

Volume 23, Number 2 March 2013 American Academy of Clinical Toxicology

Message from the President: Robert Hoffman, MD

Continuing Education: Current and Future Directions

One of the core values of the Academy is to provide highquality multidisciplinary education. With that in mind I would like to update you with some current and future initiatives here at AACT. As I hope you are all aware, the North American Congress of Clinical Toxicology (NACCT) is the premier American meeting in toxicology where people from all branches of health care and science come together to exchange information and ideas. This year's meeting will be in Atlanta, the home of the Centers for Disease Control and Prevention (CDC) to emphasize the strong relationship between toxicology and our partners in government. We are very fortunate that the keynote speaker will be Thomas R. Freiden, MD who is the current director of the CDC and Administrator for the Agency for Toxic Substances and Disease Registry (ATSDR). Prior to assuming his responsibilities at the CDC in 2009, Dr. Frieden served as the Commissioner of The New York City Department of Health and Mental Hygiene where he worked extensively with the New York City Poison Control Center. In addition to Dr. Frieden's presentation there will be the familiar opportunities for continuing education, such as symposia from groups around the world and the two presymposia presented by ACMT and AACT. I encourage you all to come to NAACT in Atlanta and to submit

abstracts of your work as the abstract tool is now open. I am also happy to announce that cities have been confirmed for NAACT 2014 (New Orleans) and NACCT 2015 (San Francisco). These venues were selected by a team of planners lead by Karen Simone (representing AACT) and Jay Schauben (representing our partners at the American Association of Poison Control Centers) working closely with Leigh DeLaTorre at Contemporary Forums (our conference management group). Their leadership and dedication deserve praise. The planning and implementation

> of NACCT is no easy task and I would also like to publically acknowledge a few other people who have essential roles for NACCT 2013; Kennon Heard as scientific chair, and Mark Kostic as abstract chair.

Although education is an essential component of job performance and patient care, regulatory bodies mandate that we certify our continuing education. This certification sets a minimum standard and serves as a commitment to the public and our colleagues that we have taken our professional responsibilities to heart. Because the Academy is an accredited CME provider we can not only assure the quality and independence of the educational programs we sponsor, but we also can provide participants with lowcost certification of their CME activities. Maintenance of the Academy's status as a CME provider is a year-round

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AACTion

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AACT Administrative Office

6728 Old McLean Village Drive McLean, VA 22101 Phone - (703) 556-9222 Fax - (703) 556-8729 www.clintox.org

Administration

Laura Degnon, CAE Executive Consultant

Sarah Shiffert Executive Director

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PRESIDENT'S MESSAGE CONTINUED

activity and would be impossible without the extraordinary efforts of a team lead by Matt Sztajnkrycer and Bryan Hayes. Besides maintaining the Academy's status as a provider, they also set the standards for, and monitor the CME activities at other events during the year, most notably the EAPCCT congress. This year's EAPCCT will be in Copenhagen and based on the program and the venue I would strongly encourage going.

Both NAACT and EAPCCT are outstanding educational venues, but education is a year-round activity. Unfortunately not everyone has the time and finances necessary to attend these and other events. So, in the next year, the Academy will begin to provide year-round CME activities. Plans are underway to create and deliver outstanding CME in virtual environments where learning can occur without travel. Some of you may have already participated in an exceptional Webinar on medicines made from venoms that was presented by a team from the Envenomations Special Interest Group (SIG), coordinated by Deborah Larison and Keith Boesen. There will be more like this in the future and I encourage all of the SIGs to consider similar presentations. Webinars are just one educational medium. While they offer the advantage of participation from your home or desk and their synchronous (real-time) nature fosters audience participation, they are limited by that very design which necessitates learning at a given time on a given day. The Academy will also provide asynchronous CME activities allowing distanced learning to occur on the participant's own schedule. Some of these may include the ABAT teaching modules being developed by a team lead by Kristen Engebretsen.

The goal is simple, for members to have year-round options to learn in a variety of formats that best serve their personal needs. For those of you interested in developing learning tools please contact the appropriate SIG or committee chair. You can find their information on the homepage at www. clintox.org.

While there are many other new initiatives at the Academy I have chosen to focus on continuing education since this is an essential part of our daily lives. In future newsletters I will highlight other activities. For now, as always I encourage your participation and invite you all to work with your Special Interest Groups to share your expertise not only with our members, but with anyone who will listen. I look forward to discussions with many of you at EAPCCT in Copenhagen, via email or at NACCT.

