**Detailed Programme**

**Sunday, 4 September, 2016**

**Congress Registration**

08h30 - 18h00

**Continuing Education Courses (CEC)**

10h00 - 16h00

**CEC 1: Integrative Approaches to Testing and Assessment (IATA) for skin sensitization: from theory to practice**

*Chairs: Janine Ezendam, The Netherlands and Laura Rossi, Finland*

Much progress has been made in the development, validation and regulatory acceptance of non-animal test methods for skin sensitisation hazard identification. For full replacement of the currently used animal tests, integration of data from multiple alternative test methods is needed to mechanistically cover the complexity of the skin sensitization process. The OECD Adverse Outcome Pathway (AOP) describes the molecular initiating event and subsequent key events of the induction of skin sensitization. This AOP is used as a mechanistic anchor to develop integrated and defined approaches to testing and assessment for skin sensitization. In this CEC, participants are informed on how non-animal test methods can be used for skin sensitization testing in the context of the REACH regulation. Furthermore, two recently published OECD guidance documents on defined and integrated approaches to testing and assessment will be presented, explaining definitions, general principles and generic examples. Case studies that illustrate different defined approaches for skin sensitization are provided and their utility for safety assessment of cosmetics is presented. The role of computational and statistical tools in integrated approaches is covered as well. Overall, this CEC course will provide the most recent knowledge on defined and integrative approaches for skin sensitization and the way they can be applied in practice.

10:00 - 10:45

**CEC 1-1**

*How to use non-animal test methods for skin sensitisation in the context of REACH Regulation*

Laura H Rossi
Evaluation, European Chemicals Agency, Helsinki, Finland

10:45 - 11:30

**CEC1-2**

*OECD guidance on the reporting of defined approaches and individual information sources to be used within Integrated Approaches to Testing and Assessment (IATA) for Skin Sensitization*

Silvia Casati
EURL ECVAM, Joint Research Centre, European Commission

11:30 – 11:45
Coffee Break

11:45 - 12:30
CEC1-3
From theory to practice: case studies illustrating different defined approaches for testing and assessment for skin sensitization
Janine Ezendam
National Institute for Public Health and the Environment (RIVM)

12:30 – 14:00
Lunch Break

14:00 - 14:45
CEC1-4
Utility of integrated non-animal approaches for skin sensitisation for safety assessment of cosmetics
Sebastian Hoffmann
Consultant of Cosmetics Europe / SEH Consulting Services, Germany

14:45 - 15:30
CEC1-5
Computational tools and their role in integrative approaches
Steve Enoch
School of Pharmacy and Biomolecular Sciences, UK

Wrap-up and final questions
15:30-15:45

10h00 - 16h00
CEC 2: Toxicokinetics

Chairs: Nancy Claude, France, and Eva Cecilie Bonefeld Jorgensen, Denmark
Toxicokinetics is a science that underpins the basis of toxicology, and provides a basis for mechanistic understanding in toxicology. This session seeks to provide an overview of toxicokinetics, whilst updating on areas that are seeing significant developments. The intention is to provide information that is tailored for use in toxicology, be it to support safety assessment of pharmaceuticals, pesticides, biocides or to optimise testing strategies in REACH. The session starts with an overview of ADME concepts, before dealing with how to choose bioanalytical methods for tox studies, and the use of micro-sampling to generate optimal information. Approaches for in vitro to in vivo extrapolation are covered, and the integration of PK information in PBPK modelling is described. Participants can expect to have an update of their general theoretical understanding of toxicokinetics, as well as a more detailed understanding of the practical application of the specific methodologies discussed.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00 - 10:30</td>
<td>CEC2-1</td>
<td>Basic ADME in non-clinical drug discovery &amp; development</td>
<td>Richard John Weaver</td>
<td>Richard J. Weaver, Servier Group, France</td>
</tr>
<tr>
<td>10:30 - 11:00</td>
<td>CEC2-2</td>
<td>Applying the right level of bioanalytical method validation for PK analysis in support of preclinical (tox) studies</td>
<td>Philip Timmerman</td>
<td>Philip Timmerman, Janssen R&amp;D, on behalf of EBF</td>
</tr>
<tr>
<td>11:00 - 11:30</td>
<td></td>
<td>Coffee Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:30 - 12:00</td>
<td>CEC2-3</td>
<td>Microsampling for Toxicokinetic Studies</td>
<td>Josephine Burnett</td>
<td>Department of Toxicology, Covance Laboratories Ltd, Harrogate, UK</td>
</tr>
<tr>
<td>12:00 - 13:30</td>
<td></td>
<td>Lunch Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:30 - 14:00</td>
<td>CEC2-4</td>
<td>In vitro kinetics in quantitative in vitro-in vivo extrapolation</td>
<td>Nynke I. Kramer</td>
<td>Institute for Risk Assessment Sciences, Utrecht University</td>
</tr>
<tr>
<td>14:00 - 14:30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00 - 16h00</td>
<td></td>
<td>CEC 3: Isoflavons: Cross-species comparison on metabolism, estrogen sensitivity, epigenetics and carcinogenesis</td>
<td>George Demetrius Loizou</td>
<td>Health Risks, Health and Safety Laboratory, UK</td>
</tr>
</tbody>
</table>

**CEC 3: Isoflavons: Cross-species comparison on metabolism, estrogen sensitivity, epigenetics and carcinogenesis**

**Chairs:** Véronique Coxam, France and William Helferich, USA
10:00 - 10:30  
CEC3-1  
**Developmental programming of breast cancer by soy isoflavones in ACI rats**  
Guenter Vollmer, Frank J Möller,  
The Isocross Consortium, Department of Biology, Technische Universität Dresden, Germany

10:30 - 11:00  
CEC3-2  
**Adverse and beneficial effects of a soy isoflavone exposure in the time period of adolescence**  
Patrick Diel, Anne Kurrat, Christina Oden  
The Isocross Consortium, Department Molecular and Cellular Sports Medicine, German Sports University, Germany

11:00 – 11:30  
Coffee Break

11:30 - 12:00  
CEC3-3  
**Impact of soy isoflavones on the epigenome**  
Clarissa Gerhauser, Maria Pudenz, Anna Lena Krug  
The Isocross Consortium, Epigenomics and Cancer Risk Factors, German Cancer Research Center, Germany

12:00 – 13:30  
Lunch Break

13:30 - 14:00  
CEC3-4  
**Influence of soy isoflavones on metabolism and activity of 17beta-estradiol in human mammary gland**  
Leane Lehmann, Katja Schmalbach, Karin Tschiggfret, Sebastian T Soukup, René Hauptstein, Lotta Brückner, Carolin Kleider, Leo N Geppert, Claudia Köllmann, Sabine E Kulling, Thomas Dandekar, Katja Ickstadt, Peter Eckert, Iva Neshkova, Harald L. Esch  
The IsoCross Consortium

1Chair of Food Chemistry, University of Wuerzburg, Wuerzburg, Germany  
2Department of Bioinformatics, University of Wuerzburg, Wuerzburg, Germany  
3Max Rubner-Institute, Karlsruhe, Germany  
4Chair of Mathematical Statistics with Applications in Biometrics, TU Dortmund, Dortmund, Germany  
5Practice for Plastic and Aesthetic Surgery, Wuerzburg, Germany  
6University Hospital of Wuerzburg, Wuerzburg, Germany
### 14:00 - 14:30
**CEC3-5**

*Species-, sex-, and tissue-dependent metabolism of soy isoflavones in humans, rats and mice and its biological implications*

Sabine E. Kulling, Sebastian T. Soukup,
The Isocross Consortium, Department of Safety and Quality of Fruit and Vegetables, Germany

### 10:00 - 16:00

#### CEC 4: Evaluation of food additives in Europe: Point of the art

**Chairs:** Claudia Roncanciopena, Italy, and Pr. D. Parent Massin, France

10:00 - 10:30

**CEC4-1**

*Principles of re-evaluation of food additives in Europe: Point of the Art of the re-evaluation of sweeteners*

Aljcia Mortensen\(^1\), Fernando Aguilar\(^1\), Riccardo Crebelli\(^1\), Alessandro Di Domenico\(^1\), Maria José Frutos Fernandez\(^1\), Paolo Colombo\(^2\), Alexandra Tard\(^2\), Claudia Roncancio Peña\(^2\)

\(^1\)Scientific Panel on Food Additives and Nutrient Sources Added to Food (ANS), European Food Safety Authority (EFSA), Parma, Italy

\(^2\)European Food Safety Authority, Food Ingredients and Packaging Unit (FIP), Parma, Italy

