

ToxTalk

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

VOLUME 24, No. 3

SEPTEMBER 2000

ToxTalk Editor

Joseph R. Monforte, Ph.D., DABFT 42408 N. Sombrero Rd. Cave Creek, AZ 85331-2821 E-mail: DrMonforte@aol.com Fax: 480-595-6663 Ph: 480-595-6646

Editorial Board

H. Chip Walls, B.S. Jim Wigmore, B.Sc. Vincent Papa, Ph.D.

Publisher

Patricia Mohn-Monforte

SOFT Board of Directors

President: J. Robert Zettl, B.S., M.P.A. Vice Pres: Michael L. Smith, Ph.D., DABFT Secretary: Amanda Jenkins, Ph.D. Treasurer: Laurel J. Farrell, B.A. Other Directors: Bruce Goldberger, Ph.D., DABFT Graham Jones, Ph.D., DABFT Daniel Isenschmid, Ph.D., DABFT N.G.S. Rao, Ph.D., DABFT Timothy Rohrig, Ph.D., DABFT

S.O.F.T. Administrative Office P.O. Box 5543 Mesa, AZ 85211-5543 Phone/fax: 480-839-9106

Website: www.soft-tox.org

2000 SOFT Annual Meeting Steven Wong, Ph.D., Co-Chair Susan Gock, M.S., Co-Chair Christine Goodall, B.S., Sec. Jim Oehldrich, Treasurer

REGULAR FEATURES

President's Message & Career Opportunities Elmer Gordon Open Forum & Professional Calendar From the Editor's Desk

TECHNICAL NOTES

In The News: Deaths of addicts traced to bacterium (Monforte)

Case notes: none submitted

SPECIAL INTEREST

ERA Recipients Announced Nominating Committee Slate for 2001 Minutes of the 1999 SOFT Annual Business Meeting

INSERTS

SOFT 2000 Milwaukee Meeting

SOFT 2000 Milwaukee

Launching thirty years of forensic toxicology into the next millennium

October 2-6, 2000

Hyatt Regency

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, 2000

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

Thanks to a dedicated staff of one at the home office in Mesa, Arizona, five Board of Directors, two ex officio's and other officers, your organization is doing just fine. SOFT has about 600 members, which I think is just phenomenal. That so many of you really do care about making the science of Forensic Toxicology better for all shows your dedication.

So what has been going on in your organization for the past few months? Most of the situations, questions or problems your officers and I handle are not earth shaking. We have had a lot of discussion about the upcoming annual meeting and those in the future. One of our main priorities is to make the annual meeting cost effective as well as scientifically challenging and stimulating. And, oh yes, a rather non-routine matter, "What should be done with a member's membership status if they commit a triple homicide"? A very distressing situation for any organization but even more so with ours since we deal too closely with death on a routine basis.

But most of the items I receive requiring my input are generally by e-mail. Such as how do I become a member and could you refer my name to those who are members so I can use them on my application and so forth. One of the more interesting questions I receive is from individuals who are writing a book or doing some type of research for a school project. The gist of the question is, could I provide the name of a poison to use to kill some one? And, oh by the way, make sure the poison is one that cannot be detected should the victim undergo an autopsy. These people go to great lengths trying to disguise their true motive. Even if I knew the answer it is not something I would feel comfortable in providing. The other type of request is from attorneys seeking assistance with a case of one type or another. With these I try to match them up with a toxicologist in the area from where the question arises.

Let's just say that being SOFT President is not quite as interesting as maybe being the President of MicroSOFT. But it may be more rewarding.

I again want to make you aware of this year's annual meeting being held in Milwaukee, Wisconsin. The theme is "Launching Thirty Years of Forensic Toxicology into the Next Millennium". The Milwaukee group has put together several half and full day workshops on a wide assortment of topics; one or more that I hope will be of interest to you. As always the meeting will offer a number of scientific papers on the latest procedures, test methodologies and drugs of interest. If you have not already submitted your abstract it is too late for this year; however, there is always next year in New Orleans. But it is not too late to volunteer as a moderator or assistant moderator, assist with registration, take tickets or help out in some other way in Milwaukee. Contact the organizing committee to volunteer.

SOFT meetings offer plenty of time to mingle with your colleagues to discuss a problem test procedure or analytical process. Having attended SOFT meetings for many years myself, I can speak first hand of the help I received from SOFT members on many occasions. Attend the Elmer Gordon open forum and see how Mr. Walls can entice the group to provide their expertise on problem solving. Though we have grown to several hundred, SOF1 is still a group of working scientists who find joy in exchanging ideas.

SEE YOU IN MILWAUKEE!

2000 E.R.A. AWARDEES ANNOUNCED

Submitted by Barbara Manno, Ph.D., DABFT, Chair, Educational Research Awards Committee

On behalf of the SOFT E.R.A. Committee, Dr. Barbara Manno is pleased to announce the following recipients of SOFT Educational Research Awards for 2000. Each awardee will receive registration for the 2000 SOFT Annual Meeting and \$1,000 for travel.

Laureen J. Marinette, M.S., Wayne State University, School of Pharmaceutic Sciences and Allied Health (Pharmaceutical Sciences), Detroit, MI. SOFT Presentation Topic: Effects of low dose GHB and EtOH, administered alone and in combination, on a memory task in rats: Comparison with scopolamine (SCOP). Laureen J. Marinetti* and Randall L. Commissaris. Sponsor: Randall L. Commissaris, Ph.D.

Martha J. Burt, M.D., Hennepin County Medical Center Clinical Laboratories, Minneapolis, MN 55415. SOFT Presentation Topic: Free and total morphine concentrations in postmortem blood. Martha J. Burt*, Julie Kloss and Fred S. Apple. Sponsor: Fred S. Apple, Ph.D.

Diane M. Boland, B.S., Department of Chemistry, University of Arizona, Tucson, AZ. SOFT Presentation Topic Development of a Generic Method to the Solid Phase Extraction of Acidic Compounds from Complex Matrices. Diane M. Boland*, Michael F. Burke, Tracy Mitchell, Paul Madley, Claire Desbrow and Richard Calverly, University of Arizona, Dept. of Chemistry, Tucson, AZ and International Sorbent Technology, Hengoed, UK. Sponsor: Michael F. Burke



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



Greetings from the Annual Meeting Committee

As the final preparations for the 30th anniversary meeting are taking place, we can assure you a full venue. We have accepted over 100 abstracts that will be divided between platform and poster sessions. The presenting authors and abstract titles are posted on the SOFT Web-site at www.soft-tox.org. In addition, we look forward to the excellent plenary speakers that will open the scientific sessions.

We will have a full slate of vendors in attendance at the meeting. We cannot thank them enough for all the support they provide to our program. Be sure to set aside some time to visit the exhibits.

Minor changes have been made to the program. *Please note the CAP inspector's workshop has been cancelled*. At the time of printing, the schedule for the FTCB Board Meeting/Exam was not finalized. Check the SOFT Web-site for current information.

If you have not volunteered to assist with the operation of the program, there is still time. Please call Chris at 608-263-7031 or write to cr.goodall@ hosp.wisc.edu with your preference.

Questions regarding the 2000 SOFT Annual Meeting should be directed to the committee members listed below.

		Phone	Fax	<u>E-mail</u>
Co-chairs:	Steven Wong, Ph.D. Susan Gock, M.S.	414-223-1227 414-223-1228	414-223-1237 same	shwong@mcw.edu SSGoc@aol.com
Secretary:	Christine Goodall, B.S.	608-263-7031		cr.goodall@hosp.wisc.edu
Treasurer:	Jim Oehldrich, M.S.	414-382-7500		jim_oehldrich@email.msn.com

NOTE: THE CAP INSPECTORS WORKSHOP HAS BEEN CANCELLED

MEETING AT A GLANCE:

Sunday	Oct. 1	CAP INSPECTORS WORKSHOP HAS BEEN CANCELLED, 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	Toxicology consultants breakfast, 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, poster set-up, scientific/plenary sessions, exhibits, posters, farewell dinner and dance
Friday	Oct. 6	Scientific/plenary sessions, brunch buffet, closing session (to 2 p.m.), optional tours

MEETING DEADLINES:

AUGUST 24 - No mail registrations will be accepted after this date. You will have to register at the meeting and pay an additional fee.

SEPTEMBER 1 - After this date, the "Fun Run" entry fee increases from \$10 to \$15.

SEPTEMBER 2 - This is the cut-off date to make your hotel reservations at the SOFT group rate. However, do not wait until the last minute since the reserved block is assigned on a "first come..." basis.

SEPTEMBER 5 - No refunds will be made after this date.

NOMINATING COMMITTEE OFFERS SLATE FOR YEAR 2001

Submitted by Marilyn A. Huestis, Ph.D.

The nominating committee of SOFT is proud to announce the 2001 slate of officers and directors for your consideration. Members of the 2001 nominating committee are Leo Dal Cortivo, Ph.D., DABFT, James Garriott, Ph.D., DABFT, and Marilyn A. Huestis, Ph.D., Chair. The committee and all SOFT members thank these individuals for their time and efforts on behalf of SOFT in the past and their willingness to serve over the next few years. We are indeed fortunate to continue to have individuals of this high caliber who are dedicated to making SOFT the wonderful organization that it is.

For the office of President: Michael L. Smith, Ph.D., DABFT

Dr. Michael (Mick) L. Smith, currently the Science Officer for the Office of the Coordinator for Drug Enforcement Policy, Department of Defense, received his bachelor's degree in chemistry from Kansas State Teachers College, Emporia, KS, and a Ph.D. in biophysical chemistry from Purdue University, W. Lafayette, IN. The American Board of Forensic Toxicology has awarded him Diplomate status. He holds the rank of Colonel in the United States Army and over the past 26 years of active duty has held the positions of Research Biochemist, director of Clinical Investigations, Director/Commander United States Army Forensic Toxicology Drug Testing Laboratory, Wiesbaden, Germany, and Director of Forensic Toxicology, Office of the Armed Forces Medical Examiner. Dr. Smith has over 100 professional publications and abstracts. He has been an active member of SOFT for more than ten years serving a three-year term on the Board of Directors, two-years as Secretary, one year as Vice President, and several positions on various planning committees. He is also an active member of the American Academy of Forensic Sciences Toxicology Section and the International Association of Forensic Toxicologists.

