

# ToxTalk

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

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SEPTEMBER 2001

## ToxTalk Editor

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#### **REGULAR FEATURES**

President's Message & Career Opportunities & Professional Calendar & Toxichem + Krimtech

### **TECHNICAL NOTES**

Drugs In The News: Ecstasy - Research Update (Papa) & Oxycontin (Papa)

Case notes: Maternal amanita phalloides poisoning during the first trimester of pregnancy (Tarsa) & Unintentional fatal hypernatremia in an adolescent (Powers) & An Extraordinarily High Fatal Ethanol Case (Manning)

Extrapolations: SAMHSA DAWN data (Mozayani)

#### SPECIAL INTEREST

Nominating Committee Slate Proposed Bylaws Amendment Minutes of the 2000 SOFT Business Meeting U.S.-v-Green (Smith)

#### **INSERTS**

2001 SOFT Meeting Forms and information

## SOFT 2001 NEW ORLEANS September 30 – October 5

Radisson Hotel

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: NOVEMBER 1, 2001** 

## PRESIDENT'S MESSAGE by Mick Smith, Ph.D.

When I assumed the duties of President I had my own ideas about our society but thought I would ask the members for their opinions. I conducted a random survey of a small group of individuals. I asked what they felt SOFT did to help them and what we could do better. The result will not surprise most of you. SOFT was already doing a good job of supporting its members and giving them what they wanted. That certainly made my job easier. The largest benefit mentioned by most of those surveyed was the annual meeting. Pat Pizzo and her crew will continue this benefit. She has an incredible agenda for the New Orleans meeting. Check out this issue of ToxTalk for specifics or go to the web-site, www.soft-tox.org.

The Continuing Education Committee, Jennifer Limoges, Chair, presented the last Chemistry of Derivatization course at its third location and is ready for the next series. Tim Rohrig, guest editor, and Christine Moore, Adam Negrusz and Lance Presley, associate guest editors, continue their dedicated work on the SOFT/JAT Special Issue and promise another outstanding issue that will help keep us current in our field of forensic toxicology. Bruce Goldberger, web-master, made several modifications to the web-site this year and it looks great. Congratulate him when you see him. Joe Monforte wanted me to point out in this letter that a change to the By-laws establishing a standing Ethics Committee is in this edition of ToxTalk. Please read it and have your comments ready for the business meeting in New Orleans.

In my first letter I promised brevity but do need to expend some words to tell you that your Board is working hard. We just finished our third email marathon since meeting at AAFS last February. You have probably seen the important issues in ToxTalk without realizing all the hard work Board members contributed. We left the other issues for conversations over a beer in New Orleans.

See you at the annual meeting. \$

You may contact President Smith with your suggestions or comments at (703) 693-1917, msmith@mail.policy.osd.mil

## 2001 Committees and Chairs

Bylaws -

Budget, Finance & Audit -

Membership -

Nominating -

ToxTalk -

Publication (JAT) -

Education Research Award -

Meeting Resource Committee -

2001 - New Orleans, LA - Pat Pizzo V

2002 - Detroit, MI - Dan Isenschmid/Brad Hepler

2003 - Portland, OR - Kent Johnson

2004 - Washington DC - Mark LeBeau, Rebecca

Treamsr

Phipps, Madeline Montgomery, Marilyn Huestis Isluschmo

Yale Caplan V

Jim Valentour

J. Robert Zettl

Joe Monforte

Tim Rohrig

Barbara Manno

Laurel Farrell

Amanda Jenkins s

2005 -Nashville - Louis Kuykendall-

2006 - Open

2007 - Chapel Hill - Ruth Winecker & Jeri Ropero-

Forensic Toxicology Lab Guidelines (AAFS/SOFT) -

Graham Jones Laurel Farrell

Bill Anderson L

Bruce Goldberger

Drugs and Driving -

Policy and Procedures -

Web Site -

Continuing Education -

Drug Facilitated Sexual Assault -

Ethics -

Jennifer Limoges Marc LeBeau

Jeanne Beno

## C.E. COMMITTEE SEMINARS OUTSTANDING SUCCESS

ana Wilkins

Jennifer Limoges, Chair

The Continuing Education Committee has wrapped up its first seminar. "The Chemistry of Derivatization" workshop was offered in Albany, NY (6/1/00), San Diego, CA (11/10/00), and Madison, WI (6/20/01). We would like to express our gratitude to all of the speakers who shared their expertise with over 180 attendees: David Darwin, Robert Fitzgerald, PhD, Amanda Jenkins, PhD, Karla Moore, PhD, Matt Slawson, PhD, and Diana Wilkins, PhD. They contributed not only their knowledge but also their time, and their efforts are greatly appreciated by the Committee and all the attendees. Furthermore, the Committee wishes to thank Bill Johnson for his hard work as the local host in Madison.

The next seminars will be dedicated to individual drug classes - pharmacology, analysis, postmortem interpretation, and DUI issues. The first will be on Antidepressants.

The other committee members are: Sarah Kerrigan, Rebecca Jufer, Kathleen Rhode, Julia Pearson, and Greg Priebe. If you are interested in sharing your expertise or hosting a seminar in your area, please contact any one of us. \$

## SOFT ANNUAL MEETING SEPTEMBER 30 to OCTOBER 5, 2001 Radisson Hotel - NEW ORLEANS, LA

## MEETING AT A GLANCE

## SUNDAY - SEPTEMBER 30, 2001

WORKSHOP #1 – ALTERNATIVE TESTING (Part A) 8 a.m. – noon Vince Papa, Ph.D.,
WORKSHOP #3 - ALTERNATIVE TESTING (Part B) 1 p.m. – 5 p.m. Leon Glass, Ph.D.
WORKSHOP #2 - HERBAL MEDICINE 8 a.m. – noon Barbara Manno, Ph.D
WORKSHOP #4 - URINE TESTING AND HUMAN PERFORMANCE 1 p.m. – 5 p.m.
Joseph Manno, Ph.D.

## **MONDAY - OCTOBER 1**

WORKSHOP #5 - ETHANOL
8 a.m. - 5 p.m. James Garriott, Ph.D.
WORKSHOP #6 - CLINICAL TOXICOLOGY
8 a.m. - noon Larry Broussard, Ph.D.
WORKSHOP #7 - THE IMPACT OF DAUBERT ON
TESTIFYING AS A FORENSIC TOXICOLOGIST
WORKSHOP #8 - ADULTERANT TESTING
1:30 p.m. - 5 p.m. Mahmoud ElSohly, Ph.D.

## **TUESDAY - OCTOBER 2**

SOFT Run/Walk 7 a.m.
Registration 7;30 a.m. – 5 p.m.
ABFT Examination 8 a.m. – noon
WORKSHOP #10 VOODOO – DOES THIS PRACTICE
USE TOXINS? 9 a.m. – 4 p.m.
ABFT Board Meeting noon – 6 p.m.
Exhibit set up 2 p.m.
NLCP Inspectors Workshop 7 p.m. – 10 p.m.

## WEDNESDAY - OCTOBER 3

Registration 7:30 a.m. – 5 p.m.

Poster set up 7 a.m. – 9 a.m.

Consultants Breakfast 7 a.m. – 8 a.m.

WELCOME and Opening of Scientific Program 8 a.m.

SOFT Business Meeting 8 a.m. – noon

Exhibits and Posters 9 a.m. – 3:30 p.m.

Luncheon noon – 1 p.m.

Exhibits open noon – 5 p.m.

Scientific Session 1 p.m. – 3:45 p.m.

Welcome Reception 7 p.m. – 10 p.m.

## THURSDAY - OCTOBER 4

Registration 7:30 a.m. – noon
ABFT Breakfast 7 a.m. – 8:30 a.m.
Vendors' Meeting 8 a.m. – 9 a.m.
Scientific Session 8 a.m. – noon
Exhibits and Posters open 9 a.m. – 3 p.m.
Luncheon noon – 1 p.m.
Scientific Session 1 p.m. – 5 p.m.
Farewell Dinner 6 p.m. – 9 p.m.
Elmer Gordon Forum 9 p.m. to 11 p.m.

## FRIDAY - OCTOBER 5

Scientific Meeting 8 a.m. – noon Poster Session 9 a.m. – noon Exhibits open 9 a.m. - noon

#### For further information contact:

Pat Pizzo 504-361-8989 x291 ppizzo@labz.com David Green 225-926-9173 x206 dgreen@labz.com

Important deadlines: Aug 1 - Mail registration (Did you make it?) Sept. 7 - Radisson reservations

## SOFT AIRLINE DISCOUNTS: Southwest and Delta Offer Reduced Fares

Southwest: Call 1-800-433-5368 (Mon.-Fri. 8 a.m. to 5 p.m. and Sat.-Sun. 9:30 a.m. to 3:30 p.m.) and reference I.D. code R6864 for a 10% discount on most of SWA's low fares. Reservation deadline: 5 or more days prior to travel.

Delta: Call 1-800-241-6760 (Mon.-Fri. 7 a.m. to 11 p.m. and Sat.-Sun 8:30 a.m. to 11 p.m. EST) and reference file 160656A for a 10% discount 60 days prior to travel or 5% when making reservations less than 60 days before travel.

Additional information is included as inserts in this issue of ToxTalk and may also be found on www.soft-tox.org

## SOFT NOMINATING COMMITTEE ANNOUNCES SLATE FOR 2002

Submitted by J. Robert Zettl (Chair), Dr. Joseph Saady and Dr. Yale Caplan

## PRESIDENT Laurel J. Farrell, BS

Ms. Laurel J. Farrell graduated with a Bachelor's degree in Chemistry from the University of Northern Colorado in 1979 and has served the state of Colorado since that time. Farrell worked more than 21 years with the Colorado Department of Public Health and Environment, ultimately as the staff authority in the Toxicology Laboratory, and currently works with the Colorado Bureau of Investigation. Through her career she has served in a variety of capacities in the drug and alcohol analytical laboratories.

