

DAY 1: Tuesday, April 12, 2016

1pm **Opening**, Thomas Hartung
Keynote (Granjero): Renama – Brazilian National Network of Alternative Methods—and Inmetro's contribution
Keynote (Kleinstreuer): Fit for Purpose Validation: The Key to Regulatory Acceptance of Alternative Methods in the U.S.
Keynote (Willet): BioMed21: Bridging Pathway-based approaches from Toxicology to Medicine
3pm Break/Poster Session

TRACK A

Session 1A: Replacement—Topical

3:45pm **Keynote** (Gehen): Is the Animal-free Six Pack Ready for Prime Time?

- Reconstructed skin model for the evaluation of phototoxic potential (Gaspar)
- Implementation of the 3Rs in the evaluation of Ocular irritation potential in Argentina (Gorzalczany)
- Eye Irritancy Classification Predicted by Irritants-induced Corneal Endothelial Damage in Human Donor Corneoscleral Explant Not Used for Transplantation (Koh)
- Skin Reconstructs and Epidermal Equivalent in perspective of alternative methods to animal experimentation (Maria-Engler)

TRACK B

Session 1B: Refinement

3:45pm **Keynote** (Zurlo) Social Housing as an Optimal Refinement for Laboratory Animal Welfare

- The Effect of Stress on Platelet Activation and Function (Pate)
- The *C. Elegans* Model in Toxicity Testing (Hunt)
- Methods Development for Co-housing Male CD1(ICR) Mice (Hukkanen)

5:15pm Plenary Keynote: (Chandrasekera) The Six Rs in Basic Research: A Roadmap for the Americas

DAY 2: Wednesday, April 13, 2016

Session 2A: Replacement—Biologicals

9am

- Serology and Other 3Rs Approaches Methods for Replacing In Vivo Challenge Assays Used for Determining Potency of Bacterial Vaccines (Landys)
- Development of a Vero Cell Method for Determining Specific Toxicity and Reversion to Toxicity for Diphtheria Toxoid in Vaccines (Herrera)
- Presenter 3 (TBD)
- Applicability of the Pyrogen Tests for Determining the Influence of Soluble Glucans on the LPS Activity: Relevance of the Monocyte Activation Test as Alternative (Pardo)

Panel: Possible Incentives for Alternative Methods for Biologicals

Session 2B: Read-across /In Silico

9am

- Quantitative Nano-structure Toxicity Relationship: Developing Predictive Cell Recognition Models for Gold Nanoparticles (Zhu)
- Boosting the Accuracy of Predicting Chemical-induced Human Skin Sensitization by Combining LLNA and QSAR (Alves)
- Prediction of Genotoxic Mode of Action Using a Multiplexed Flow Cytometric Assay and a Multinomial Logistic Regression Machine Learning Approach (Bryce)
- Integration Into Risk Assessment of Open Source Human Omics Data from In Vitro Studies (Hardy)

Panel: Possible Incentives for Alternative Methods for Biologicals

11am

Break/Poster Session

Session 3A: Replacement—Disease Models

11:45am **Keynote** (Fitzpatrick) In Vitro Microphysiological Systems: Advancing Regulatory Science Through Innovation

- Integrating the Exposome with Genetics to Uncover the Causality of Chronic Diseases in Humans (Machereone)
- Modelling Musculoskeletal Disorders In Vitro – Comprising Complex Processes in Convincing Systems (Lang)
- Generation of 3D Models to Mimic Parkinson's Disease Neurodegeneration of Midbrain Dopaminergic Neurons (Bolognin)
- High-Throughput Microfluidic Platform for Culture of 3D Kidney Tissue Models (Saleh)

Session 3B: Roadmaps—Education

11:45am **Keynote** (Hill) Training and Collaboration: Approaches to Overcome Barriers of Acceptance of 3R Methods

- Simulation, Animal Sparing, and Surgical Education and Testing (Sassani)
- Educational Programs for Alternative Approaches (Smirnova)
- Policy (Amundson)
- Toxicity Assessment of Co-Culture Human Systems during Serial Multi-Well Gradient Exposures (Klose)

DAY 2: Wednesday, April 13, 2016 (continued)

TRACK A

TRACK B

12:45
Lunch (Offsite)

Session 4A: Replacement—Topical 2

- 2:15 Keynote** (Seidle) Advancing Safety Science and Legislating Cruelty-Free Cosmetics Throughout the Americas
- Potency Classifications for Contact Dermal Sensitization As Determined by the h-CLAT Assay (Varsho)
 - Potency Ranking of Dermal Sensitizing Chemicals Using the IVSA and epiCS® Skin Tissues (DeGeorge)
 - Detection of DNA-Damaging Activity of Food-Borne Compounds in the In Ovo Genotoxicity Assay (Kobets)
 - Development and Validation of the Reconstructed Skin Micronucleus Assay (Curren)

Session 4B: Roadmaps 2

- 2:15 Keynote** (Allen) Title TBA
- Can Organ-on-a-Chip Technology Really Replace Animal Testing of Drug and Chemical Safety? (Davidge)
 - Microfluidics and High-Content Imaging for In-Vitro to In-Vivo Safety and Efficacy Assessment (Klose)
 - A Framework to Reduce Reliance on Animal Testing for GMO Safety: Putting Exposure First in Risk Assessment (Fleming)
 - Making the Use of Alternative Methods a Reality (Bishop)

4:15pm Break/Poster Session

5pm: Plenary Keynote (Stephens) Full Replacement, Revisited
Recognition Ceremony (Thomas Hartung, Andrew Rowan, Sue Leary, Rodger Curren)

DAY 3: Thursday, April 14, 2016

Session 5A: Replacement—Organ Toxicities 1

- 9am Keynote** (Dix) Endocrine Disruption
- Metabolically Competent Human Hepatic HepaRG Cells in 384-well Format (BioPredic/Chesné)
 - Pathway of Toxicity from Omics Data: Mapping Estrogen Response (Maertens)
 - Omics Approaches in a 3D Rat Primary Brain Model to Study Pathways of Developmental Neurotoxicity (Hogberg)
 - Integrated Testing Strategies (Hartung)

Session 5B: Relevance

- 9am Keynote** (Pamies) Good Cell Culture Practice
- Evidence-based Toxicology (Tsaion)
 - Talk Title TBD (Fowle)
 - Talk and Presenter TBD
 - Talk and Presenter TBD

11am
Break/Poster Session

Session 6A: Replacement—Organ Toxicities 2

- 11:45am** • In Vitro 3D Dopaminergic Model to Study (Developmental) Neurotoxicity and Parkinsonism (Smirnova)
- In Vitro Strategies for Studying the Metabolic Interactions Potential During the Development of New drugs, Results in Cuba (Roderio)
 - A Perfused 3D Blood Vessel Mimic for Anti-angiogenesis and Vascular Toxicity
 - High-throughput Screening (Saleh)
 - Presenter 4 TBD

Session 6B—Topic TBD

11:45am Talks and Presenters TBD

Panel: Organotypic cultures

12:45pm
Closing (Hartung)
1pm ADJOURN