For the office of Vice-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 been with the Colorado Department of Public Health and Environment for the twenty-one years that have followed. Through her career she has served in a variety of capacities in the drug and alcohol analytical laboratories and currently serves as the staff authority in the Toxicology Laboratory, 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 committees. She has remained active in the area of drug impaired driving with her participation on the SOFT DUID committee, participation in SOFT workshops and now as chair of the new joint AAFS/SOFT Drugs and Driving committee. Ms. Farrell has also been active in supporting the annual meetings of SOFT by Co-hosting 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 and as Treasurer from 1999 to present.

(continued on next. page . . .)

FROM THE EDITOR'S DESK .

Joseph R. Monforte, Ph.D., DABFT

The **ToxTalk** editorial board changes periodically, and I am anticipating the next change in calendar year 2001. Volunteers are welcome, and I would appreciate being contacted by interested individuals. Contributions of *"Case Reports"* and *"Drugs in the News"* articles are of particular interest, and persons to manage these areas are always needed. New ideas for regular features in **ToxTalk** are welcome, and the entire membership is encouraged to submit suggestions.

Please contact me via e-mail: DrMonforte@aol.com

For the office of Treasurer: Daniel S. Isenschmid, Ph.D., DABFT

Dr. Daniel S. Isenschmid is currently Chief Toxicologist at the Office of the Wayne County Medical Examiner in Detroit. He also holds appointments as Clinical Assistant Professor at Wayne State University's Colleges of Pharmacy and Medicine and serves as a member of the Drug Testing Advisory Board for SAMHSA. Dr. Isenschmid received M.S. and Ph.D. degrees in pathology and forensic toxicology, respectively, from the University of Maryland at Baltimore, School of Medicine. Dr. Isenschmid was the recipient of several Educational Research Awards from the Society of Forensic Toxicologists and the Irving Sunshine Award from the American Academy of Forensic Sciences for his doctoral research on cocaine. He has published papers on such topics as MRO interpretation of urine drug test results. and several papers on the forensic toxicology of cocaine and marijuana. In addition, Dr. Isenschmid has presented lectures for continuing legal education seminars and toxicology review courses. Dr. Isenschmid is active in both the American Academy of Forensic Sciences and SOFT. Since 1996 he has served on the SOFT Board of Directors and he is currently preparing to co-host the 2002 SOFT Annual meeting in Detroit, Michigan. Prior SOFT activities have included serving on the ToxTalk editorial board, co-editing the 1998 SOFT special issue of the Journal of Analytical Toxicology and serving on the ERA and Health and Safety Committees.

ELECTIONS WILL TAKE PLACE DURING THE SOFT ANNUAL BUSINESS MEETING Wednesday October 4th 4:00 p.m.

For a 3 year term on the Board of Directors: Diana G. Wilkins, Ph.D.

Dr. Diana G. Wilkins is currently an Assistant Director of the Center for Human Toxicology at the University of Utah Health Sciences Center. She concurrently holds a faculty position as Research Associate Professor in the Department of Pharmacology and Toxicology, College of Pharmacy at the University of Utah. Previously, Dr. Wilkins served as the Quality Control /Quality Assurance Manager and Senior Toxicologist at the Center for Human Toxicology. She received a B.S. (1985), M.S. (1988) and PhD. (1991) from the University of Utah. Her postdoctoral education included training in toxicology and pharmacology, with particular emphasis on drugs of abuse. She is a Laboratory Inspector for the National Laboratory Certification Program (NLCP) under the auspices of the Department of Health and Human Services (NIDA) and a laboratory assessor for the Standards Council of Canada (SCC). Dr. Wilkins was a member of the Drug Testing Advisory Board (DTAB) of the Division of Workplace Performance, Department of Health and Human Services from 1994-1997. She has also served as an Ad Hoc member of several NIH/NIDA study sections. Dr. Wilkins belongs to several scientific associations including the Society of Forensic Toxicology, American Academy of Forensic Sciences, the International Association of Forensic Toxicologists, the California Association of Toxicologists and the Association for Women in Science. She has been an active member of SOFT since 1994 and has co-authored 13 abstracts presented at the SOFT Annual Meetings (1995-1999). Dr. Wilkins has served as faculty for three SOFT-sponsored meeting workshops (1996, 1998, 2000), as well as the SOFT Educational Workshop on "Derivatization" currently conducted at various regional toxicology meetings. As a member of the Center for Human Toxicology, she co-hosted the 1997 SOFT Annual Meeting (Utah) and is presently serving as a co-Editor of the 2000 SOFT JAT Special Issue. 3

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

ToxTalk Volume 24, No. 3 SEPTEMBER 2000

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

October 13, 1999

The Annual Business meeting of the Society of Forensic Toxicologists, Inc. was held on October 13, 1999 in San Juan, Puerto Rico. President Marilyn Huestis called the meeting to order at 3:05 p.m. and requested that the Secretary establish a quorum. President Huestis advised attendees to sign in and reminded those in attendance that only full members may vote. Upon a motion duly made, seconded and passed, the agenda was approved. By motion duly made, seconded and passed, the minutes of the annual business meeting of the Society of Forensic Toxicology of October 9, 1998 as published in ToxTalk were approved by acclamation.

President's Report: Marilyn Huestis, Ph.D.

President Huestis delivered the following report:

I have greatly enjoyed being the last 20th century President of SOFT and appreciate the opportunity and confidence that you have placed in me. It has been challenging, interesting, and rewarding hard work. By far the best part of the job is the personal interactions with students, new toxicologists, and of course the SOFT regulars. Those individuals who are always there willing to step in and help do whatever it takes to get the job done. Some of these dedicated souls are your Board of Directors and Officers, and Committee Chairs and members. This year we dealt with a number of important issues and communicated very effectively through email and our interim meeting at AAFS. It was a busy year for all of us and it was only through the combined efforts of many that we accomplished our goals. SOFT is known and admired around the world as one of the premier professional toxicology societies. The quality of the science presented, discussed and argued at our meetings is appreciated, as is our renowned reputation for having fun. I credit the friendly, sharing environment that we strive to create with fostering our growth and success. Thank you for your generosity in sharing your knowledge, experience, talents and energy with us. Thanks for helping to create some wonderful new SOFT and Puerto Rico memories.

Many thanks to Flor Mattos and her dedicated committee, and Lee Hearn, Laurel Farrell and Bob Zettl for this outstanding 1999 SOFT Annual Meeting. We are enjoying the science, the warmth of the Puerto Rican people and the beautiful location. We especially welcome our new members and first time attendees and hope that you will become active participants in SOFT. Having hosted the 1994 meeting myself, I am acutely aware of the unending details that require attention and the just plain hard work that it takes to stage a meeting of this magnitude and complexity. Please accept all of our heart-felt thanks for this wonderful meeting. I would ask the membership to join me in thanking our hosts.

This has been a very productive year. Yale Caplan, our new Bylaws committee chair, and Mick Smith, Secretary, in conjunction with the Board of Directors and officers of SOFT, have updated the Bylaws and distributed the proposed changes to the document to all members. We will vote on its acceptability later in the meeting. The Forensic Toxicology Guidelines Committee is updating and revising the Guidelines and reformatting the document in a more user-friendly style. For nineteen years the Society of Forensic Toxicologists, Inc. (SOFT) has been privileged and honored to collaborate with Preston Publications in the presentation of the SOFT Special Issue of the Journal of Analytical Toxicology. The combined talents and efforts of the authors, reviewers and editors who contributed to this excellent Special Issue is acknowledged. Bruce Goldberger has produced an excellent SOFT Special Issue that showcases the best science that we have to offer. The long-term and generous scientific and financial support of SOFT's activities by Tinsley Preston must also be recognized. The Drugs and Driving Committee has distributed the new benzodiazepine monograph. Bill Anderson continues work on the SOFT policy and procedures manual. Bruce Goldberger, SOFT's webmaster, improves our website almost daily with numerous redesigns and additional member services. The ERA committee has selected two students for 1999 awards and four \$1,000.00 awards for the best two posters and oral presentations at this meeting are being prepared to honor members' scientific contributions. Plans for next year's SOFT 2000 meeting in Milwaukee, WI, 2001 in New Orleans, LA, 2002 in Detroit, MI, and 2003 in Portland, OR are progressing nicely. *The Board of Directors has accepted kind offers to host the 2004 meeting in Washington, DC by Marc Le Beau and in San Antonio, TX by Gary Kunsman.* This advanced planning helps to ensure well-designed and carefully prepared meetings. Thanks go out to all of these individuals and their respective committees for their important contributions. We have also greatly improved communication with our wonderful Administrative Assistant, Bonnie Fulmer, by outfitting the SOFT Office with a new computer and email capability.

I established five Ad Hoc committees this year: the Drug-Facilitated Sexual Assault Committee chaired by Marc Le Beau, the Visioning Committee chaired by Joe Saady, the Continuing Education Committee chaired by Christine Moore, the Meeting Host Guidelines Committee chaired by Laurel Farrell and the Ethics Committee chaired by Jeanne Beno. Laurel Farrell has drafted a greatly expanded and updated manual that contains the essence of years of experience hosting SOFT meetings which should help annual meeting hosts prepare for their big events. I would like to comment upon the critical need for continuing education. Our goal is to find ways to support all SOFT members; those who are fortunate enough to attend the annual event and those who do not get the opportunity to travel. There is a tremendous need to offer high quality, low cost educational opportunities for our members across the country. The high cost of attending commercial training courses and of traveling long distances to annual meetings, despite our efforts to equally distribute annual meetings across the country, requires that we find ways of meeting our members needs for education and training. I am grateful to Christine and her energetic committee for their dedication to creating education opportunities for all our members. I have asked Jeanne Beno to take on the difficult responsibility of the Ad Hoc Ethics Committee. Your Board of Directors and Officers has spent a significant amount of time this past year dealing with ethical issues. I suppose that this should be expected as our society grows; however, it has presented difficult challenges for us. I feel that it has become important for us to have a mechanism readily available to deal fairly, objectively, consistently and in a timely manner with these issues as they occur. Thank you again Jeanne for taking on this responsibility.

I would like to personally and sincerely thank all the officers, committee chairs and members who have given so much of their personal time and effort to make SOFT a wonderful professional organization. The dissemination of toxicological knowledge, continuing education of our members, development of performance guidelines and standards, and encouragement of research initiatives are major objectives. I have enjoyed my sojourn as SOFT President and have truly tried to represent you in an honorable and productive manner. Thank you for your guidance, trust and most of all for your enduring friendship. SOFT is beautifully positioned to be a leader in the field of forensic toxicology in the 21st century. I am proud to have played a part in these efforts.