Laurel has served in a number of positions for SOFT. Her SOFT committee work includes past appointments to the Health and Safety, Budget, Finance, and Audit, and DUID committees as well as chair of the joint AAFS/SOFT Drugs and Driving Committee. Ms. Farrell has also been active in supporting the annual meetings of SOFT by Cohosting the 1996 and 1999 meetings and by formalizing the meeting guidelines that are used by future meeting hosts. Ms. Farrell has previously served SOFT as a Director from 1996-1998, Treasurer for 1999 and 2000, and is currently SOFT Vice President...

## VICE PRESIDENT Amanda Jenkins, Ph.D., D-ABC

Amanda Jenkins is currently the Chief Toxicologist for the Office of the Cuyahoga County Coroner in Cleveland, Ohio. She is also an Assistant Professor in the Department of Pathology, School of Medicine at Case Western Reserve University. Dr Jenkins received a Bachelor of Science degree in Biochemistry and

Physiology from the University of Leeds, England; a Master of Science degree in Forensic Science from Strathclyde University in Glasgow, Scotland; and a Ph.D. in Toxicology from the University of Maryland. Jenkins' previous positions include working as an Assistant Toxicologist at the Office of the Chief Medical Examiner, State of Maryland, in Baltimore. conducted her doctoral thesis at the Intramural Research Program, National Institute on Drug Abuse at the National Institutes of Health.

Amanda has served SOFT as a member of the Health and Safety Committee and Membership Committee. She was the scientific program co-chair for the 1996 SOFT annual meeting in Denver, a member of the Board of Directors from 1997 to 1999, and currently serves as Secretary and member of the Drug Facilitated Sexual Assault Committee. She also serves on the Editorial Board of the Journal of Analytical Toxicology, is a Laboratory Inspector for the College of American Pathologists FUDT accreditation program; a Fellow of the American Academy of Forensic Sciences Toxicology Section and a member of The International Association of Forensic Toxicologists.

## SECRETARY Graham Jones, Ph.D.

(2 year term)

Dr. Graham R. Jones is Chief Toxicologist for the Alberta Office of the Chief Medical Examiner, in Edmonton. He originally qualified as a Pharmacist in the U.K. and later earned his Ph.D. degree in Pharmaceutical Chemistry (Drug Metabolism), from Chelsea College at the University of London. Dr. Jones

subsequently moved to Canada for a fellowship at the University of Alberta, later joining the University of Alberta Hospital as a Senior Scientist / Clinical Toxicologist. In 1981 he joined the Alberta Medical Examiner's Office as director of the new toxicology laboratory.

Dr. Jones has been very active in his profession, and is a member of several professional organizations in Canada, the U.K. and the U.S.A. He hosted the 1987 meeting of the International Association of Forensic Toxicologists (TIAFT) in Banff, Alberta and has served as Chairman of the Toxicology Section of the Canadian Society of Forensic Science (CSFS). Jones has served as Toxicology Section Chair in the American Academy of Forensic Sciences (AAFS), numerous committees, as well as on the board of directors: he is currently President-Elect.

Dr. Jones is currently serving a 3-year term as a director on the board of SOFT. He has a member of SOFT/AAFS laboratory Guidelines Committee since its formation in 1988, has been chairman of that committee since 1993, and has played an active role in the development and operation of the **ABFT** Forensic Laboratory Accreditation Program. He is certified as a Diplomate of the American Board of Forensic Toxicology (ABFT), has served on its Board of Directors since 1991. and is Chair of the Laboratory Accreditation Committee. He has been an inspector with the National Laboratory Certification Program (RTI/SAMHSA) since 1988, and is also a laboratory assessor for the Standards Council of Canada. Dr. Jones' special professional interests include the postmortem changes affecting toxicology, and the development of professional standards.

## DIRECTOR Rod McCutcheon, B.S.

(2 year term.)

Rod McCutcheon, B.Sc., D-ABFT, has held his current position as Chief Toxicologist at Travis County Medical Examiner's Office in Austin, Texas, for the past eleven years. He received his Bachelors Degree in Chemistry from the University of Texas at Austin in 1970. He worked twenty years for the Texas Department of Public Safety Crime Laboratory, the last ten years as Supervisor of Toxicology. He has lectured in classes for law enforcement personnel in the areas of alcohol and drug related driving impairment and drug induced robberv. He has publications on a variety of topics, the most recent a report of overdoses by ingestion of 1,4butanediol. Rod has been active in American Academy of the Sciences Forensic and the Southwestern Association Toxicologists. holding various offices in each organization. He is currently on the board of directors of the Alcohol Testing Alliance and was recently elected to the American Board of Forensic Toxicology Board of Directors. He is currently serving a one-year term on the SOFT Board of Directors.

## DIRECTOR Michael Baylor, Ph.D.

(3 year term)

Dr. Michael R. Baylor is currently a Senior Research Forensic Toxicologist at RTI in Research Triangle Park, NC. He is responsible for managing the National Laboratory Certification Program (NLCP) laboratory inspection activities. Dr. Baylor

also serves as a consultant to the Drug Abuse Warning Network (DAWN) for emergency department and medical examiner data and is involved with the National Forensic Laboratory Information System (NFLIS) for Crime Labs.

Dr. Baylor received his Doctorate pharmacology from Virginia University in 1976. He served in the U.S. Army Medical Department for ten years as a Forensic Toxicologist where he was involved in post mortem toxicology, urine drug testing and clinical toxicology. Since then, he has been involved in various aspects of drug testing including serving as the Director of CompuChem Laboratories. was appointed as a Senior Staff Fellow (1990-1993) at NIDA and as a Special Expert (1993-1994) for SAMHSA developing technical policies for federal workplace drug testing.

He presented has numerous lectures for continuing education workshops and toxicology review courses. Dr. Baylor is active in both the American Academy of Forensic Sciences as well as SOFT where he serves on the Membership and Budget, Finance and Committees.

## DIRECTOR

Anthony Costantino, Ph.D., DABFT (3 year term)

After completing his B.S. Pharmacy and M.S. Pharmacology/Toxicology at Duquesne University, Costantino was granted his Ph.D. in Forensic Toxicology from the University of Maryland. He worked Maryland Medical at the Laboratory, Inc., Toxicology Department and then the Office of the Chief Medical Examiner, Toxicology Laboratory, in Baltimore, MD, while completing his doctoral degree requirements.

Since 1990, Dr. Costantino has associated been with American Medical Laboratories in Chantilly, VA, where he currently serves as Vice President and Director, Toxicology. member of the Forensic Science Advisorv Board at George Washington University (Washington, DC), Tony was graduate student advisor to 3 students who successfully obtained MSFS degrees. Dr. Costantino is a Diplomate of the American Board of Forensic Toxicology and holds a Certificate of Qualification as Laboratory Director by the State of New York. He is also a laboratory inspector and team leader for the National Laboratory Certification Program.

Dr. Costantino has made numerous contributions to the field of forensic toxicology through his publications, workshop and paper presentations, and memberships in related professional organizations. He has the honor of being recognized early in his career as a recipient of the SOFT Educational Research Award three times: 1986, 1988, and 1990.

Currently, Dr. Costantino's professional memberships include Forensic Society of the Toxicologists, the American Academy of Forensic Sciences (Fellow), American Association for Clinical Chemistry, the American Association of Pharmaceutical Sciences. The International Association of Forensic Toxicologists, and The Society of Toxicology.

Tony Costantino has attended most of the SOFT annual meetings since 1985 and looks forward to becoming more involved with the Society as an active Director.

## Elections will be held during the SOFT Annual Business Meeting Wednesday, October 3rd from 8 a.m. until noon

Remember - only FULL MEMBERS (including Charter) may vote.

# Annual Business Meeting Minutes Of the Society of Forensic Toxicologists, Inc.

## October 4, 2000

The Annual Business meeting of the Society of Forensic Toxicologists, Inc., (SOFT) was held on October 4, 2000 in Milwaukee, Wisconsin. President Robert Zettl called the meeting to order at 4.15 p.m. and requested that the Secretary establish a quorum. President Zettl advised attendees to sign in on the notebooks located at the back of the room. Upon a motion duly made, seconded and passed, the agenda was approved with one correction: The location of the 2005 SOFT meeting will be in the state of Tennessee not Kentucky. By a motion duly made, seconded and passed, the minutes of the annual business meeting of the Society of Forensic Toxicologists, Inc., of October 13, 1999, as published in Toxtalk, were approved by acclamation.

### President's Report: J. Robert Zettl, MPA.

President Zettl thanked the members of SOFT for the opportunity to serve the organization. He also wanted to recognize and give credit to the many individuals who work behind the scenes in the organization and at meetings.

### Secretary's Report: Amanda J. Jenkins, Ph.D.

Secretary Jenkins reported that there were now 598 members of SOFT. This included 437 Full members; 98 Associate; 20 Charter; 13 Student; and 30 Retired. New members present at the meeting were recognized by the members.

### Treasurer's Report: Laurel Farrell, BA.

Treasurer Farrell reported that she had enjoyed being Treasurer of SOFT and that the organization is financially sound with assets totaling over \$214,000. These assets included \$25,000 in permanent reserve. She stated that although the organization is healthy, its activities cannot be supported by dues alone.

## Vice President's and Committee Reports: Michael L. Smith, Ph.D.

Vice President Smith called on the committee chairs to give their reports:

#### A. Bylaws - Yale Caplan, Ph.D.

The bylaws were available for members in Toxtalk and on the web-site

### B. Budget, Finance, & Audit, - Michael Baylor, Ph.D.

Dr Baylor reported that the records were reviewed by the committee and are in good order.

