analytical approaches for screening, identification and quantification of the various cannabinoids and/or their metabolites including immunoassays and gas chromatography/mass spectrometry. The fourth series of presentations will address the issues regarding marijuana exposure and the resulting effects on human performance including clinical, driving simulator and on-the-road studies, epidemiological data and real world driving cases from DRE officers. The final presentation of the day will discuss the judicial aspects of marijuana use by drivers from the point of view of attorneys charged with prosecuting such cases. To conclude the symposium, all of the faculty will participate in a round table discussion, addressing any questions the audience might have from various issues discussed during the workshop.

Workshop #6 Pharmacology and Toxicology of Drugs Used in the Treatment of Infectious Disease - Amanda Jenkins, Chair

The toxicological analysis of drugs prescribed in the treatment of infectious diseases is limited. In many instances, individuals who are thought to have died from the disease are not autopsied, and limited or no toxicological testing is conducted. However, the possibility that death in these cases was the result of drug overdose, or a fatal drug interaction is frequently the concern of surviving family members. The response to this concern is often toxicological testing limited to drugs frequently administered during the terminal event such as analgesics, anticonvulsants, and antiarrhythmic medications. Other drugs used in the treatment of infectious disease are overlooked. This workshop will outline the disease process of four frequently encountered infectious conditions which may be fatal: Hepatitis (B and C), Acquired Immunodeficiency Syndrome, Tuberculosis, and Meningitis. In addition, the discussion of each disease will include a description of the pharmacology and toxicology of the medications (past, present and future) utilized to treat these conditions. Further, the utility of therapeutic drug monitoring, potential drug interactions, analysis and interpretation will be delineated. This workshop will be useful for individuals involved in the treatment of patients with infectious diseases, and toxicologists in clinical and forensic facilities who may be required to conduct toxicological testing in these cases.

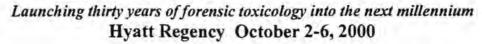
Workshop #7 The Forensic Toxicological Aspects of Chemical Terrorism - George Behonick, Chair

The use of chemical agents in acts of terrorism represents a terrible specter confronting domestic, non-military target populations and facilities in the United States and abroad. Contingency planning by and between various local, state and federal agencies is vital to initiating the timely and appropriate response to a chemical act of terrorism. The response is multi-faceted and begins with the immediate deployment of emergency medical and rescue assets and law enforcement personnel. The investigative phase is launched in parallel to efforts by the first responders. Various forensic specialties will be enlisted to provide meaningful and timely information in support of an investigation. The Forensic Toxicological Aspects of Chemical Terrorism workshop is intended to provide participants with a broad overview of the issues and aspects of importance in formulating a response to a chemical terrorist incident. Topic areas of discussion in the workshop will include a survey of potential threat agents, the immediate and investigative response to an incident, the forensic medico-legal management of victims and the role of the forensic toxicology laboratory in the investigation of a chemical terrorist act. The objectives of the workshop are to present relevant information from recognized expert speakers and to stimulate discussion and thought among forensic toxicologists as to devising appropriate strategies for successfully confronting the challenges posed by the civil disaster of a chemical attack.

Workshop #8 Pharmacology Reviews II: Selected Cardiovascular Drug Toxicology & Update on Pharmacogenetics - Lionel Raymon, Chair

The toxico-kinetics and toxico-dynamics of drugs underlay many deaths investigated in forensic cases. The workshop will review cardiovascular pathophysiology as it pertains to major drug classes and the principles and methods of pharmacogenetics. A general section will lay the foundations for a sound understanding of cardiovascular function and regulation of vital parameters of blood pressure and heart rhythm. Drug classes as varied as antipsychotics, antidepressants, antihypertensives and antiarrhythmics will illustrate the roles of the autonomic nervous system and the fundamentals of hemodynamics. The second section will present calcium channel blockers and their relevance to forensic toxicology and pathology cases. Phenylalkylamines, dihydropyridines and benzothiazepines will be reviewed. The discussion will examine metabolic and functional issues reviewing classical interactions with beta-blockers, digitalis, prazosin and foods. In addition, a focus on mibefradil will illustrate the relevance of CYP 3A4 inhibition in toxicology.







