



# Society of Forensic Toxicologists, Inc.

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## ToxTalk

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### IN THIS ISSUE

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**REGULAR FEATURES:** Professional Calendar ☼ Career Opportunities ☼ Elmer Gordon ☼ President's Message ☼ Journal Club ☼ Extractions ☼

**TECHNICAL NOTES:** Case Notes: *Most frequently detected drugs in DUI cases in Virginia in 1998* (Valentour et al) ☼ *LSD Military Court Decision* (McBay) ☼ *Drugs in the News: Steroid abuse - a continuing problem in athletics* (Papa) ☼ *Alcohol breath testing Drug testing in Michigan* (Monforte) ☼ Technical Notes: *Amphetamine Analogue Testing - Air Force Drug Testing Lab* (Papa) ☼

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**SPECIAL INTEREST:** Highlights of 1999 SOFT Annual Meeting ☼ SOFT 2000 Board ☼ Recap of SOFT Board Meeting ☼

**INSERTS:** 1999 SOFT Meeting Abstracts ☼ Y2K Meeting Information ☼ Call for Papers - JAT Special Issue ☼

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## SOFT 2000 Milwaukee

*Launching thirty years of forensic toxicology into the next millennium*

**Hyatt Regency October 2-6, 2000**

### ADDITIONAL DIRECTORS

**Bruce Goldberger, Ph.D.**

**Daniel Isenschmid, Ph.D.**

**Amanda Jenkins, Ph.D.**

**Thomas F. Simonick, B.S.**

**Graham Jones, Ph.D., DABFT**

ex officio:

**Joseph J. Saady, Ph.D., DABFT**

**Joseph R. Monforte, Ph.D., DABFT**

(ToxTalk Editor)

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

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

SOFT is a supporting organization of the American Board of Forensic Toxicology

## PRESIDENT'S MESSAGE by Marilyn Huestis, Ph.D.

The 1999 SOFT annual meeting in Puerto Rico was wonderful. It was rewarding to have the opportunity to see and enjoy so many members. For those of you who were unable to attend this year's meeting, we missed you and hope to see you next year in Milwaukee. Based on the hosts' presentation in Puerto Rico, it looks to be a wonderful scientific and very pleasant social gathering.

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 interaction with students, toxicologists just entering the field, 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 the outstanding 1999 SOFT Annual Meeting. We enjoyed the science, the warmth of the Puerto Rican people and the beautiful location. We especially welcomed our new members and first time attendees and hope that they 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.

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, updated the Bylaws and distributed the proposed changes to the document to all members. The revised bylaws were accepted by the membership at the SOFT annual 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 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 selected Sandra Valtier, a recent master's degree recipient and student of John Cody, and Robin Evans, a doctoral student at the University of Maryland who is working with us at NIDA, as this year's ERA recipients. Also, Lee Hearn and a select group of scientific judges awarded four individuals \$1,000.00 each for the best two oral and best two poster presentations at the Puerto Rico meeting. The Board of Directors has voted to offer four full meeting and workshop registrations for the best presentations at next year's SOFT 2000 meeting in Milwaukee, WI. Plan ahead to attend the upcoming SOFT annual meetings including 2001 in New Orleans, LA, 2002 in Detroit, MI, and 2003 in Portland, OR. The Board of Directors accepted kind offers to host the 2004 meeting in Washington, DC by Marc Le Beau and 2005 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. This year we also greatly improved communication with our wonderful Administrative Assistant, Bonnie Fulmer, by outfitting the SOFT Office with a new computer and email capability. I also think that offering dues payment and meeting registration by credit card has been helpful and useful for the membership.

