

## **Detailed Programme**

Status: 10 September, 2015

Sunday, 13 September, 2015			
08h00 - 18h00	Congress Registration	16h00 – 21h00 Exhibition	
09h00 - 16h00	Continuing Education Courses (CEC) including individual coffee & lunch breaks		
09h00 - 15h30	CEC 1: Removing Obstacles on the Way to Implement 3R Methods in Toxicology		
D. Luis Hall	Chairs: Herman Koëter, Belgium and Marc Teunis, The Netherlands		
	Intro: General overview of the variables that determine the process of the regulatory acceptance and use of 3R models (Historical view & new vision)  Herman Koëter, Belgium and Marc Teunis, The Netherlands  09:00 – 09:30		
	CEC1-1 Removing Obstacles on the Way to implement 3R Methods in Hazard and Risk Assessment Herman Koëter Orange House Partnership, S.Lorenzo di Moriano, Lucca, Italy		
	09:30 – 10:00  CEC1-2 Lessons learned from the 'SLIM' project; regulatory acceptance and use of 3R methods  *Cyrille Krul¹², Marie-Jeanne Schiffelers³, Marc Teunis², Raymond Pieters²³,  ¹TNO, Healthy Living, Zeist, Netherlands  ²University of Applied Sciences Utrecht, Life Sciences & Chemistry, Utrecht, Netl lands  ³Utrecht University, School of Governance, Utrecht, Netherlands  ⁴Utrecht University, IRAS, Utrecht, Netherlands		
	10:00 – 10:15 Coffee Break		
	10:15 – 10:45 Industrial point of view		
	imal-free methods for safety Erwin L. Roggen	scribed for industrial and regulatory application of anassessment sulting ApS, Lyngby, Denmark	

10:45 - 11:15

### Regulators point of view

#### **CEC1-4**

## Removing obstacles on the way to implement 3R methods in toxicology: Regulators point of view

Sonja Beken

Federal Agency for Medicines and Health Products (FAMHP), DG PRE, Dept. Evaluators, Brussels, Belgium

11:15 - 11:45

### Academia's point of view

#### **CEC1-5**

## Implementing 3Rs methods in toxicology: a view from academia

Ian Kimbei

University of Manchester, Faculty of Life Sciences, Manchester, United Kingdom

11:45 – 12:00

Wrap-up before lunch

Herman Koëter, Belgium and Marc Teunis, The Netherlands

12:00 - 13:00

Lunch Break

13:00 - 15:00

### CEC1-6

### Validation; truth or dare!

Round 1: Prioritizing factors that can be influenced by stakeholders

Round 2: Actions to be taken to improve implementation and acceptance \*Marc Teunis<sup>1</sup>, Raymond Pieters<sup>1,2</sup>, Cyrille Krul<sup>1,3</sup>

<sup>1</sup>University of Applied Sciences, Innovative Testing in Life Sciences & Chemistry, Utrecht, Netherlands

<sup>2</sup>Utrecht University, Institute for Risk Assessment Sciences, Utrecht, Netherlands <sup>3</sup>TNO, Healthy Living, Zeist, Netherlands

15:00 - 15:30

Wrap-up and conclusions

Herman Koëter, Belgium and Marc Teunis, The Netherlands

### 09h30 - 15:30

### CEC 2: Revisiting the Challenges Posed by New Recreational Drugs

Chairs: Simon Gibbons, United Kingdom and Bruno Mégarbane, France

S. João Hall

09:30 - 10:00

CEC2-1

### Novel psychoactive substances: a chemical overview for the toxicologist

Simon Gibbons

UCL School of Pharmacy, London, United Kingdom

10:00 - 10:15

General Discussion



10:15 - 10:45

#### CEC2-2

### Pharmacological characterization of designer cathinones in vitro

Matthias Liechti

University Hospital Basel, Basel, Switzerland

10:45 - 11:00

General Discussion

11:00 - 11:15

Coffee Break

11:15 - 11:45

#### CEC2-3

## Understanding mechanisms of toxicity of designer cathinones: contribution of animal models

Bruno Mégarbane

Paris-Diderot University, Lariboisière Hospital, Paris, France

11:45 - 12:00

General Discussion

12:00 - 12:30

#### **CEC2-4**:

# Toxicovigilance of new psychoactive substances – Perspectives from the EU Early Warning System

Michael Evans-Brown EMCDDA, Lisbon, Portugal

12:30 - 12:45

General Discussion

12:45 - 13:45

Lunch Break

13:45 - 14:15

### CEC2-5

### New psychoactive substances: data from the STRIDA project

\*Matilda Bäckberg<sup>1</sup>, Olof Beck<sup>2,3</sup>, Anders Helander<sup>2,3</sup>