Secretary's Report: Michael L. Smith, Ph.D.

Secretary Smith reported that S.O.F.T. approved 38 new members in 1999 bringing total membership to 563. He then read the names of all new members and asked them to stand. The other members welcomed them with applause.

Treasurer's Report: Laurel Farrell, B.S.

Treasurer Farrell reported that S.O.F.T. is in good standing. A detailed transaction report was filed with the Board and a brief written Treasurer's report was available to members. The report listed \$8,757.33 in a checking account and \$192,084.37 in savings. ERA awards totaled \$2,450 and with other expenses and incomes the ERA Fund Balance on 9/26/99 was \$77,557.54. S.O.F.T. Special Issue costs were \$347 at the time of the meeting. She reminded members that dues notices would be out soon and encouraged them to update their addresses via the website or by direct communication with the S.O.F.T. administrative office.

Vice President's and Committee's Reports: J. Robert Zettl, B.S., M.P.A.

Vice President Zettl thanked committee chairs in advance for their dedication this past year. He then called on them in turn to give their reports.

A. Bylaws Committee: Yale Caplan, Ph.D., chair, informed the members that the Bylaws with all recommended corrections were complete and were published in ToxTalk. The Bylaws will be voted on by the members later in this meeting.

B. Budget, Finance & Audit Committee: Vice President Zettl gave the report of Jim Valentour, Ph.D., chair, that stated that all accounting practices from January 1 through September 26, 1999 were audited. Records were in excellent order.

C. Nominating Committee: Vice President Zettl gave the report for Joe Saady, Ph.D., chair, who was not present. Nominees were selected from those members who had a proven record of participation in S.O.F.T. activities, of understanding S.O.F.T. business and of accomplishing tasks. Committee selected nominees as published in the September 1999 issue of ToxTalk were as follows: for President, J. Robert Zettl, B.S., M.P.A.; for Vice President, Michael Smith, Ph.D.; for Secretary, Amanda Jenkins, Ph.D.; for Directors, N.G.S. Rao, Ph.D., Tim Rohrig, Ph.D. and for a two year term to complete a 3-year term, Dan Isenschmid, Ph.D.

D. ToxTalk: Joe Monforte, Ph.D., editor, could not attend but sent a report that was read by the Vice President. Dr. Monforte reminded the members of deadlines and that he continues to save money with bulk mailing. As in the past he stated that the biggest challenge to ToxTalk is getting material from the members.

E. JAT Special Issue: Editor Bruce Goldberger, Ph.D., thanked all reviewers and the JAT staff for helping produce another outstanding issue. The Issue was available at this meeting and will be distributed to members who could not attend.

F. ERA Committee: Barbara Manno, Ph.D., chair, relayed that we had another rewarding year selecting two awardees: Robin Evans and Sandra Valtier. Meeting registration and \$1000 travel for each was paid by the award.

G. Meeting Resource Committee: Vice President Zettl asked meeting hosts in turn to give their reports.

1998 Meeting: N.G.S. Rao, Ph.D., acknowledged the work of his S.O.F.T. co-host Ron Backer, Ph.D. and TIAFT co-host Vina Spiehler, Ph.D. He described the meeting as very successful with over 670 registrants, over 300 being S.O.F.T. or TIAFT members. He informed the members that the meeting was scientifically excellent and very profitable. Profits were apportioned between S.O.F.T. and T.I.A.F.T. following guidelines established by the board.

Current Meeting: Flor Mattos, B.S., meeting host, acknowledged her co-hosts and reported that there were 314 registrants. She praised the scientists who presented their research findings and were making the meeting an educational success.

2000 Meeting, Milwaukee, WI: Susan Gock, meeting co-host, showed slides of Milwaukee featuring the Art Museum, possible site for the reception, Lake Michigan, site for the fun run, a local Pub, site for the welcoming events, and the Hyatt Regency, meeting location. After highlighting several attractions that provide opportunities for social interaction, including an Asian Moon Festival, she outlined the program that includes 7 workshops and 6 plenary lectures. She ended her presentation by telling members to be prepared for Midwest hospitality and fun.

2001 Meeting, New Orleans: Pat Pizzo, B.S., host, stated that the meeting would be held in the Radisson Hotel. This hotel allows easy access to the French Quarter with great food and entertainment. The meeting will feature many unique educational presentations including a workshop on Voodoo to be held at the Oak Alley Plantation.

H. Forensic Toxicology Laboratory Guidelines Committee: Graham Jones, Ph.D., chair, stated that the guidelines were approved in 1998. They will be posted in the S.O.F.T. web-site and put before the membership for vote at the Milwaukee meeting.

I. Drugs & Driving Committee: H. Chip Walls, B.S., chair, listed activities of the committee. These include 1) Drugs, Driving and Traffic Safety Workshop held on Sunday, October 10, 1999; 2) benzodiazepine monograph that is in the second revision; 3) methamphetamine monograph by Barry Logan that is nearly complete; 4) a monograph on Alcohol and Drug interactions in psychomotor performance that is being started by Jim Wigmore, Michael Corbett and H. Chip Walls; and 5) the Drugs and Driving bibliography with over 2000 citations that is on CD-ROM. Chip Walls also mentioned a Seattle meeting being organized by Barry Logan, Ph.D., that would be designed to produce consensus on the effects of different drugs on driving performance.

J. Policies & Procedures Committee: The Vice President mentioned that Bill Anderson, Ph.D., chair, had recently moved and was not in attendance. Dr. Anderson had informed him that no formal document had been produced to date.

K. Web-site Committee: Bruce Goldberger, Ph.D., chair, pointed out the success and activity of the S.O.F.T. web-site with 40-50 hits/day. Last June/July 1999 the web-site was relocated to a new server, LunaWeb, located in Memphis. He outlined the popular sites within the web-site and introduced future plans to include a software upgrade to Microsoft Front Page 2000 and redesign of the home page.

L. Ad Hoc Committees:

- Drug Facilitated Sexual Assault: Marc LeBeau, chair, reported that the committee would have its first official meeting during this annual meeting. They have already produced an article "Recommendations for the Toxicological Investigation of Drug-Facilitated Sexual Assault", J. Forensic Sci. 1999 and is currently preparing slides for training.
- Continuing Education: Christine Moore, chair, reported that this new committee would communicate monthly by email and meet annually at the S.O.F.T. meeting. They are surveying members to collect opinions on educational needs and are planning workshops. Education for bench level analysts will be one educational focus.
- 3. Visioning: Joe Saady, chair, was not present. The Vice President reported that this committee was still developing groundwork for a S.O.F.T. vision statement.
- 4. Meeting Host Guidelines: Laurel Farrell, chair, reported that she had developed preliminary guidelines that could be updated with each meeting. She had this document in electronic format and would transfer it to the next Vice President. She stated that the committees work was done and the President had disbanded this committee.
- 5. Ethics: Jeanne Beno, chair, reported that Jim Garriott and Jane Speaker were members of the committee. She would select one more person as a member of this new committee. The committee would begin by developing a protocol for addressing ethics issues. The committee will also clarify current Bylaws requirements and investigate any needed changes to address ethics requirements in our current environment.

J. Liaison Report: Yale Caplan, representing the A.B.F.T., informed the members of recent changes. A.B.F.T. previously required candidates for Diplomate status to have a Ph.D. and will continue this practice. A Masters Degree was previously required to obtain a Toxicology Specialists level of certification and now a Bachelors Degree will be the minimum educational requirement. As previously required all applicants must have experience in forensic toxicology and pass the required certification exam in order to be awarded certification.

Unfinished Business:

President Huestis asked for any unfinished business. Dr. Caplan stated that the members needed to vote on the revised Bylaws. This motion was seconded and the Bylaws were unanimously accepted. The President stated that the Bylaws would be posted on the S.O.F.T. web-site.

There was no other unfinished business from the members.

New Business:

A. Awards and Recognition:

President Huestis thanked Mr. Tinsley Preston for publishing another excellent Special Issue of the Journal of Analytical Toxicology. Mr. Preston then thanked Dr. Bruce Goldberger for editing the edition and presented him with a special plaque.

The membership thanked meeting organizers Flor Mattos, Laurel Farrell, J. Robert Zettl and Lee Hearn for an excellent meeting then they were presented plaques and gifts. Flor Mattos in turn thanked her committee, Ms. Fernandez, Dr. Hearn, Ms. Farrell, Mr. Zettl and Ms. O'Dell and presented them with special Puerto Rican gifts including a bottle of passion fruit wine.

President Huestis reminded the members that Sandra Valtier and Robin Evans were the recipients of the Society's 1999 ERA awards and officially presented them the \$1000 awards.

B. Additional New Business

President Huestis asked if there were other issues for the members to consider. The Vice President mentioned that John Trisher, North American Congress of Clinical Toxicology, would like to have a combined meeting. It was suggested that he call the hosts of the next meeting or send in a formal proposal to the Board when they meet at the AAFS Interim Meeting.

One member asked about awards for the best poster and presentation. Dr. Lee Hearn, program chair, stated that a final decision had not been reached. The recipients would be notified later as will the members through ToxTalk or via the web-site.

Dr. Graham Jones explained that a bill, HR 2340, had sponsorship and might be introduced in the House of Representatives for vote. This bill authorizes laboratories that are accredited by the National Association of Medical Examiners and the American Society of Crime Laboratory Directors to receive special federal funding. ABFT was not mentioned. He asked that S.O.F.T. lend support to have ABFT included as an accrediting agency. The members were in favor and the President stated that she would send a letter of support to sponsoring congressmen.

C. Nominations from the Floor and Election of Officers:

Since no nominations were received from the floor, it was moved and seconded that all officers be elected as presented by the Nomination Committee. The newly elected 2000 S.O.F.T. officers and directors are as follows:

President:. J.	Robert Zettl, B.S., M.P.A. one-year term
Vice-President:	Michael L. Smith, Ph.D., one-year term
Secretary:	Amanda Jenkins, Ph.D., two-year term
Director:	N.G.S. Rao, Ph.D., three-year term
Director:	Tim Rohrig, Ph.D., three-year term
Director:	Dan Isenschmid, Ph.D., two-year term.