10:30 - 11:00

**CEC4-2**

*Food colours: Point of the Art evaluation*

Agneta Oskarsson\(^1\), Ruud Woutersen\(^2\), Jean Charles Leblanc\(^2\), Peter Moldeus\(^2\), David Gott\(^2\), Ursula Gundert Remy\(^2\), Federica Lodi\(^3\), Stravoula Tasiopoulou\(^3\)

\(^1\)Department of Biomedical Sciences and Veterinary Public Health, Swedish University of Agricultural Sciences, Uppsala, Sweden

\(^2\)Scientific Panel on Food Additives and Nutrient Sources Added to Food (ANS), European Food Safety Authority (EFSA), Parma, Italy

\(^3\)European Food Safety Authority, Food Ingredients and Packaging Unit (FIP), Parma, Italy

11:00 – 11:30

Coffee Break

11:30 - 12:00

**CEC4-3**

*Thickeners and preservatives: Point of the Art of the re-evaluation*

Dominique Parent Massin\(^1\), Birgit Dusemund\(^1\), Oliver Lindtner\(^1\), Pasquale Mosesso\(^1\), Pierre Galtier\(^1\), Anna Christodoroulidou\(^2\), Juho Lemmetyinen\(^2\)

\(^1\)Scientific Panel on Food Additives and Nutrient Sources Added to Food (ANS), European Food Safety Authority (EFSA), Parma, Italy

\(^2\)European Food Safety Authority, Food Ingredients and Packaging Unit (FIP), Parma, Italy
Scientific Panel on Food Additives and Nutrient Sources Added to Food (ANS), European Food Safety Authority (EFSA), Parma, Italy
European Food Safety Authority, Food Ingredients and Packaging Unit (FIP), Parma, Italy

12:00 – 13:30
Lunch Break

13:30 - 14:00
**CEC4-4**
**Emulsifiers: Point of the Art evaluation**

Matthew C Wright¹, Ivan Stankovic², Ine Waalkens Berendsen³, Ruud A Woutersen³, Maged Younes³, Ana Maria Rincon⁴, Dario Battacchi⁴
¹Institute Cellular Medicine, Newcastle University, UK
²Faculty of Pharmacy, University of Belgrade, Serbia
³Scientific Panel on Food Additives and Nutrient Sources Added to Food (ANS), European Food Safety Authority (EFSA), Italy
⁴European Food Safety Authority, Food Ingredients and Packaging Unit (FIP), Italy

10h00 - 16h00
**CEC 5: In vivo chemical genotoxin exposure and DNA damage in humans measured using the lymphocyte cytokinesis-block micronucleus (CBMN) assay**

*Chairs: Michael Fenech, Australia, and Nina Holland, USA*

10:00 - 10:30
**CEC5-1**
**Pesticides and herbicides - Results of a systematic review of human exposure studies using the lymphocyte CBMN assay**

Claudia Bolognesi¹, Nina Holland²
¹Environmental Carcinogenesis Unit, IRCCS AUO San Martino IST- National Cancer Research Institute, Genova, Italy
²Nina Holland, School of Public Health, University of California, Berkeley, California, USA

10:30 - 11:00
**CEC5-2**
**Heavy metals: Results of a systematic review of human exposure studies using the lymphocytes micronucleus assay**

Siegfried Knasmueller, Miroslav Mišik, Michael Kundi, Georg Wultsch, Armen Nersesyan
Institute of Cancer Research, Department of Internal Medicine I, Medical University of Vienna, Vienna, Austria
11:00 – 11:30

Coffee Break
11:30 - 12:00  
**CEC5-3**  
**Exposure to petroleum, petroleum derivatives PAHs and traffic fumes - Results of a systematic review of human studies using the lymphocyte CBMN assay**  
Radim Sram  
*Institute of Experimental Medicine AS CR, Prague, Czech Republic*

12:00 – 13:30  
Lunch Break

13:30 - 14:00  
**CEC5-4**  
**Biomonitoring of genotoxic effects for human exposure to nanomaterials: The challenge ahead**  
Micheline Kirsch Volders, Laetitia Gonzalez  
Laboratory of cell genetics, Vrije Universiteit Brussel, Brussels, Belgium

14:00 - 14:30  
**CEC5-5**  
**All other chemicals – Results of systematic reviews of human exposure studies using the lymphocyte CBMN assay**  
Stefano Bonassi  
*Clinical and Molecular Epidemiology IRCCS San Raffaele Pisana, Rome, Italy*

### 10h00 - 16h00

**CEC 6: Green toxicology - A complementary 'qua non' activity for the sustainable development of chemicals and drugs in the 21st century**  
*Chairs: Harald Krug, Switzerland*

Green toxicology is the application of predictive toxicology to the production of chemicals with the specific intent of improving their design for hazard reduction. The twelve principles of green chemistry outline a strategy to reduce hazard through molecular and process design. Reducing toxicity is at the core of green chemistry and sustainability, therefore the input of toxicologists early in the chemical enterprise is essential to inform the choices of molecular designers in selecting less hazardous design strategies. Information derived from mechanistic and computational toxicology combined forms the nexus between toxicology and green chemistry. Each group is trained to examine, understand and describe aspects of the structure hazard relationship from a narrow perspective. This course will provide a forum for collaboration among academia and industry working in complementary fields to discover common ground in the quest for safer chemicals

10:00 - 10:30  
**CEC6-1**  
**Twenty first century toxicology and safer chemical design**  
Thomas Hartung
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30 - 11:00</td>
<td>Johns Hopkins Bloomberg School of Public Health</td>
</tr>
<tr>
<td></td>
<td>CEC6-2</td>
</tr>
<tr>
<td></td>
<td>How the Greenpeace Detox campaign drives the fashion industry towards sustainable supply chains</td>
</tr>
<tr>
<td></td>
<td>Anne Bonhoff</td>
</tr>
<tr>
<td></td>
<td>UL Environment</td>
</tr>
<tr>
<td>11:00 - 11:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>11:30 - 12:00</td>
<td>CEC6-3</td>
</tr>
<tr>
<td></td>
<td>Green toxicology and chemistry: Hand in glove</td>
</tr>
<tr>
<td></td>
<td>Bennard Van Ravenzwaay, Hennicke Kamp, Robert Landsiedel, Tzutzuy Ramirez</td>
</tr>
<tr>
<td></td>
<td>all authors BASF SE, Ludwigshafen/Germany</td>
</tr>
<tr>
<td>12:00 - 13:30</td>
<td>Lunch Break</td>
</tr>
<tr>
<td>13:30 - 14:00</td>
<td>CEC6-4</td>
</tr>
<tr>
<td></td>
<td>Green Toxicology – The Future in sustainability in chemical and material development</td>
</tr>
<tr>
<td></td>
<td>Harald F. Krug</td>
</tr>
<tr>
<td></td>
<td>Empa - Swiss Federal Laboratories for Materials Science and Technology, St. Gallen, Switzerland &amp; NanoCASE GmbH, Engelburg, Switzerland</td>
</tr>
<tr>
<td>16:00</td>
<td>Opening of the Exhibition</td>
</tr>
<tr>
<td>17:00 - 19:00</td>
<td>Opening Ceremony</td>
</tr>
<tr>
<td></td>
<td>Chair: Aristidis Tsatsakis, President of EUROTOX, Greece</td>
</tr>
<tr>
<td></td>
<td>17:00-17:45</td>
</tr>
<tr>
<td></td>
<td>Welcome Address by Ali Esat Karakaya</td>
</tr>
<tr>
<td></td>
<td>President of the EUROTOX 2016 Congress, Turkey</td>
</tr>
<tr>
<td></td>
<td>Welcome Address by Aristidis Tsatsakis</td>
</tr>
<tr>
<td></td>
<td>President of EUROTOX, Greece</td>
</tr>
<tr>
<td></td>
<td>17:45 – 18:00</td>
</tr>
<tr>
<td></td>
<td>EUROTOX Merit Award Ceremony</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>19h00 - 21h00</td>
<td>Welcome Reception</td>
</tr>
<tr>
<td>08h00 - 18h00</td>
<td>Congress Registration</td>
</tr>
<tr>
<td>08h30 - 09h30</td>
<td>Keynote Lecture</td>
</tr>
<tr>
<td></td>
<td><strong>K-1</strong> Evolution of Computational Toxicology: From Primitive Beginnings to Sophisticated Application</td>
</tr>
<tr>
<td>09h30 - 10h00</td>
<td>Coffee Break, Exhibition and Poster Viewing</td>
</tr>
<tr>
<td>10h00 - 12h00</td>
<td>Symposium S01: Adverse Drug Reactions: Mechanisms and Preclinical Testing</td>
</tr>
<tr>
<td></td>
<td><strong>S01-1</strong> Mechanisms of Adverse Drug Reactions: Metabolic and Others</td>
</tr>
<tr>
<td></td>
<td><strong>S01-2</strong> Role of glutathione transferases and quinonoxidoreductases in protection against reactive drug metabolites</td>
</tr>
<tr>
<td></td>
<td><strong>S01-3</strong> High throughput imaging-based mode-of-action analysis in DILI prediction</td>
</tr>
<tr>
<td></td>
<td><strong>S01-4</strong> Involvement of mitochondria in drug-induced toxicities</td>
</tr>
<tr>
<td>Time</td>
<td>Session Description</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 10h00 - 12h00| Symposium S02: A multidisciplinary approach for novel developmental neurotoxicity risk assessment contributing to the AOP concept  
*Chairs: Eugenia Vilanova, Spain and Anna Price, Italy* | Andrea Terron¹, Stefan Masjosthusman², Henrich Alm², Jenny Baumann², Lieve Geerts⁴, Helen Hakansonn³, Hilda Witters⁴, Ellen Fritsche²  
¹European Food Safety Authority (EFSA), Parma, Italy  
²IUF, Dusseldorf, Gemany  
³Karolinska Institutet, Stockholm, Sweden  
⁴VITO, Boeretang, Belgium |
|              | S02-1 Systematic review on methods for developmental neurotoxicity evaluation based on an EFSA Report     | Helena T. Hogberg¹, Mounir Bouhifd², Ozge Cemiloglu Ulker¹, Rita De Cassia Da Silveira E Sa⁴, Georgina Harris¹, Andre Kleensang⁴, Alexandra Maertens¹, David Pamies¹, Lena Smirnova¹, Liang Zhao¹, Hartung Thomas¹  
¹Center for Alternatives to Animal Testing, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA  
²Joint Research Center, European Commission, Ispra, Italy  
³Department of Toxicology, Faculty of Pharmacy, University of Ankara, Ankara, Turkey  
⁴Department of Physiology and Pathology, Federal University of Paraiba, Paraiba, Brazil |
|              | S02-2 3D Models and omics approaches to study developmental neurotoxicity                               | Eugenio Vilanova, Andrea C. Romero, David Pamies, Carmen Estevan, Miguel A. Sogorb  
Unit of Toxicology, Institute of Bioengineering, Miguel Hernandez University of Elche, Alicante-Spain |
|              | S02-3 Species-specific, comparative functional and 'omics' analyses of developing human, rat and mouse primary neurospheres  | Ellen Fritsche  
IUF - Leibniz Research Institute for Environmental Medicine, Düsseldorf, Germany |
|              | S02-4 From simple in vitro test to complex models: the example of developmental toxicity of organophosphorus compounds | Anna Price  
Institute for Health and Consumer Protection, European Commission Joint Research Centre, Ispra, Italy |
| 10h00 - 12h00| Workshop W01: Enhancing the quality of predictions for developmental toxicity                           | EuromoTox2016 Conference Host                                                                                     |