<sup>1</sup>The Swedish Poisons Information Centre, Stockholm, Sweden

<sup>2</sup>Karolinska Institutet, Department of Laboratory Medicine, Stockholm, Sweden

<sup>3</sup>Karolinska University Laboratory, Stockholm, Sweden

14:15 - 14:30

General Discussion

14:30 - 15:00

## CEC2-6

### The new recreational drugs in the emergency department

David M. Wood

Guy's and St Thomas' NHS Foundation Trust, London, United Kingdom

15:00 - 15:15 General Discussion

15:15 - 15:30 Conclusions





09h30 - 16h00

CEC 3: Thresholds of Toxicological Concern – Basics and Latest Developments
Organised and supported by the International Life Sciences Institute (ILSI Europe)

**Arrabida Hall** 

Chairs: Susan Barlow, United Kingdom and Kirstin Kosemund, Germany

09:30 - 09:35

Introduction to the CEC on TTC

Susan Barlow, United Kingdom

09:35 - 10:05

CEC3-1

### Introduction into the Tiered TTC Concept and regulatory status globally

\*Kirstin Kosemund<sup>1</sup>, Susan Felter<sup>2</sup>

<sup>1</sup>Procter & Gamble, Global Product Stewardship, Schwalbach am Taunus, Germany

<sup>2</sup>Procter & Gamble, Central Product Safety, Mason, OH, United States

10:05 - 10:20

Questions and answers

10:20 - 10:50

CEC3-2

### Cancer thresholds, Cohort of Concern and other excluded substance groups

Alan Boobis

Imperial College, London, United Kingdom

10:50 - 11:05

Questions and answers

11:05 - 11:30

Coffee Break

11:30 - 12:00

**CEC3-3** 

### Non-cancer oral toxicity databases for TTC

Susan Barlow

Consultant, Brighton, United Kingdom

12:00 - 12:15

Questions and answers

12:15 - 12:45

### CEC3-5

### Estimation of Toxic Hazard - A Revised Cramer-Ford-Hall Decision Tree

\*Jürgen Schnabel<sup>1</sup>, Sean Taylor<sup>2</sup>

<sup>1</sup>Givaudan International AG, Product Safety and Regulatory Affairs, Kemptthal, Switzerland

<sup>2</sup>International Organisation of the Flavor Industry, Brussels, United States

12:45 - 13:00

Questions and answers

13:00 - 14:00

Lunch Break



14:00 - 14:30

#### CEC3-4

### Computational modelling for TTC assessment

\*Andrew Worth1, Chihae Yang2

<sup>1</sup>European Commission, Joint Research Centre, Ispra, Italy

<sup>2</sup>Altamira LLC, Ohio, United States

14:30 - 14:45

Questions and answers

14:45 – 15:15

### CEC3-6

### TTC concept: non oral routes and influence of local effects

Sylvia Escher

Fraunhofer ITEM, Chemical risk assessment, Hannover, Germany

15:15 - 15:30

Questions and answers

15:30 – 16:00 Conclusions

### 09h30 - 16h00

## CEC 4: Evaluating and Expressing Uncertainty in Hazard Characterization: New Guidance from the World Health Organization

### **Porto Hall**

Organised and supported by the World Health Organization (WHO)

**Chairs:** Carolyn Vickers, Switzerland and Matthias Herzler, Germany

09:30 - 09:45

### Welcome and introductions

Carolyn Vickers, World Health Organization, Switzerland

09:45 - 10:30

### CEC4-1

## Probabilistic Hazard Characterization: The basic principles, and the general approach

Wout Slob

RIVM, Bilthoven, Netherlands

10:30 - 11:15

### CEC4-2

Deriving generic distributions from historical data for interspecies, intraspecies, and subchronic-chronic extrapolation, and how to deal with other uncertainties

Weihsueh Chiu

Texas A&M University, Veterinary Integrative Biosciences, College Station, United States

11:15 - 11:30 Coffee Break

11:30 - 12:00

### CEC4-3

Illustration of the software for probabilistic analysis (APROBA) using deoxynivalenol (DON) as a case study

Matthias Herzler

Federal Institute for Risk Assessment (BfR), Berlin, Germany



12:00 – 13:00 Lunch Break

13:00 – 14:30 Case Studies

Students are encouraged to bring their notebook computers (fully charged) to work in pairs on a practical training exercise using the software APROBA.