#### C. Membership, Amanda Jenkins, Ph.D.

Dr Jenkins informed the membership that the current committee members were Daniel Anderson, Glynn Chaney, Dr Michael Baylor and herself as Chair. She reminded members that if they provide references for applicants they should ensure they know the individual and provide as complete a reference as possible since the committee does not complete background checks on applicants. Dr Jenkins further stated that notification of change of address etc. should go to the administrative office in Arizona as she does not maintain the database. Dr Jenkins stated that the committee had revised the application form for retired status. The revised form has been approved by the Board and will be made available on the web-site. It is important to note that applicants will be required to provide a curriculum vitae at the time of application for retired status.

Members brought up issues about membership being dropped due to lack of payment of dues. Secretary Jenkins responded that to date members are sent two dues notices before being dropped from the rolls. In future the administrative assistant would be instructed to send a third notice by registered or certified mail to the member before removing them from membership. Secretary Jenkins impressed on the members that they need to be vigilant about notifying the office if they change their address or by checking payment has been made if their employer provides this service for them. A new category of membership called retired charter was proposed by a member. Since the organization has retired and charter categories it was felt this issue was already covered.

#### D. Nominating, - Marilyn Huestis, Ph.D.

Dr Huestis stated that to be nominated represents long term service to SOFT and the committee selected the following individuals for SOFT office: President-Michael L. Smith, Ph.D.; Vice President-Laurel Farrell, BA, Treasurer-Daniel Isenschmid, Ph.D., Board of Directors-Diana Wilkins, Ph.D.

E. ToxTalk, Joe Monforte, Ph.D.

Dr Monforte thanked the editorial Board and stated he was looking for new members. He stated that a charge of \$15 allows individuals to become corresponding members and receive ToxTalk only. A member suggested dedicating one issue of the newsletter to case reports.

F. Publication (JAT), David Moody, Ph.D.

Dr Moody thanked the contributors and reviewers of manuscripts for the JAT special issue.

G. Education Research Award, Barbara Manno, Ph.D.

Dr Manno reported that the committee had received 3 worthy applicants for the award. The following individuals received the award with meeting registration fee waiver and \$1000--Laureen Marinetti; Martha Burt and Diane Boland. The certificates were awarded by President Zettl.

H. Meeting Resource Committee, Michael L. Smith, Ph.D.

2000 Co-Hosts Dr. Steven Wong and Sue Gock acknowledged the hard work and dedication of the many individuals who made the meeting a success. With the aid of Jana Champion, they presented plaques of recognition to Dr Nancy Wu Chen; Dr Adam Negrusz; Dr Barry Logan; Tinsley Preston, Dr Michael Wagner and Jana Champion.

Dr Michael Wagner reported that 4 students had been awarded student grants to attend the meeting and they were presented with certificates. In recognition of their hard work, President Zettl presented plaques and gifts to the co-hosts, Dr Steven Wong and Sue Gock.

2001 New Orleans, Pat Pizzo

A slide presentation was given by Leon Glass, Ph.D.

Dr Smith then read the future meeting sites and hosts and stated the Board was looking for a site for 2006: 2002 Detroit, MI-Isenschmid/Hepler; 2003 Portland, OR-Johnson; 2004 Washington, DC-LeBeau 2005-Nashville, TN-Kuykendall; 2007 Raleigh/Durham, NC-Winnecker/Ropero-Miller

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

Dr Jones reported that the guidelines were re-formatted in 1999 to a point style rather than paragraph style. The revised document must be adopted by SOFT and the AAFS Toxicology Section. The latter adopted the revised version in February 2000. Therefore, SOFT must vote on the revised document at this meeting. A motion was duly made, seconded and passed that the re-formatted guidelines be accepted as they are delineated on the SOFT web-site.

J. Drugs and Driving Committee, Laurel Farrell, BA

Ms Farrell reported that as of February 2000, the joint committee from AAFS and SOFT comprised 28 members. The focus of the committee will be continuing education by conducting workshops at the organizations' meetings and publishing drug monographs.

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

Committee members were Marilyn Huestis and Dwain Fuller. The committee was currently working on the task of updating the policy and procedures manual of SOFT.

L. Web-site, Bruce Goldberger, Ph.D.

Dr Goldberger stated that the membership directory was available online. The web-site is an active site with the most popular fields including the laboratory guidelines; employment exchange and toxilink. Dr Sunshine stated that the membership should thank Dr Goldberger for the excellent job he has done on the web-site. Those in attendance applauded Dr Goldberger for his work.

M. Ethics, Jeanne Beno, Ph.D.

Dr Beno stated that the committee had drafted a standard operating procedure manual to handle complaints. She stated she had referred two issues to the Board -the suggestion that this committee be a standing committee and the fact that the bylaws may need to be revised to reflect the status etc. of this committee.

Vice President Smith responded by stating the Board of Directors voted that the Ethics committee would be a standing committee of SOFT. The question regarding changing the bylaws was referred to the Bylaws committee for review.

N. Drug Facilitated Sexual Assault Committee, Marc LeBeau, MS.

Marc LeBeau stated that the committee had published a survey in Toxtalk which had received little response. The committee was organizing a workshop to be presented at the 2001 AAFS meeting in Seattle.

O. Continuing Education Committee, Christine Moore, Ph.D.

Dr Moore stated that this committee had organized a successful seminar in Albany New York in June 2000 on GC/MS derivatization procedures. This seminar will be repeated in San Diego, CA in November, 2000.

P. Visioning Committee, Joseph Saady, Ph.D.

Dr Saady reported that the committee was started 3 years ago and has now produced a document for the Board to review.

## Liaison Reports: Robert Zettl, MPA

ABFT, Yale Caplan, Ph.D.

Dr Caplan stated that the Board had initiated a Bachelor level program in 2000 for individual certification. With regard to laboratory accreditation, the first laboratories have just gone through the first re-accreditation cycle. There are currently 9 laboratories accredited through the ABFT. The ABFT Board has been expanded to 13 members, with Drs Goldberger and Logan recently joining. The Board has adopted an ethics policy which is outlined in the newsletter. Dr Caplan completed his remarks by thanking Dr Goldberger for his work on the web-site. The ABFT site is now linked to the SOFT web-site.

AAFS, Barry Logan, Ph.D.

The 2001 AAFS meeting will be in Seattle, WA. Dr Joe Saady is the program chair.

TIAFT, Marie Balikova, Ph.D.

Dr Balikova stated that the next TIAFT meeting will be held in Prague, Czech Republic on August 26-30, 2001.

## **Unfinished Business**

President Zettl asked for any unfinished business. There was no unfinished business from the members.

#### **New Business**

Awards and Recognition

Tinsley Preston stated that Dr Randy Baselt will be retiring as Editor of JAT. Dr Bruce Goldberger has accepted the position as editor. His editorship will begin with the January 2001 issue. Mr Preston further announced that the SOFT JAT special issue this year was the second largest issue to date and that there had been 6 guest editors who he recognized. Dr Moody accepted a plaque on behalf of the editors. Mr Preston then concluded by thanking all the guest reviewers.

President Zettl thanked the outgoing officers of SOFT and presented each of the following individuals with a plaque-Daniel Isenschmid, Ph.D. Board of Directors, 1996-2000; Laurel Farrell, BA, Treasurer and Michael L. Smith, Ph.D., Vice President.

There was no other new business.

#### Nominations and Elections, President Zettl

No nominations for SOFT officers were received from the floor. Nominations were closed. It was moved and seconded that all officers be elected by acclamation as presented by the Nomination Committee. The newly elected 2001 SOFT officers and directors are as follows:

President-Michael L. Smith, Ph.D. Vice President- Laurel Farrell, BA Treasurer- Daniel Isenschmid, Ph.D.

Director- Diana Wilkins, Ph.D.

Michael Smith, Ph.D. presented outgoing President Zettl with a commemorative plaque on behalf of the members.

#### Incoming President's Remarks

The newly elected President Smith remarked that he is interested in members opinions concerning the future of SOFT. He will be contacting members randomly throughout the year for member input on the direction and focus the organization should take. Traditionally, the annual meeting has been the cornerstone of SOFT activities and the education programs have been very successful.

Adjournment: The meeting was adjourned at 5.47 p.m.

Respectfully submitted, Amanda J. Jenkins, Ph.D. SOFT Secretary

Subject to approval at the 2001 SOFT Annual Business Meeting \$

## NOTICE TO SOFT MEMBERSHIP PROPOSED BYLAWS AMMENDMENT

The purpose of this amendment is to create a permanent ethics committee for SOFT and to establish the composition (membership and appointment of chair) and duties of the committee. The amendment has been approved by the Board of Directors and will be presented and voted on at the annual meeting in New Orleans.

Yale H. Caplan, Ph.D., Chair, Bylaws Committee

## SOFT BYLAWS AMMENDMENT

Chapter II **MEMBERSHIP**Section 3. <u>Termination of Membership</u>

C. Delete in entirety and replace with the following:

#### New:

C. A member in any category may be censured or may be expelled from SOFT for unethical or other conduct detrimental to the profession of forensic toxicology, or conduct detrimental to SOFT as an organization. Charges alleging any such conduct must be presented in writing to the President of SOFT who shall refer the matter to the Ethics Committee. The Ethics Committee shall investigate the charges and recommend the action, if any, to the Board of Directors. Any action taken against a member must be approved by the Board of Directors. Prior to any adverse action, a member shall be notified in writing of the nature of the charges and afforded an opportunity to file a written response to the charges and/or to appear at a formal hearing.

