



AACT Election Results 2006

Results from the 2006 election are in. G. Randall Bond, MD, ABMT, a current member of the AACT Board of Trustees, was elected President. His term will begin after the meeting in San Francisco. E. Martin Caravati, MD, MPH, ABMT, also a current member of the AACT Board of Trustees, was elected Secretary-Treasurer. His term will also begin after this year's Annual Meeting.

Elizabeth J. Schaman, Pharm.D., DABAT, BCPS and Michele Greenberg, MD, MPH were elected to a second, three year term on the Board of Trustees. There were two, new Board of Trustees elected:

Maria Mercurio-Zappala, RPh, MS, CSPI, DABAT Managing Director, New York City Poison Control Center



Maria Mercurio-Zappala received her BA in Pharmacy from St. John's University in 1984 and worked in retail pharmacy until 1987 when she began working at the New York City Poison Control Center as a Poison Information Specialist. She was certified in 1998 and recertified again in 1993

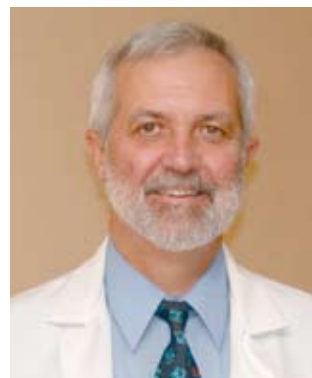
and 2000. In 1994, she resumed her studies at St. John's University for her Master's degree in toxicology, which she completed in 1997. In 1998, she returned to St. John's University to complete her PhD in toxicology. In 1999, she became the Managing Director of the New York City Poison Control Center (NYC PCC), and became a diplomat of ABAT in 2000.

Maria Mercurio-Zappala has been involved in three Toxicology Societies, including a member of the Abstract Review Committee for the American Academy of Clinical Toxicology, a member of the Scientific Affairs Subcommittee for the American Board of Applied Toxicology, and various subcommittees within the American Association of Poison Control Centers. These include the Scientific Review Subcommittee, the Data Collection Subcommittee, the Staff Development Subcommittee, and the Benchmarking/Quality Assurance/Audit Subcommittee. She was the President of the New York State Association of Poison Control Centers and Sub-Committee chair

for the New York City Department of Health and Mental Hygiene Nursing Quality Improvement committee.

She was awarded the 1997 American Association of Poison Control Centers Research Award for her project titled Carbaryl poisoning; 2-PAM or Not 2-PAM. In addition, she is currently conducting research that involves heavy metal poisoning in a rat hippocampal cell line. Mrs. Mercurio-Zappala has also authored the Thallium chapter in Goldfrank's Toxicological Emergencies, as well as various articles. She is the Coordinator of the Animal Research Program at the NYC PCC.

Alan Woolf, MD, MPH



Alan Woolf has been a member of the AACT since 1987 and currently serves as co-chair of the AACT's Special Interest Group on Herbs & Dietary Supplements. He has also served as a member of the AACT's International Awards Committee since 1994. Since 2003, he has participated on the Expert

Panel on Pre-Hospital Consensus Guidelines, a project co-sponsored by AACT, AAPCC, and ACMT. He is currently the deputy editor for *Clinical Toxicology*, an associate editor of the *Poisindex*[®] electronic database, and medical editor of *The Children's Hospital Guide to Your Child's Health & Development* (Perseus Press, Cambridge, MA, 2001). He has also previously served both as a member of the Board of Directors and as President of the American Association of Poison Control Centers.