Link to the WHO Guidance on Evaluating and Expressing Uncertainty in Hazard Characterization:

http://www.who.int/ipcs/methods/harmonization/areas/hazard\_assessment/en/

14:30 - 14:45

Short break and preparation of final discussion

14:45 – 16:00

### Guided group discussion on applications of the probabilistic approach

Matthias Herzler

Federal Institute for Risk Assessment (BfR), Berlin, Germany

09h30 - 15h00

## CEC 5: Co-Exposure Risk Assessment: Approaches and Options for Prioritisation and Refinement

### Miragaia Hall

Supported by CEFIC LRI

Chairs: Heli M Hollnagel, Switzerland and Paul Price, United States of America

09:30 - 10:15

CEC5-1

## Refresher: Terminology, Models and tiered Schemes in Co-Exposure Risk Assessment

\*Heli M Hollnagel, Nathalie Vallotton

Dow Europe GmbH, TERC, Horgen, Switzerland

10:15 - 11:00

Types and sources of exposure data in co-exposure risk assessment

### CEC5-2

### Data and models needed to calculate the risk of co-exposure in Europe

\*Jacob van Klaveren<sup>1</sup>, Hilko van der Voet<sup>2</sup>

<sup>1</sup>RIVM National Institute Public Health and the Environment, Bilthoven, Netherlands <sup>2</sup> Wageningen UR, Biometris, Wageningen, Netherlands

11:00 - 11:30 Coffee Break

11:30 – 12:15

**CEC5-3** 

### Value and challenges of screening level assessments of co-exposures

Paul Price

US EPA, Computational Exposure Scientist National Exposure Research Laboratory, United States

12:15 - 13:15 Lunch Break



13:15 - 14:00

Higher Tier Co-Exposure Assessments – Options for Refinements

#### **CEC5-4**

### Regulatory challenges and methodological aspect for cumulative risk assessment

Roland A. Solecki

Federal Institute for Risk Assessment, Pesticide Safety, Berlin, Germany

14·00 = 15·00

## **Practical Exercise based on Case Studies**

All speakers

### 09h30 - 15h00

### **CEC 6: Modern Risk Assessment in Food Safety**

#### D. Maria Hall

CLC 0. Wodelli kisk Assessifielli ili i ood saleiy

Chairs: A. Wallace Hayes, United States of America and Dieter Schrenk, Germany

### 9.30 - 10.05

CEC6-1

### What is GRAS?

\*Wally Hayes<sup>1</sup>, Claire Kruger<sup>2</sup>

<sup>1</sup>Harvard University, Andover, United States

<sup>2</sup>Spherix, Rockville, United States

10.05 - 10.40

### CEC6-2

### Functional feed for farm animals from oil mill waste waters

**Demetrios Kouretas** 

University of Thessaly, Biochemistry-Biotechnology, Larisa, Greece

10.40 - 11.15

#### CEC6-3

## The Margin-of-exposure approach in food safety risk assessment: Acrylamide as an example

Dieter Schrenk

University of Kaiserslautern, Food Chemistry and Toxicology, Kaiserslautern, Germany

11.15 - 11.40 Coffee Break

11.40-12.15

### CEC6-4

### The cadmium case: data use and what to make out of it

Eugenia Dogliotti

Istituto Superiore di Sanità, Rome, Italy

12.15 - 13.15 Lunch Break

13.15 - 13.50

### CEC6-5

### Assessment of the known and the unknown: Brominated flame retardants

\*Marco Binaglia, Luisa Ramos Bordajandi, Ake Bergman, Alan Boobis, Sandra Ceccatelli, Jean-Pierre Cravedi, Metka Filipic, Peter Fuerst, Nicklas Johansson, Helle Knutsen, Miroslav Machala, Franco Merletti, Olaf Papke, Dieter Schrenk, Rolaf Van Leeuwen, Stefan Van Leeuwen

European Food Safety Authority, Unit on Biological Hazards and Contaminants, Parma, Italy