**EUROTOX 2016 Congress Host**  
**Greek Society of Toxicology**  
**EuromoTox2016 Secretariat**  
**VISITUR M.I.C.E.**
based on alternative methods

**Chairs:** Bennard van Ravenzwaay, Germany and Aldert Piersma, The Netherlands

**W01-1**
A transcriptomic approach for a mechanistic insight into developmental toxicity of azoles in the rat Whole Embryo Culture

Myrto Dimopoulou¹, Aart Verhoef², Bennard Van Ravenzwaay³, Ivonne M.C.M. Rietjens¹, Aldert H. Piersma²

¹Division of Toxicology, Wageningen University, the Netherlands
²National Institute of Public Health and the Environment (RIVM), Bilthoven, The Netherlands
³BASF SE, Experimental Toxicology and Ecology, Ludwigshafen, Germany

**W01-2**
Screening of developmental toxicity – Validation and predictivity of the zebrafish embryotoxicity assay (ZETA) and strategies to optimize de-risking developmental toxicity of drug candidates

Eckart Krupp
Sanofi-Aventis Deutschland GmbH, Preclinical Safety, Frankfurt, Germany

**W01-3**
Crack the egg – Improvement in the use of chicken embryos to predict developmental toxicity

Burkhard Flick, Tzutzuy Ramirez, Bennard Van Ravenzwaay
Department of Experimental Toxicology and Ecology, BASF SE, Ludwigshafen, Germany

**W01-4**
Pathway specific assay (1) The assessment of angiogenesis/vasculogenesis in the context of developmental toxicity

Tuula Heinonen, Outi Huttala, Tarja Toimela
Ficam, University of Tampere, Finland

**W01-5**
Computational modeling and simulation of developmental toxicity

Thomas B Knudsen
National Center for Computational Toxicology, USA

10h00 - 12h00

**Workshop W02:** Improving chemicals risk assessment with refined exposure characterisation

**Chairs:** Jim Bridges, UK, and Helmut Greim, Germany

**W02-1**
Improving chemical risk assessment through tiered and targeted application of exposure assessment
<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>12h00 - 14h00</td>
<td>Lunch Break, Exhibition &amp; Poster Session I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12h00 - 13h00</td>
<td>HESI CITE Lecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14h00 - 16h00</td>
<td>Symposium S03: Microbiome, nutrition, and immune-mediated diseases</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**W02-2**
Experiences from the ECETOC TRA tool, 2004-2016

*Gerlienke Schuur*
A.G. Schuur

**W02-3**
Refining exposure data acquisition and application in higher tier consumer assessments, W2(10)

*Natalie Von Goetz*
Institute of Chemical and Bioengineering, ETH Zurich, Switzerland

**W02-4**
Modelling Total Exposure to Chemicals from Multiple Sources

*Sarah Anne Tozer*
Procter & Gamble, Egham, Surrey, UK

**W02-5**
How to improve the quality of exposure information needed for REACH processes?

*Andreas Ahrens*
Registration Directorate, European Chemicals Agency, Helsinki, Finland

**HESI CITE Lecture**

*K-2 HESI CITE Lecture 2016*
Introduction by Syril D Pettit, HESI Executive Director

**Symposium S03: Microbiome, nutrition, and immune-mediated diseases**

*Chairs: Berran Yucesoy, USA, and Ian Kimber, UK*

**S03-1**
Complex interplay between the immune system and the infant gut microbiota: potential health implications

*Maria Jenmalm*
Department of Clinical and Experimental Medicine, Unit of Autoimmunity and Immune Regulation, Linköping University, Linköping, Sweden

**S03-2**
Early-life nutrition, gut microbiota and allergies

*Hania Szajewska*
The Medical University of Warsaw, Department of Pediatrics
<table>
<thead>
<tr>
<th>S03-3</th>
<th>Diet, gut microbiota, and immunometabolic dysfunction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alexander R Moschen</strong></td>
<td></td>
</tr>
<tr>
<td>Department of Medicine, Division of Internal Medicine I, Medical University Innsbruck, Innsbruck, Austria</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S03-4</th>
<th>Skin microbiome, inflammatory and allergic skin diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Georgios Stamatas</strong></td>
<td></td>
</tr>
<tr>
<td>Emerging Science &amp; Innovation, R&amp;D, Johnson &amp; Johnson Santé Beauté France, Issy-les-Moulineaux, France</td>
<td></td>
</tr>
</tbody>
</table>

### 14h00 - 16h00

**Workshop W05 Rat Carcinogenicity Studies – Can they be replaced?**

*Chair: Thomas Weiser, Switzerland, and Ruth Roberts, UK*

**W05-1**

*Overview of pharmacology-induced mechanisms of carcinogenesis*

- Jan Willem Van Der Laan¹, Peter Kasper², Beatriz Silva Lima³, David Jones⁴, Markku Pasanen⁵
  ¹Section on pharmacological, Toxicological and Kineticst, Medicines Evaluation Board, PO Box 8275, 3503RG Utrecht, The Netherlands.  
  ²Federal Institute for Drugs and Medical Devices (BfArM), Bonn, Germany  
  ³Universidade de Lisboa, Faculty of Pharmacy, Lisbon, Portugal  
  ⁴Medicines and Healthcare products Regulatory Agency, London, United Kingdom  
  ⁵University of Eastern Finland, Faculty of Health Sciences, School of Pharmacy, Kuopio, Finland

**W05-2**

*Revision of the current ICH S1 guidance on rodent carcinogenicity testing: Where do we stand?*

