June/July 2012

Successful First HESI Annual Meeting in Europe! Many thanks to all who participated in the meeting (75 attendees) in Prague, Czech Republic. The sessions provided an opportunity for the HESI Board, Assembly, staff, invited guests, and speakers to discuss strategic and scientific accomplishments and goals for HESI. In total, 7 government agencies, 17 academic institutions, and 23 corporate sponsors were represented at the meeting. Copies of the open meeting presentations and summary reports are available online, and can be viewed by clicking here.

2012 HESI Activities Report. The latest HESI Activities Report is now available online and in print! The 2011-2012 Activities Report features the latest activities and accomplishments, key impacts, and next steps from all HESI scientific committees. To view the online PDF click here. For a print copy, please email Ms. Regina Graham at rgraham@hesiglobal.org.

HESI Continues to Develop and Share Impactful Science...

- 30 May 2012. HESI Asian Outreach Webinar. Presentation by Dr. Karen Augustine (Bristol-Myers Squibb) on behalf of the HESI DART Technical Committee: "Assessment of the Zebrafish Model for Developmental Toxicology Screening." The recorded session can be found here.
- 6 June 2012. ECETOC Workshop, "Chemical Exposure for Risk Assessment: Present Problems and Future Solutions," Brussels, Belgium. Presentation by Dr. Timothy Pastoor (Syngenta) on behalf of the HESI Risk Assessment for the 21st Century Technical Committee: "Risk Assessment for the 21st Century: RISK21 Exposure-Driven Risk Assessment."
- 12-13 June 2012. ICCA-LRI and UK HPA Workshop, "Technologies to Inform Chemical Safety Sciences," Budapest, Hungary. Poster presentation by Dr. Rosemary Zaleski (ExxonMobil Biomedical Sciences) on behalf of the HESI Risk Assessment for

- the 21st Century Technical Committee, Exposure Subteam: "Assessing Consumer Exposure Models for Developing Exposure Bands."
- 13 June 2012. Society of Toxicology Risk Assessment Specialty Section Webinar. Presentation by Dr. Daland Juberg (Dow AgroSciences) on behalf of the HESI Project Committee on Distinguishing Adverse from Non-Adverse/Adaptive Effects: "Identification and Characterization of Adverse Effects in 21st Century Toxicology and Risk Assessment." The presentation and a webinar recording can be downloaded from the SOT website by clicking here.
- 16-20 June 2012. European Academy of Allergy and Clinical Immunology Congress, Geneva, Switzerland. Two poster presentations on behalf of the HESI Protein Allergenicity Technical Committee: "Interlaboratory Optimization of Two-Dimensional Difference Gel Electrophoresis (2D-DIGE) of Rice Seed Allergens in Non-Transgenic Rice Varieties," presented by Dr. Jean-Baptiste Rascle (Bayer SAS), and "Absolute Quantitation of Seed Allergens from Three Varieties of Soy Cultivated in Nine Different Locations," presented by Dr. Severin Stevenson (University of Missouri).
- 17 June 2012. 48th EUROTOX Congress, Stockholm, Sweden. Continuing education course on "Risk Assessment of Combined Exposures to Multiple Chemicals" with the World Health Organization. Prof. Alan Boobis (Imperial College London) and Dr. Kevin Crofton (USEPA), members of the HESI Mixtures Project Committee, were two of the course instructors.
- June 18 2012. 48th EUROTOX Congress, Stockholm, Sweden. HESI seminar, "Exploring the Human Protein Atlas in the Field of Toxicology." Facilitated by Prof. Mathias Uhlen (KTH Biotechnology AlbaNova University Center).

- 19 June 2012. 48th EUROTOX Congress, Stockholm, Sweden. Presentation by Dr. Jean-Charles Gautier (Sanofi) on behalf of the HESI Biomarkers of Nephrotoxicity Committee: "The Association of MicroRNAs with Drug Induced Kidney Injury."
- 20 June 2012. FOCIS Annual Meeting, Vancouver, BC, Canada. Symposium organized by the HESI Immunotoxicology Technical Committee on "Antidrug Antibody Responses during Clinical Development: Current Practices and Case Studies."
- 26 June 2012. 52nd Annual Meeting of the Teratology Society, Baltimore, MD, USA. Presentation by Dr. Jane Stewart (AstraZeneca) on behalf of the HESI DART Technical Committee: "Industry Efforts to Validate Inhibin B and microRNA as Translational Testicular Toxicity Biomarkers."
- 27 June 2012. 52nd Annual Meeting of the Teratology Society, Baltimore, MD, USA. HESI DART Symposium, "Predictive Toxicology: Screening Tools and Mechanistic Support."
- 29 June 2012. First European Conference on the Replacement, Reduction and Refinement of Animal Experiments in Ecotoxicology, Dübendorf, Switzerland. Presentation by Dr. Michelle Embry (HESI): "Alternative Methodologies for Ecotoxicity Testing: ILSI HESI Initiatives."