13.50 - 14.25 CEC6-6 New approaches to uncertainty in chemical risk assessment - the example of bisphenol A \*Trine Husøv, Andy Hart, Ralph Pirow, Wim C. Mennes, Detlef Wölfle, Paul A. Fowler, Ursula Gundert-Remy, Natalie von Goetz, Rudolf A. Woutersen, Davide Arcella, Anne Theobald, Cristina Croera, Anna F. Castoldi European Food Safety Authority, Parma, Italy 14.25 - 15.00 Final Discussion 16h00 Opening of the Exhibition (Exhibition Area West Ground Floor) 17h00 - 19h00 **Opening Ceremony** Chair: Aristidis Tsatsakis, President of EUROTOX, Greece **Archive Hall** 17.00-17.45 Welcome Address by Félix Carvalho President of the EUROTOX 2015 congress, Porto, Portugal Welcome Address by Aristidis Tsatsakis President of EUROTOX, Greece 17:45 - 18:00**EUROTOX Merit Award Ceremony** 18:15 - 18:45 Keynote Lecture: Public Understanding of Risk Alexandre Tiedtke Quintanilha, Porto, Portugal 19h00 - 21h00 **Welcome Reception (Exhibition Area West Ground Floor)** Monday, 14 September, 2015 08h00 - 18h00 09h00 - 18h00 Exhibition Congress Registration 09h00 - 09h45 **Keynote Lecture:** Chair: David Bell, Finland **Archive Hall** Systems Medicine, Microbiomes and Personalised Healthcare Jeremy Nicholson Imperial College London, London, United Kingdom 09h45 - 10h00 Coffee Break, Exhibition and Poster Viewing 10h00 - 12h00 Symposium S01: Experiences of Substance Evaluation under REACH - Perspectives from ECHA, Member States and Industry Chairs: Ingo Bichlmaier, Finland and Eva Bonefeld-Jørgensen, Denmark **Archive Hall** SO1-1 Substance Evaluation under REACH - EU-cooperation to increase knowledge on safety of chemicals Pia Korjus



**S01-2** 

European Chemicals Agency, Directorate Evaluation, Helsinki, Finland

## Looking beyond REACH standard information requirements: Testing requested under Substance Evaluation

Gabriele Schöning ECHA, Evaluation, Helsinki, Finland

#### S01-3

Industries' perspective: How an 'identified concern' can drive 'better science? Violaine Verougstraete

Eurometaux, EHS, Brussels, Belgium

#### S01-4

### Member state priorities and role in Substance Evaluation

Magnus Løfstedt

Danish Environmental Protection Agency, Chemicals, Copenhagen, Denmark

#### S01-5

### Conclusions of substance evaluation and possible following regulatory actions Evelin Fabian

European Chemicals Agency, Helsinki, Finland

### 10h00 - 12h00

## Workshop W01: Natural and Process-Related Carcinogens in Food: How Should the Risk be Assessed?

#### Infante Hall

Chairs: Dieter Schrenk, Germany and Ans Punt, The Netherlands

### W01-1

### Risk assessment of plant genotoxins

\*Ans Punt, Ivonne M.C.M. Rietjens
Wageningen University, Wageningen, Netherlands

#### W01-2

### Current risk assessment of pyrrolizidine alkaloids in food

Diane Benford

Food Standards Agency, London, United Kingdom

### W01-3

## Aristolochia species: A metabolomic and ethnopharmacological risk assessment focusing on local uses in Bangladesh

\*Michael Heinrich, J. Michl

UCL School of Pharmacy, Centre for Pharmacognosy and Phytotherapy, London, United Kingdom

### W01-4

## Natural and Process-Related Carcinogens in Food: Macromolecular Adducts in Animal Models and Human Blood and Tissue Samples

\*Hansruedi Glatt<sup>1,2</sup>, Walter Meinl<sup>2</sup>, Wolfram Engst<sup>2</sup>, Fabian Schumacher<sup>2,3</sup>, Benjamin Sachse<sup>2</sup>, Kristin Herrmann<sup>2</sup>, Gitte Barknowitz<sup>2</sup>, Mareike Bernau<sup>2</sup>, Carolin Bendadani<sup>2</sup>, Melanie Wiesner<sup>2,4</sup>, Monika Schreiner<sup>4</sup>, Roman Tremmel<sup>5</sup>, Achim Bub<sup>6</sup>, Ulrich Zanger<sup>5</sup>, Bernhard Monien<sup>1,2</sup>