- **Peter Kasper**
  Federal Institute for Drugs and Medical Devices (BfArM)

**W05-3**

*Carcinogenicity Assessment Documents and the added value of “Weight-of-Evidence” factors - an industry perspective*

- **Lutz Mueller**
  F. Hoffmann-La Roche Innovation Center, Basel, Switzerland

**W05-4**

*Future Directions in Carcinogenicity Testing for Pharmaceuticals*

- **Michael Graziano**
  Drug Safety Evaluation at Bristol-Myers Squibb

### 14h00 - 16h00

**Symposium S05: The H2020 EU-ToxRisk project: A novel flagship program for mechanism-based safety sciences and risk assessment**
**Chair:** Bob van de Water, The Netherlands, and Felix Carvalho, Portugal

**S05-1**

The EU-ToxRisk project: A European flagship program for mechanism-based safety sciences and risk assessment

Bob Van De Water  
Leiden Academic Centre for Drug Research, Leiden University, Leiden, The Netherlands

**S05-2**

Industry perspective on AOP-based toxicological approaches: from knowledge to implementation

Hennicke Georg Kamp  
BASF SE, Experimental Toxicology and Ecology, Ludwigshafen, Germany

**S05-3**

Integrative knowledge management and modelling supporting the EU-ToxRisk project

Ferran Sanz  
IMIM – Universitat Pompeu Fabra Barcelona (Spain)

**S05-4**

Assessment of quantitative AOP key events in human hepatocytes using transcriptomics biomarkers

Jan G Hengstler  
Department of Systems Toxicology, IfADo at TU Dortmund

**S05-5**

Development and reproductive toxicity: Advanced model systems and quantitative risk assessment

Dinant Kroese¹, Andre Wolterbeek², Bart Van De Burg³  
¹Department Risk Analysis of Products In Development, TNO Zeist, The Netherlands  
²Triskellion B.V., a TNO Company, Zeist, The Netherlands  
³BioDetection Systems BV, Amsterdam, The Netherlands

<table>
<thead>
<tr>
<th>Time</th>
<th>Workshop W03: Mass Spectrometry Imaging as investigative tool for molecular toxicology</th>
</tr>
</thead>
<tbody>
<tr>
<td>14h00 - 16h00</td>
<td><strong>Chairs:</strong> Stefan Platz, UK and Richard Goodwin, UK</td>
</tr>
</tbody>
</table>
|            | **W03-1**  
Mass spectrometry imaging in drug discovery and development  
Richard Goodwin  
Pathology Sciences, Drug Safety & Metabolism, AstraZeneca UK  
**W03-2** |
### Investigating drug-induced toxicity in tissue samples using mass spectrometry imaging

**Per E. Andren**, Anna Nilsson, Mohammadreza Shariatgorji, Richard Goodwin

1. Department of Pharmaceutical Biosciences, Biomolecular Imaging and Proteomics, Uppsala University, Uppsala, Sweden
2. AstraZeneca, Drug Safety and Metabolism, Cambridge, UK

**W03-3**
Ambient Ionization Mass Spectrometry – From the Origins to Molecular Pathology Applications

Zoltan Takats

*Imperial College, UK*

**W03-4**
Target organ toxicity – application of MSI

John Swales

Pathology Sciences, AstraZeneca

**W03-5**
Moving MS(i) closer to surgery: The need to improve pre-, intra- and post-operative clinical diagnostics

Tiffany Porta, Keely Pierzchalski, Klara Scupakova, Anne L. Bruinen, Florian P. Y. Barré, Pierre Maxence Vaysse, Flora Olivier, Benjamin Balluff, Berta Cillero-Pastor, Ron M. A. Heeren

M4I institute, University of Maastricht, Maastricht, The Netherlands

### Workshop W04: Protein targets of reactive intermediates: linking chemistry to biology and adverse outcome

**Chairs:** Angela Mally, Germany, and Hilmi Orhan, Turkey

**W04-1**
Introduction/Chair

Angela Mally and Hilmi Orhan

*University of Würzburg, Würzburg, Germany and Ege University, Izmir, Turkey*

**W04-2**
Targets and consequences of alkylation damage by reactive electrophiles

Angela Mally

Department of Toxicology, University of Würzburg, Würzburg, Germany

**W04-3**
The expanding landscape of the thiol redox proteome

Jing Yang

National Center for Protein Sciences, Beijing
### W04-4
Modification of cysteine residues by cyclopentenone prostaglandins in the elucidation of redox regulation of protein function

Dolores Pérez Sala  
Department of Chemical and Physical Biology, Centro de Investigaciones Biológicas, CSIC, Madrid, Spain

### W04-5
Redox proteomics analysis to decipher the neurobiology of alzheimer-like neurodegeneration

Marzia Perluigi  
Department of Biochemical Sciences, Sapienza University of Rome

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>16h00 - 17h00</td>
<td>Coffee Break, Exhibition &amp; Poster Viewing</td>
</tr>
<tr>
<td>17h00 - 19h00</td>
<td>Symposium S06: Nanosafety: Present and Future</td>
</tr>
<tr>
<td></td>
<td>Chairs: Kai Savolainen, Finland, and Flemming R. Cassee, The Netherlands</td>
</tr>
<tr>
<td>S06-1</td>
<td>Predicting of toxicity of engineered nanomaterials</td>
</tr>
<tr>
<td>Kai Savolainen</td>
<td>Finnish Institute of Occupational Health</td>
</tr>
<tr>
<td>S06-2</td>
<td>Immunotoxic and pulmonary effects of engineered nanomaterials</td>
</tr>
<tr>
<td>Harri Alenius</td>
<td>Department of Bacteriology and Immunology, Helsinki University, Helsinki, Finland</td>
</tr>
<tr>
<td>S06-3</td>
<td>Innovation and Model Organisms for the Environmental Hazard Assessment of Engineered Nanomaterials</td>
</tr>
<tr>
<td>Richard D Handy</td>
<td>School of Biological Sciences, Plymouth University, United Kingdom</td>
</tr>
<tr>
<td>S06-4</td>
<td>Developmental toxicity of engineered nanomaterials</td>
</tr>
<tr>
<td>Karin S. Hougaard¹, Jitka S. Hansen¹, Petra Jackson¹, Zdenka O. Kyjovska¹, Anne Mette Z. Boisen¹, Carole Yauk², Sabina Halappanavar², Keld A. Jensen¹, Håkan Wallin¹, Sandra Goericke Pesch¹, Astrid Skovmand¹, Ulla Vogel¹</td>
<td></td>
</tr>
<tr>
<td>¹Danish Nanosafety Centre, National Research Centre for the Working Environment, Copenhagen, Denmark</td>
<td></td>
</tr>
<tr>
<td>²Environmental Health Science and Research Bureau, Health Canada, Ottawa, Canada</td>
<td></td>
</tr>
<tr>
<td>³Veterinary Reproduction and Obstetrics, Department of Large Animal Sciences, University of Copenhagen, Denmark</td>
<td></td>
</tr>
<tr>
<td>S06-5</td>
<td>Dose metric for the prediction of toxicity of nanomaterials</td>
</tr>
<tr>
<td>Time</td>
<td>Symposium</td>
</tr>
<tr>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>17h00 - 19h00</td>
<td>S07</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S07-1</td>
</tr>
<tr>
<td></td>
<td>S07-2</td>
</tr>
<tr>
<td></td>
<td>S07-3</td>
</tr>
<tr>
<td></td>
<td>S07-4</td>
</tr>
<tr>
<td></td>
<td>S08</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S08-1</td>
</tr>
<tr>
<td></td>
<td>S08-2</td>
</tr>
</tbody>
</table>
### NOD mice via impaired macrophage function

Johanna Bodin¹, Anette Kochbach Bølling², Rune Becher², Frieke Kuper³, Martinus Løvik⁴, Unni Cecilie Nygaard¹

¹Department of Toxicology and Riskassessment, Norwegian Institute of Public Health, Oslo, Norway
²Department of Air Pollution and Noise, Norwegian Institute of Public Health, Oslo, Norway
³TNO Nutrition and Food Research, Zeist, The Netherlands
⁴Department for Cancer Research and Molecular Medicine, Faculty of Medicine, Norwegian University for Science and Technology, Trondheim, Norway

**S08-3**  
**Glucocorticoid receptor disruptors and immune functions**

Marija Sollner Dolenc, Ivana Klopčič  
Faculty of Pharmacy, University of Ljubljana, Aškerčeva 7, 1000 Ljubljana, Slovenia

