

INNOVATION

IN

PREDICTIVE

TOXICOLOGY

OpenTox  
Asia 2017

MAY 2017  
17-18

CONFERENCE



## CHAIRS



**Dr. Barry Hardy**  
Douglas Connect, Switzerland



**Prof. Tae Hyun Yoon**  
Hanyang University, Korea



**Dr. Samik Ghosh**  
SBI Japan



**Dr. Johan Nyström-Persson**  
Douglas Connect, Switzerland



**Dr. Kyun-Sun Kang**  
Seoul National Uni., Korea



**Dr. John Colbourne**  
Uni. of Birmingham, UK



## WORKSHOP

ACEnano-OpenTox-S2NANO Workshop

**ACEnano - OpenTox**  
Dr. Barry Hardy  
Prof. Eugenia Valsami-Jones

**Nanosafety Data Measure-  
ment and Applications**  
Dr. Young Heon Kim  
Dr. Jongwoon Kim

**Predictive Models on  
Nano-Risk Assessment**  
Prof. Tae Hyun Yoon  
Prof. Hyung Gi Byun

**Panel Discussion**



## CONFERENCE

- S1** Data Management and Integration
- S2** Systems Biology and Toxicology
- S3** Testing Methods in Nanotechnology
- S4** Stem Cell Biology and Alternative Testing Methods
- S5** Current Trends in Predictive Toxicology
- S6** Environmental Toxicological Science

DAEJEON, SOUTH KOREA

**16** Workshop  
ACEnano-OpenTox-S2NANO

**17** Conference  
Day 1

**18** Conference  
Day 2

## OPENTOX ASIA 2017

Enabling and Strengthening Reproducible Safety Science on Complex Systems

**When :** 17-18 May, 2017

**Where :** Daejeon, South Korea / Didimdol Plaza, Auditorium (4th Floor)



**OpenTox Asia 2017** is both a conference and a historic community meeting. It provides an opportunity for scientists from different sectors in the Asian region to come together with their international colleagues to share knowledge and build partnerships for the future.

Our common goal is to develop a strong and innovative science for assessing risk, supporting safer products and a safer world for people and the environment they live in. Partnerships between public and private sectors should be enabled to create synergies, shared insight and new solutions.

At this meeting, we will also launch our first local chapter in the Asian region.

When we look back on this day, we can reflect that this was the day when our knowledge community principles enshrined in our values and articles, took a big step forward towards being a global collaboration, building a strong and safer future together.

I wish you a warm welcome to Daejeon.

Barry Hardy,  
President,  
OpenTox Association

## ACENANO-OPENTOX-S2NANO WORKSHOP

Collaborations in Nanosafety Data Management, Integration, and Predictive Modeling

**When :** 13:00 – 18:00, May 16, 2017

**Where :** Daejeon, South Korea / Didimdol Plaza, Auditorium, 4th Floor

TIME	TITLE	SPEAKER
13:00 – 13:10	Opening Remark	<b>Prof. Tae Hyun Yoon</b>
<b>Overview : ACEnano &amp; OpenTox</b>		
13:10 – 13:40	Current OpenTox views on nanosafety data concepts and needs	<b>Dr. Barry Hardy</b> (Douglas Connect)
13:40 – 14:10	How ACEnano address current needs in nanosafety via method and protocol harmonisation	<b>Prof. Eugenia Valsami-Jones</b> (Birmingham University)
14:10 – 14:30	Coffee Break ☕	
<b>Case Studies: Nanosafety Data Measurement and Application</b>		
14:30 – 15:00	Nanoparticle Size Measurement by Transmission Electron Microscopy in KRISS	<b>Dr. Young Heon Kim</b> (KRISS)
15:00 – 15:30	Recommendations for nanomaterials applicable to the Guidance on QSARs and Grouping of Chemicals under EU REACH	<b>Dr. Jongwoon Kim</b> (KIST-Europe)
15:30 – 16:00	Coffee Break ☕	
<b>Case Studies: Predictive Model Developments for Nano-Risk Assessment</b>		
16:00 – 16:30	Meta-Analysis of Literature Data Collection, Management, and Integration in S2NANO	<b>Prof. Tae Hyun Yoon</b> (Hanyang Univ.)
16:30 – 17:00	Predictive Model Developments for Nanotoxicity Assessment in S2NANO	<b>Prof. Hyung Gi Byun</b> (Kangwon Nat'l Univ.)
17:00 – 17:50	Panel Discussion, Q & A with Advisory Board Members	
17:50 – 18:00	Closing Remark	<b>Prof. Tae Hyun Yoon</b>
18:00 – 20:00	<b>Dinner</b>	