D. Vice President Zettl presented President Huestis with a commemorative plaque on behalf of the members and thanked her for her past year of service to the society.

E. The newly elected President Zettl closed the meeting with important remarks to the members. He announced that Denny Crouch would be the next S.O.F.T. JAT Special Issue editor and asked members to contribute research articles. He asked members to approach him or other officers to get involved in S.O.F.T. activities.

Adjournment: The meeting was adjourned at 5:37 p.m.

Respectfully submitted,

Michael L. Smith, PH.d., DABFT SOFT Secretary (1998-1999)

Subject to approval at the 2000 SOFT Annual Business Meeting.

HAVE YOU SUBMITTED YOUR

*

SOFT Drug-Facilitated Sexual Assault Committee Update and Survey?

The survey form was enclosed in the last issue of **ToxTalk**. If you have had any DFSA cases, please take the time to fill this survey out and submit it now Results from the database will be available to the SOFT membership at annual meetings and through **ToxTalk**. Questions should be directed to Mark LeBeau at mlebeau@cox.rr.com or 202-324-4329.

"DRUGS IN THE NEWS"

Deaths of Addicts Traced to Bacterium Submitted by Joseph R. Monforte, Ph.D., DABFT, Forensic Toxicology Consultant, 42408 N Sombrero Rd, Cave Creek, AZ 85331

Officials investigating the mysterious deaths of heroin addicts in England, Scotland and Ireland in the past months said that the cause was a strain of clostridium, a bacterium usually found in soil or dust. The clostridium strain,, known as Clostridium novyi Type A, is well known as a cause of severe infection in farm animals and can lead to a bovine illness known as Black Disease, which kills off flesh, turning it black. It rarely affects humans, although it is said to have been responsible for the outbreaks of gangrene among soldiers in the First and Second World Wars.

In the case of the heroin users, the bacterium is most likely coming from a particular batch of heroin contaminated with dirt harboring clostridium spores. When the users dissolve the heroin in citric acid and inject it into their muscles, generally because their veins have collapsed from repeated abuse, the injection kills off surrounding tissue, forming a perfect breeding ground for the bacterium. The first symptom of the illness is a severe infection at the site of the injection, leading to massive localized swelling and gaping abscesses. The illness is treatable at this early stage, with huge doses of antibiotics and the surgical removal of the dead tissue. Untreated, the bacterium then releases powerful toxins into the body, causing a huge increase in white blood cell count and kidney and liver malfunctions. Patients who have reached this stage have died of heart failure within 48 hours. Of more than 70 reported cases in Glasgow, Edinburgh, Manchester, Liverpool and other cities, about half the victims have died.

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: SEPTEMBER 1, 2000

Visit the SOFT Web-site at www.soft

Visit the new SOFT web-site at www.soft-tox.org and get the latest information on items of interest to SOFT members. Web Master Bruce Goldberger welcomes comments.

To gain access to SOFT's on-line membership directory and drugs and driving pages, type the following username and password:

USERNAME: drugs PASSWORD: #cocaine!

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.

Forensic Toxicology Laboratory Manger to direct the laboratory operations of the Washington State Toxicology Lab. Qualifications include degree in biological or physical sciences, at lease 3 yrs experience in postmortem and human performance forensic tox lab, expert witness, and current knowledge of analytical standards, instrumentation and technology. Contact Barry Logan at 206-464-5435 or e-mail: blogan@wsp.wa.gov.

PROFESSIONAL CALENDAR

SOFT MEETING: SOFT 2000 "Launching thirty years of forensic toxicology into the next millennium" October 2-6, Hyatt Regency, Milwaukee, WI

		Phone	Fax	<u>E-mail</u>
Co-chairs:	Steven Wong, Ph.D.	414-223-1227	414-223-1237	shwong@mcw.edu
	Susan Gock, M.S.	414-223-1228	same	SSGoc@aol.com
Secretary:	Christine Goodall, B.S.	608-263-7031	Gamo	cr.goodall@hosp.wisc.edu
Treasurer:	Jim Oehldrich, M.S.	414-382-7500		jim_oehldrich@email.msn.com

Future meetings: 2001 - New Orleans, LA - Pat Pizzo 2002 - Detroit, M1 - 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.

The Robert F. Borkenstein Course on Alcohol, Drugs and Highway Safety: Testing, Research and Litigation: Dec. 10-15, 2000, Indiana University, Bloomington, IN. Contact Darlena Lindsay, Program Coordinator at e-mail: 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

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



October 2-6 Milwaukee, Wisconsin

Launching thirty years of forensic toxicology into the next millennium



ToxTalk -September 2000



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



MEETING INFORMATION as of 8/05/2000

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 – <u>www.milwaukee.hyatt.com</u>. 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 $\frac{1}{2}$ 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 championjl@doj.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 ssgoc@aol.com



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



PRELIMINARY MEETING SCHEDULE

SUNDAY, October 1, 2	2000	WEDNESDAY, Octobe	er 4, 2000	
5:00 p.m8:00 p.m.	Registration Open Pre conference tours available	7:00 a.m8:30 p.m.	Toxicology Consultants SIG Breakfast	
MONDALL OF L	2000	7:30 a.m5:00 p.m.	Registration	
MONDAY, October 2,		7:00 a.m8:30 a.m.	Poster set up	
7:30 a.m5:00 p.m.	Registration	8:00 a.m8:15 a.m.	Welcome and Opening of Scientific	
8:00 a.m12:00 p.m.	ABFT Examination		Program	
8:00 a.m12:00 p.m.	Workshop #1 Forensic	8:15 a.m12:00 p.m.	Scientific/Plenary Session	
	Applications of LC/MS at the	8:30 a.m3:30 p.m.	Exhibits and Posters Open	
	Beginning of the 21st Century	12:00 p.m1:00 p.m.	Luncheon	
8:00 a.m12:00 p.m.	Workshop #2 Automated Data	1:00 p.m3:45 p.m.	Scientific/Plenary Session	
	Reduction of HP GC/MS Analysis	4:00 p.m5:30 p.m.	SOFT Business Meeting	
	via Macro Programming	7:00 p.m10:00 p.m.	President's Reception and Elmer	
12:00 p.m6:00 p.m.	ABFT Luncheon and Board Mtg	i de la companya de l	Gordon Forum	
1:30 p.m5:30 p.m.	Workshop #3 Benzodiazepines:	7:00 p.m9:00 p.m.	Exhibits Open	
	Pharmacology and Analytical Challenges	To be announced:	FTCB Board Meeting/Exam	
1:30 p.m5:30 p.m.	Workshop #4 Automation of	THURSDAY, October 5, 2000		
	Micro-Plate Enzyme Immunoassay	7:30 a.m12:00 p.m.	Registration	
	Systems in Forensic Analysis	7:00 a.m8:30 a.m.	ABFT Breakfast	
7:00 p.m11:00 p.m.	NLCP Inspector Workshop	7:00 a.m8:30 a.m.	Poster set up	
		8:00 a.m9:00 a.m.	Vendor's Meeting	
TUESDAY, October 3,	2000	8:00 a.m12:00 p.m.	Scientific/Plenary Session	
6:30 a.m7:30 a.m.	SOFT Fun Run/Walk	8:30 a.m1:30 p.m.	Exhibits Open	
7:30 a.m5:00 p.m.	Registration	8:30 a.m3:30 p.m.	Posters Open	
8:00 a.m5:30 p.m.	Workshop #5 Marijuana Forensic	12:00 p.m1:00 p.m.	Luncheon	
49 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Symposium	1:00 p.m5:00 p.m.	Scientific/Plenary Session	
8:00 a.m12:00 p.m.	Workshop #6 Pharmacology and	1:30 p.m3:30 p.m.	Exhibit tear down	
and a second	Toxicology of Drugs Used in the	7:00 p.m12:00 a.m.	Farewell Dinner and Dance with	
	Treatment of Infectious Disease	7.00 p.m. 12.00 d.m.	Vendor Recognition	
12:00 p.m6:00 p.m.	SOFT Board of Directors Meeting		vendor Recognition	
1:30 p.m5:30 p.m.	Workshop #7 The Forensic	FRIDAY, October 6, 2000		
1.50 p.m. 5.50 p.m.	Toxicological Aspects of Chemical	8:00 a.m10:30 a.m.	Scientific/Plenary Session	
	Terrorism	10:30 a.m11:30 a.m.	Brunch Buffet	
1:30 p.m5:30 p.m.	Workshop #8 Pharmacology	11:30 a.m2:00 p.m.	Scientific/Closing Plenary Session	
1.50 p.m. 5.50 p.m.	Reviews II: Selected Cardiovascular Drug Toxicology & Update on Pharmacogenetics	11.50 a.m2.00 p.m.	Post conference tours available	
2:00 p.m	Exhibit set up			
6:30 p.m10:30 p.m.	Welcoming Reception at Milwaukee County Museum			

For further information contact:

Dr. Steven Wong, Co-chair Sue Gock, Co-chair Christine Goodall, Secretary Jim Oehldrich, Treasurer Phone: 414-223-1227 Phone: 414-223-1228 Phone: 608-263-7031 Phone: 414-382-7500 E-mail: shwong@mcw.edu E-mail: SSGoc@aol.com E-mail: cr.goodall@hosp.wisc.edu E-mail: jim_oehldrich@email.msn.com



SOFT 2000 Milwaukee

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



WORKSHOP PROGRAM ABSTRACTS

Workshop #1 Forensic Applications of LC/MS at the Beginning of the 21st 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.

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; Steven Wong and Michael Wagner, Co-chairs

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.



SOFT 2000 Milwaukee



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

Opening Plenary Lecture

Informatics and Scientific Information Exchange in 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 C. 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

MILLER BREWING COMPANY

4251 W. State Street, Milwaukee, WI 53208 Phone: 414/931-2467 Fax: 414/931-2183 Web site: <u>www.millerbrewing.com</u>

Free, guided outdoor/indoor walking tour includes theater presentation, visits to our packaging and shipping centers, brew house and historic Cave Museum. Enjoy products sampled in the Bavarian style Miller Inn or seasonal outdoor beer garden. Reservations required for groups of 15 or more. Capacity of 90 per tour. Gift shop open: Monday-Saturday 10 a.m.-5:30 p.m. Tours: Monday-Saturday, year round. Closed Sundays and Holidays. Call 414/931-BEER or 1-800-944-LITE for daily updated information.