Methanol Outbreak in Libya

There is an ongoing methanol outbreak in Libya with greater than 700 patients exposed and 79 fatalities. Our colleagues are looking for donations of fomepizole. If you are able to provide any assistance, please contact Knut Erik at any of these email addresses: k.e.hovda@medisin. uio.no / KnutErikHovda@gmail.com / Knut.Erik.Hovda@ous-hf.no

Message from the Editor: Jeanna Marraffa, PharmD

Here Comes the Sun

I live in Upstate New York and like many of us, I look forward to winter ending and spring beginning. And, for those of you that have been to Upstate New York during the months of October through April, you know we need a reminder that the sun will come again! In this issue, Dr. Benitez's photo entitled, "Here Comes the Sun" reminds me of that transition and the excitement of what is to come.

Spring is always an exciting time for AACT and clinical toxicology. We are preparing to attend spring scientific meetings, including the ACMT March Course, and the EAPCCT Congress. And everyone is hustling and bustling pulling together those final pieces of their research project and case reports. Don't worry, though, you have plenty of time to get those abstracts submitted (abstract announcement and information is just a few pages away). It seems like only a short time ago that I was re-capping the success of NACCT 2012 and yet, here we are again, preparing to meet the NACCT 2013 deadline. The planning committee for NACCT is working hard to deliver yet another strong, productive Congress. And, even as we speak, planning for NACCT 2014 in New Orleans, LA is underway.

Congratulations to Drs. Jang and Cole. They are the recipients of the AACT Research Award and Junior Investigator Research Grant, respectively. Be sure to read about their innovative research projects in this issue.

This issue of AACTion is a good reminder of all of the opportunities for personal and scientific growth and advancement available to all of the members of the AACT. Look through these opportunities and make the decision to become more involved in AACT: consider becoming a part of the Education Committee; submit an application for an upcoming research award; consider running for the Board of Trustees, or finally complete the application for Fellow Status. Whichever you choose, AACT wants you to become involved.

Happy Spring!



Here Comes the Sun!

AACT Junior Investigator Award



Jon Cole, MD

The American Academy of Clinical Toxicology is excited to announce the most recent winner of the Junior Investigator Research Award, Dr. Jon Cole, Medical Director of the Poison Control Center at Hennepin County Medical Center, for his project entitled "A randomized double blind controlled study comparing haloperidol to ketamine as a chemical restraint for 'severe agitation' in the pre-hospital setting". Dr. Cole

was awarded \$30,000 for a two year study to perform a randomized prospective double blind study comparing ketamine to haloperidol as a chemical restraint in the severely agitated patient in the pre-hospital setting. In the severely agitated patient, rapid sedation is often required to prevent harm to law enforcement, EMS or the patients themselves and continued physical restraint has numerous risks. Although benzodiazepines and antipsychotics have been the cornerstone of treatment for years, recent case reports have described the use of ketamine to treat severely agitated patients, thus initiating a debate on what is the best therapeutic agent to be used. No studies have compared the use of ketamine to antipsychotic therapy as a chemical restraint. Dr. Cole noted that "The recent emergence of the use of ketamine by EMS personnel for severe agitation is a unique and exciting development in the fields of both Medical Toxicology and EMS."

The AACT Junior Investigator Research Grant is designed to support clinical toxicology research and the development of the research skills of new investigators. Mentoring of new researchers by more experienced senior investigators is a priority of this program. The junior and senior investigator must be members of the AACT. For this award, Dr. Kristin Engebretsen is the senior investigator. When notified about the award, Dr. Cole stated that "This grant gives us a tremendous opportunity to capitalize on our institution's long history of exception from informed consent research to address not only if ketamine is more effective than haloperidol, but if it is safer. On behalf of the investigators, we are tremendously grateful to the AACT for this opportunity".

AACT/ABAT Journal Club

The AACT and ABAT held its first Journal Club on December 4, 2012. Approximately 40 participants attended the live session. Christine M. Stork, Pharm.D., DABAT presented the paper by Perez et al entitled: L-Carnitine increases survival in a murine model of severe verapamil toxicity (Acad Emerg Med 2011;18:1135-40) and Jeanna M. Marraffa, Pharm.D., DABAT presented the paper written by AACT's very own, Dr. Ken McMartin and first authored by Landry GM entitled: Diglycolic Acid is the nephrotoxic metabolite in Diethylene Glycol Poisoning Inducing Necrosis

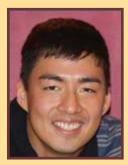
in Human Proximal Tubule Cells in Vitro (Toxicological Sciences 2011; 124:35-44).