## Chapter V COMMITTEES

Add new Section 3 as follows:

Section 3. Ethics Committee

### A. COMPOSITION OF THE ETHICS COMMITTEE

The President with the approval of the Board of Directors shall appoint members to the Ethics Committee. The Committee shall consist of five (5) members, serving staggered three (3) year terms. In the first year, the five members shall be designated to serve the following terms: two members for three years, two members for two years, and one member for one year. The chair of the committee shall be appointed annually by the President from one of the five committee members. A committee member may recuse him/herself or be recused by the chair of the committee from considering a particular complaint. If a member is excused, the President will appoint another SOFT member to serve on the committee for the consideration of the particular complaint. The replacement member will serve until the complaint for which he/she was appointed is concluded.

#### B. DUTIES OF THE ETHICS COMMITTEE

The duties of the Ethics Committee shall be to investigate complaints brought against SOFT members and to recommend action, if any, to the Board of Directors. The operating procedures of the Ethics Committee shall be approved by the Board of Directors.

Current Section 3 Other Ad Hoc Committees will be renamed Section 4. \$\frac{1}{2}\$

## Guidelines for Hosting an Annual SOFT Meeting Now Available

Potential SOFT meeting hosts should contact Laurel Farrell (farrell@oneimage.com) for details

## DRUGS IN THE NEWS

Submitted by Vincent M.Papa, Ph.D. Brooks AFB, TX. 78238

**ECSTASY - RESEARCH UPDATE:** Last July, USA Today stated that early reports at a scientific conference sponsored by NIDA indicated that brain damage produced from ecstasy may persist for years. Researchers from the University of London compared current ecstasy users to subjects that smoked marijuana and drank alcohol. They showed that subjects who took ecstasy in doses sold on the street and at rave parties showed significantly more memory impairment than marijuana or alcohol users. The impairment included memory tests and other tests requiring concentration. These deficits were not erased even after one year. Brookhaven National Laboratory found that individuals had decreased blood flow to their brains 14 days after taking low doses of ecstasy consistent with recreational use. Researchers have not determined whether the human brain can recover from intermittent and low doses of ecstasy.

**OXYCONTIN:** Recently, USA Today, National Public Radio, and the major television stations have reported on the nationwide use and abuse of painkillers. From NFL players and other sports figures to the public abusing painkillers, this has become a national issue. Pharmaceutical and government data report that the amount of prescriptions written by physicians increased from 25 to 145 billion dollars. For one of these painkillers, DEA reports an increase in distribution with "street value" of some of the pills ranging up to \$80/tablet.

Oxycontin, or oxycodone, is a semi synthetic analgesic available in oral formulations in combinations with other drugs such as acetaminophen, aspirin, phenacetin and caffeine. The usual adult dose is 2.5-5 mg every 6 hours. Subcutaneuosly, it is equipotent to morphine. Leow et.al.(1) administered 10 mg oral doses to 12 patients with peak plasma levels averaging 0.030 mg/L at 0.8 – 2.5 hrs post dose. Poyhia et al. (2) determined that the elimination half-life averaged 5.1 hrs in 9 volunteers receiving 0.28 mg/kg oral doses. Peak plasma levels averaged 0.038 mg/L at 1 hr.

Oxycodone is known to be metabolized by N and O-demethylation. O-demethylation results in oxymorphone, a potent narcotic analgesic while N-demethylation produces noroxycodone (3). From 31-61 % of a single dose is excreted in a 24-hr urine. Free oxycodone accounts for 13-19 %, conjugated oxycodone 7-29 % and conjugated oxymorphone 13-14 % (3). Free oxycodone concentrations range from 1 mg/ml for therapeutic doses to 13 mg/L for 700 mg overdose (4). Oxycontin is capable of producing stupor, coma, muscle flaccidity, severe respiratory depression, hypotension and cardiac arrest in overdosage. A series of 3 deaths exhibited post mortem blood concentrations of 0.4- 0.7 mg/L. Additionally, two suicides by oxycodone overdosage had postmortem blood concentrations of 4.3 and 14 mg/L in blood and 22 and 63 mg/kg in the liver (5).

There are many methods that have been used to analyze for oxycodone. Immunoassays are limited because of low cross reactivity (approximately, 23%). Specific analyses for oxycodone and metabolites have been based on HPLC, GC-ECD of heptafluorobutyryl derivatives, GCNPD and GCMS.

#### References:

- 1. K.P.Loew, M.T.Smith, J.A.Watt et al. Comparative oxycodone pharmacokinetics in humans after intravenous, oral and rectal administration. Ther.Drug Mon.14: 479-484, 1992.
- 2. R.Poyhia, T.Seppala, K.T.Olkkola and E.Kalso. The pharmacokinetics and metabolism of oxycodone after intramuscular and oral administration to healthy subjects. Brit.J.Clin.Pharm. 33: 617-621, 1992.
- 3. Ellenhorn and Barceloux, Medical Toxicology, 1988.
- 4. R.C.Baselt and C.B.Stewart. Determination of oxycodone and a major metabolite in urine by GCECD. J.Anal.Tox. 2: 107-109, 1978.
- 5. Baselt, R.C. Determination of Toxic Drugs and Metabolites in Man, 1988. \$

## "NEW DRUGS" FEATURE

Submit information on new drugs relative to forensic toxicology to: Daniel Anderson, M.S.

L.A. County Coroner's Dept., 1104 N. Mission Road, Los Angeles, CA 90033 E-mail: danderso@co.la.ca.us Ph: 323-343-0530

Next issue: ZALEPLON (Sonata)



## 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 (arial font, size 10, Microsoft Word 6.0 preferred) 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 that Arizona is hours behind the East Coast. **NOTE: Dr. Monforte has returned to his original e-mail address: DrMonforte@aol.com** 

Other items of interest to SOFT members are also welcome.

## CASE NOTES: MATERNAL AMANITA PHALLOIDES POISONING DURING THE FIRST TRIMESTER OF PREGNANCY

Submitted by Nancy Jane Tarsa, MS, MSFC

A woman in her first trimester of pregnancy was admitted to a hospital in southern France with symptoms of gastroenteritis. At admission her liver function tests were normal. She had eaten some wild mushrooms which her husband, an amateur mycologist, had recognized as edible. By 36 hours post ingestion, the woman's aspirate aminotransferase (AST) and alanine aminotransferase (ALT) levels were increased 60-fold. Upon examination of the intact remaining mushrooms, *A. phalloides* was identified. (1) Chemical analyses were not performed in this case although *Amanita* toxins have been positively identified using radioimmunoassay, thin layer chromatography, and reverse phase high-performance liquid chromatography (2,3). Measurement of these toxins has no prognostic value; a delay in therapy might even result in a fatal outcome (2).

The course of *A. phalloides* poisoning progresses through three stages and can be explained by the presence of two groups of toxins. Phalloidin is a weak toxin whose action impairs the functioning of cell membranes. It is responsible for the initial gastroenteritis. At 24-48 hours post ingestion, there may seem to be improvement clinically. But this is a false impression because the second group of toxins, the amanitins, is at work, interfering with RNA synthesis and the production of structural proteins. In this third stage cell necrosis, especially of the liver and kidneys, results. Therefore continued monitoring during the second "quiescent" phase must be maintained and can help to determine the severity of poisoning. (2,3)

In this case liver and renal functions were monitored three times daily for days 2-4 post ingestion. The woman was given activated charcoal to remove residual mushroom particles from her stomach. Silymarine and N-acetylcysteine were administered since neither drug would cause fetal injury. Silymarine interrupts amanitin enterohepatic recirculation and N-acetylcysteine conjugates toxins by an alternate sulfonic pathway. At day 4, the patient's AST and ALT levels peaked at several hundred times her admission values. After this she showed progressive improvement. By day 40 her liver function tests were at their admission levels. The woman was judged to have had medium severity poisoning since her clinical symptoms did not progress to encephalopathy and a liver transplant was not necessary. There was no fetal damage since amatoxins do not cross the placental barrier. Two years later the mother is in good health and the baby is developing normally. (1)

- (1) Boyer J-C, Hernandez F, Estorc J, et al: Management of Maternal *Amanita phalloides* Poisoning during the First Trimester of Pregnancy: A Case Report and Review of the Literature. Clin Chem 47: 971 (2001).
- (2) Klein AS, Hart J, Brems JJ, et al: *Amanita* Poisoning: Treatment and the Role of Liver Transplantation. Am J Med 86: 187 (1989).
- (3) Ellenhorn MJ, Schonwald S, Ordog G, et al. Ellenhorn's Medical Toxicology: Diagnosis and Treatment of Human Poisoning. Second Edition. "Mushrooms": 1880- 1896. Philadelphia: Williams & Wilkins, 1997. \$

## Next ToxTalk deadline: NOVEMBER 1, 2001

## CASE NOTES: UNINTENTIONAL FATAL HYPERNATREMIA IN AN ADOLESCENT

Submitted by Robert H. Powers, Ph.D., Hamilton County Coroners Office, 3159 Eden Avenue, Cincinnati, OH 45219; Bradley J. Lewis, M.D. and Dorothy E. Dean, M.D., Franklin County Coroners Office, 520 King Avenue, Columbus, OH 43201.

Hypernatremia is a commonly encountered clinical issue (1), but only rarely seen in a forensic setting. Usually a result of volume (free water) depletion, hypernatremia may also be caused by exogenous salt ingestion, and as such, can be considered a poisoning event. Symptoms may vary, but are attributable to central nervous system dysfunction (2), and may include hyperpnea, lethargy, muscle weakness, restlessness and insomnia. Depending on the severity of the hyperosmolarity, twitching, seizures, obtundation, stupor or coma may be caused (3). Diarrhea is the most common GI symptom of hypernatremia (3). Fever, as a physiologic consequence of seizures, may be noted as well. In severe cases, permanent brain damage and/or death may result, as a function of the osmolar disturbances, CNS effects, or overaggressive therapeutic attempts to return to normal sodium levels (135 -145 mmol/L)(3).