Opening Plenary Lecture

Informatics for Forensic Toxicology

Robert E. Gaensslen, Ph.D., Professor of Forensic Sciences University of Illinois at Chicago

Plenary Lectures

Pharmacogenetics - A Basis for Drug Therapy and Toxicity

Mark W. Linder, Ph.D., Assistant Professor of Pathology and Laboratory Medicine University of Louisville

Brain - Functional Study and Pathology for Toxicologists

John G. Csernansky, M.D. & Gregory B. Couch, Professor of Psychiatry and Neurobiology Washington University School of Medicine

> Elliot A. Stein, Ph.D., Professor of Psychiatry and Behavioral Medicine Medical College of Wisconsin

Steven B. Karch, M.D.
Assistant Medical Examiner, City and County of San Francisco

Critical Assessment of Alternative Samples

Bruce Goldberger, Ph.D., Assistant Professor of Pathology University of Florida School of Medicine at Gainesville

> Yale Caplan, Ph.D. National Scientific Services at Baltimore

Amphetamines - An Update

Barry K. Logan, Ph.D., Assistant Professor of Laboratory Medicine University of Washington and Washington State Toxicology Laboratory

Closing Plenary Lecture

Ethics - A Primer and Foundation for Toxicologists

Joe Saady, Ph.D. Virginia Division of Forensic Sciences

SOFT 2000 Milwaukee Optional Tours Available

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Greater Milwaukee Convention and Visitors Bureau www.milwaukee.org

Key Milwaukee Convention and Visitors Guide www.keymilwaukee.com

Milwaukee, Wisconsin City Guide: On Milwaukee www.onmilwaukee.com

Milwaukee's Premier Nightlife and Entertainment Guide – Milwaukee One www.mkel.com





Launching thirty years of forensic toxicology into the next millennium Hyatt Regency October 2-6, 2000

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	Presid	ent's Reception/Elmer Gordon Forum	\$25	# of tickets	\$
	Farew	ell Dinner and Dance	\$30	# of tickets	\$
	Lunch	eon - Wed - Thurs - Fri	\$20	# of tickets	\$
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Launching thirty years of forensic toxicology into the next millennium Hyatt Regency October 2-6, 2000



Instructions for Abstract Preparation

General Instructions:

The program committee solicits abstracts on all forensic toxicology topics, but is especially interested in papers on the analysis of drugs and metabolites in alternative biological fluids and tissues such as hair, sweat, saliva, skin, vitreous, breast milk, meconium, etc. and in papers relating drug concentrations to performance impairment, drug interactions, drug metabolism, pharmacology and pharmacokinetics. Platform presentations will be 15 minutes including questions. The dimensions of the poster board will be provided at a later date. Tack boards and thumbtacks will be provided.

An original and three copies of the abstract must be submitted on the official abstract form. Please also submit the abstract on a computer disk. Electronic submissions must be in IBM word processing format (MS Word for Windows preferred) or ASCII format. Please label the disk with the first author's name and the word processing program utilized. The deadline for submission of bstracts is May 15, 2000. The presenting authors of all papers will be required to register for the meeting. Only abstracts written in English will be considered.

Content of Abstract

- 1. Author(s) names and addresses
- 2. Short specific title
- 3. Statement of paper's objectives
- 4. Statement of methods, if pertinent
- 5. Statement of results
- 6. Statement of conclusion
- 7. Key words (3 each)

Format of Abstract

Abstracts must be typed and submitted in a neat legible format following the instructions and style provided in the sample below. Type the entire abstract within the boxed area, single-spaced with 11 or 12 point font. Type the title in upper and lower case, followed by the author(s) names and addresses. Use an Asterisk (*) to identify the presenting author. Separate the author(s) names from the body of the abstract by a single blank line. Indent each paragraph three spaces. Identify three key words at the bottom of the abstract.

Notification of Acceptance

All submitting authors will be notified of receipt of the abstract. Notification of acceptance of the abstract and selection of the type of presentation will be mailed or sent by fax or e-mail no later than July 15, 2000.