I established five Ad Hoc committees this year: The Drug-Facilitated Rape and Sexual Assault Committee chaired by Marc Le Beau, the Visioning Committee chaired by Joe Saady, the Continuing Education Committee chaired by Christine Moore and the Ethics Committee chaired by Jeanne Beno. Laurel Farrell, kindly accepted the position of chair of the Meeting Host Guidelines Ad Hoc Committee and 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. Our 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

*(continued on Page 4)*

# S.O.F.T. Y2K OFFICERS AND DIRECTORS

Subsequent to the elections held at the recent 1999 SOFT Annual Meeting, SOFT officer and other directors for the year 2000 are:

**PRESIDENT - Robert Zettl, B.S., M.P.A:**

**VICE PRESIDENT - Michael Smith, Ph.D., DABFT**

**SECRETARY - Amanda Jenkins, Ph.D., D-ABC**

**TREASURER - Laurel 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**

## SYNOPSIS OF SOFT BOARD MEETING IN PUERTO RICO

*Submitted by SOFT Secretary, COL Michael Smith, Ph.D., DABFT*

President Marilyn Huestis presided over the meeting held October 11, 1999, during the annual meeting in San Juan, Puerto Rico. Committee reports were given and are highlighted. Yale Caplan reported that he and the Secretary had completed a draft of the Bylaws with proposed changes and these were published in the September edition of Tox Talk. The complete document was submitted to the members for approval at the business meeting. Secretary Smith announced that SOFT added 38 new members in 1999 bringing total membership to 563; 22 charter, 420 full, 80 associate, 27 retired and 14 student members. Joe Saady, Nominating Committee Chair, announced candidates for SOFT Officer positions: Bob Zettl, President; Michael L. Smith, Vice President; and Amanda Jenkins, Secretary. The committee also nominated Dan Isenschmid to serve two more years on the Board and added Tim Rohrig and NGS Rao as new Board directors. Each was elected to their respective offices at the business meeting. Joseph Monforte, ToxTalk editor, was not present but sent a report outlining the savings to SOFT from bulk mailing of the newsletter and asked officers and board members to encourage other members to contribute material. Bruce Goldberger, editor of the SOFT Special Edition of the Journal of Analytical Toxicology, noted the high quality of the 29 articles published at a total cost to SOFT of \$5,300. Dr. Goldberger made a motion that one author in each future article for this Special Edition be a SOFT member, and the Board approved. Barbara Manno, ERA Committee, announced that Robin Evans, IRP, NIDA, Baltimore, MD, and Sandra Valtier, Clinical Investigations, USAF, San Antonio, TX, had won the ERA awards. This meeting's registration fee and \$1000 of travel expenses were paid for each. Graham Jones reported that the Toxicology Laboratory Guidelines of 1997 were redacted in a format similar to ISO documents and this document will be distributed for review then submitted for approval of the members at the next business meeting.

Following the committee reports, meeting hosts gave their reports. NGS Rao described the success of the 1998 joint meeting with TIAFT in Albuquerque, NM. The scientific content was excellent, and the meeting netted \$89,498. Following guidelines by the Board, he distributed TIAFT's portion to the Developing Countries Fund, future TIAFT meeting hosts and the TIAFT treasurer.

Flor Mattos reported that the current annual meeting had 314 registrants at the time of the board meeting. She highlighted the Puerto Rican night that was one year in planning and the good scientific presentations in progress. Future meeting hosts Susan Gock (presenter) & Steve Wong (not present) [Milwaukee 2000], Pat Pizzo [New Orleans 2001], Dan Isenschmid & Brad Hepler [Detroit 2002] Mark LeBeau [Washington 2004], and Gary Kunsman [San Antonio 2005] gave detailed presentations of their accomplishments. Kent Johnson [Portland 2003] could not attend but sent a report of his committee's activities. Each plan featured excellent opportunities for social and educational interactions. In addition, the Milwaukee group presented a preliminary program, and Mark LeBeau announced that the FBI deputy director approved educational funding to supplement each Washington 2004 attendee's registration fee.

President Huestis informed the Board that she had appointed an Ad Hoc Ethics Committee with Jeanne Beno, Chair. She also thanked the Board and Officers for hard work this past year and stressed our need to push for low cost educational courses.