The recorded journal club is available for viewing on the <u>AACT website</u>. Enduring continuing education is available for this event.

Stay tuned for future journal clubs and other online educational events!

AACT Research Award

Can We Improve on Supportive Care: AACT Research Award Given for Studies on High Dose Insulin Therapy for Calcium Channel Blocker Toxicity



The American Academy of Clinical Toxicology is excited to announce this year's winner of the AACT Research Award, David Jang MD of New York University Department of Emergency Medicine/Medical Toxicology, who was awarded \$5,665 for his project entitled "A comparison of high-dose insulin euglycemia therapy between a non-dihydropyridine and dihydropyridine calcium channel

David Jang, MD

blocker in a experimental model." Poisonings with CCBs, including non-dihydropyridines such as verapamil and dihydropyridines (DHP) such as amlodipine account for a substantial number of deaths related to cardiovascular drugs. Although supportive care remains the mainstay of treatment, experimental therapies such as high dose insulin-euglycemia (HIE) therapy and intravenous lipid emulsion have been used clinically without much experimental backing. There is experimental and clinical experience that support the use of HIE with the cardioactive CCBs such as verapamil, but data are not available for the efficacy of HIE with DHP poisoning. To help address this important clinical question, Dr. Jang will investigate whether HIE is effective with DHP poisoning using his recently developed animal model in adult Sprague-Dawley rats. Dr. Jang noted that "one of the questions I contemplated during (my toxicology) fellowship was the role of high-dose insulin therapy with calcium channel blocker (CCB) poisoning as a inotropic agent of sorts. While most

of the studies examine its use in cardioactive CCB poisoning (verapamil), my clinical experience with its use for dihydropyridine poisoning has been less than favorable. As we recently developed a reliable experimental model of DHP poisoning, we now want to compare the use of HIE between these two types of CCB."

The AACT is happy to note that Dr. Jang's development of the experimental model necessary for the proposed research occurred with the assistance of the AACT Junior Investigator award that was given to him in January 2011. Jang is an Assistant Professor at New York University School of Medicine. He notes that "AACT's commitment to supporting young investigators such as myself is unique and the data we have obtained thus far has formed the basis for my current career development grant application", thus paying our field forward.

The AACT offers three different research awards, the Junior Investigator Research Grant (up to \$30,000 for two year projects), the AACT Research Award (up to \$5,750 to support clinical research that encourages the development of new therapies and treatment) and the Lampe-Kunkel Memorial Award (up to \$3,750 to investigate some aspect of toxicity due to naturally occurring phenomenon (i.e., plants, mushrooms, algae, insects, snakes). The latter two awards may be part of a larger project, but must have a specific hypothesis and aims to produce distinct results. The Lampe-Kunkel award is given out in odd numbered years, while the other two awards are offered in even years. Announcements of these awards for the current year, along with the all important deadline date for submission (November 1), is posted on the AACT website. We hope to have many submissions – you can do it and we hope to help.

Do you have News to Share?

AACTion wants to know what you are up to. Please send your accomplishments or any updates to AACTion editor, Jeanna Marraffa at marraffj@upstate.edu.

AACT Announcements & Reminders

Board of Trustees

All members of the American Academy of Clinical Toxicology (AACT) are encouraged to submit recommendations for the following AACT leadership positions for 2013-2014 (please see Bylaws excerpt below for a description of duties):

* Board of Trustees Member (3 positions)

Elected by the membership, the Board of Trustees establishes policy and is responsible for providing strategic oversight for AACT. The Board consists of 5 Officers (President, President-elect, Past President, Secretary, and Treasurer) and 10 elected Trustees.

Please send your suggestions for nominees, along with their CV, or the bio of the person(s) you are recommending, to the AACT Headquarters office at info@clintox.org by **April 15, 2013**.

Become an AACT Fellow

The AACT Board of Trustees wishes to recognize Academy

members whose contributions are important to the Academy and to the field of clinical toxicology. The designation of Fellow of the American Academy of Clinical Toxicology (FAACT) honors those members whose contributions have been of significant benefit to the Academy, and advanced the field of clinical toxicology. Applications for FAACT status are reviewed by the AACT Fellowship Committee and are due on May 1, 2013. For more information, go to www.clintox. org

Become a Member of the Education Committee

The AACT Education Committee is looking for you! Are you interested in being part of AACT's future endeavors to provide on-going, continuous educational activities? Are you interested in new and innovative ways to expand the efforts of AACT? If the answer to either of these questions is yes, then the Education Committee needs your help. If you are interested, please submit a letter of intent and curriculum vitae to the Chair of the Committee, Deborah Larison at debrx@me.com

Upcoming Meetings & Announcements

EAPCCT Congress

The EAPCCT Congress will be held in Copenhagen from May 28-31, 2013. A preliminary programme is found on the website (www.eapcct.org/index.php?page=congress1).