SPRECHER BREWING COMPANY

701 W. Glendale Avenue, Glendale, WI 53209Phone: 414/964-BREWFax: 414/964-2462Web site: www.spreherbrewery.com

Milwaukee's original micro-brewery known for producing award winning beers and gourmet sodas. An indoor beer tent for your sampling pleasure, with up to seven different beers and four sodas on draft. Call the brewery for tour times, directions and other information.

HARLEY DAVIDSON ENGINE PLANT TOUR

11700 West Capital Drive, Milwaukee, WI 53225 Phone: 414/535-3666

Experience the feel of America's EZ Rider. Factory tours are available. Engine plant tours are free and run approximately one hour. Visit the gift shop at the tour center. Call for times and information.

EDELWEISS

 1110 Old World Third Street, Milwaukee, WI 53203

 Phone: 414/272-3769; 272-3625
 Fax: 414/272-4242

Located in the heart of Milwaukee's Downtown Riverwalk District, within walking distance to theaters, hotels, Midwest Express Conference Center and the Bradley center. Enjoy award-winning cuisine aboard Euro-styled vessels. Tour the harbor and see the skyline of Milwaukee. Offering lunch, Sunday brunch, cocktail and dinner cruises. Pre and post cruise receptions on lovely covered patio overlooking the water.

MITCHELL PARK HORTICULTURAL CONSERVATORY - THE DOMES 524 S. Lavton Blvd., Milwaukee, WI 53215

Phone: 414/649-9830 Fax: 414/649-8616 Web site: <u>www.countyparks.com/horticulture</u>

Come and enjoy the beauty of a tropical rainforest, a desert oasis and the grandeur of our famous floral shows. We are open everyday of the year from 9:00 a.m. to 5:00 p.m.

CEDAR CREEK SETTLEMENT

N70 W6340 Bridge Road, Cedarburg, WI 53012 Phone: 414/377-8020 Fax: 414/375-9428 Web site: <u>www.cedarcreeksettlement.com</u>

Visit Cedar Creek Settlement, listed on the National Register of Historic Places. Browse through shops, galleries and winery in this restored, 1864 woolen mill on the banks of Cedar Creek. Shop for everything from antiques to fine arts, from jewelry to unique gifts. Take a winery tour and sample Cedar Creek wines. Over 30 stores, artist studios and restaurants combine to make your trip relaxing and rewarding.

Hours: Monday-Saturday 10 a.m.-5 p.m. Sunday 11 a.m.-5 p.m.

HISTORIC MILWAUKEE, INC.

828 N. Broadway – PO Box 511220, Milwaukee, Wl Phone: 414/277-7795 Fax: 414/277-0645 Web site: <u>www.execpc.com/~histmilw</u>

Take a historic walking tour of Milwaukee with us and see what you've been missing! Historic Milwaukee, Inc., a nonprofit educational organization, is dedicated to increasing the public's awareness of Milwaukee's historical and architectural heritage. Historic Milwaukee offers numerous guided walking tours of Milwaukee's ethnically diverse neighborhoods. Come walk with us to learn about Milwaukee's colorful history and neighborhoods. Group and specialized tours are also available.

MARCUS CENTER FOR THE PERFORMING ARTS

 929 North Water Street, Milwaukee, WI 53202-3122

 Phone: 414/273-7121
 Fax: 414/273-5480

 Web site: www.milwaukeearts.org

Southeastern Wisconsin's premier cornerstone for culture opened in 1969. Located in the heart of downtown Milwaukee, its halls showcase a variety of concerts, plays and annual events. Serves as home to a multitude of arts groups and hit Broadway shows. Guided tours available.

MILWAUKEE WEB SITES

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

Allwaukee One

www.mke1.com



SOFT 2000 Milwaukee

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



Name						Degree	
4	Last		First				
				A			
Address					_		
Telephone			Fax			E-mail	
A							
					SOFT	Non-	TOTAL
					MEMBE	R MEMBER	ENCLOSED
Basic Meeti	ng Regist	ration			\$135	\$180	\$
			ntific sessions, abstrac			0100	
			ient's Reception, Elme				
			ance, Luncheons Wed-				
	offee Brea		anee, Editencons wea	Tri, and			
	The second s		of LC/MS at the Beginn	ing	\$50	\$70	\$
workshop #1		21st Century	I DOING at the Degin	ining	000	570	
Workshon #7			tion of HP GC/MS An	alvsis	\$50	\$70	\$
workshop of		acro Program		u19515	000		•
Workshon #3	Renzodia	zenines: Phan	macology and Analytic	al	\$50	\$70	S
workshop #5	Challe		indeology and relialytic		000	570	
Workshon #4			late Enzyme Immunoa	ssav	\$50	\$70	\$
workshop and		ns in Forensic		5547	000	0.0	
Workshop #5					\$80	\$100	\$
Workshop #6			icology of Drugs Used	in the	\$50	\$70	\$
Course of		nent of Infecti					
Workshop #7	The Foren Terror		gical Aspects of Chemi	cal	\$50	\$70	\$
Workshon #8			II: Selected Cardiovas	cular	\$50	\$70	\$
workshop #0			Update on Pharmacog		000		
Full-time Stud					\$25/day	\$45/day	\$
			essions on Wed/Thurs/		\$25/day	surviulay	Ψ
ABFT Breakf		ie Scientific S	casions on wear mars/		\$20	# of tickets	\$
Extra Tickets:		ming Recepti	07		\$25	# of tickets	S
LAUA TICKEIS.			on/Elmer Gordon Foru		\$25	# of tickets	\$
		ell Dinner and			\$30	# of tickets	\$
		eon - Wed -			\$20	# of tickets	\$
	Lunch	Circle			\$20	# Of fickets	4
SOFT 2000 J	acket: M			XX-Lar	ge	@ \$20 each	\$
\$20	each for ex		Extras				1000
Late Fee:	For al	l registrations	received after Aug. 15	, 2000	\$50		\$ 50
					a Flore Arr	- 24 2000	
0	in the second		nail registration will b	e accepted	atter Au	g. 24, 2000	
On site registi Administratio			is requested a CEO for	will be dea	ucted 6-	n the original narmant	
Administratio	n ree:	ii a rerund	is requested, a 550 fee	will be dec	ucted from	n the original payment.	
Mathad of ma	ument.	Check D	rawn on a USA bank. I	nternationa	Bank Ch	ecks or Money Order	
Method of pa	yment.		nust be paid in US doll				
Credit Card:		Visa	MasterCard		can Expre		
Card #	-		Exp. I	Date	Signatu	re	

WI 53226 USA (FAX) 414-456-6623 Federal Tax ID: 51-0233801



Hyatt Regency Milwaukee 333 West Kilbourn Avenue Milwaukee, W1 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
	Please check type and # of room(s) requested
	# Single(s) 1 person
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
Departure Date:	only \$20.00 more per day. Call the hotel for details
Departure Dater	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 <u>www.milwaukee.hyatt.com</u> the SCR code is 55009



CITY	STATE ZIP	AGE ON SEX RACE DAY
		MF
PHONE	5K RUN 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 '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.

Date

Signature (parent or guardian if under 18)_



SOFT 2000 Milwaukee

Launching thirty years of forensic toxicology into the next millennium



Hyatt Regency October 2-6, 2000

Preliminary List of Scientific Presentations

Following is a preliminary list of presentations for the 2000 SOFT Annual Meeting. This information is subject to change and offered to provide as much information as possible regarding the excellent scientific program for this meeting.

Evaluation of Adulteration Effects on OnLine, EMIT II, FPIA, and CEDIA DAT Technologies Ken Slickers, Bridget Mann, Lisa Evans, Sharan Walker, Monika Zion, Alan McNally, Salvatore Salamone, Roche Diagnostics Corporation, Indianapolis, IN 46250

Genotyping CYP2D6 by conventional and real time PCR. Schur BC, Bjerke J, Hubbard L, Wong SHY, Chang J, Nuwayhid N, Wagner MA, Dept. Pathology, and Elias M, Dept. Anesthesiology, Medical College of Wisconsin, Milwaukee, WI

Citalopram Distribution in Postmortem Cases Barry Levine,*, Xiang Zhang, and John E. Smialek, Office of the Chief Medical Examiner, State of Maryland 111 Penn St., Baltimore, MD and Gary W. Kunsman, Ph.D. and Michael E. Frontz, MSFS, Bexar County Medical Examiner's Office, 7337 Louis Pasteur, San Antonio, TX 78229

Irreversible association of (3H)Nicotine,

(3H)Flunitrazepam and (3H)cocaine with melanin during generation from tyrosine: A model of drug deposition in pigmented hair. James A Ruth, David J. Claffey and Peter R. Stout, University of Colorado Health Sciences Center, Denver, CO 80262

Comparative postmortem stability of pentobarbital in brain, liver, skeletal muscle and hair follicles of eumelaninpigmented and albino mice. Donna L. Dehn and James A. Ruth, University of Colorado Health Sciences Center, Denver, CO 80262

Long term stability of alcohol in blood and urine. John Vasiliades and Kim Ford, Toxicology and Clin/Chem Labs. Inc., 4472 South 84 St., Omaha, NE 68127

Detection of Fluoxetine and Norfluoxetine in Saliva and Nails Fiona M. Wylie* and John S. OliverDepartment of Forensic Medicine and Science, University of Glasgow, G12 8QQ, Scotland, U.K. Dihydrocodeine – Pain Killer, Cough Suppressant or Drug of Abuse Alison Seymour*, Marjorie Black and John S. Oliver, Department of Forensic Medicine and Science, University of Glasgow, G12 8QQ, Scotland, U.K.

Postmortem Examination of Liver and Brain for the Presence of Methylecgonidine (MED), Ecgonidine (ED), Cocaine, and Benzoylecgonine (BZE) by Selected Ion Monitoring (SIM) GC/MS. Eric T. Shimomura*, Gwendolyn D. Hodge, and Buddha D. Paul, Division of Forensic Toxicology, Armed Forces Medical Examiner, Armed Forces Institute of Pathology, 1413 Research Boulevard, Rockville, MD 20850

Applicability of the New Federal Opiate "Cutoffs" to Opiate Intoxication Cases Karla A. Moore^{*1}, Joseph Addison¹, Barry Levine^{1,2} and John E. Smialek². ¹Armed Forces Institute of Pathology, Washington DC 20306; ²Office of the Chief Medical Examiner, State of Maryland, Baltimore, MD 21201

Detection of illicit heroin markeres in urine with liquid chromatography-atomspheric pressure chemicalionization mass spectrometry. M.J. Bogusz, R.D. Maier, M.Erkens, U. Kohls, Institute of Forensic Medicine, Aachen, Germany.