After completion of committee issues, the Board met in closed session to discuss additional business. ❧

# '99 SOFT PUERTO RICO MEETING HIGHLIGHTS

## "SCIENCE IN PARADISE"

*Submitted by Bob Zettl*

You couldn't help but be overwhelmed by the beauty of the Westin Rio Mar Beach in Rio Grande, Puerto Rico, when you arrived. From the iguanas by the front entrance to the flowers and birds in the lobby area, from the golf courses to the beaches and the view of the ocean, there is no doubt this year's meeting location tops the list as most beautiful.

The meeting began in normal fashion with six workshops covering a broad range of topics on Sunday and Monday. Over 460 attendees gained additional knowledge on the topics of Drugs, Driving, and Traffic Safety; Drug Testing Issues in Puerto Rico; Pathology for Toxicologists, Ion Trap Mass Spectrometry, Pharmacology; and Drug Facilitated Sexual Battery. Thank you from all of SOFT to the workshop chairs for the time that dedicated to coordinating their workshop and to the SOFT members that willingly continue to offer their time to provide education to their colleagues. Continuing education has and will continue to be a need addressed by SOFT.

Dr. Lee Hearn coordinated the scientific program. A big THANKS to Lee and all of the folks who volunteered as moderators for designing a strong scientific program. There were a total of 87 papers slated for presentation as platform talks or posters. Thank you to all of the 315+ meeting attendees who actually gave up the beach and attended the scientific sessions. This year, for the first time, SOFT awarded prizes for best platform and poster presentation. The votes are still being counted, but if available, the winners will be noted elsewhere in this issue of **ToxTalk**. It was too tough to easily decide among the many excellent presentations. SOFT would like to congratulate all those who participated, and for their contribution in making the Puerto Rican meeting truly memorable.

FUN – yes SOFT, as usual, had a good mix of fun and serious science. Early Monday morning approximately 35 athletic forensic toxicologists participated in the Tox 'n Purge Fun Run/Walk. This was the first time that the Westin had coordinated an event like this. I'm not sure who had more fun – the participants or the hotel staff. Teri Stockham took first place in the women's division, and Mike Robertson won it for the men. Congratulations to all of you who participated and were still smiling after getting soaked during a cloud burst! More fun was had during both the Welcoming & President's Receptions as members renewed old friendships and made new ones. The most special social event of the meeting was the Puerto Rican Night planned and hosted by the local hosts. The evening included time to shop or tour Old San Juan, a wonderful dinner, free rum drinks, an excellent band, free rum drinks, dancing in the rain, free rum drinks, and an excellent dance troupe performance.

And last but not least, a word about our exhibitors and other sponsors. You help in many behind-the-scene ways and, by doing so, provide the needed support to put on meetings such as this. So to each and every one of you, thanks from SOFT.

Now that El Yunque has bid us "adios", I hope all of you who attended found the meeting to be a success by all traditional SOFT standards – good food, good friends, and good science. We look forward to seeing everyone in Milwaukee next year! Y2K/M ☺

### SOFT EVENTS AT AAFS MEETING (Reno, Nevada)

**SOFT Board Meeting - Tuesday, 2/22, 7 p.m.**

**Elmer Gordon Open Forum - Thursday, 2/24, 7:30 p.m.**

Please confirm date and time in your meeting program which will also note the location.

#### **PRESIDENT'S MESSAGE** *(continued from page 2)*

expected as our society grows, but 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. ☺

# SOFT EDUCATIONAL RESEARCH AWARD (ERA) CALL FOR CANDIDATES

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

To apply, submit the following documents by the **May 1, 2000, deadline** to Barbara R. Manno, Ph.D., SOFT ERA Chairman, LSU Medical Center, 1541 Kings Hwy, P O Box 33932, Shreveport, LA 71130-3932.