### S08-4  
**Gene signatures in human leukocytes exposed to endocrine disruptors**

Greet Schoeters¹,²,³, Sylvie Remy², Nathalie Lambrechts¹, Britt Wens¹  
¹Health Department, VITO, Mol, Belgium
²Biomedical Dept. University of Antwerp, Antwerp, Belgium
³Environmental Medicine, Public Health departement, Southern Denmark University, Odense, Denmark

---

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>17h00 - 19h00</td>
<td><strong>Symposium S04: DNA Damage and Repair in Cancer: From Bench to Clinic</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chair:</strong> Miral Dizdaroglu, USA and Sinan Süzen, Turkey</td>
</tr>
<tr>
<td>S04-1</td>
<td><strong>Coordination during the stepwise process of base lesion DNA repair</strong></td>
</tr>
<tr>
<td></td>
<td>Samuel H. Wilson</td>
</tr>
<tr>
<td></td>
<td>Genome Integrity and Structural Biology Laboratory, NIH-NIEHS, Research Triangle Park, NC, USA</td>
</tr>
<tr>
<td>S04-2</td>
<td><strong>Mitochondrial dysfunction in DNA repair defective disorders: mechanisms and pathological relevance</strong></td>
</tr>
<tr>
<td></td>
<td>Eugenia Dogliotti</td>
</tr>
<tr>
<td></td>
<td>Istituto Superiore di Sanità, Rome, Italy</td>
</tr>
<tr>
<td>S04-3</td>
<td><strong>Genomic uracil – Important carcinogenic mutagen but normal intermediate in adaptive immunity</strong></td>
</tr>
<tr>
<td></td>
<td>Hans Einar Krokan, Geir Slupphaug, Pål Sætrom, Antonio Sarno, Anastasia Galashevskaya, Maria Brenner Lundbæk, Per Arne Aas, Ruth Haaland Krokan, Nina Beate Liabakk, Henrik Sahlin Pettersen, Mirta M. Sousa, Berit Døseth, Bodil Kavli</td>
</tr>
<tr>
<td></td>
<td>Department of Cancer Research and Molecular Medicine, Norwegian University of</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>17h00 - 19h00</td>
<td><strong>Workshop W06: Use and misuse of the TTC concept in risk assessment</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chair:</strong> Dieter Schrenk, Germany, and Mojmir Mach, Slovakia</td>
</tr>
<tr>
<td>W06-1</td>
<td>Twelve years of TTC (of genotoxic carcinogens) – A success story?</td>
</tr>
<tr>
<td></td>
<td>Dieter Schrenk</td>
</tr>
<tr>
<td></td>
<td>Food Chemistry and Toxicology, University of Kaiserslautern</td>
</tr>
<tr>
<td>W06-2</td>
<td>TTC and &quot;unknowns&quot;, e.g. in food contact materials</td>
</tr>
<tr>
<td></td>
<td>Benoit Schilter</td>
</tr>
<tr>
<td></td>
<td>Nestlé Research Center</td>
</tr>
<tr>
<td>W06-3</td>
<td>TTC and herbal preparations</td>
</tr>
<tr>
<td></td>
<td>Olavi Pelkonen</td>
</tr>
<tr>
<td></td>
<td>Department of Pharmacology and Toxicology, University of Oulu, Oulu, Finland</td>
</tr>
<tr>
<td>W06-4</td>
<td>Is the use of a default TTC for impurities warranted?</td>
</tr>
<tr>
<td></td>
<td>Lutz Mueller</td>
</tr>
<tr>
<td></td>
<td>F. Hoffmann-La Roche Innovation Center, Basel, Switzerland</td>
</tr>
<tr>
<td>19h30 – 21h00</td>
<td><strong>AstraZeneca Reception</strong> by invitation only</td>
</tr>
<tr>
<td></td>
<td>NH Collection Hotel</td>
</tr>
</tbody>
</table>

**Tuesday, 6 September, 2016**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>08h00 - 18h00</td>
<td>Congress Registration</td>
</tr>
<tr>
<td>08h30 – 18h00</td>
<td>Exhibition</td>
</tr>
</tbody>
</table>

**Science and Technology, Trondheim, Norway**

**S04-4**

Dissecting base excision repair in breast cancer for personalization of therapy

Srinivasan Madhusudan

*University of Nottingham, Nottingham, UK*

**S04-5**

Inhibition of DNA glycosylases in development of cancer therapeutics

Miral Dizdaroglu¹, Aaron C. Jacobs², Marcus J. Calkins², Ajit Jadhav³, Dorjbal Dorjsuren³, David Maloney³, Anton Simeonov³, Nathan Donley², Pawel Jaruga¹, Erdem Coskun¹, Amanda K. McCullough², Stephen Lloyd²

¹National Institute of Standards and Technology, Gaithersburg, Maryland, USA
²Oregon Health and Science University, Portland, Oregon, USA
³National Center for Advancing Translational Sciences, National Institutes of Health, Rockville, Maryland, USA
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>08h30 - 09h30</td>
<td><strong>Keynote Lecture Bo Holmstedt Memorial Fund</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chair:</strong> Herman Autrup, Denmark</td>
</tr>
<tr>
<td>09h30 - 10h00</td>
<td>Coffee Break, Exhibition and Poster Viewing</td>
</tr>
<tr>
<td>10h00 - 12h00</td>
<td><strong>Symposium S09: Integrating epidemiology and experimental toxicology to improve pesticide risk assessment</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Chairs:</strong> Aristidis Tsatsakis, Greece and Antonio Hernandez-Jerez, Spain</td>
</tr>
<tr>
<td>S09-1</td>
<td>Integrating epidemiological, mechanistic and experimental toxicology data for pesticide risk assessment</td>
</tr>
<tr>
<td></td>
<td><strong>Antonio F Hernández Jerez¹, Fernando Gil², Marina Lacasaña²</strong></td>
</tr>
<tr>
<td></td>
<td>¹Dept. Legal Medicine and Toxicology, University of Granada School of Medicine, Granada (Spain)</td>
</tr>
<tr>
<td></td>
<td>²Escuela Andaluza de Salud Pública, Granada (Spain), CIBERESP, ibs. GRANADA</td>
</tr>
<tr>
<td>S09-2</td>
<td>Pesticides and Parkinson’s disease – what is the evidence from epidemiological and experimental studies?</td>
</tr>
<tr>
<td></td>
<td><strong>Martin F Wilks</strong></td>
</tr>
<tr>
<td></td>
<td>Swiss Centre for Applied Human Toxicology, University of Basel, Basel, Switzerland</td>
</tr>
<tr>
<td>S09-3</td>
<td>Using large animal models and clinical research to understand organophosphorus toxicity and treatment</td>
</tr>
<tr>
<td></td>
<td><strong>Michael Eddleston</strong></td>
</tr>
<tr>
<td></td>
<td>Pharmacology, Toxicology &amp; Therapeutics, University of Edinburgh</td>
</tr>
<tr>
<td>S09-4</td>
<td>Neurodevelopmental toxicity of organophosphate pesticides: Mechanistic data and epidemiological studies</td>
</tr>
<tr>
<td></td>
<td><strong>Félix Carvalho</strong></td>
</tr>
<tr>
<td></td>
<td>UCIBIO, REQUIMTE, Laboratory of Toxicology, Department of Biological Sciences, Faculty of Pharmacy, University of Porto, Portugal</td>
</tr>
<tr>
<td>S09-5</td>
<td>Disturbed extracellular matrix homeostasis: identification of novel biomarkers for pesticide-induced toxicity?</td>
</tr>
<tr>
<td></td>
<td><strong>Dragana Nikitovic</strong></td>
</tr>
<tr>
<td>Time</td>
<td>Workshop Title</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>10h00</td>
<td><strong>Workshop W07: Application of human-based system toxicology for preclinical safety assessment of pharmaceuticals</strong>&lt;br&gt;&lt;br&gt;<strong>Chairs:</strong> Rob Stierum, The Netherlands, and Geny Groothuis, The Netherlands</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 12h00 - 13h00 | **EUROTOX-SOT Debate**  
**Topic:** Preclinical (Safety) Toxicology Testing Predicts the Clinical Outcome  
**Chairs:** Patricia E. Ganey, USA, and Mümtaz Iscan, Turkey  
**D-01**  
Preclinical (Safety) Toxicology Testing Predicts the Clinical Outcome  
**Ruth A Roberts**¹, Thomas Monticello²  
¹ApconiX, Alderley Park  
²Amgen Inc, California |
| 12h00-14h00 | Poster Session II                                                        |
| 13h00 - 14h00 | Lunch Break & Exhibition Viewing                                          |
| 14h00 - 15h00 | **Keynote Lecture**  
**Chair:** Asuman Karakaya  
**K-4**  
Genetics and Epigenetics of Liver Cancer  
**Mehmet Öztürk**  
Dokuz Eylül University, Izmir International Biomedicine and Genome Institute, Izmir, Turkey |
<table>
<thead>
<tr>
<th>Time</th>
<th>Session/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>15h00 - 16h00</td>
<td>Coffee Break, Exhibition &amp; Poster Viewing</td>
</tr>
<tr>
<td>15h30 - 16h30</td>
<td>Oral Communication Session 1</td>
</tr>
<tr>
<td><strong>Chairs:</strong> Eren Özçağlı, Turkey and Emanuela Corsini, Italy</td>
<td></td>
</tr>
<tr>
<td>OSC01-009</td>
<td>Development of an (in vitro) inhalation toxicity test using the EpiAirway model for improved protection of human health</td>
</tr>
<tr>
<td>P. J. Hayden¹, G. R. Jackson, Jr., A. Hunter¹, S. Coughlin¹, A. Maione¹, S. Letasiova², H. Kandarova²</td>
<td></td>
</tr>
<tr>
<td>¹MatTek Corporation, Ashland, MA, USA</td>
<td></td>
</tr>
<tr>
<td>²MatTek In Vitro Life Science Laboratories, Bratislava, Slovak Republic</td>
<td></td>
</tr>
<tr>
<td>16h00 - 18h00</td>
<td>Measuring Apoptosis in Real-Time by Linking Luciferase Fragments to Annexin V</td>
</tr>
<tr>
<td>OSC01-008</td>
<td>In vitro validation of in vivo assessment of toxicity and antidotes to Cleisthanthus collinus poisoning - a common suicidal phytotoxin in India</td>
</tr>
<tr>
<td>G. S. Chandra</td>
<td></td>
</tr>
<tr>
<td>Pharmacovigilance Laboratory For Animal Feed And Food Safety centre For Animal Health Studies, Tanuvas, madhavaram Milk Colony, chennai – 600 051. tamilnadu, India</td>
<td></td>
</tr>
<tr>
<td>16h30 - 17h30</td>
<td>Evaluation of read-across argumentation according to the ECHA Read-Across Assessment Framework (RAAF)</td>
</tr>
<tr>
<td>A. Richarz, E. Berggren, A. Worth</td>
<td></td>
</tr>
<tr>
<td>European Commission Joint Research Centre, IHCP, Systems Toxicology Unit &amp; EURL ECVAM, Ispra, Italy</td>
<td></td>
</tr>
<tr>
<td>OSC01-010</td>
<td>Exposome analysis of polyaromatic hydrocarbons</td>
</tr>
<tr>
<td>D. Sarigiannis¹, S. Karakitsios¹, E. Handakas¹, A. Gotti²</td>
<td></td>
</tr>
</tbody>
</table>
OSC02-001