We were recently involved in the case of an otherwise healthy 14 y/o male, who had been given an unknown quantity of salt water by a parent, in a "Folk Remedy" effort to induce vomiting, following consumption of ethyl alcohol. The boy subsequently experienced diarrhea and a seizure, and was taken to a local hospital, with more seizures en route. Upon admission, (a few hours after drinking alcohol), his blood ethanol level was 35.7 mg/dl and serum sodium was 195 mmol/L. He was transferred to a children's hospital, with a core temperature of 105°F, and ethanol "not detected" (four hours after the initial determination). During communication of the patient's status, the blood alcohol level was incorrectly interpreted by the receiving hospital as 0.350 g/dl. The working diagnosis was ethanol intoxication with hypernatremia. He was treated with normal saline at 200 ml/hour with 40 meq/L potassium phosphate, then 3% normal saline, vasopressin, Ativan, Dilantin and mechanical ventilation until he expired (about 36 hours after the salt ingestion). Death was attributed to (seizure induced) hypoxic encephalopathy due to hypernatremia as a consequence of acute salt ingestion. The manner of death was listed as accident.

The authors hoped this case would be of interest to others in the field since the symptoms caused by hypernatremia (seizure, coma, death) might readily suggest other causative agents, particularly in the absence of electrolyte levels, case history or significant medical intervention.

#### References:

- Moder, K.G. and Hurley, D. L. Fatal Hypernatremia from exogenous salt intake: Report of a case and review of the literature. Mayo Clin. Proc., 65:1587-1594 (1990).
- 2. Adrogue, H.J. and Madias, N.E. Hypernatremia. New Eng. J. Med. 342 (20):1493-9 (2000).
- 3. Fauci, A.S., et. al., Eds., Harrison's Principles of Internal Medicine. 14<sup>th</sup> Edition; pp270 271 (1998).

## **CASE NOTES: An Extraordinarily High Fatal Ethanol Case**

Submitted by Thomas Manning, Ph.D., Tamara Bloom, M.D., and Andrew Wolodzko, M.D., Office of the Medical Examiner, County of Nassau, East Meadow, NY

Although there have been a number of unusually high concentrations of alcohol in fatal cases, they are rarely seen in most jurisdictions. Furthermore, fatal concentrations for vitreous fluid, which is considered by many toxicologists to be the most accurate specimen to assess intoxication at the time of death, have rarely been reported.

The deceased was a 30-yr-old male alcohol abuser who drank heavily every day (one quart of vodka/day). He was seen intoxicated after drinking his usual quantity while walking through a park at 3 a.m. He was found dead on a park bench at 7:08 p.m. Autopsy revealed fatty metamorphosis of the liver.

Postmortem tissue samples were analyzed for volatile compounds by headspace GC using a flame ionization detector with n-propanol as internal standard. The brain tissue was quantitated by two methods: the aforementioned GC method and an old oxidation titration method developed by A. Freireich (the methods agreed within 0.01%). Ethyl alcohol was found as follows:

Cardiac blood 0.64% Femoral blood 0.64% Vitreous 0.77% Brain 0.62%

Ethyl alcohol was also present in the stomach at a concentration equal to the blood.

The cause of death was attributed to "acute ethanol intoxication" with chronic alcoholism contributing. The manner was listed as accidental.

## UPDATE: U.S. v Green Submitted by Michael Smith, Ph.D., DABFT

In ToxTalk Vol. 23, No. 4, Dec, 1999, Joe Monforte outlined a decision from the United States Court of Appeals of the Armed Forces (CAAF) in the case of U.S. v Campbell. For those unfamiliar with the CAAF it is the highest appeals court for cases tried in the Armed Forces and is at a judicial level just below that of the United States\_Supreme Court. The CAAF is comprised of five civilian federal judges who are appointed by the President. Although the decisions of the Court are not binding for most civilian jurisdictions the decisions can have persuasive value in civilian courts and if the case were elevated to the Supreme Court may have direct impact. The Campbell decision was of interest to readers because it was a high level federal court decision, involved acceptability of drug urinalysis evidence (Daubert, etc.), introduced a required nexus between urine drug concentrations and pharmacodynamic effects, reintroduced the important role of expert testimony and had the potential to significantly limit the effectiveness of random urinalysis programs. On June 11, 2001 the CAAF released a decision in U.S. v Green that clarified and reduced some of the difficult requirements of Campbell. A short history of the cases and opinions of the CAAF are described below.

The original case, May 1997: A special court-martial composed of officer and enlisted members convicted Private First Class Christopher W. Campbell, contrary to his pleas, of wrongful use of LSD, a violation of Article 112a, Uniform Code of Military Justice, 10 USC § 912a. He was sentenced (federal conviction) to a bad-conduct discharge, confinement for 75 days, forfeiture of \$549.00 pay for 2 months and reduction to the lowest pay grade. The evidence against him was a urinalysis result based on two positive RIA tests for LSD using a 500 pg/mL cutoff and a positive

GC/MS/MS result of 307 pg/mL of LSD, cutoff 200 pg/mL. Expert testimony was provided at the trial.

CAAF, Campbell I, April 20,1999: The conviction was appealed with the defense appellate counsel arguing that the GC/MS/MS result did not meet Daubert requirements for general acceptability within the scientific community. The Court of Criminal Appeals disagreed, affirmed the conviction and the case was further appealed to the CAAF. The CAAF reaffirmed the need for urine drug testing to combat "the corrosive impact of drug abuse on the readiness of the armed forces to engage in combat". They reaffirmed that to obtain a conviction the prosecution must introduce sufficient evidence 1) to show that the accused used a controlled substance and 2) that the use was wrongful. The Court further explained that by precedent and the Manual for Courts-Martial "Knowledge of the presence of the controlled substance is a required component of use." They further reaffirmed regarding "knowledge" that they traditionally went "well beyond the constitutional analysis that the Supreme Court has applied in civilian society"...and have "...approved prosecutorial use of permissive inference in criminal proceedings to sustain convictions based solely upon results of a drug test." The CAAF in a 3 to 2 decision finally declined to address the issue of the acceptability of GC/MS/MS results and overturned the conviction based on other issues they introduced themselves. The Court opined that inference of wrongfulness strictly requires the prosecution to establish the reliability of the testing methodology and explain the significance of the results of the test. They introduced the so-called three-part standard. "The prosecution's expert testimony must show: (1) that the 'metabolite' is 'not naturally produced by the body' or any substance other than the drug in question, (2) that the cutoff level and reported concentration are high enough to reasonably discount the possibility of unknowing ingestion and to indicate a reasonable likelihood that the user at some time would have 'experienced the physical and psychological effects of the drug' and (3) that the testing methodology reliably detected the presence and reliably quantified the concentration of the drug or metabolite in the sample. As most scientists reading will observe, item (2) was the difficult requirement and in the dissenting opinion was "fatally flawed."

**CAAF, Campbell II, March 22, 2000**: The US Army asked for a reconsideration of the opinion. The CAAF agreed to reconsider the case and further explained their opinion. The CAAF stated that in the case at hand, "the deficiency was the absence of evidence establishing the frequency of error and margin of error in the testing process." Also, the three-part standard [items 1-3 above] does not constitute the only means of proving knowing use. Evidence other than from the expert can be introduced. Finally, the prosecution's scientific evidence does not have to be tailored to the defendant but expert testimony can support the permissive inference of knowledge based on "human beings as a class." This opinion of the CAAF on reconsideration did little to improve the prosecution of urinalysis cases.

CAAF, Green, June 11, 2001: Before any specifics, a popular Irish saying quoted by Judge Sullivan in his

concurring opinion, "Anyone who isn't confused here really doesn't understand what is going on."

US v Green was a case in which Sergeant Nolan P. Green was convicted of knowingly using cocaine. The only evidence was a positive urine drug test with expert witness testimony. The Court of Criminal Appeals modified the sentence but upheld the conviction. The CAAF in a 4 to 1 decision upheld the conviction. They affirmed that "if the military judge determines that the scientific evidence—whether novel or established— is admissible, the prosecution may rely on the permissive inference [of knowledge] during its case on the merits."

Impact: The most immediate impact is that novel testing procedures, although subject to higher scrutiny, will no longer be inadmissible because the expert is unable to provide physiological effects testimony. This is simply one factor among many others that prosecutors may use to prove reliability of the testing procedure. Further, under standard testing procedures, a positive urinalysis supported by expert testimony will provide a legally sufficient basis to draw a permissive inference of knowing, wrongful use without physiological effects testimony. This means that military prosecutors in most courts-martial will not have their cases dismissed before or at trial because they have no scientific evidence to prove that the accused actually experienced the physical and psychological effects of the drug. §

EXTRAPOLATIONS: Submitted by Ashraf Mozayani, Pharm D., Ph.D., D-ABFT, Laboratory Director/Chief Toxicologist, Harris County Medical Examiner Office, Houston, Texas

Substance Abuse and Mental Health Services Administration (WASHINGTON, July 25 /PRNewswire)

## New Trends Released for Drug Related Emergency Department Visits 20 Percent Increase Found for Youth Age 12 to 17

Emergency department visits involving the club drug MDMA (Ecstasy) increased 58 percent, from 2,850 visits in 1999 to 4,511 in 2000 in the continental United States. The number of heroin/morphine related visits increased 15 percent, from 84,409 to 97,287. These and other significant trends in drug related emergency department visits are reported for the first time today with the release of the Substance Abuse and Mental Health Services Administration's (SAMHSA) 2000 Emergency Department Data from the Drug Abuse Warning Network (DAWN).

Among 21 metropolitan areas covered by DAWN, 7 had increases in drug related emergency department visits from 1999 to 2000: 32 percent in Seattle (from 8,426 to 11,116), 28 percent in Boston (from 11,699 to 14,902), 22 percent in Los Angeles (from 20,678 to 25,288), 20 percent in Miami (from 7,128 to 8,560), 16 percent in Chicago (from 26,158 to

30,330), 12 percent in Minneapolis (from 4,643 to 5,198), and 9 percent in Phoenix (from 8,293 to 9,072).