- ◆ Resume of student
- ◆ Copy of abstract to be presented at SOFT 2000 Annual Meeting
- ◆ Description of research (research proposal supplemented with current findings)
- ◆ Cover letter from the research advisor providing background information about the student, the proposed research, and the advisor's or institution's willingness to receive and administer funds.) ☼



## SOFT 2000 Milwaukee

*Launching thirty years of forensic toxicology into the next millennium*

**Hyatt Regency October 2-6, 2000**

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

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	Susan Gock, M.S.	414-223-1228	same	sgock@execpc.com
Secretary:	Christine Goodall, B.S.	608-263-7031		cr.goodall@hosp.wisc.edu

### MEETING AT A GLANCE:

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

# CASE NOTES: Most Frequently Detected Drugs in DUID Cases in Virginia in 1998

Submitted by: Submitted by Jim Valentour, Joe Saady and Randall Edwards

Ever since 1988 blood samples have been collected from Virginia drivers suspected of driving under the influence of drugs and submitted for toxicological analyses to the Central Laboratory of the Virginia Division of Forensic Science. Immunoassays and GC/NPDs are used for screening. GC/MS is used to confirm all positives and to quantitate most; GC/NPD or GC/ECD are used for the remaining quantitations.

As would be expected, trends in drug prevalence in these samples have varied over the years. For example phencyclidine was one of the most common drugs in our DUID cases in the late 1980s but is only occasionally seen today. Marijuana positives have gradually risen. Alprazolam has become more common in recent years and even more recently, carisoprodol/meprobamate positive cases have risen. For those readers who may have some interest in our statistics, we include our 1998 data for the most frequently detected drugs and metabolites in DUID cases in Virginia:

DRUG OR METABOLITE	NO. CASES POSITIVE	% CASES POSITIVE	MEAN CONC. mg/L	MEDIAN CONC. mg/L	STD. DEVIATION mg/L
THC-COOH	251	40.5	0.034	0.021	0.0309
THC	215	34.6	0.0032	0.002	0.00281
DIAZEPAM	67	10.8	0.40	0.23	0.44
NORDIAZEPAM	78	12.6	0.36	0.20	0.39
ALPRAZOLAM	59	9.5	0.062	0.05	0.044
B.E.	70	11.2	1.06	0.74	1.04
COCAINE	44	7.1	0.039	0.03	0.034
CARISOPRODOL	38	6.1	7.4	5.5	6.0
MEPROBAMATE	43	6.9	23.8	21	15.4
BUTALBITAL	45	7.2	9.04	6.9	6.8

## LSD MILITARY COURT DECISION

Submitted by Arthur McBay, Ph.D.

**United States Court of Appeals for the Armed Services - *United States v Christopher W. Campbell* USCA**  
Dkt. No. 97-0149/AR Crim. App. No. 9400527

This was a urine LSD positive case in which the defendant was found guilty and was punished, received a dishonorable discharge, and total forfeitures.

Ordered and Adjudged: That the decision of the United States Army Court of Criminal Appeals is reversed in accordance with the opinion filed herein this date (April 20, 1999). The findings and sentence are set aside. The Charge is dismissed.

"Under applicable case law, the prosecution cannot rely solely on the presence in the body of the drug or its constituent elements. The cases which permitted the inference of wrongfulness strictly require that the prosecution also establish the reliability of the testing methodology and explain the significance of the test of the accused's sample. The prosecution's expert testimony must show: (1) that the "metabolite" is "not naturally produced by the body" or any substance other than the drug in question (see *United States v Harper*, 22 MJ 161 (1990) (CMA 1986); (2) that the cutoff level and reported concentration are high enough to reasonably discount the possibility of unknowing ingestion to indicate a reasonable likelihood that the user at some time would have "experienced the physical and psychological effects of the drug," see *id* at 163; *United States v. Murphy*, 23 MJ 312 (CMA 1987); and (3) that the testing methodology reliably detected the presence and reliably quantified the concentration of the drug or metabolite in the sample. see *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 590 (1993) (expert scientific testimony must "establish [] a standard of evidentiary reliability"). Once this showing is made, the prosecution is not required to disprove the possibility of unknowing ingestion in order to sustain the Legal sufficiency of a conviction, see e.g., *United States v. Ford*, 23 MJ 336 Z(CMA 1987).