Mercury Human Health Risk Assessment Among Lebanese Youth

H. R. Dhaini¹, P. J. Obeid², S. A. Fares³, G. N. Farhat⁴, B. El Khoury², R. M. Nassif⁵
¹Department of Environmental Health, American University of Beirut, Beirut, Lebanon
²Department of Chemistry, University of Balamand, Al Kurah, Lebanon
³Hariri School of Nursing, American University of Beirut, Beirut, Lebanon
⁴Hubert Department of Global Health, Emory University, Atlanta, Georgia, USA
⁵Medical Laboratory Sciences Program, University of Balamand, Beirut, Lebanon

OSC02-003

Thresholds of Toxicological Concern – Overview of Ongoing Scientific Developments

C. Turek¹, S. Campos², J. Edwards³, S. Escher⁴, P. Ferret⁵, N. Höfer⁶, K. Kosemund⁷, J. Schnabel⁸, B. Van Ravenzwaay⁹, H. M. Hollnagel¹⁰
¹Corporate drug safety, WALA Heilmittel GmbH, Bad Boll, Germany
²Food Contact Materials, The Coca-Cola Company, Brussels, Belgium
³NIC-RD/HN Toxicology and Kinetics, DSM Nutritional Products Ltd, Kaiseraugst, Switzerland
⁴Fraunhofer Institute of Toxicology and Experimental Medicine (ITEM), Hannover, Germany
⁵Pierre Fabre Dermo-Cosmétique, Toulouse, France
⁶Südzucker AG, Mannheim, Germany
⁷Global Product Stewardship, Central Product Safety, Procter & Gamble Service GmbH, Schwalbach am Taunus, Germany
⁸Givaudan Schweiz AG, Kemptthal, Switzerland
⁹BASF SE, Ludwigshafen, Germany
¹⁰Toxicology and Environmental Research & Consulting, Dow Europe GmbH, Horgen, Switzerland

OSC02-004

Concentration-response analysis of high throughput data obtained in embryos cultured in vitro in presence of a binary mixture of two antifungal azoles (triamidine and flusilazole)

F. Metruccio¹, M. Battiston², F. Di Renzo², A. Moretto³, E. Menegola²
¹ICPS, ASST Fatebenefratelli Sacco, Milano- Italy
²Università degli Studi di Milano, Dipartimento di Biocienze, Milano-Italy
³Università degli Studi di Milano, Dipartimento di Scienze Biomediche e Cliniche, Milano- Italy

OSC01-003
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>The pulmonary toxicity in nanoscale carbon black-exposed workers</td>
<td>R. Zhang¹, Z. Pei², Y. Zheng³</td>
</tr>
<tr>
<td></td>
<td>¹Department of Toxicology, School of Public Health, Hebei Medical University, Shijiazhuang, China</td>
</tr>
<tr>
<td></td>
<td>²School of Medicine, China Three Gorges University, Yichang, China</td>
</tr>
<tr>
<td></td>
<td>³National Institute for Occupational Health and Poison Control, Chinese Center for Disease Control and Prevention, Beijing, China</td>
</tr>
<tr>
<td>OSC01-004</td>
<td>Toxicity of Cerium Dioxide Nanoparticles – Effects from a 90-Day Inhalation Study</td>
</tr>
<tr>
<td></td>
<td>D. Schwotzer, M. Niehof, T. Hansen, T. Tillmann, H. Ernst, O. Creutzenberg</td>
</tr>
<tr>
<td></td>
<td>Fraunhofer Institute for Toxicology and Experimental Medicine, Hannover, Germany</td>
</tr>
<tr>
<td>OSC01-005</td>
<td>Co-occurring mycoestrogens formed by {Fusarium} and {Alternaria species} mediate synergistic estrogenic effects</td>
</tr>
<tr>
<td></td>
<td>K. Vejdovszky, K. Hahn, B. Warth, D. Marko</td>
</tr>
<tr>
<td></td>
<td>University of Vienna, Faculty of Chemistry, Dept. of Food Chemistry and Toxicology, Vienna, Austria</td>
</tr>
</tbody>
</table>

16h00 - 18h00

Symposium S10: Current state of scientific issues in risk assessment of endocrine disruptors and reproductive toxicants

Chairs: Hande Gürer-Orhan, Turkey, and Ana Soto, USA

S10-1 Performance Of The In Vitro Assays For Testing Endocrine Disrupters

Hande Gürer Orhan
Department of Toxicology, Faculty of Pharmacy, Ege University, Izmir, Turkey

S10-2 Fetal BPA exposure, development and cancer

Ana M. Soto
Department of Integrative Physiology and Pathobiology Tufts University School of Medicine

