

Nanotoxicology Specialty Section Newsletter

Volume 3, Issue 1 (July 2012)

President's Message

With the annual meeting and review of program proposals for 2013 behind us, we are well into the 2012-2013 year for our specialty section. I first of all wish to thank Justin Teeguarden for his wave of intrepid leadership and direction that I can easily ride into this year. This past year, we surveyed the membership for input, hosted or co-hosted a total of four webinars, raised funds for better awards for Graduate and Post-Doctoral Students (special thank you to councilor David Hobson), promoted [student mentoring](#) (special thank you to Christie Sayes), and finished the year well in the black.

In response to last year's survey, we also tried to provide some, hopefully entertaining and maybe even educational information at the annual meeting, in the form of "Bluff the Toxicologist"—a takeoff on "Bluff the Listener" from the popular NPR news quiz "Wait, Wait, Don't Tell Me!" All of the scenarios presented ended up having some basis in fact, even the proposed carbon nanotube-enabled products: heated underwear and treatment for baldness.¹

This year we are planning several more informative webinars, awards (within NTSS and nomination for SOT awards), and further efforts to engage and support our students. Our by-laws will hopefully be updated to include three student positions: vice student representative, student representative, and a post-doc representative. We are also investigating potential venues for our meeting next year in San Antonio (line dancing or mechanical bull riding anyone?). The board is continuing to seek ways to serve the membership. Please do not hesitate to contact any of us on the [board](#) if you have any comments or suggestions (e.g., webinar topics, actions), or would like to work with us on any committees or other efforts.

- Joyce Tsuji

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^[1] Takaya, M., M. Ono-Ogasawara, Y. Shinohara, H. Kubota, S. Tsuruoka, S. Koda. 2012. Evaluation of exposure and risk in the weaving process of MWCNT-coated yarn with real-time particle concentration measurements and characterization of dust particles. *Industrial Health*. **50**:147-155.

Zhou, Z., R. Lenk, A. Dellinger, D. MacFarland, K. Kumar, S.R. Wilson, C.L. Kepley. 2009. Fullerene nanomaterials potentiate hair growth. *Nanomedicine: Nanotechnology, Biology and Medicine*. **5**:202-207.

Summary of 2012 Annual Meeting

The NTSS continues to help shape SOT's scientific program, with sponsorship of four sessions at the 2012 Annual Meeting – a Symposium ("Nanoparticles for Drug Delivery: Interactions with the Immune System"), a Workshop ("State of the Science and the Future for the Predictive Power of *In Vitro* and *In Vivo* Models for Nanomaterials Toxicity Testing"), a Roundtable ("Testing of Nanomaterials for Genotoxicity—Necessity or Waste of Time?") and an Informational Session ("NIEHS Centers for Nanotechnology Health Implications Research: Building the Scientific Foundation for Evaluating Public Health Impacts of Engineered Nanomaterials). In addition, there were three nanotoxicology platform sessions ("Nanogold or Nanosilver", "Cardiovascular Toxicity of Nanoparticles", "Carbon Nanotubes and Nanofibers") and four nanotoxicology poster sessions ("Environmental

Toxicology, Zebrafish, and Nanoparticles", "Nanoparticles I", "Nanoparticles II", "Nanoparticles III").

With the aim of serving and supporting students and post-docs, NTSS launched a successful mentor/mentee program at this year's annual meeting, with 12 mentees and 8 mentors participating in 4 groups. This program, which was conceived of and spearheaded by Christie Sayes, paired NTSS associate and full SOT members/mentors with student and post-doc mentees, based on career interests.

Finally, in addition to the Graduate Student, Post-doctoral and Best Paper awards, this year NTSS presented a special Unsung Hero award to Christie Sayes, for her enthusiasm, vision, and contributions to the NTSS this past year.

Christie Sayes, recipient of the 2012 Unsung Hero Award, with NTSS President Justin Teeguarden



Award Winners

We had a large group of candidates this year for all award categories, making it difficult to choose the winners for each one. There were 11 student award applicants, 9 post-doctoral applicants, and 6 submissions for the best paper award. The award winners were:



1st place Graduate Student Award winner Lisa Truong with NTSS Councilor Dave Hobson

Graduate Student Award

1st: *Lisa Truong*, Oregon State University; mentor, Prof. Robert Tanguay

2nd: *Anurag Mishra*, West Virginia University; mentor, Prof. Liying Wang

3rd: *Jeremy Kevin Larson*, University of Wisconsin, Milwaukee; mentor, Prof. Reinhold Hutz



1st place Post-Doctoral Award winner Jason Blum with NTSS Councilor Dave Hobson

Postdoctoral Award

1st: *Dr. Jason Blum*, New York University; mentor, Prof. Judith Zelikoff

2nd: *Dr. Vamsi Kodali*, Pacific Northwest National Laboratory; mentor, Dr. Brian Thrall

3rd: *Dr. Gaurav Sharma*, Pacific Northwest National Laboratory; mentor, Dr. Brian Thrall



2nd place Graduate Student Award winner Anurag Mishra with NTSS Vice-President Alison Elder



2nd place Post-Doctoral Award winner Vamsi Kodali with NTSS Vice-President Alison Elder



3rd place Graduate Student Award winner Jeremy Kevin Larson with NTSS Vice-President Alison Elder

Best Publication Award

Kagan et al. (2010). Carbon nanotubes degraded by neutrophil myeloperoxidase induce less pulmonary inflammation. *Nat Nanotechnol* 5(5): 354-359.