**Editor's note:** In this case, the U.S Court of Appeals for the Armed Services reversed the guilty decision of the U.S. Army Court of Criminal Appeals by a majority vote of 3 to 2. The major opinion stated, in part, that the test result (1) did not reasonably exclude the possibility of a false positive and (2) did not indicate a reasonable likelihood that at some point a person would have experienced the physical and psychological effects of the drug. ☹

# "DRUGS IN THE NEWS"

## **TEROID ABUSE – A CONTINUING PROBLEM IN ATHLETICS** *Submitted by Vincent Papa, Ph.D., Air Force Drug Testing Laboratory, Brooks, AFB, Texas 78235\**

With the events of the summer of 99 such as the doping scandals in cycling, track and field, and the Home Run race in Major League Baseball, anabolic and other steroid precursor use have figured prominently in various news reports. The International Olympic Committee and other agencies have banned the use of various anabolic steroids, masking agents and precursors from a number of sports (1). Some of these compounds are nutritional supplements, which are precursors to testosterone and the synthetic steroid nandrolone. The delta - 4 agents include 4-androsten-3, 17-dione; 19-nor-4-androsten-3, 17-dione and others. Delta - 5 agents consist of dehydroepiandrosterone (DHEA), 5-androsten-3, 17-dione, 19-nor-5 androsten-3, 17-dione, etc.

These agents come in different dosage forms and are commonly taken orally or can be injected. Since these substances are extensively metabolized a sensitive and specific means such as GC/MS is employed. When these agents are injected, the window of detection is days as opposed to weeks to months when they are taken orally (2). The results are reported in terms of the testosterone (T): epitestosterone (E) ratio or the presence of the agent itself. The method of detection is generally a RIA screen and a GC/MS confirmation.

Recently, because of the extensive use of these agents by athletes and the general public, concern has been raised on their effects on steroid testing. In a study by Uralets et al and others presented at the October 1999 SOFT meeting (3) in San Juan, Puerto Rico both delta - 4 and 5 steroids were orally given to volunteers and urine collected at various time intervals and analyzed via standard methodology. Results showed that the delta - 4 steroids were metabolized to androsterone and etiocholanolone via T giving a brief increase in the T/E ratio above the 6:1 cutoff. Administration of delta 5 steroids caused a less dramatic increase in the ratio. Because of the number and variety of these compounds more case reports describing the effects on steroid testing will be required.

- References: 1. Kintz, P., Crimele, V., Ludes, B., Physiological Concentrations of DHEA in Human Hair, *J. Anal. Tox.* pg 424-428, 1999.
2. Uralets, V.P., Gillette, P.A., Over-the-Counter Nutritional Supplements, Precursors of Testosterone and Nandrolone, SOFT Annual Meeting, San Juan Puerto Rico, 1999.
3. Hold, K.M, Borges, C.R., Wilkins, D.G., Rollins, D.E., Joseph, R.E., Detection of Nandrolone, Testosterone and their esters in Rat and Human Hair Samples, *J. of Anal.Tox.* pg 416-423, 1999.

\*The opinions expressed herein are strictly those of the author and are not to be construed as reflecting the views, policies, or positions of the Department of the Air Force, The Department of Defense, or the U.S. Government.

## **ALCOHOL BREATH TESTING** *Submitted by Joseph R. Monforte, Ph.D., DABFT*

Defense attorneys in Maricopa County (AZ) asked a judge to disqualify the Maricopa County Attorney's Office from prosecuting more than 100 drunk driving cases in light of allegations of evidence tampering relating to breath-test results. The request is based upon an allegation that the State Department of Public Safety (DPS) crime lab maintained a secret file of errors and failed tests involving the Intoxilyzer 5000 that is used by police statewide in drunken-driving cases. The attorneys allege that DPS and county prosecutors acted in collusion to hide information about faulty instruments from lawyers defending clients accused of driving under the influence because DPS informed several deputy county attorneys about the problems in 1996 and 1997. Deputy County Attorneys deny the allegations.