S10-3 Utility of AOPs/MOAs in assessing the effects of endocrine disruptors

Alan R Boobis
Department of Medicine, Imperial College London, UK

S10-4
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive toxicity of boric acid and sodium borates</td>
<td>Yalcin Duydu¹, Nursen Basaran², Hermann M Bolt³</td>
<td>¹Department of Toxicology, Faculty of Pharmacy, Ankara University, Ankara, Turkey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>²Department of Toxicology, Faculty of Pharmacy, Hacettepe University, Ankara, Turkey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>³Leibniz Research Centre for Working Environment and Human Factors (IfADo), Dortmund, Germany</td>
</tr>
<tr>
<td>Oral Communication Session 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10 min presentations)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chairs: Pınar Erkekoğlu, Turkey, and Joao Paulo Texeria, Portugal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSC02-009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nrf2 and Sirt3 mediated pathways in Patulin-induced mitochondrial dysfunction in kidney cells</td>
<td>Y. Pillay¹, A. Phulukdaree², S. Nagiah¹, A. A. Chuturgoon¹</td>
<td>¹Discipline of Medical Biochemistry, University of KwaZulu-Natal, Durban, South Africa</td>
</tr>
<tr>
<td></td>
<td></td>
<td>²Department of Physiology, University of Pretoria, Pretoria, South Africa</td>
</tr>
<tr>
<td>OSC01-007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cytotoxicity and genotoxicity of chlorogenic acid alone or associated with the demethylating drug 5-azacytidine in Jurkat cells</td>
<td>L. C. Hernandes¹, A. R. Machado¹, D. L. Ribeiro², A. F. Aissa¹, V. D. Venâncio¹, R. V. Burim¹, M. D. Bianchi¹, L. M. Antunes¹</td>
<td>¹Department of Clinical Analyses, Toxicology and Food Sciences, School of Pharmaceutical Sciences of Ribeirão Preto, University of São Paulo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>²Department of Genetics, School of Medicine of Ribeirão Preto, University of São Paulo</td>
</tr>
<tr>
<td>OSC02-002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deltamethrin produces oxidative stress in the livers and kidneys</td>
<td>B. Nieradko Iwanicka, A. Borzęcki</td>
<td>Medical University of Lublin</td>
</tr>
<tr>
<td>OSC02-010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dioxin-like POPs: induced aryl hydrocarbon receptor transactivity in the Danish pregnant women</td>
<td>M. Long, E. C. Bonefeld Jørgensen</td>
<td>Centre for Arctic Health &amp; Molecular Epidemiology, Department of Public Health, Aarhus University, Aarhus, Denmark</td>
</tr>
</tbody>
</table>
### OSC01-002

**Size-dependent genotoxicity of gold nanoparticles in the comet assay and long-term in vivo micronucleus test**

L. Hongxia  
National Chengdu Center for Safety Evaluation of Drugs, West China Hospital, Sichuan University, Chengdu 610041, P.R. China

### OSC01-006

**Cholestatic drugs impair bile acid profiles and disposition in HepaRG cells**

A. Sharanek¹, A. Burban¹, L. Humbert², D. Rainteau², A. Guillouzo¹  
¹Inserm UMR991, Université de Rennes 1, Rennes, France.  
²ERL Inserm U1157/UMR7203, Faculté de Médecine Pierre et Marie Curie, Site Saint Antoine, Paris, France.

### OSC01-011

**Introducing a new method for absolute quantification of DNA repair proteins in relation to drug development: LC-MS/MS with isotope dilution**

E. Cosku¹, P. Jaruga¹, A. Jemth², O. Loseva², S. D. Leona³, A. Tona³, M. S. Lowenthal¹, P. T. Reddy¹, T. Helleday², M. Dizdaroglu¹  
¹Biomolecular Measurement Division, National Institute of Standards and Technology, Gaithersburg, MD, USA.  
²Science for Life Laboratory, Division of Translational Medicine and Chemical Biology, Department of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden.  
³Biosystems and Biomaterials Division, National Institute of Standards and Technology, Gaithersburg, MD, USA.

### OSC01-001

**Use of a human (non-3D equivalent) skin assay for the detection of adverse reactions and potency**

S. S. Ahmed¹, X. N. Wang², A. M. Dickinson¹  
¹Alcyomics Ltd, Bulman House, Regent Centre, Gosforth, Newcastle-upon-Tyne, NE3 3LS, UK.  
²Haematological Sciences, Institute of Cellular Medicine, Newcastle University, Newcastle-upon-Tyne, NE2 4HH, UK.

### OSC02-005

**Nitro and oxy-PAHs derived from amazon biomass burning and their mutagenicity using different models**

S. Batistuzzo¹, M. D. Galvão², N. D. Alves³, P. A. Ferreira⁴, S. Caumo⁵, P. D. Vasconcellos⁵,
P. Artaxo⁶, S. Hacon⁷, D. A. Roubicek⁸
1Key-words: Amazon region, particulate matter, reactive oxygen species and cytokines.
2Programa de Pós-Graduação em Bioquímica, Universidade Federal do Rio Grande do Norte, Natal, RN, Brazil
3Faculdade de Medicina da Universidade de São Paulo, FMUSP, Brazil
4Universidade Federal do Pará, Campus Universitário de Altamira, Brazil
5Instituto de Química, Universidade de São Paulo, São Paulo, SP, Brazil
6Instituto de Física, Universidade de São Paulo, São Paulo, SP, Brazil
7Escola Nacional de Saúde Pública da Fundação Oswaldo Cruz, Rio de Janeiro, RJ, Brazil
8Departamento de Análises Ambientais, CETESB, São Paulo, Brazil

OSC02-007
A Reliable workflow for in silico assessment of genetic toxicity and application to pharmaceutical genotoxic impurities

C. H. Schwab¹, J. F. Rathman², J. Marusczyk¹, A. Mostrag¹, B. Bienfait¹, V. Gombar², C. Yang¹
1Molecular Networks GmbH, Erlangen, Germany
2Altamira LLC, Columbus, OH USA

OSC02-008
Synthesis, biological characterization and evaluation of molecular mechanisms of novel copper complexes as anticancer agents

Y. Cetin¹, C. Acilan¹, Z. Adigüzel¹, B. Cevatemre², D. Karakuş², E. Ulukaya³, N. Ribeiro⁴, I. Correia⁴, J. C. Pessoa⁴
¹TUBITAK, Marmara Research Center, Genetic Engineering and Biotechnology Institute, Gebze/Kocaeli, Turkey
²Uludag University, Faculty of Arts and Sciences, Department of Biology, Bursa, Turkey
³Uludag University, Medical School, Department of Medical Biochemistry, Bursa, Turkey
⁴Centro de Química Estrutural, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais 1, 1049-001, Lisbon, Portugal

20h00 - 24h00 Gala Dinner

Wednesday, 7 September, 2016

08h00 - 13h00 Congress Registration
08h00 – 14h00 Exhibition
08h00 - 09h00 Keynote Lecture
Chair: Sibel Özden, Turkey
K-5 Precautionary Principles in Risk management of chemicals and expectations on toxicologists
Heidi Foth, Jan Wiese, Felix Glahn
Institute of Environmental Toxicology, Martin Luther University Halle Saale
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
</table>
| 09h00 - 11h00 | **Symposium S11: Reflections on the application of “Chemical-Specific Adjustment Factors” (CSAF) in quantitative risk assessment**  
Chairs: Richard Brown, Switzerland and Bette Meek, Canada |
|            | **S11-1** Analysis of International Experience on CSAFs and Potential Path Forward  
Bette Meek  
McLaughlin Centre, University of Ottawa, Ottawa, Canada |
|            | **S11-2** Harmonization of CSAFs with other research efforts including integration with AOP and MOA frameworks  
Alan R Boobis  
Department of Medicine, Imperial College London, UK |
|            | **S11-3** Analysis of published Chemical Specific Adjustment Factors (CSAFs) and other data derived factors: obstacles and opportunities  
Joanne Caroline English  
NSF International |
|            | **S11-4** From Default Uncertainty Factors to CSAFs: Past, Present and Future in food safety  
Jean Lou Christian Michel Dorne  
European Food Safety Authority, Scientific Committee and Emerging Risks Unit, Parma, Italy |
|            | **S11-5** Panel Discussion: Enhancing uptake in risk assessment  
All Speakers |
| 09h00 - 11h00 | **Symposium S12: Integration of in vitro systems to predict toxicity from repeated exposure**  
Chairs: Miyoung Yoon, USA, and Bas Blaubooer, The Netherlands |
|            | **S12-1** Overview: integrated in vitro systems for toxicity assessment from repeated exposure  
Harvey Clewell  
ScitoVation, Research Triangle Park, North Carolina, USA |
|            | **S12-2** In vitro models of the human airway epithelium for inhalation toxicity testing  
Samuel Constant |
S12-3
Liver bioreactor and incorporation of metabolism and biokinetics into the integrated cell-based toxicity system

Miyoung Yoon¹, Martin Phillips¹, David Billings¹, Pergentino Balbuena¹, Joseph Shim¹, Erin Burgunder¹, Jenny Pedersen², Jeffrey Enders¹, Jeffrey Macdonald³, Melvin Andersen¹, Harvey Clewell¹
¹ScitoVation, LLC, RTP, NC, USA
²The Hamner Institutes for Health Sciences, RTP, NC, USA
³University of North Carolina, Chapel Hill, NC, USA

S12-4
Integrated Human Multi-Organ Culture Plate for Estimating Systemic Toxicity In Vitro

James M Mckim¹, Heidi Baas¹, Miyoung Yoon², Harvey Clewell², Melvin E Andersen²
¹IonTox, LLC
²ScitoVation