Urinary analytes that define the limits of renal dilution. Janine Denis Cook, University of Maryland, School of Medicine, Department of Medical and Research Technology, Baltimore, MD; Yale H. Caplan*, National Scientific Services, Baltimore, MD; Charles P. LoDico and Donna M. Bush, Division of Workplace Programs/SAMHSA/HHS, Rockville, MD.

Optimizing Sympathomimetic Amine Analysis using a Dual Derivatization Technique Richard A. Morehead, Restek Corporation, 110 Benner Circle, Bellefonte, PA 16823

Г

Detection period for cocaine metabolite in urine following topical ophthalmic cocaine administration for testing Horner's Syndrome. Daniel M. Jacobson, Richard Berg, Gregory F. Grinstead*, Mary R. Dommer, Jodene R. Kruse – Marshfield Clinic, Marshfield, Wisconsin, USA

A Luminescent Screen for Carisoprodol Michele Glinn, Ph.D.* and Helen Lee, B.Sc(Hons). Toxicology Unit, Forensic Sciences Division, Michigan State Police, 714 S. Harrison, East Lansing, MI 48823.

Analysis of gamma-hydroxybutyrate (GHB) in whole blood and urine by GC/MS. Julia M. Pearson* and Mary L. Blackburn, Michigan State Police Toxicology Laboratory, East Lansing, MI

Simultaneous Assay for Δ^9 -Tetrahydrocannabinol (THC), 11-Hydroxy- Δ^9 -Tetrahydrocannabinol (11-OH-THC), and 11-Nor-9-Carboxy- Δ^9 -Tetrahydrocannabinol (THCCOOH) in Human Urine by GC/MS. William D. Darwin*, Abraham T. Wtsadik, Jonathan M. Oyler, Raf J. P. Schepers, and Marilyn A. Huestis, Intramural Research Program, NIDA, NIH, Baltimore, MD

Buprenorphine glucuronide plasma concentrations by LC-MS-MS after high dose intravenous and sublingual buprenorphine administration. Aldo Polettini, Edward J. Cone, Kenzie L. Preston, Annie Umbricht and Marilyn A. Huestis, CDM, IRP, NIDA, NIH, Baltimore, MD

Nicotine and Nicotine Metabolite Adducts of Melanin Demonstrated by Matrix-Assisted Laser Desorption/Ionization Time-of-Flight (MALDI-TOF) Mass Spectrometry. David J. Claffey*, Donna L. Dehn, Mark W. Duncan and James A. Ruth, University of Colorado Health Sciences Center, Denver, CO 80262.

GHB Overdose Case: Examination of Blood, Brain and Hair Marcie M. Dixon^{*1}, Kathryn S. Kalasinsky¹, Stephen J. Kish², and Gregory A. Schmunk³; ¹Division of Forensic Toxicology, Office of the Armed Forces Medical Examiner, Armed Forces Institute of Pathology, Rockville, MD 20850, ²Human Neurochemical Pathology Laboratory, Centre for Addiction and Mental Health, Toronto, Ontario, Canada, ³Office of the Santa Clara County Medical Examiner-Coroner, San Jose, CA

Telazol®: A Dissociative Animal Anesthetic Agent Found In Two Fatalities. Norman A. Wade*, Charles E. Spies and Susan M. Cooley, Office of the Medical Examiner, Phoenix, AZ

Side by Side Comparison of Microplate Enzyme Immunoassays for Opiates, Methamphetamine, Benzodiazepines, Benzoylecgonine (BE), Phencyclidine (PCP) and Marijuana in Blood and Urine Sarah Kerrigan, * and William H. Phillips, California Department of Justice, Toxicology Laboratory, 4949 Broadway, Sacramento, CA, 95820. Validation of Fully Automated Microplate Enzyme Immunoassays for Opiates, Methamphetamine, Benzodiazepines, Benzoylecgonine (BE), Phencyclidine (PCP) and Marijuana in Blood and Urine. Sarah Kerrigan, Ph.D*., Timothy A. Appel, Joshua S. Spatola and William H. Phillips, California Department of Justice, Toxicology Laboratory, 4949 Broadway, Sacramento, CA, 95820.

Paired measurements of creatinine and specific gravity after water loading. Kenneth C. Edgell*, US Department of Transportation, Washington, DC, Leon R. Glass, Kroll Laboratory Specialists, Gretna, LA, Yale H. Caplan, National Scientific

Comparison of Ethyl Alcohol Concentrations in Simultaneously Collected Blood, Breath and Urine Samples: A Field Study

Samples: A Field Study Lakshmaiah Sreerama^{1, 2}, Shawn Gallagher^{*1}, Patrick Pulju¹, and Glenn G. Hardin¹. ¹Forensic Science Laboratory, MN Bureau of Crim. Apprehension, St. Paul, MN and ²Dept. of Chemistry, St. Cloud State U., St. Cloud, MN

A Rapid Instrumented Fluorescence Immunoassay for the Detection of Phencyclidine in Oral Fluid *Greg Liang, Thomas J Foley, Guohong Wang, Tony Tusak, Dan Nam, LifePoint Inc. 10400 Trademark Street, Rancho Cucamonga, CA 91730

Criteria for Conducting Hair Analysis for Drugs of Abuse Thomas Cairns, Ph.D., DSc.*, John Irving, M.S., Michael Schaffer, Ph.D. and William Thistle, J.D., Psychemedics Corporation, 5832 Uplander Way, Culver City, Ca 90230

HAIR ANALYSIS: Correlation Between Original Analysis and Subsequent Follow-Up Test Thomas Cairns, Ph.D., DSc.*, John Irving, M.S. and Michael Schaffer, Ph.D., Psychemedics Corporation, 5832 Uplander Way, Culver City, Ca. 90230

An Evaluation of Two Wash Procedures for the Differentiation of External Contamination Vs. Ingestion in the Analysis of Human Hair Samples for Cocaine Michael I. Schaffer, Wen-Ling Wang, and John Irving. Psychemedics Corporation, 5832 Uplander Way, Culver City, Ca 90230

Characterization of the Effects of Stealth Adulterant on Drugs of Abuse Testing Sandra Valtier* and John T. Cody; Clinical Research Squadron, 59th Medical Wing, Lackland AFB, TX 78236-5319 and AMEDD C & S, MCCS-HMP PA Branch, Fort Sam Houston, TX 78234-6138

Countering the Effect of Stealth Adulterant on the Analysis of Morphine and Codeine. James Kuhlman*, Sandra Valtier and John T. Cody; Air Force Drug Testing Laboratory, Brooks AFB TX 78235, Amphetamine, Clobenzorex and 4-hydroxyclobenzorex Levels Following Multi-Dose Administration of Clobenzorex John T. Cody* and Sandra Valtier; AMEDD C & S, MCCS-HMP PA Branch, Fort Sam Houston, TX 78234-6138 and Clinical Research Squadron, 59th Medical Wing, Lackland AFB, TX 78236-5319

A Simple Method for Derivatizing the Surface of Silica Gel with Aldehyde Groups by Employing a New Alkoxy Aldehyde Silane. Lauren Benner *, Ann N. Coyne, John MacMillian, Mike Telepchak, United Chemical Technologies, 2731 Bartram Road, Bristol, PA, USA

Optimization of drugs of abuse assays on the Abbott AEROSET[®] clinical chemistry analyzer. Sandra Stonebraker*, Wendy Rapp, Marilyn Weintraub, Dave Armbruster, Abbott Diagnostic Division, Abbott Laboratories, 1920 Hurd Dr, Irving, Texas 75038

Effects of low dose GHB and EtOH, administered alone and in combination, on a memory task in rats: Comparison with scopolamine (SCOP). Laureen J. Marinetti* and Randall L. Commissaris, Dept. of Pharmaceutical Sciences, Wayne State Univ. Coll. of Pharmacy and AHP, Detroit, MI 48202

Data Management in Forensic Toxicology: An inexpensive Solution with MS Access©. Jack R. Kalin, Alabama Department of Forensic Sciences, 1001 13th Street South, Birmingham, AL 35205

Metabolism of Lysergic Acid Diethylamide (LSD) to 2-oxo-3-hydroxy LSD (O-H-LSD) in Human Liver Microsomes and Cryopreserved Human Hepatocytes Kevin L. Klette[‡], Cynthia J. Anderson, and Gregory K. Poch, Navy Drug Screening Laboratory, 34425 Farenholt Avenue Suite 40, San Diego, CA 92134-7040; Alison C. Nimrod and Mahmoud A. ElSohly, University of Mississippi, School of Pharmacy, National Products Research, 135 Coy Waller Complex, University, MS 38677

Tissue Distribution of Paroxetine (Paxil ®) in Fifty-six Postmortem Cases Kristina L. Fritz*, Tiffany F. Kuwahara, Kristy L. Kagan, and Daniel T. Anderson, Los Angeles County Department of Coroner, 1104 N. Los Angeles, CA

Tissue Distribution of Paroxetine (Paxil ®) in Fifty-six Postmortem Cases Kristina L. Fritz*, Tiffany F. Kuwahara, Kristy L. Kagan, and Daniel T. Anderson, Los Angeles County Department of Coroner, 1104 N. Mission Rd., Los Angeles, CA 90033

Study of heroin metabolism pattern in the urines of addicts. Wang Mei,¹ Daming Zhang, ¹ Guanmin Pan, ¹ Jason S. Lai.² ¹Forensic Medical Examination& Identification Center of Beijing, Public Secureity Bureau, Beijing, China.² Special Chemistry Business Unit, Clinical Systems Division, Bio-Rad Laboratories, Hercules, CA, USA. An Evaluation of the OnLine II Immunoassay for Opiate 300/2000 ng/mL Cutoffs: Comparison to EMIT II, and CEDIA DAU for Cross-Reactivity of Prescription Medications or Common Adulterants Huiru Zhao*, Davina C. Ananias, Sienna L. Yarbrough, Alan J. McNally, and Salvatore J. Salamone. Roche Diagnostics Corporation, 9115 Hague Rd., Indianapolis, IN 46250.