Drug related emergency department visits decreased 19 percent in Baltimore (from 14,172 to 11,505) and 12 percent in San Francisco (from 8,930 to 7,857). No overall changes were reported in Atlanta (11,114 visits), Buffalo (2,899), Dallas (6,798), Denver (4,946), Detroit (17,042), New Orleans (4,664), New York (31,885), Newark (7,749), Philadelphia (23,433), St. Louis (6,908), San Diego (7,094), and Washington, DC (10,303).

Illicit Drugs: In 2000, the estimated number of emergency department visits related to marijuana/hashish use, 16 percent (96,446), continued to be about the same as the number of visits related to heroin/morphine (97,287). Cocainerelated visits constituted 29 percent (174,896) of all drug related visits in 2000, more than any other illicit substance measured by DAWN. The number of marijuana/hashish and cocaine related visits were statistically unchanged from 1999

Cocaine: From 1999 to 2000, cocaine mentions increased significantly in 6 of the 21 metropolitan areas in DAWN: 35 percent in Los Angeles (from 6,772 to 9,111), 32 percent in Seattle (from 2,520 to 3,338), 19 percent in Atlanta (from 5,236 to 6,229), 15 percent in Boston (from 3,560 to 4,101), 11 percent in Chicago (from 13,399 to 14,871), and 9 percent in Miami (from 4,018 to 4,318). Decreases in cocaine mentions were observed in 4 of the 21 metropolitan areas: 29 percent in Baltimore (from 6,921 to 4,943), 13 percent in Newark (from 3,124 to 2,726), 10 percent in Washington DC (from 3,150 to 2,830), and 7 percent in New Orleans (from 2,140 to 1,998).

Heroin/morphine: Eight of the 21 metropolitan areas had increases in heroin/morphine mentions between 1999 and 2000. They were: 58 percent in Miami (from 921 to 1,459), 50 percent in New Orleans (from 664 to 996), 35 percent in Boston (from 2,874 to 3,888), 31 percent in Buffalo (from 525 to 687), 29 percent in Chicago (from 9,725 to 12,564), 26 percent in Detroit (from 2,678 to 3,369), 17 percent in Atlanta (from 432 to 507), and 14 percent in Minneapolis (from 207 to 237). Heroin/morphine mentions decreased 23 percent in Baltimore (from 7,013 to 5,414) and 10 percent in San Francisco (from 3,074 to 2,773).

Marijuana/hashish: Seven of the 21 metropolitan areas experienced significant increases in marijuana/hashish mentions between 1999 and 2000: 75 percent in Seattle (from 808 to 1,414), 50 percent in Boston (from 1,961 to 2,945), 38 percent in Miami (from 1,285 to 1,770), 33 percent in San Francisco (from 470 to 627), 28 percent in Minneapolis (from

627 to 803), 20 percent in Denver (from 681 to 818), and 18 percent in Chicago (from 4,561 to 5,401).

Methamphetamine/speed: Overall, methamphetamine/speed was mentioned in 2 percent of drug related emergency department visits in 2000. From 1999 to 2000, methamphetamine/speed mentions increased 29 percent, from 10,447 to 13,513. Looking across the 10 metropolitan areas with at least 100 mentions of methamphetamine/speed in 1999 or 2000, significant increases from 1999 to 2000 were evident in 6: 76 percent in Phoenix (from 341 to 600), 53 percent in Seattle (from 353 to 540), 51 percent in Los Angeles (from 910 to 1,375), 35 percent in Dallas (from 100 to 135), 31 percent in Atlanta (from 83 to 109), and 28 percent in San Diego (from 584 to 747). Methamphetamine/speed estimates were stable in San Francisco (591 mentions in 2000), St. Louis (162), Minneapolis (153), and Denver (110).

Club Drugs: Mentions of club drugs, so called because of their association with "raves" and dance clubs, have increased dramatically since 1994. Significant increases in club drug related emergency department visits are reported between 1994 and 2000 for GHB (from 56 to 4,969), MDMA (from 253 to 4,511), and Ketamine (from 19 to 263). The apparent increase in Rohypnol mentions (from 13 to 469) during this time is within the margin of error and not statistically

significant.

Club drugs tend to be used by young people. About 31 percent of DAWN emergency department cases overall involve patients age 25 and under, at least 80 percent of Rohypnol and MDMA mentions, over 70 percent of Ketamine mentions, and 60 percent of GHB mentions are attributed to patients age 25 and younger. More than half of the mentions of GHB, Ketamine, MDMA, and Rohypnol in emergency department visits were associated with recreational drug use and more than half were associated with visits for unexpected reactions or overdose.

(continued next page)

Unlike methamphetamine/speed, which is concentrated in western metropolitan areas, other club drugs are somewhat more geographically dispersed. In 2000 the highest rates of emergency department visits of GHB per 100,000 population appear in San Francisco (9 per 100,000 population), Dallas (7), and New Orleans (6). Rates of MDMA mentions appear highest in San Francisco (7), Seattle (7), and Miami (5). The highest rates of LSD mentions appear in Phoenix (7) and Seattle (5).

<u>Prescription Drugs:</u> From 1999 to 2000 emergency department mentions of prescription drugs containing oxycodone increased 68 percent (from 6,429 to 10,825), and mentions of drugs containing hydrocodone increased 31 percent (from 14,639 to 19,221). Mentions of oxycodone and hydrocodone increased 108 percent and 53 percent respectively, in the 2-year period from 1998 to 2000. DAWN estimates for these narcotic analgesics (pain killers) should not be attributed to drugs marketed under particular trade or brand names. For example, the DAWN estimates for oxycodone cannot be attributed to Oxycontin, Percocet, Percodan, or any other particular brand of analgesic containing oxycodone.

Total Drug-Related Visits: DAWN is a nationally representative survey of hospitals with emergency departments conducted annually by the federal Substance Abuse and Mental Health Services Administration (SAMHSA). In 2000, 466 hospitals participated in DAWN. The survey is designed to capture information about emergency department visits that are induced by or related to the use of an illegal drug or the nonmedical use of a legal drug. Because up to 4 drugs can be reported for each emergency department visit, there are more `mentions" than `visits".

In 2000, there were an estimated 601,776 drug-related emergency department visits in the continental United States with 1,100,539 mentions of a particular drug (on average, 1.8 drugs per visit). There was no statistically significant change between 1999 and 2000 in the number of emergency department visits or the number of drugs mentioned.

Among drug-related emergency department visits in 2000, dependence (217,224, or 36 percent of visits) and suicide (193,061, or 32 percent) were the most frequently cited motives for taking the substances. Overdose (264,240 or 44 percent of visits) was the most common reason given for contacting the emergency department. Between 1999 and 2000, emergency department visits involving patients seeking detoxification increased 24 percent (from 72,960 to 90,625) and visits involving overdose increased 14 percent (from 232,283 to 264,240).

From 1999 to 2000, total drug related emergency department visits increased 20 percent for patients age 12 to 17 (from 52,783 to 63,448) and 13 percent for patients age 18 to 25 (from 109,580 to 123,438), but remained stable for older age groups. Total drug-related emergency department visits involving females increased 9 percent (from 258,079 to 281,994) between 1999 and 2000, but were statistically unchanged for males. From 1999 to 2000 visits involving Hispanic patients increased 20 percent (from 56,891 to 68,282). There were no significant changes for visits involving other racial/ethnic subgroups.

The DAWN report is available on the SAMHSA website at <a href="http://www.samhsa.gov/">http://www.samhsa.gov/</a>. Click on highlights. Or, by calling SAMHSA's National Clearinghouse for Drug and Alcohol Information at 1-800-729-2600. Sign up for SAMHSA's mailing list for the DAWN and other reports at <a href="http://www.samhsa.gov">http://www.samhsa.gov</a>. \$\frac{\xi}{\xi}\$

## Toxichem + Krimtech 67(3):105 (2000)

Submitted by Donald Kippenberger, Ph.D.

## Rapid Determination of Cyanides in Biological Material by HS-GCMS. G. Asselborn and R. Wennig

Cyanide photometric determination following the classical microdiffusion method in body fluids is rather time consuming (1). More recently other methods have become available by Odoul et al. (2) using HS-GC/ECD and by Marquet et al. (3) using HS-GC/MS for cyanide identification in an azide suicide case. Both methods did not meet our required quantitative forensic criteria. So a more specific HS-GC/MS method with a capillary column HP 625 or 30 was developed. The column temperature is programmed from 60 °C (2 min hold) to 120 °C (7 min hold) at 50 °C/min. Total GC run time is 10 minutes. The sample volume used in the photometric method could be reduced from 2 ml to 1 ml.

HCN is liberated from the matrix by phosphoric acid and incubation for 60 minutes at 60 °C in a head space vial and subsequently transformed to cyanogen chloride (CL-CN) by reaction with chloramine-T. The ions m/e = 61 for CL-CN are monitored by SIM/MS and 1 BuOH is used as an internal standard (m/e = 56, 31 and 41).

The LOD is 0.1 mg CN/L and the calibration curve is linear from 0.4 to 4 mg CN/L. The method can be applied to other biological tissues and may be useful for a routine clinical and /or forensic toxicology laboratory in cases of acute cyanide poisoning.