S12-5
Integrating toxicodynamics and biokinetics: Use of in vitro biomarkers

Paul Jennings
Department of Physiology and Medical Physics, Medical University of Innsbruck, Austria

09h00 - 11h00
Symposium S13: Toxicology of organophosphorus nerve agents (OPA) as the chemical weapons
Chairs: Mahdi Balali-Mood, The Netherlands and Shahriar Khateri, The Netherlands

S13-1
Clinical management of acute poisoning with organophosphorus nerve agents

Mahdi Balali Mood
Medical Toxicology Research Center, Faculty of Medicine, Mashhad University of Medical Sciences, Mashhad, Iran

S13-2
Environmental exposure to nerve agents

Slavica Vučinić
National Poison Control Centre, Military Medical Academy, Medical faculty University of Defense, Belgrade, Serbia

S13-3
Nerve agents and chemical disarmament

Shahriar Khateri
Organization for the Prohibition of Chemical Weapons, OPCW
| S13-4 | Promoting the work of the OPCW through toxicology societies  
Aristidis Tsatsakis  
*Laboratory of Forensic Science & Toxicology, Medical School, University of Crete, Heraklion, Greece* |
| --- | --- |

| **Workshop W09: Deciphering the role of the aryl hydrocarbon receptor in toxicity and its emerging functions in physiology**  
**Chairs:** Jan Vondracek, Czech Republic, and Dieter Schrenk, Germany |
| **W09-1** | Insights into novel functions of the dioxin receptor in cell differentiation and pluripotency  
*Pedro M Fernández Salguero*¹, Nuria Moreno Marin¹, Antonio Morales Hernandez¹, Ana Nacarino Palma¹, Beroe Paniagua¹, Ascensión Infante Campos², Aurea Gomez Duran², Inmaculada Catalina Fernández², Jaime M. Merino¹  
¹Department of Biochemistry and Molecular Biology, Faculty of Sciences, University of Extremadura, Badajoz, Spain  
²Department of Pathology, Infanta Cristina University Medical Center, Badajoz, Spain |

| **W09-2** | The AhR: A regulator of liver fibrosis?  
*Xavier Coumoul*¹, Stéphane Pierre², Aline Chevallier², Fatima Teixeira Clerc³, Ariane Ambolet Camoit³, Linh Chi Bui³, Anne Sophie Bats⁴, Jean Christophe Fournet⁵, Pedro Fernandez Salguero⁶, Robert Barouki⁷, Sophie Lotersztajan³, Martine Aggerbeck¹  
¹INSERM UMR S 1124, Toxicologie Pharmacologie et Signalisation Cellulaire, Paris, France  
²Université Paris Descartes, Sorbonne Paris Cité, Paris, France  
³IRMB, INSERM U955, Hôpital Henri Mondor, 94010 Creteil, France  
⁴AP-HP, Hôpital Européen Georges Pompidou, Service de Chirurgie Gynécologique Cancérologique, Paris, France  
⁵AP-HP, Hôpital Necker-Enfants Malades, Service d’Anatomo-Pathologie, Paris, France  
⁶Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias, Universidad de Extremadura, Badajoz, Spain  
⁷AP-HP, Hôpital Necker-Enfants Malades, Service de Biochimie Métabolique, Paris, France |

| **W09-3** | Small immune-modulating molecules interacting with the AhR system  
*Dieter Schrenk*  
Food Chemistry and Toxicology, University of Kaiserslautern, Germany |

| **W09-4** | The aryl hydrocarbon receptor (AhR) and barrier immunity  
*Charlotte Esser*  
IUF - Leibniz Research Institute for Environmental Medicine, Düsseldorf, Germany |

<p>| <strong>W09-5</strong> | --- |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>11h00 - 11h30</td>
<td>Coffee Break</td>
</tr>
</tbody>
</table>
| 11h30 - 13h30 | **Symposium S14: The impact of complexity on chronic disease from exposure to treatment**  
*Chairs: Ali Esat Karakaya, Turkey, and Stefano Bonassi, Italy*  
**S14-1** Disease networks and predictive methods for clinical data analytics  
*Cesare Furlanello*  
Predictive Models for Biomedicine & Environment, Fondazione Bruno Kessler, Trento, Italy  
**S14-2** Emergence of new properties in the investigation of disease aetiology: the contribution of omics  
*Toby James Athersuch*  
Department of Surgery and Cancer, Imperial College London, London, UK  
**S14-3** Advances in multi-omics approaches in chronic disease  
*Jos Kleinjans*  
Department of Toxicogenomics, Maastricht University, The Netherlands  
**S14-4** Integrating genomic and clinical complexity for better patient outcomes  
*Gerrit Meijer*  
Netherlands Cancer Institute, Amsterdam, Netherlands  
**S14-5** The big challenge of complexity for national health systems. How is changing the epidemiology of chronic disease  
*Mario Bonassi*  
IRCCS San Raffaele Pisana, Rome, Italy  

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 11h30 - 13h30 | **Symposium S15: New insights into the toxicity of commonly used pharmaceuticals**  
*Chair: Martin Wilks, Switzerland, and Heather Wallace, UK*  
**S15-1** Toxicity of the psychotropic drugs: Role of transporters at the blood-brain |
**Barrier**

**Bruno Mégarbane**
Department of medical and toxicological critical care, Lariboisière Hospital, INSERM U1144, Paris-Diderot University, Paris, France

**S15-2**
Paracetamol (acetaminophen) overdose: Are current recommendations for treatment with N-acetylcysteine satisfactory?

**Simon Hugh Lynton Thomas**
Medical Toxicology Centre, Institute of Cellular Medicine, Newcastle University, Newcastle NE2 4HH, UK

**S15-3**
Colchicine-related life-threatening toxicity: Risk factors and management

**Philippe Hantson**
Department of Intensive Care, Cliniques St-Luc, Université catholique de Louvain, Brussels, Belgium

**S15-4**
Antidotes for direct oral anticoagulants

**Ismail Elalamy**
Hôpital Tenon UPMC Inserm UMRS-938 Paris, France

**S15-5**
Toxicological and pathological findings in opioid-related deaths

**Henrik Druid**
Department of Oncology-Pathology, Karolinska Institutet, Stockholm, Sweden

---

11h30 - 13h30

**Symposium S16: Risk Assessment of Metals via Inhalation: Challenges and New Developments**

*Chair: Violaine Verougstraete, Belgium, and Yalçın Duydu, Turkey*

**S16-1**
Risk Assessment of Metals via Inhalation: Challenges and New Developments

**Steven Verberckmoes**
Umicore, Brussels, Belgium

**S16-2**
Concepts of adversity in inhalation hazard assessment of metals

**Gary R Burleson**
Burleson Research Technologies, Inc., Morrisville, North Carolina, USA

**S16-3**
How can bioaccessibility testing add value in the inhalation hazard assessment?
Vanessa Viegas
The Cobalt Development Institute, UK

S16-4
The issue of lung overload of inert insoluble dust. How can prediction modelling contribute in risk assessment?

Len Levy¹, David B Warheit²
¹Institute of Environment and Health, Cranfield University, UK
²Chemours Company

S16-5
The Human Equivalent Concentration: A valid approach in extrapolating animal data to the human situation

Adriana Oller
NiPERA, Inc, Durham, NC, USA

S16-6
Closing remarks
Steven Verberckmoes
Umicore, Belgium

Workshop W10: Design and interpretation of testing according to the extended one generation reproductive toxicity study for regulatory use
Chair: René Hunziker, Switzerland, and Bruno Hubesch, Belgium

W10-1
The Extended One Generation Reproduction Toxicity Study: Expectations for the new guideline, opportunities, threats

Aldert Piersma, Andre Muller
National Institute for Public Health and the Environment RIVM, Bilthoven, The Netherlands

W10-2
First experiences from testing according to the EOGRST method

Ivana Fegert
Regulatory Toxicology Pesticides, BASF SE, Ludwigshafen, Germany

W10-3
Changes introduced with the new OECD 443 method and implications on the toxicological interpretation

Jochen Buschmann
Department of Reproductive Toxicology, Fraunhofer Institute for Toxicology and Experimental Medicine, Germany

W10-4
Using EOGRTS under REACH, BPD and CLP

Hannele Huuskonen
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>13h30 - 14h00</td>
<td>Closing Ceremony and Awards Presentation</td>
</tr>
</tbody>
</table>

**W10-5**  
The role of the EOGRTS in product safety assessment in industry  
René Hunziker  
Dow Europe GmbH, Cefic LRI, The Switzerland  

European Chemicals Agency, Helsinki, Finland