The allegations have already had significant local repercussions. A judge in Glendale, AZ tossed out breath-test evidence against 88 defendants accused of DWI. The judge found that the DPS crime lab engaged in "bad faith" dealings in handling breath-test evidence. DPS officials have denied that the crime lab did anything legally or scientifically improper to justify the judge's ruling. Documents have been filed urging the state Supreme Court to offer guidance on the issue.

## **DRUG TESTS HALTED IN MICHIGAN** *Submitted by Joseph R. Monforte, Ph.D., DABFT*

USA Today reported that a federal judge in Detroit called a temporary halt to Michigan's requirement that welfare applicants undergo drug testing. A judge ruled that the testing is "likely unconstitutional" and barred the state from conducting further tests pending a hearing December 14. The ACLU is challenging the tests, begun in October, on grounds that they violate protections against unreasonable searches. Michigan states the tests help prepare welfare applicants to work in a state where most private employers require drug tests. So far, 8% of welfare applicants have tested positive for drugs, primarily marijuana. ♀

## TECHNICAL NOTE: AMPHETAMINE ANALOGUE TESTING - AIR FORCE DRUG TESTING LAB

Submitted by Vincent Papa, Ph.D., Air Force Drug Testing Laboratory, Brooks, AFB, Texas 78235\*

The latest from US Customs and DEA reports has shown seizures of MDMA (Ecstasy) tablets are up more than 2X the previous 1997 record. Ecstasy is a designer drug that has been evaluated in the past as an adjunct to psychotherapy. Due to its widespread use as a recreational drug, the DEA has scheduled the drug as Schedule 1. The drug is usually taken in oral doses of 100 – 150 mg as the hydrochloride. Peak levels after ingestion of these dosages in urine can range up to 17,000 ng/ml (1)

The Air Force Drug Testing laboratory detects the presence of MDMA in amphetamine testing. The window of detection for ecstasy and related compounds is up to three days. MDMA when ingested is metabolized to MDA. Therefore, when it comes to charging individuals with use only MDMA should be charged since any MDA present is most likely due to metabolism of the drug. Also, it must be kept in mind that DEA studies have shown that in confiscations that supposedly MDMA tablets can contain a variety of compounds like MDA and Eve (MDEA).

Ecstasy tablets can cost up to \$ 45 each on the street. Ecstasy is a hallucinogen that causes euphoria. Researchers have shown that the drug damages nerves that produce serotonin. Serotonin influences mood, memory, pain perception, sleep, appetite and sexual activity. The Drug Testing laboratory has recently seen an increase in the number of MDMA positive specimens.

The Air Force Drug Testing laboratory employs the Roche On-Line method (2) to screen for the amphetamines. Those specimens that are presumptive positive for the amphetamine class (cutoff – 500 ng/ml) are analyzed by the Abbot TDX method as an adjunct testing method before being re-analyzed with the On-line procedure. Subsequently, the presumptive positive specimens are extracted by a Solid Phase extraction technique and analyzed by GCMS-EI employing a DB1 (12.5 m and 0.25 mm internal diameter). Ions monitored are m/z 375,254, 368 with a d-5 MDA and MDMA internal standard. Only those specimens exhibiting peaks identical to the standard and control retention times of MDA, MDMA and MDEA are analyzed for analogues. Recently, the positive rate for those specimens tested for analogues has increased from 16 – 30 % (through July 1999) .