## OPENTOX ASIA 2017 VENUE - Didimdol Plaza



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Enabling and Strengthening Reproducible Safety Science on Complex Systems

17 - 18 May, 2017  
Daejeon, South Korea  
Didimdol Plaza, Auditorium, 4th Floor

# WEDNESDAY, 17 May 2017

- 09:00 Introduction and Opening Remarks, by  
Moon-Koo Chung, Director, Korea Institute of Toxicology  
and Barry Hardy, President, OpenTox Association
- 09:10 S1. **Data Management and Integration, Chair: Johan N.-Persson (Douglas Connect, Switzerland)**
- 09:35 A Data Warehousing approach with TargetMine, Yayoi Natsume
- 10:00 Efforts for Data Sharing and DB Integration, Hideki Hatanaka
- 10:25 DNA-Binding Protein Predictions, Shandar Ahmad
- 10:30 ☕ Coffee Break
- 11:00 S2. **Systems Biology and Toxicology, Chair: Samik Ghosh (Systems Biology and Toxicology, Japan)**
- 11:05 Garuda Platform as a Tool for Open Toxicology, Satoshi Kitajima
- 11:30 Software Platform Supporting Multilevel Modeling, Yoshiyuki Asai
- 11:55 Disease Understanding and Drug Discovery, Anshu Bhardwaj
- 12:20 Pharmacogenetic and Genomic Applications for Safety and Therapeutic Efficacy Assessment,  
Jurgen Borlak
- 12:45 Whole Genome Expression Profiling of Mini Pig Liver and Kidney, Saravanakumar Selvaraj
- 13:00 🍽️ Lunch, courtesy of the City of Daejeon
- 14:00 S3. **Testing Methods in Nanotechnology, Chair: Tae Hyun Yoon (Hanyang University, Korea)**
- 14:00 ACEnano, a Tiered Approach, Eugenia Valsami-Jones
- 14:25 Alternative Methods for Nanotechnology, Rawiwan Maniratanachote
- 14:50 ANN-Based QNTR Model Development, Hyung Gi Byun
- 15:15 Safety Assessment of Engineered Nanomaterials, Barry Hardy
- 15:45 Toxicity of Zinc Oxide Nanoparticles, Pinpin Lin
- 16:10 ☕ Coffee Break
- 16:30 **Knowledge Cafe**
- 18:00 **Poster Discussion Session**
- 20:00 **Conference Dinner**

# THURSDAY, 18 May 2017

- 09:00 S4. **Stem Cell Biology, Chair: Kyung-Sun Kang (Seoul National University, Korea)**
- 09:05 Drug Toxicity Screening using human stem cells, Kyung-Sun Kang
- 09:30 Disease Modeling of Parkinson's Disease, Janghwan Kim
- 10:00 Human Pluripotent Stem Cell-Derived Cardiomyocytes, Hyung-Min Chung
- 10:30 ☕ Coffee Break
- 11:00 S5. **Current Trends in Predictive Toxicology, Chair: Ram Parthasarathi (CSIR-IITR, India)**
- 11:05 In Silico Approaches for the Development of Predictive Toxicology, Dr Ram Parthasarathi
- 11:30 High-throughput Methods for Accurate Prediction of Human Organ-Specific Toxicities, Daniele Zink
- 11:55 Establishment of Transcriptomic Database Based on Multi-Organ Interaction, Jung-Hwa Oh
- 12:20 Knowledge Based Integration Supporting Predictive Toxicology and Safety Assessment, Barry Hardy
- 13:00 🍽️ Lunch
- 14:00 S6. **Environmental Toxicological Science, Chair: John Colbourne (University of Birmingham, UK)**
- 14:05 Systems Toxicology Approaches to Environmental Health Protection, John Colbourne
- 14:30 Mixture Toxicity of Engineered Nanoparticles, Jongwoon Kim
- 15:00 Data and Knowledge Fusion and Management: Supporting Toxicology, Health Effects Endpoints  
Analysis & Human Health Risk Assessment, Asish Mohaparta, Health Canada
- 16:00 ☕ Coffee Break
- 16:30 **Panel Discussion**
- 18:00 Conference Ends

You can find abstracts and speakers' profiles on our website: [www.opentox.net/events/opentox-asia-2017](http://www.opentox.net/events/opentox-asia-2017).



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