The Analysis of Ketamine and Norketamine in Humane Urine Specimens using Liquid Chromatography/Selected Ion Monitoring Mass Spectrometry Kevin L. Klette[‡], Gregory K. Poch, and Cynthia J. Anderson, Navy Drug Screening Laboratory, 34425 Farenholt Avenue Suite 40, San Diego, CA 92134-7040

Identification of gasoline components present in brain tissue by DFLEX, Diffuse Flammable Liquid Extraction. Heather Wogoman, Mike Wathen, John Wyman. Montgomery County Coroner's Office, 361 W. Third St., Dayton, OH 45402

Vitreous Humor Analysis by Immunoassay: Switching Technologies FPIA vs. KIMS Flor R. Mattos, Institute of Forensic Sciences, P.O. Box 11878, San Juan, Puerto Rico 00922-1878

CEDIA[®] Ecstasy Drugs Assay for Urine Drug Testing. Bob T. Ramage, Jeff E. Shindelman*, Mike Leos, Riaz Rhouhani, Rao Kammula, Wiliam A. Coty and Yuh-Geng Tsay, (Microgenics Corporation, Fremont, CA).

CEDIA[®] Amphetamines Assay with Improved Recognition of Ecstasy Drugs for Urine Drug Testing. Bob T. Ramage, Jeff E. Shindelman*, Mike Leos, Riaz Rhouhani, Rao Kammula, William A. Coty and Yuh-Geng Tsay, (Microgenics Corporation, Fremont, CA).

Simultaneous GC/MS analysis of GHB and other low boiling acidic drugs using a water scavenger technique. Y. Mary Pan, William H. Wall, H. Horton McCurdy. GBI Division of Forensic Sciences, P.O. 370808. Decatur. GA 30037

Analysis of Capsaicinoids in Extracts of Fresh Pepper, Oleoresin Capsicum, and Pepper Spray Products Using LC/MS Christopher A. Reilly*, Dennis J. Crouch, and Garold S. Yost. Center for Human Toxicology, University of Utah, Salt Lake City, UT 84112.

pH Interference on Dry Chemistry Test Strip Specific Gravity Assays. *Edward J. King, East Side Physicians PLLC, 55 East 86th Street, New York, NY 10128.

pH dependent organic-aqueous partitioning does not occur with non-conjugated 11-nor-delta-9-tetrahydrocanninol-9carboxylic acida (THCA) but does occur with conjugated THCA. John G. Fisher III, Keystone Laboratories, Inc., 30 Garfield St., Suit B, Asheville,NC 28803. Mark Bartalini, Key Stone Laboratories, Inc., and Perry Lovely, Alabama Poison Cnter, 2503 Phoenix Drive, Tuscaloosa, Al 35405 Analysis of Urine for Anionic Surfactants Diana Garside* and James A. Callies. Quest Diagnostics, Inc, 7470 Mission Valley Road, San Diego, CA 92108

Comparative Analysis of Sweat Patches for Cocaine and Metabolites by Gas Chromatography/Mass Spectrometry and Radioimmunoassay David E. Moody, * Alan C. Spanbauer, Elizabeth K. Smith, James L. Taccogno, and Kimberly J. Shaw. Center for Human Toxicology, University of Utah, Salt Lake City, UT 84112

Detection of Δ^9 -THC in Human Saliva by GC/MS and A Continues Flow Immunoassay Guohong Wang^{*}, Thomas J. Foley, Greg Liang, Albert Avila and Connie Chang, LifePoint, Inc, 10400 Trademark St., Rancho Cucamonga, CA 91730

Detection of 7-Aminoflunitrazepam and Flunitrazepam in Hair After a Single Dose of Rohypnol[®] Adam Negrusz^{1*}, Karley B. Hinkel¹, Christine M. Moore² Teri L. Stockham³, Mauli Verma¹, Philip G. Janicak¹, ¹University of Illinois at Chicago Medical Center, Chicago, IL 60612, ²United States Drug Testing Laboratories, Inc., 1700 S. Mount Prospect Rd., Des Plaines,IL 60018, ³ 1700 SE 15 St., Suite,309, Ft. Lauderdale,FL 33316

Precision and Accuracy of Positive Urine Drug Testing Confirmation Results Jay M. Poupko*, James J. Kuhlman, Monica Ramon, James A, Swaby, U.S. Air Force Drug Testing Laboratory, Brooks AFB, TX 78235-5240

Influence of Sodium Fluoride (NaF) Concentration on Quantitative Analysis of Ethanol by Headspace Gas Chromatography (HSGC) in Urine Samples.

Lakshmaiah Sreerama^{1, 2}, Jody K. Nelson*¹, Robert F. Meyer¹, and Glenn G. Hardin¹. ¹Forensic Science Laboratory, MN Bureau of Crim. Apprehension, St. Paul, MN, and ²Dept. of Chemistry, St. Cloud State U., St. Cloud, MN.

Development of Peroxidase-Detect[™] Test for Automated Chemistry Analyzers to Screen Urine Samples Adulterated with STEALTH[™] Weixing Luo*, Amoolya Peapally, Sunil Shama, Kiran ahluwalia and Lakshmi Anne. Microgenics Corp. 46360 Fremont Boulevard, Fremont, CA 94538.

Performance of the Microgenics Ethyl Alcohol Assay on the Boehringer Mannheim Hitachi 717 Analyzer Weixing Luo, Amoolya Peapally, Lakshmi Anne*, Microgenics Corporation, 46360 Fremont Blvd, Fremont, CA 94538.

Distribution of Citalopram in Postmortem Tissues Ashraf Mozayani, and Ronda Nix, Harris County Medical Examiner Office, Joseph A. Jachimczyk Forensic Center, 1885 Old Spanish Trail, Houston, TX 77054-2098 Clinical Implications and Identification of Designer and Drugs of Abuse on Urine Samples Laraine Fuentes-Block, and Marc B. Block, 23553, East Rd., Forest Drive, IL 60047

Amphetamine - beta-Phenethylamine Analysis by Gas Chromatography/Time-of-Flight Mass Spectrometry Raymond Matejczyk*, Ritchard Parry, Nancy Myers and Evaldo DeArmas, LECO Corporation, 3000 Lakeview Avenue, St. Joseph, MI 49085

Comparison of six immunoassays for the detection of amphetamines and ecstasy. Alain G. Verstracte*, Paola Pezzati, Eric J. Van de Velde. Laboratory of Clinical Biology – toxicology, Ghent University Hospital, Belgium and Ospedale Santa Maria Nuova, Florence, Italy

Development of a rapid Screening Method for Cannabinoids in Post Mortem Blood. Rachel D. Fontenot* and Amanda J. Jenkins, The Office of the Cuyahoga County Coroner, 11001 Cedar Road, Cleveland OH 44106 USA

Case report: A polypharmacy suicidal overdose involving loratadine(Claritine) Jeri D. Ropero-Miller, Ruth E. Winecker, Kris A. Flectcher, and Caroline L. Oldenburg, Office of the Chief Medical examier, Chapel Hill, NC 27599, M. Michael Sullivan, Mecklenburg County Medical Examiner, Charlotte, NC 28202, William H. Anderson, Washoe County Sheriff's Office, Reno, NV 89512

Development of a Simple and Universal Extraction Procedure for the SAMSHA Drugs of Abuse (DOA) Using the Waters Oasis® MCX Extraction Cartridge and the Zymark RapidTrace® SPE Robotics Instrument. Michael A. Evans, Brenda J. Sweeny, Karen S. Smith, James W. Plassard, James C. Kraner and Jenny D. Vorpagel, AIT Laboratories, Indianapolis, IN 46241. Yung-Fong Cheng, Pamela C. Iraneta and Michael F. Early, Waters Corporation, Milford Ma. 01757

A Death from Ingestion of 1,4-Butanediol, a GHB Precursor James C. Kraner^{1*}, James W. Plassard¹, Daniel J. McCoy¹, John A. Rorabeck², Kevin B. Smith², Mark J. Witeck², and Michael A. Evans¹. AIT Laboratories, Indianapolis, IN and the ²Lake County Coroner's Office, Waukegan, IL.

A Comparison of Selection Criteria in Meconium Drug Testing James C. Kraner^{*1}, Haywood L. Brown², Linda E. Evans¹, Brenda J. Sweeney¹, Carolyn S. Waller³, Edward M. Bloom³, Weilin Long³, Carol E. Winkler¹, Scott T. Simmonds¹ and Michael A. Evans¹. ¹AIT Laboratories, ²St. Vincent's Hospital, and the ³Indiana State Board of Health, Indianapolis, IN. Disposition of methamphetamine and amphetamine in saliva and plasma following controlled oral drug administration to human volunteers Raf J-F. Scheper, Jonathan M. Oyler, Robine E. Evans, Robert E. Joseph, Jr., Eric T. Moolchan, and Marilyn Huestis, CDM Section, IRP,NIDA, NIH, Baltimore, MD

Preliminary findings on the ingestion of hemp seed oil and urine cannabinod immunoassay screening results Richard A. Gustafson, M.P. Geroge#,Eric T. Moolchan, Willam D.Darwin, John Faniyi, and Marilyn A. Huestis, IRP,NIDA, NIH, Baltimore, MD, and # Quest Diagnostics, Shaumburg, IL

Excretion of $\Delta 9$ -tetrahydrocannabinol (THC), 11hydroxy- $\Delta 9$ -THC (11-OH-THC0, and 11-nor-9-carboxy- $\Delta 9$ -THC(THCCOOH) in human urine following administration of smoked marijuana. Abrabam T. Wtsadik, Willilam D. Darwin, Eric T. Moolchan, Jonathan M.Oyler and Marilyn A. Huestis, Chemistry and Drug Metabolism Section, IRP, NIDA, NIH, Baltimore, MD

Cardiomyopathy in Young Cocaine Abusing Patients Presenting to an Inner City Emergency Department Stephen Winbery, Ph.D.*, M.D., Kari Blaho, Ph.D., Lynda Park, M.D., Barry Logan, Ph.D.** Steven Karch, M.D. Department of Emergency Medicine, UTMG, Memphis, TN; State Toxicology Laboratory, University of Washington, Seattle, WA**; San Fransisco Medical Examiners Office, San Fransisco, CA.