Specific Instructions

Complete the attached form and follow the sample provided below. Proofread all information provided. Send the original, three additional copies and an IBM disk with the abstract to the mailing address.

Mailing Address:

Steven H. Wong, Ph.D. Milwaukee Co. Med. Examiner's Office 933 W. Highland Avenue Milwaukee, WI 53233

Phone: 414-223-1227 Fax: 414-223-1237

Sample Abstract:

Title: Type Upper and Lower Case. Use Significant Words Descriptive of Subject Content

Author(s) Names and Addresses: Type Upper and Lower Case; Spell Out First and Last Names, Use Middle Initial, e.g. John B. Smith

Indent each paragraph three spaces. Type the entire abstract within the boxed area, single-spaced. Do not type in all capital letters. Capitalize and punctuate exactly as you wish the abstract to appear in the program.

Key Words: Type three key words or phrases in upper and lower case,





Launching thirty years of forensic toxicology into the next millennium Hyatt Regency October 2-6, 2000

Abstract of Paper - Deadline for Submission May 15, 2000

			Categories - Please circle one
2 = 2			Alcohol and volatiles Alternative samples Amphetamines Antibiotics Antipsychotics Antidepressants Antiepileptics Automation Cardiac Criminalistics Drugs of Abuse – Specify GC/MS General Immunoassay Informatics LC/MS Opiates/Analgesics Pharmacokinetics Pharmacogenetics Quality Assurance Sports Medicine Workplace Testing Other ERA applied for () Has the paper been presented before? () Yes () No Where and when?
			The scientific committee reserves the right of final placement of the paper. The presenting author(s) of all papers are required to register for the meeting. Signature of presenting author
			Signature of presenting author
	Preference: () Oral () Poster	Affiliation: () SOFT () non-SOFT
Name of present			
Name of Respon Address:	sible Author for correspondence (plea	se type):	
City:	Province/State:	Postal/Zipcode:	Country:
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Hyatt Regency Milwaukee 333 West Kilbourn Avenue Milwaukee, WI 53203 USA

Telephone: 414.276.1234 Fax: 414.276.6338

SOCIETY OF FORENSIC TOXICOLOGISTS, INC. Annual Conference October 2 – 6, 2000

Room Reservation Form

All information needs to be filled in to assure your reservation.

PLEASE PRINT:	GUEST ROOM RATE:
Name:	Singles \$107.00
	Doubles \$107.00
Company:	Triples \$127.00
	Quads \$147.00
Address:	Cut off date: September 2, 2000
S. 1000 E. 1000	
Business Phone:	# Double(s) 2 persons - 1 bed
Fax Number:	Double(s) 2 persons - 2 beds
Arrival Date:	Hyatt Business Plan upgrades are available for only \$20.00 more per day. Call the hotel for details
Departure Date:	
Credit Card Type:	Name(s) of person(s) sharing accommodations:
credit card Type:	
Credit Card #:	
Expiration Date:	
Hyatt Gold Passport #:	Maximum of four guests per room Suites available on a request basis

Your reservation must be received prior to and before the group reservation block is filled to assure your room accommodations. If the group rate is not available, the next available rate will be assigned. Early response is suggested for guest desiring the group rate. Room type requested is subject to availability at time of contact. All reservations subject to applicable state and local taxes. Check-out time is 12:00 Noon. Rooms may not be available for check-in until after 3:00 p.m. An early departure fee will be charged in the event a guest departs earlier than scheduled unless the reservation is changed 24 hours in advance.

You can make your hotel reservations by:

- Dialing our toll free number at 1-800-233-1234
- Fax your form to ATTN: Reservation Department at 414-276-6338
- Via Internet www.milwaukee.hyatt.com the SCR code is 55009



First	Last	Carlota Vanis
ADDRESS		SHIRT SIZE
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CITY	STATE ZIP	SEX RACE DAY
		MF
DUONE	5K RUN WALK	
PHONE	SKRUN WALK	

Liability waiver must be signed before mailing

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

Signature (parent or guardian if under 18)

Date