We were very grateful for support from NanoTox, Inc., for their financial sponsorship of the student awards, which allowed the NTSS to recognize first, second, and third place graduate student and postdoctoral winners. Thank you to Dr. David Hobson for facilitating this support of our student and post-doc members. In addition, the student awardees were given one year of free access to *Nanotoxicology* via Informa Healthcare. Thank you to Joris Roulleau, managing editor of the journal, for setting this up on behalf of the students.

- Alison Elder, Vice-President



Best Publication co-author Bengt Fadeel with NTSS Vice-President Alison Elder



3rd place Post-Doctoral Award winner Gaurav Sharma with NTSS Vice-President Alison Elder

Message for Student and Post-Doctoral Members

A short poll was taken of the NTSS student members:

- Most agree the mentee/mentor activity at the annual meeting was useful
- The Spotlight of the students was not useful
- The students would like more social gatherings (with other NTSS members), job shadow opportunities, mentor/mentee events.

As your student reps, we will try to facilitate and create more of these opportunities.

We would also like to remind those who participated in the mentor/mentee activity, that the mentors are there to help/answer questions, and you should feel free to contact them.

- Lisa Truong and Christin Grabinski, Graduate Student Representatives

Webinar, July 16 – Mark your Calendars!

NTSS will host the first webinar for the 2012-2013 year on July 16th, at 2 PM (EDT). The webinar, titled "Risk assessments for engineered nanomaterials: Addressing the unique challenges", will be presented by Dr. Harvey Clewell, who is Director of the Center for Human Health Assessment at the Hamner Institutes for Health Sciences Research

NTSS would like to thank last year's webinar committee members Susan Sumner, Dan Bechtel and Tim Fennel, for their contribution to a successful webinar series!

Report from the Program Committee

One important function of the NTSS within the Society is to shape of the scientific program for the annual meeting. This involves initial discussions between the NTSS leadership and session proposers, formal review by the NTSS to make recommendations to the SOT Program Committee, and a 2-step review by the NTSS Program Committee. We had a good response this year both from our own membership and from other Specialty Sections with overlapping interests, including proposals for 6 symposia, 5 workshops, 1 roundtable and 3 continuing education courses to review for either primary sponsorship or endorsement. With the proposal deadline and specialty section review happening within 8 weeks after the annual meeting, it is a hectic time for both the session proposers and the reviewers. This year, though, in addition to the NTSS officers,

several other NTSS members served on the Program Committee to make the process go smoothly, including Syed Ali, Diane Heck, David Hobson, Jeremy Larson, Saura Sahu, William Waissmann, David Warheit, and Leshuai Zhang. Thank you to all who gave their time and energy to put proposals together and to review them!

I am happy to report that, after SOT Program Committee review, eight sessions with NTSS primary sponsorship or endorsement have preliminary approval for the 2013 meeting. Look in this space in the next newsletter for an update on approved sessions for the San Antonio meeting. Thank you for your support of the NTSS!

Alison Elder, Vice-President

Nano OEL Workshop

The George Washington University School of Public Health, in conjunction with the American Chemistry Council's Nanotechnology Panel, is sponsoring a workshop titled:

Strategies for Setting Occupational Exposure Limits for Engineered Nanomaterials

On September 10 – 11, 2012, at The George Washington University, in Washington, DC

The purpose of the workshop is to convene leaders from academia, government, industry and non-governmental organizations to present new information and discuss strategies for establishing and implementing OELs for engineered nanomaterials. Sessions are expected to cover the following topics:

- Assessing the need for an OEL for an engineered nanomaterial when an OEL exists for the bulk material
- Comparing approaches currently used or proposed for setting OELs for engineered nanomaterials: advantages, limitations and data requirements
- Categorical OELs for engineered nanomaterials
- Practical issues related to establishing and using OELs for engineered nanomaterials: exposure assessment, dose metrics, sampling and analytical methods

For more information see www.cvent.com/d/fcq059

2012 – 2013 Executive Board

The 2012-2013 Executive Board is composed of the following people. Please consider contacting any of them directly if you have any thoughts you would like to share with the Executive Board regarding how best it can serve the membership.



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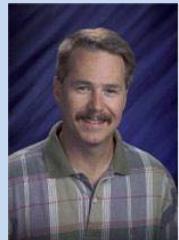
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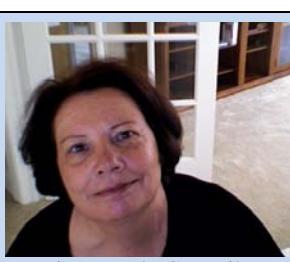
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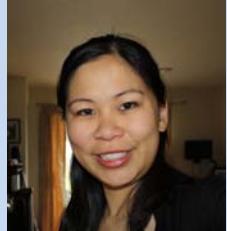
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