#### References

- (1) Baselt RC, Analytical Procedures for Therapeutic Drug Monitoring and Emergency Toxicology, Biomed Pub 1980
- (2) Odoul M, Gouillet B, Nouri B, Chambon P, Specific Determination of Cyanide in Blood by Headspace Gas Chromatography, J. Anal. Toxicol, 18: 205-207 (1994)
- (3) Marquet P, Clement S, Lotfi H Dreyfuss MF, Debord J, Dumont D, Lachatre G, analytical findings in a Suicide involving sodium azide, J. Anal. Toxicol., 20: 134-138 (1996)

## ELMER GORDON OPEN FORUM AN OPPORTUNITY FOR INFORMAL DIALOGUE

Send items for this section to Editor Joseph Monforte: E-mail DrMonforte@aol.com or fax to 480-595-6663.\$

## **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.

Ph.D. Toxicologist + experience for NJ position relative to petrochemicals. Contact Gretchen Anderson at 410-576-2400 or e-mail to gretchen@parkerad.com

The following employment opportunities are listed on the SOFT website (6/01-8/12/01). For more information, go to www.soft-tox.org

Position - City - State - Post Date

Forensic Lab Mgr, San Francisco, CA 6/05 Post Doc, Oak Ridge, TN 6/13 Toxicologist I, Concord, NH 6/16 Scientist, Toxicologist, Berkley, CA 6/27 Forensic Toxicologist 3, Seattle, WA 7/05 Toxicology Study Director, Palo Alto, CA 7/11 Criminalist I-IV, Phoenix, AZ 7/11
Project Director, Morgantown, WV 7/13
Forensic Lab Supv, Chapel Hill, NC 7/23
Sr Forensic Chem II, Chapel Hill, NC 8/01
Forensic Toxicologist, Albuquerque, NM 8/08
Forensic Scientific Director, Concord, NH 8/08

## PROFESSIONAL CALENDAR

**SOFT MEETINGS:** 

2001 - New Orleans, LA - Pat Pizzo September 30 - October 5

2002 - Detroit, MI - Dan Isenschmid /Brad Hepler October 12-17, 2002

2003 - Portland, OR - Kent Johnson 2004 - Washington, D.C. - Marc LeBeau

MAFS 30th Annual Meeting 2001 - A Forensic Odyssey: September 24-28, 2001, Minneapolis, MN. Contact Dan Bergman (Dani.Bergman@state.mn.us) or Ann Marie Gross (Ann.Gross@state.mn.us) or check out the MAFS website at: http://www.mafs.net\_for\_the\_latest\_information.

Northeastern Association Of Forensic Scientists: October 3-6, 2001, Mt. Snow, VT. Contact Mary Eustace 914-231-1810, e-mail: mme1@westchestergov.com

National Conference On DNA And The Law: 11/30-12/01/01, at Duquesne University, contact the Wecht Institute at 412-396-4801 or comas@duq.edu.

R F Borkenstein Course on Alcohol, Drugs and Highway Safety: Testing, Research and Litigation: 12/2-7/01. Contact dlindsay@indiana.edu

International Association Of Forensic Sciences: September 2-7, 2002, Montpellier, France. Information by e-mail: algcsi@mnet.fr

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

E-mail: DrMonforte@aol.com or Fax: 480-595-6663 (after 11 a.m. E.S.T. please)

## SOFT ANNUAL MEETING

SEPTEMBER 30 to OCTOBER 5, 2001 Radisson Hotel **NEW ORLEANS, LA** 

## PRELIMINARY MEETING SCHEDULE as of 8/12/01

## SUNDAY - SEPTEMBER 30, 2001

7:30 a.m. - 8:30 p.m. Registration Open

8:00 a.m. - noon

**WORKSHOP #1** - ALTERNATIVE TESTING (Part A) Vince Papa, Ph.D.,

WORKSHOP #2 - HERBAL MEDICINE Barbara Manno, Ph.D

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

**WORKSHOP #3** - ALTERNATIVE TESTING (Part B)

Leon Glass, Ph.D.

**WORKSHOP #4** - URINE TESTING AND HUMAN

PERFORMANCE Joseph Manno, Ph.D.

## **MONDAY - OCTOBER 1**

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

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

WORKSHOP #5 - ETHANOL James Garriott, Ph.D.

8:00 a.m. - noon

WORKSHOP #6 - CLINICAL TOXICOLOGY Larry

Broussard, Ph.D.

WORKSHOP #7 - THE IMPACT OF DAUBERT,

JOINER, KUMHO ON TESTIFYING AS A FORENSIC TOXICOLOGIST

noon - 5:00 p.m. SOFT Board Meeting 1:00 - 5:00 p.m.**WORKSHOP #8 -**

ADULTERANT TESTING Mahmoud ElSohly, Ph.D.

## **TUESDAY - OCTOBER 2**

7:00 a.m. - 8:00 p.m. SOFT Run/Walk

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

ABFT Examination

9:00 a.m. - 4:00 p.m. WORKSHOP #10 VOODOO -

DOES THIS PRACTICE USE TOXINS?

noon - 6:00 p.m.

8:00 a.m. - noon

ABFT Board Meeting

2:00 p.m.

Exhibit set up

7:00 p.m. - 10 p.m. NLCP Inspectors Workshop

## **WEDNESDAY - OCTOBER 3**

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

7:00 a.m. - 8:00 a.m. Bob Bost Consultants Breakfast

7:00 a.m. - 9:00 a.m. Poster set up

8:00 a.m. - 8:15 a.m. WELCOME and Opening of

Scientific Program

8:00 a.m. - noon SOFT Business Meeting

9:00 a.m. - 3:30 p.m. Exhibits and Posters

noon - 1:00 p.m. Luncheon noon - 5:00 p.m. Exhibits open 1:00 p.m. - 3:45 p.m. Scientific Session

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

## THURSDAY - OCTOBER 4

7:30 a.m. - noon Registration 7:00 a.m. - 8:30 a.m. ABFT Breakfast

8:00 a.m. - 9:00 a.m. Vendors' Meeting 8:00 a.m. -- noon Scientific Session

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

noon - 1:00 p.m. Luncheon

1:00 p.m. - 5:00 p.m. Scientific Session 6:00 p.m. - 9:00 p.m. Farewell Dinner

9:00 p.m. to 11 p.m. Elmer Gordon Forum

## FRIDAY - OCTOBER 5

8:00 a.m. - noon Scientific Meeting

Exhibits Open 9:00 a.m. - noon

## For further information contact:

Pat Pizzo 504-361-8989 x291

ppizzo@labz.com

David Green 225-926-9173 x206

dgreen@labz.com

## SOFT AIRLINE DISCOUNTS: Southwest and Delta Offer Reduced Fares

Southwest: Call 1-800-433-5368 (Mon.-Fri. 8 a.m. to 5 p.m. and Sat.-Sun. 9:30 a.m. to 3:30 p.m.) and reference I.D. code R6864 for a 10% discount on most of SWA's low fares. Reservation deadline: 5 or more days prior to travel.

Delta: Call 1-800-241-6760 (Mon.-Fri. 7 a.m. to 11 p.m. and Sat.-Sun 8:30 a.m. to 11 p.m. EST) and reference file 160656A for a 10% discount 60 days prior to travel or 5% when making reservations less than 60 days before travel.

#### SOFT 2001

SEPTEMBER 30 – OCTOBER 5, 2001 RADISSON HOTEL - NEW ORLEANS, LOUISIANA

## WORKSHOP PROGRAM ABSTRACTS

## WORKSHOP #1 – ALTERNATIVE TESTING A

Sunday, September 30, 2001 8:00 a.m. – 12:00 p.m. Vince Papa, Ph.D., Moderator

This is the first half of a full day seminar on alternative testing. This session will be devoted to techniques that are non traditional in most forensic labs. The program will cover the uses of ICP, LCMS, LCQ, and CZE in forensic drug testing.

## WORKSHOP #3 - ALTERNATIVE TESTING B

Sunday, September 30, 2001 1:00 p.m. – 5:00 p.m. Leon Glass, Ph.D., Moderator

Part two of alternative testing will be devoted to MS techniques and include MS/MS, GC/MS, and LC/MS. This workshop will benefit those who are current perators as well as those new to the field.

#### **WORKSHOP #2 - HERBAL MEDICINE**

Sunday, September 30, 2001 8:00 a.m. – 12:00 p.m. Barbara Manno, Ph.D., Moderator

This should not only be informative, but also fun. The coordinators have put together a well balanced presentation. The workshop will cover the positive input of using herbal medicines, the toxicology of overdose and chronic use, drug interaction and the impact of herbal products on drug test results.

## WORKSHOP #4 - URINE TESTING AND HUMAN PERFORMANCE

Sunday, September 30, 2001 1:00 p.m. -5:00 p.m. Joseph Manno, Ph.D., Moderator

The issue of ethanol and human performance has been a frequent topic of discussion at toxicology meetings. This workshop will explore the interpretation of urine drug screen results and human performance. The first portion of the program will address the urinary excretion of drugs, physiology, pharmacology and xicology. The emphasis then moves to individual drugs and ethanol, cocaine and marijuana will be discussed at length. Can you really attribute any significance to a urine drug level? Hopefully this workshop will answer that question and many more.

#### **WORKSHOP #5 - ETHANOL**

Monday, October 1, 2001 James Garriott, Ph.D., Moderator 8:00 a.m. - 5:00 p.m.

After the resounding success of the prior workshops a return engagement was absolutely necessary. This workshop will cover ethanol from A to Z. The program is designed to cover topics from detection to interpretation of results. Issues such as matrix, correlation of results, post mortem samples and DUI specimens will be addressed.

### WORKSHOP #6 - CLINICAL TOXICOLOGY

Monday, October 1, 2001

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

Larry Broussard, Ph.D., Moderator

Clinical toxicology, a topic often overlooked in the current rage of workplace testing and DUI analysis. Situations of overdose and accidental poisoning are often the major concern for hospitals and medical examiners offices. This workshop will address topics such as initial management of poisoning and overdose victims, antidotes, and common poisons.

## WORKSHOP #7 - THE IMPACT OF DAUBERT ON TESTIFYING AS A FORENSIC TOXICOLOGIST

Whether you're a seasoned veteran or the "new kid on the block", this workshop will provide helpful information. The program will include review of Daubert, Frye and the essential rules of evidence and preparing for direct and cross examinations. A new twist will be audience participation for demonstration and drills.