Upcoming HESI Activities.

- 19 July 2012. HESI will host a lunchtime Seminar on "Application of Imaging to Drug Safety Evaluation," at the Annual Meeting of Japan Society of Toxicology in Sendai, Japan. The seminar will be chaired by Dr. Jiro Seki (Astellas Pharma), with presentations given by Ms. Ayako Takei (HESI Science Advisor in Japan), Dr. Katsuyuki Kazusa (Astellas Pharma), and Dr. Takafumi Shirakawa (Astellas Pharma).
- 18-19 October 2012. HESI will hold a Workshop on "Adjuvants and Vaccines: Focus on Autoimmunity" in Amsterdam, The Netherlands. Click <u>here</u> to access the latest details about the program, registration, and hotel.

HESI Sponsors Green Chemistry & Engineering Conference. In a first for HESI, the Frameworks for Alternative Chemical Assessment and Selection of Safer, Sustainable Alternatives Subcommittee participated in the 16th Annual Conference organized by the American Chemical Society's Green

Chemistry Institute. The Subcommittee presented a poster, and Dr. Jennifer Young (HESI) gave an oral presentation on behalf of the HESI program. The session provided valuable opportunities for networking and has yielded increased interest and participation in this exciting new program. For more information on how to get involved with the HESI subcommittee, contact Dr. Young at jyoung@hesiglobal.org.

HESI Seeks Prioritization of New Topics. Two emerging issues were presented at the HESI Annual Meeting in Prague for possible HESI action: 1) The Utilization of Dried Blood Spot to Reduce Animal Usage in Non-Clinical Studies, and 2) Translational Safety Biomarker Assessment of Neurotoxicity. We seek your prioritization of these two topics by Monday, 23 July 2012. To access the voting form, click here. Presentations on these topics can be found <a href=here.

Committee Renewals. Congratulations to the HESI Committee on the Application of Genomics to Mechanism-based Risk Assessment (3 year re-charter) and the RISK21 Technical Committee (2 year re-charter) on their successful renewals after the HESI Stewardship Program Review by the Board Program Strategy and Stewardship Committee! Both committees gave comprehensive and informative presentations at the HESI Annual Meeting in Prague, and have implemented ambitious and impactful portfolios. For more information about the work of the two committees, you can access their June 2012 presentations below:

• Genomics:

- HESI Application of Genomics to Mechanism-Based Risk Assessment Technical Committee:
 Collaborative Experimental Approaches to Improved Risk Assessment
- Multi-laboratory Assessment of Best Practices for Measuring Injury-associated microRNAs in Biofluids Using a Model of Isoproterenolinduced Myocardial Injury in Rats

RISK21

- Risk Assessment for the 21st Century: RISK21
 Session Overview and Introduction
- The RISK21 Project: Novel Approach for Integrating Exposure Science, Dose-Response Assessment, IVIVE, and Cumulative Risk
- Risk Assessment for the 21st Century: Case Studies

Staff News. Congratulations to Dr. Raegan O'Lone on her promotion to HESI Senior Scientific Program Manager!

During her tenure here at HESI, Raegan has demonstrated tremendous skill and dedication in her direction of the Genomics, Immunotoxicology, and Nephrotoxicity projects among others. We are so glad to have her as part of the team, and hope you will join us in commending her promotion!

New In Print – Correction. Our last issue of Insights included an Immunotoxicology Committee publication with an incomplete listing of authors. Please see the corrected publication details here:

Collinge M, Burns-Naas LA, Chellman GJ, Kawabata TT, Komocsar WJ, Piccotti JR, Shenton J, and Wierda D. 2012. Developmental Immunotoxicity (DIT) Testing of Pharmaceuticals: Current Practices, State of the Science, Knowledge Gaps, and Recommendations. *J Immunotoxicol* 9(2): 210-30.

From the Executive Director: At several points during this year's Annual Meeting, participants characterized the state of the organization with this word, MOMENTUM. Our scientific programs and their technical outputs are growing in impact, rigor, and reach. Citations of HESI's research have more than doubled in the last three years, and international scientific bodies have incorporated HESI's technical research into their own discussions and work products. New staff and external partnerships have brought exciting opportunities and energy. In the coming months, we look forward to added drive from new interdisciplinary and translational initiatives. It's an exciting time for HESI so please join us and keep that momentum going.





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