Dr. Woolf received his BS degree from Stanford University, his MD from the University of Chicago Pritzker School of Medicine, and he completed a pediatric residency and fellowship at Duke University Medical Center. He also completed master's degree training in public health at the University of North Carolina at Chapel Hill and is both a board-certified pediatrician and a board-certified medical toxicologist. Dr. Woolf currently directs the program in environmental medicine, fellowship training in pediatric environmental health, and the Pediatric Environmental Health Center, all at Children's

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In The Literature

David Juurlink, MD, PhD

Aminotransferase elevations in healthy adults receiving 4 grams of acetaminophen daily: a randomized controlled trial. Watkins PB, Kaplowitz N, Slattery JT et al. *J Am Med Assoc* 2006;296(1):87-93

Background: It is frequently taught that acetaminophen doses of up to 4 grams per day confer little risk of liver injury, and that hepatotoxicity from therapeutic use of acetaminophen is rare in patients without additional risk factors. Most studies of acetaminophen toxicity familiar to toxicologists define 'hepatotoxicity' when either the AST or ALT level exceeds 1000 U/L. However, the incidence of lesser degrees of aminotransferase elevation during therapeutic dosing of acetaminophen remains unclear.

Methods: The investigators randomized 147 healthy volunteers to one of 5 treatment regimens: placebo (n=40), acetaminophen 1000 mg every 6 hours (n=27), or the same dose of acetaminophen plus therapeutic doses of morphine (n=26), hydro-morphine (27), or oxycodone (27). A large number of patients (n=196) were excluded from the trial; the reasons for this were not clearly stated, but patients receiving other medications, as well as those with evidence of hepatitis B or C or recent drug use were excluded. Pretreatment alcohol use by participants was not characterized. Treatment was continued for up to 14 days, and routine liver chemistries (AST, ALT, ALP, α GST) were measured daily for 8 days and at least every two days thereafter. The protocol was stopped in patients whose AST or ALT exceeded 120 U/L (3 times the upper limit of normal). The research was conducted at a contract research organization where patients received a standardized diet without access to other foods or beverages.

Results: The "average patient" was a 34 year-old Hispanic man with a body-mass index 25.7. None of the participants assigned to placebo had a maximum

ALT of more than 3 times the upper limit of normal (ULN). In contrast, 39% of patients in the other treatment arms experienced a maximum ALT of more than 3 times ULN, and 25% had a peak ALT value at least 5 times ULN. The highest recorded ALT value was 636 U/L. Significant aminotransferase elevations (> 3 times ULN) were delayed (none occurred during the first three days of treatment) and protracted, remaining > 3 times ULN for a median of 6.5 days after discontinuation of the study drug. As a result, acetaminophen was often undetectable while the ALT remained elevated. There were no statistically significant differences in aminotransferase levels among the active treatment groups. Interestingly, patients of Hispanic background (who comprised 57% of study participants) were more likely than non-Hispanics to experience a maximum ALT greater than 3 times the upper limit of normal (relative risk 1.9; 95% confidence interval 1.1 to 3.3).

Implications for Practice: Although some important details are missing regarding the health status of participants in the study, the findings indicate that initiation of acetaminophen therapy at 4 grams per day in healthy adults is associated with clinically significant aminotransferase elevations. The incidence of these abnormalities is greater than generally appreciated, and the study raises the intriguing possibility that ethnicity may modulate acetaminophen hepatotoxicity. The clinical significance of these laboratory abnormalities, as well as the extent to which they would have progressed (or even possibly resolved) with ongoing treatment is unknown. Toxicologists should be aware that aminotransferase elevations during therapeutic acetaminophen dosing are common and occasionally striking, and that these abnormalities may persist for a week or more after treatment is discontinued.

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Hospital Boston. He is also an Associate Professor of pediatrics at Harvard Medical School and Fellow of The Academy at Harvard Medical School.

Dr. Woolf's research interests have focused on the medical and epidemiological aspects of toxicology in vulnerable populations, the development of

antidotes, the neurotoxicity of environmental toxins such as lead, manganese and trichloroethylene, and studies of childhood poisoning prevention. His most recent studies have included investigations into the safety of medicinal products and dietary supplements (e.g. nicotine patches, brimonidine, ephedra, and yohimbe), with grant support from both the NIH and ATSDR.