The Congress registration is now open, see www.eapcct. org/index.php?page=congress1. If you are a member of EAPCCT or AACT you are able to register for a reduced fee.

The XIII International Congress of Toxicology (ICT XIII)

The XIII International Congress of Toxicology (ICT XIII), to be held in Coex, Seoul, Korea, June 30-July 4, 2013 at the COEX Convention & Exhibition Center.

The abstract submission and early registration deadlines have now been extended to April 30, 2013. The ICT 2013 Scientific Program Committee cordially invites you to submit abstracts (www.ict2013seoul.org/abstract.asp) for the Poster Session. All abstracts will be reviewed by the committee and outstanding abstracts will be invited to the symposium. Participants are advised to register in advance (www.ict2013seoul.org/regi1.asp) to receive an early registration discount. For more information on the meeting please visit the website at www.ict2013seoul.org.

The 2013 North American Congress of Clinical Toxicology

NACCT 2013 will be held September 27 - October 2, 2013 at the Hyatt Regency in Atlanta, Georgia. The NACCT Planning Committee is hard at work for what will surely be a successful Congress.

Abstracts are being accepted until Midnight (Eastern Standard Time), April 17, 2013. To submit your abstract, go to www.prolibraries.com/nacct. For more information about NACCT 2013 and abstract submission, go to www.clintox.org.

The 2014 North American Congress of Clinical Toxicology

Save the Date for the 2014 North American Congress of Clinical Toxicology! NACCT 2014 will be held October 17 -22 at the Sheraton New Orleans Hotel in New Orleans, LA. Visit www.clintox.org for more information!



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AACT Junior Investigator Research Award



What is the AACT Junior Investigator Research Award?

- This award supports clinical toxicology research and development of new investigator's research skills
- Awardee must be mentored by senior investigator

How much money?

• Award is (maximum) \$30,000

Who can apply?

 Awardee and mentor are members of AACT in good standing

Applications due: November 1, 2014 What are the Award requirements?

- The entire study must be completed within two years of the award date
- Annual progress reports must be submitted to AACT
- A one-time only, no-cost extension may be granted

How do I apply?

• Apply on-line at <u>www.clintox.org</u>

More information?

- Email the AACT Executive Director, Sarah Shiffert: <u>sarah@clintox.org</u>
- Email the AACT Awards Committee Chair, Dr. Kenneth McMartin: <u>kmcmar@lsuhsc.edu</u>









The American Academy of Clinical Toxicology

Uniting scientists and clinicians in the advancement of research, education, prevention and treatment of diseases caused by chemicals, drugs and other toxins.

The AACT Research Award



What is the AACT Research Award?

 This award is intended to support research on principles and practices of clinical toxicology

How much money?

- Award is (maximum) \$5000
- A separate award of \$750 is given to present at the North American Congress of Clinical Toxicology

Who can apply?

• Members of AACT in good standing

Applications due: November 1, 2014

What are the Award requirements?

- The entire study must be completed within two years of the award date
- Annual progress reports must be submitted to AACT
- A one-time only, no-cost extension may be granted

How do I apply?

• Apply on-line at <u>www.clintox.org</u>

More information?

- Email the AACT Executive Director, Sarah Shiffert: <u>sarah@clintox.org</u>
- Email the AACT Awards Committee Chair, Dr. Kenneth McMartin: <u>kmcmar@lsuhsc.edu</u>





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AACT Lampe-Kunkel Award Research in Natural Product Toxicology



What is the L-K Award?

 This award is intended to support research into the toxic effects of biota such as botanicals and reptiles

How much money?

- Award is (maximum) \$3000
- A separate award of \$750 is given to present at the North American Congress of Clinical Toxicology

Who can apply?

• Members of AACT in good standing

Applications due: November 1, 2013

What are the Award requirements?

- The entire study must be completed within two years of the award date
- Annual progress reports must be submitted to AACT
- A one-time only, no-cost extension may be granted

How do I apply?

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More information?

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