Changing Demographics of Cocaine Abusing Patients Presenting to an Inner City Emergency Department Kari Blaho,*, Stephen Winbery, Department of Emergency Medicine, UTMG, Memphis, TN

Methamphetamine Movement into Memphis Tennessee: Experiences of an Inner City Emergency Department Kari Blaho,*, Stephen Winbery, Lynda Park, Kari Blaho, Stephen Winbery, Department of Emergency Medicine, UTMG, Memphis, TN

Chromate Adulteration in Employment Related Drug Screens Penny D Colbourne*, Yvette M Boisvert, Sharon Parent, Donald F LeGatt and David W Kinniburgh, Dynacare Kasper Medical Laboratories, Edmonton, Alberta, Canada

Detection of Cocaine/Cocaine Metabolite in Vitreous Humor by Cloned Enzyme Donor Immunoassay. Chris W. Chronister*, Jessica C. Walrath, and Bruce A. Goldberger, Department of Pathology, Immunology and Laboratory Medicine, College of Medicine, University of Florida, 2310 S.W. 13th, Gainesville, FL 32608

Intra- and Interindividual Variations in Urinary Levels of Endogenous GHB Marc A. LeBeau, M.S.^{1*}, W. David Darwin, B.S.², and Marilyn A. Huestis, Ph.D.², ¹Chemistry Unit, FBI Laboratory, Washington, D.C. 20535, ²Chemistry nd Drug Metabolism, IRP, NIDA, NIH, Baltimore, MD 21224 Analysis of Biological Specimens for Opiates by Solvent Extraction and Derivatization with d₆-Acetic Anhydride: Application to a Case of Morphine Poisoning. Madeline A. Montgomery, B.S., Rebecca A. Jufer, Ph.D., and Marc A. LeBeau, M.S. Federal Bureau of Investigation Laboratory, Washington, DC.

Cocaine and Metabolite Concentrations after Swallowing Illicit Cocaine Barry K. Logan*§, Kari E. Blaho^, Stephen L. Winbery^, Gene W. Schwilke§, Richard C. Harruff#, §Washington State Toxicology Lab, Bureau of Forensic Laboratory Services, Washington State Patrol, Seattle, WA; ^Dept of Emerg. Med., UT Medical Group, Memphis, TN; #King Co. Medical Exam. Office, Seattle, WA

Detection of Nefazodone (Serzone) in Whole Blood by Gas Chromatography/Mass Spectrometry. Eugene W Schwilke*, Patrick N Friel, Barry K Logan, Washington State Toxicology Lab, Bureau of Forensic Laboratory Services, Washington State Patrol, Seattle WA

A Five Year Statistical Review of Toxicological Findings in Motor Vehicle Fatalities in Cuyahoga County. Krista M. Gubanich,*, Amanda J. Jenkins, The Office of the Cuyahoga County Coroner, 11001 Cedar Road, Cleveland, Ohio

Determination of methadone, EDDP and EMDP inmeconium by GC-PCI-MS. Robin E. Evans, Marilyn A. Huestis and Jonathan M. Oyler, Chemistry and Drug Metabolism Section, IRP, NIDA, NIH, Baltimore, MD

Case Report: A Polypharmacy Suicidal Overdose Involving Loratadine (Claritin®) Jeri D. Ropero-Miller*, Ruth E. Winecker, Kris A. Fletcher, and Caroline L. Oldenburg, Office of the Chief Medical Examiner, Chapel Hill, NC 27599 U.S.A.; J. Michael Sullivan, Mecklenburg County Medical Examiner, Charlotte, NC 28202 U.S.A.; William H. Anderson, Washoe County Sheriff's Office, Reno, NV 89512 U.S.A.

Semi-Automated Assay of Tacrolimus (FK506) Concentrations in Blood by Liquid Chromatography-Electrospray Ionization Mass Spectrometry Michael A. Poquette* and Gary L. Lensmeyer, University of Wisconsin Hospital & Clinics, Division of Laboratory Medicine, 600 Highland Avenue, Madison, WI 53792

Simplified GCMS SIM Screen and Confirmation Analysis for Methylenedioxyamphetamine (MDA) and Methylenedioxymethamphetamine (MDMA) in Air Force Member Specimens. Vincent M Papa, James Kuhlman, Edward Hubster, James Swaby, Air Force Drug Testing Laboratory, Brooks AFB, TX 78235.

Secretion of methamphetamine and amphetamine in sweat following controlled drug administration. Marilyn A. Huestis, Raf J.-F Schepers, Robert E. Joseph, Jr., Diana M. Lafko, Ann E. Basham, Eric T. Moolchan and Jonathan M. Oyler, Chemistry and Drug Metabolism Section, IRP, NIDA, NIH, Baltimore, MD Disposition of Methamphetamine and Its Metabolite, Amphetamine, In Urine Following Controlled Drug Administration Jonathan M. Oyler, Raf J.-F. Schepers, Eric T. Moolchan, and Marilyn A. Huestis, Chemistry and Drug Metabolism, IRP, NIDA, NIH, Baltimore, MD

Modulation of Oxidizing Agents Adulteration by Manipulation of Urinary pH Values Jane S Tsai*, Mahmoud. ElSohly, Shiow-Fen Tsai and Salvatore. J. Salamone, Roche Diagnostics Corp., 9115 Hague Rd., Indianapolis, IN 46250

OnTrak TesTstik Methamphetamine Assay for On-Site Urine Drug Testing Bernadette Oades*, Jane S. Tsai, Demitris Demirtzoglou, Salvatore Salamone Roche Diagnostics Corp., 9115 Hague Rd., Indianapolis, IN 46250

The utility of ofloxacin as a reference marker for hair analysis D. G. Wilkins, A. Mizuno, C.R. Borges and D.E. Rollins. Center for Human Toxicology, University of Utah, SLC, UT

Quantitation of cocaine and metabolites in hair via API-ES LC/MSD. R. Bu. Paulsen, D.G. Wilkins, M.H. Slawsn, K. Shaw, and D.E. Rollins. . Center for Human Toxicology, University of Utah, SLC, UT

α - Thujone and Absinthe: Structural and Metabolic
 Aspects of Neurotoxic Action Karin M. Höld, Nilantha
 S. Sirisoma, and John E. Casida Environmental Chemistry and
 Toxicology Laboratory, Department of Environmental

Driving Under the Influence of GHB Fiona J. Couper* and Barry K. Logan, Washington State Toxicology Laboratory, 2203 Airport Way S., Ste 360, Seattle, WA 98134

Performance Characteristics of 2H5- and 13C4-Butalbital in Serving as Internal Standards for the Quantitation of Butalbital Ray H. Liu*, Graduate Program in Forensic Science, Department of Justice Science, University of Alabama at Birmingham, Birmingham, AL 35294-2060, USA; Wei-Tun Chang, Department of Forensic Sciences, Central Police University, Taoyuan, Taiwan.

Chromium (VI) reduction mediated by cytochrome b5 in human hepatic microsomes leads to hydroxyl radical formation and oxidative damage. Paul J. Jannetto^{1*}, William E. Antholine², Judith M. Myers¹, and Charles R. Myers¹. Dept. of Pharmacology and Toxicology¹, Dept. of Biophysics², Medical College of Wisconsin, Milwaukee, WI. 53226.

A Liquid Chromatography Screening Method Using a Polymer Column with an Alkaline Mobile Phase for Detection of Drugs of Abuse Samer Dashi¹, Victor A. Skrinska^{1*}, Steven H. Y. Wong², Susan B. Gock³, Jeffrey M. Jentzen³, M. Mascarenhas¹, ¹University of WisconsinMilwaukee, ²Medical College of Wisconsin, and ³Milwaukee County Medical Examiner's Office, Milwaukee, WI

Improved Liquid Chromatographic Resolution of Drugs on a Polymer Column with an Alkaline Mobile Phase Melissa Mascarenhas¹, Victor A. Skrinska¹⁴, Steven H. Y. Wong², Susan B. Gock³, Jeffrey M. Jentzen³, Samer Dashi¹, ¹University of Wisconsin-Milwaukee, ²Medical College of Wisconsin, and ³Milwaukee County Medical Examiner's Office, Milwaukee, WI

Death by Strychnine – A Case for Postmortem Redistribution. Kristin M. Rossum*, Glenn Holt and Michael D. Robertson. Office of the Medical Examiner, 5555 Overland Ave. Bld. 14, San Diego, CA 92123.

Mirtazapine in 16 Postmortem Cases Susan B. Gock*, Steven H. Wong, Michael A. Wagner, Tina N. Tripke. Milwaukee Co. Med. Exam. Off., and Dept. Path., Med. Coll. WI, Milwaukee, WI 52232

Application of CEDIA reagents for drug screening dilute urine specimens Lynn A. McGrath, John Wells and Dianne Rampersaud, Maxxam Analytics Inc., Mississauga, Ontario, Canada

Free and total morphine concentrations in postmortem blood Matha J. Burt, Julie Kloss and Fred S. apple, Hennepin County Medical Cener, Clinical Laboratories, Minneapolis, MN

Quetiapine related fatalities Mary K. Mainland, Michael A. Wagner, Susan B. Gock and Steven H. Wong, Milwaukee County Medical Examiners' Office and Dept. of Pathology, Medical College of Wisconsin, Milwaukee, W1

A retrospective study of oxycodone monitoring in pain management Ajar.B. Gobar, Michael A. Wagner, Steven H. Y. Wong, Dept. of Pathology, and Maza Elias, Dept. Anesthesiology, Medical College of Wisconsin, and Anthony Wu, Wu and Assoc., Milwaukee, WI

The use of "Rapid test cups "in corrections – Boon or Bane Jack Wawrzynski (1), Theimann Ackerson (2), Suzanne McMurphy, (3) 1. Director Drug Testing Lab, New Hampshire Department of Corrections, Laconia, NH;; 2. Programs Coordinator, New Hampshire Department of Corrections, Concord, NH, USA, 3. Assistant Professor, University of New Hampshire, Durham, NH, USA

Drugs of abuse testing in a Wisconsin correctional system facility using the Olympus AU640. Williams T¹, Mohorko A¹, Wagner MA^{1,2}, Armstrong G¹, Walczak M¹, Robert D¹, Wong SHY^{1,2}. ¹Drug Evaluation Laboratory - Wisconsin Correctional Services, and ²Dept. Pathology, Medical College of Wisconsin, Milwaukee, WI