- References :
1. Baselt, R., Disposition of Toxic Drugs in Man, Fourth Edition, 1995
  2. Methamphetamine package insert, Roche Diagnostics, 1999

\*The opinions expressed herein are strictly those of the author and are not to be construed as reflecting the views, policies, or positions of the Department of the Air Force, The Department of Defense, or the U.S. Government. ☺

## EXTRACTIONS

From the Rieders Renaissance Report, V1 No 1, Fall 1999: "*Research Article: Methemoglobin Stabilizing Solution*" by Anthony J Macherone, M.A.. Short article noting agents which frequently cause methemoglobinemia and use/source of these agents. Also states that an aqueous solution has been developed which maintains the methemoglobin concentration at the value it had at the time of collection for at least one month. For further information, contact the Fredric Rieders Family Renaissance Foundation at 215-784-9294 (frfoundation@frfoundation.org -or- www.frfoundation.org). A seminar schedule is also available. ☺

**JAT Call For Papers:** See the insert with this issue of ToxTalk.

Deadlines: March 13, 2000 for abstracts

March 27, 2000 for completed papers

## ABFT NEWS

Dr. Graham Jones reports that at the recent ABFT Board meeting in San Juan, Puerto Rico, the following medical examiner laboratories were approved for certification by the American Board of Forensic Toxicology:

Bexar County, San Antonio, TX    Director: Gary W. Kunsman, Ph.D., DABFT  
Wayne County, Detroit, MI    Director: Bradford R. Hepler, Ph.D., DABFT ☺

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## 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 2 or 3 hours behind the east coast.  
The e-mail address is : DrMonforte@aol.com

Other items of interest to SOFT members are also welcome.

**Next deadline: February 1, 2000**

# ELMER GORDON OPEN FORUM

## AN OPPORTUNITY FOR INFORMAL DIALOGUE

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

**CONGRATULATIONS ARE IN ORDER . . .** J. Robert Zettl has recently been honored with the Borkenstein Award. He and Karen have been further blessed with a granddaughter, Paxton, born September 1st. Dr. James Valentour of the Virginia division of Forensic Science (Richmond) will be retiring at the end of December. You may send your congratulatory wishes to Jim at 1474 Hermitage Road, Manakin Sabot, VA 23103. Jenna Farrell, daughter of Laurell, brought home a gold medal from the World Jumprope Competition in St. Louis. Her team took 1st place in the Junior Mixed Teams ages 15-17 division.

Dr. William Eckert, renowned forensic pathologist, died September 17 at the age of 73. ☞

## 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 information is confirmed by the person who submitted it. If you have a job position available, FAX (480-595-6663) or E-MAIL (DrMonforte@aol.com) to ToxTalk or mail to: Dr. Joseph Monforte, ToxTalk Editor, 42408 N. Sombrero Rd., Cave Creek, AZ 85331-2821.

**Ph.D. toxicologist:** work in lab that directs screening and development of safety evaluation of novel biopharmaceutical products for the treatment of CNS disorders and drug delivery polymer products for cancer treatment. The ability to interpret results and summarize study conclusions clearly and concisely is essential. Research facility in Maryland, excellent benefits and opportunity for advancement. Contact Bob Griese Ph: 609-584-8733 ext 235 or e-mail 915613@candseek.com ☞

**Don't forget to check the SOFT Web site for current career openings:  
[www.soft-tox.org](http://www.soft-tox.org)**

## PROFESSIONAL CALENDAR

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

Future meetings: 2001 - New Orleans, LA - Pat Pizzo  
2002 - Detroit, MI - Dan Isenschmid /Brad Hepler  
2003 - Portland, OR - Kent Johnson

**American Academy of Forensic Sciences (AAFS) annual meeting:** February 21-26, 2000, Reno, NV. Contact AAFS at 719-636-1100.

**California Association of Toxicologists:** 2/05/2000: "New Technologies for the New Millennium" Call Jeff and Susan Zehnder, Sacramento, CA (916) 366-3917; 5/2000 Call Bob Taylor and Dan Anderson, Los Angeles, CA (213) 343-0530; 8/2000 Call Bill Phillips, Sacramento, CA (916) 227-3620 ☞

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