### **WORKSHOP #8 - ADULTERANT TESTING**

Monday, October 1, 2001 1:30 p.m. – 5:00 p.m. Mahmoud ElSohly, Ph.D., Moderator

The classic case of good versus evil. The forensic toxicologist (wearing the white hat) is in a daily battle to overcome the evil drug culture villain, the adulterant manufacturers (wearing the black hat). As quickly as we isolate and identify an adulterant a new and more difficult to detect product is on the Internet. This workshop will visit the adulterants we can currently identify and explore what's new and potential as an adulterant.

## WHAT TO DO IN NEW ORLEANS

The Radisson furnishes a trolley service to many of the downtown areas. These sites can be visited for only admission fees. Those attractions within trolley service of the hotel are listed below:

### Aquarium of the Americas

Hours 9:30 a.m. Cost - Adults - \$13.00, Seniors - \$10.00, Children under 12 - \$6.50

Audubon Zoo – Accessible at the Aquarium with a combined riverboat ride. You can visit the Aquarium and then take the John J. Audubon Riverboat to the Zoo or vice versa, the boat trip is 1 hour. Cost: Adults – Zoo and Aquarium = \$28.25 / Zoo, Aquarium and IMAX = \$34.50 Departure times:

From Aquarium	From Zoo
10:00a.m.	11:00a.m.
noon	1:00p.m.
2:00p.m.	3:00p.m.
4:00p.m.	5:00p.m.

IMAX – can be visited separately or as part of a zoo/aquarium/boat tour or aquarium and IMAX tour, shows hourly 10:00a.m.-6:00p.m.

Cost: IMAX only \$7.75/\$6.75/\$5.00 IMAX+Aquarium \$17.25/\$14.00/\$10.50

Audubon Living Science Museum (an insectarium) – the first free standing museum of its kind in the U.S., hours of operation and admission cost will be furnished as soon as available.

For more information on the zoo, aquarium, IMAX, Science Museum contact www.auduboninstitute.org

**D-Day Museum** – dedicated to Vorld War II. This museum opened June 6, 2000 and is the only one of its kind in the U.S. Hours 9:00a.m.-5:00p.m. daily. Web site www.ddaymuseum.org.

## The Confederate Museum

- founded in 1891 as a repository for memorabilia of Louisiana Confederate veterans, this museum houses 90,000 war related documents artifacts. Open 10:00a.m.-4:00p.m. Cost: Adults -\$5.00, Seniors \$4.00. Children \$2.00. Web site www.confederatemuseum.c om.

Contemporary Arts
Center – no permanent
collection. Exhibits rotate 5
times per year. Open
Tuesday-Saturday,
11:00a.m.-5:00p.m.
Admission is free on
Thursday (as a guest of
Texaco), \$3.00 for Adults
and \$2.00 for Seniors

Children's Museum and Ogden Museum of Southern Art — both museums are in walking distance of the Contemporary Art Center.

Mardi Gras World – take the trolley to the Aquarium of the Americas, ride the free ferry across the mighty Mississippi and you are on your way to Mardi Gras World. This is where the artist and sculptors actually create the magic of Mardi Gras. You will see the floats used in all the major parades as well as those under construction. Once you arrive on the Westbank

of the river (Algiers) a free van from Mardi Gras World will transport you to the facility. The ferry and van run on the hour and half hour. Admission is adults \$11.50, seniors (62+) \$8.50. If you call in advance with a group of 20 or more, the admission drops to \$8.50/\$7.00. Web site www.mardigrasworld.com.

Walking tour of the French Quarter. The National Parks Service has an office in the Old French Market that conducts walking tours of the French Quarter.

Harrah's Casino – located at the river and Canal Street. This facility is also easily accessible by the Radisson's free trolley. Be very careful, this facility tends to keep ones money, only the fortunate few leave with more money then they had upon entering.

Trolley Car Ride – ride a historic trolley car to the Uptown or Garden District of New Orleans. The fare is \$1.25 one way. The trip is 13.13 miles and takes about 1½ hours from Canal Street to Carrollton and back to Canal. You can stop all along the track. You will pass Audubon Park, Tulane and Loyola Universities and travel under an arch of majestic oaks.

Riverboat Rides – New Orleans has several riverboats, the Natchez (location of our welcome reception), the Cotton Blossom, the Jean Lafitte and the John J. Audubon (trip to the zoo). All of these are easily accessible along the river walk. Most trips are 2-3 hours or less.



## SOCIETY OF FORENSIC TOXICOLOGISTS

## ANNUAL MEETING 2001 September 30 – October 5



## **HOTEL REGISTRATION FORM**

Reservations must be received by September 7, 2001. Reservations received after this date will be subject to availability

## RADISSON

Card Holder Signature:

Fax to: (504) 523-9617 Or call: 1-800-333-333 Or access: www.radisson.com Or mail this completed form to:

Radisson Hotel New Orleans 1500 Canal Street, New Orleans, LA 70112

Telephone: 504-522-4500

PLEASE PRINT:		
NAME:		I understand that I am liable for one night's
		room charge, which will be deducted from my deposit, or billed through my credit card,
ADDRESS:		in the event that I do not arrive on the date indicated or cancel my reservation at least 48 hours prior to arrival.
Business Phone:		GUEST ROOM RATE
Fax Number:		
	(4:00 p.m. check in)	Rate Quoted of \$113.00 Single/Double per night.
Airline & Flight #	Time:	# of Rooms
Departure Date:	(11:00 a.m. check out)	# of Adults
Airline & Flight #	Time:	# of Children
Reservations will be held with credit cards or by enclosing a c	a one night's deposit with the following check of money order:	Special Requests:
Visa American Express	MasterCard Discover	
Diners Club		
Check/Money Order Enclosed		(Rooms are for single/double occupancy
Card Number:		and are subject to an 11% sales tax. Extra person charge is \$15.00 person with a maximum of 4 people per room. Children
Expiration Date:		under 18 at no additional charge. Subject to availability, the resort will honor the group

rate 3 days prior to and 3 days after the

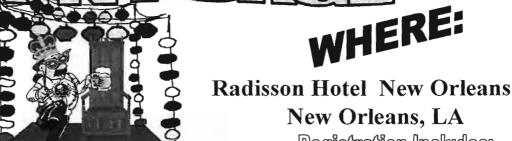
official meeting dates.



## I WE WELL

WHEN:

Tuesday, October 2, 2001 6:30 AM



Registration Includes:
5th ANNUAL TOX 'N PURGE T-Shirt
Prizes for 1st place (men and women) and
random drawings after run for other prize:

## 5K FUN RUNWALK

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

Tuesday, October 2, 2001 • 6:30 AM • Entry Fee: \$10 • Make checks payable to Karla Moore (TOX 'N PURGE FUN RUN/WALK) • Mail to: Karla Moore, 9043 Dunloggin CT., Ellicott City, MD 21042.

NAME	
First	Last
ADDRESS	SHIRT SIZE
	LX
CITY	STATE ZIP SEX RACE DAY  M F
PHONE	5K RUN WALK E-MAIL ADDRESS

## 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 ponsors, 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

## SOFT 2001 NEW ORLEANS, LOUISIANA - SEPTEMBER 30 – OCTOBER 5, 2001

This registration form is included as a courtesy to those members who missed the 8/01/01 pre-registration deadline. Bring this completed form(+ \$50 late fee) to the meeting.

NAME	LAST FIR	CT.	DEC	GREE
TITLE/AGE	ENCY			
ADDRESS_				
TELEPHON	NE			
GUEST(S)_		E-MAIL		
CURRE	NT SOFT MEMBER NON-MEMB	ER 🗌 STU	DENT: University	
	ission to all scientific sessions, Welcome Recepti ner, Luncheon Wednesday and Thursday,	on, <u>MEMBER</u>	NON-MEMBER	TOTAL <u>ENCLOSED</u>
	Imer Gordon Open Forum	\$170.00	\$220.00	
Workshop #1	Alternative Testing A- 8:00 a.m12:00 p.m.	\$50.00	\$75.00	
Workshop #2	Herbal Medicine	\$50.00	\$75.00	
Workshop #3	Alternative Testing B -1:00 p.m5:00 p.m.	\$50.00	\$75.00	
Workshop #4	Urine Testing and Human Performance 1:00p.m5:00p.m.	\$50.00	\$75.00	
Workshop #5	Ethanol - 8:00 a.m5:30 p.m.	\$75.00	\$100.00	
Workshop #6	Clinical Toxicology 8:00 a.m12:00 p.m.	\$50.00	\$75.00	
Workshop #7	Expert Witness Testimony 8:00 a.m12:00 p.m.	\$50.00	\$75.00	
Workshop #8	Adulterant Testing 1:30 p.m5:30 p.m.	\$50.00	\$75.00	
Workshop #1	0 Voodoo – 9:00 a.m4:00 p.m	Registration	deadline 08/01	
Full Time Stu	ident	\$25.00	\$40.00	
ABFT Break <i>f</i> Extra Tickets:	Farewell Dinner # @ @ Lunch Wednesday # @ Lunch Thursday # @	\$25.00 \$35.00 \$40.00 \$25.00 \$25.00 \$12.00	\$25.00	
	irt: \$10.00 each, only if available at registration  #X-Large #XX-Large		ts	
Late Fee: F	or all registrations received after August	1, 2001		+ \$50.00
International l	istrations accepted after August 1, 2001. Pay Bank Checks or Money Order. All funds must be y: Refunds may be honored upon written request	paid in US dollars.	Make payable to SOFT	
	For payment by credit card: Type of Ca	ard (circle one): Vi	sa Master Card	AmX
	Card No.	E	xpiration Date	
	Signature			