<sup>1</sup>Federal Institute for Risk Assessment, Berlin, Germany <sup>2</sup>German Institute of Human Nutrition, Potsdam-Rehbrücke, Germany <sup>3</sup>University of Potsdam, Nuthetal, Germany <sup>4</sup>Leibniz-Institute of Vegetable and Ornamental Crops, Grossbeeren, Germany <sup>5</sup>Dr. Margarete Fischer-Bosch-Institute of Clinical Pharmacology, Stuttgart, Germany <sup>6</sup>Max Rubner Federal Research Institute of Nutrition and Food, Karlsruhe, Ger-



many

#### W01-5

Genotoxic and carcinogenic constituents in food and medicinal drugs: Margin of exposure, Virtually Safe Dose, TTC – which way to go?

Dieter Schrenk

University of Kaiserslautern, Food Chemistry and Toxicology, Kaiserslautern, Germany

### 10h00 - 12h00

## Workshop W02: Nanotoxicology Modelling for Risk Assessment: The Regulators' Dilemma

### Despachantes Hall

## Chairs: Karin Aschberger, Italy and João Paulo Teixeira, Portugal

### W02-1

## Feasibility and Challenges of Health Risk Assessment of Nanomaterials

\*Zuzana Klöslova<sup>1</sup>, Karin Aschberger<sup>2</sup>, Jos Bessems<sup>2</sup>, Kirsten Gerloff<sup>2</sup> <sup>1</sup>ECHA, Evaluation, Helsinki, Finland

<sup>2</sup>European Commission, JRC-IHCP, Systems Toxicology Unit, Ispra, Italy

### W02-2

## Evaluating and Modeling Oxidative Stress Responses of Immune Cells to Nanoparticles: Usefulness in Risk Assessments

Anna Shvedova<sup>1,2</sup>

<sup>1</sup>WVU, Physiology and Pharmacology, Morgantown, United States <sup>2</sup>West Virginia University, Physiology and Pharmacology, Morgantown, WV, United States

### W02-3

## Achievements and perspectives of computational nanotoxicology

Tomasz Puzyn

University of Gdansk, Faculty of Chemistry, Laboratory of Environmental Chemometrics, Gdansk, Poland

### W02-4

## Proteomics approaches for hazard assessment of nanomaterials and for supporting NM classification

\*Andrea Haase<sup>1</sup>, Marc Driessen<sup>1</sup>, Rainer Ossig<sup>2</sup>, Bryan Hellack<sup>3</sup>, Antje Vennemann<sup>4</sup>, Jürgen Schnekenburger<sup>2</sup>, Martin Wiemann<sup>4</sup>, Thomas Kuhlbusch<sup>3</sup>, Wendel Wohlleben<sup>5</sup>, Andreas Luch<sup>1</sup>

<sup>1</sup>German Federal Institute for Risk Assessment, Safety of Chemicals and Consumer Products, Berlin, Germany <sup>2</sup>Westfälische Wilhelms-Universität, Biomedical Technology Center, Münster, Germany <sup>3</sup>Institute of Energy and Environmental Technology (IUTA) e.V., Duisburg, Germany <sup>4</sup>IBE R&d gGmbH, Münster, Germany <sup>5</sup>BASF SE, Ludwigshafen, Germany

### W02-5

## Moving towards a safe by design approach for ENM: linking ENM relevant properties to toxicological concerns

\*Teresa Borges<sup>1</sup>, Maria João Silva<sup>2</sup>, Henriqueta Louro<sup>2</sup>

<sup>1</sup>General-Directorate of Health, Occupational and Environmental Health Division, Lisbon, Portugal <sup>2</sup>Instituto de Saúde Dr. Ricardo Jorge, Genética Humana, Lisboa, Portugal

10h00 - 12h00

Workshop W03: Opportunities to Enhance Quality and Impact of Omics Sciences Chairs: Bennard van Ravenzwaay, Germany and Thomas Hartung, United States of America

Noble Hall



#### W03-1

### RNA-sequencing in toxicogenomics

Jos Kleinjans

Maastricht University, Toxicogenomics, Maastricht, Netherlands

#### W03-2

### The importance of data quality to enhance the impact of omics sciences

Timothy Gant

Public Health England, Fermie Avenue, Oxford, United Kingdom

#### W03-3

## Identification of Potential Endocrine Disrupting Chemicals Using Gene Expression Biomarkers

Chris Corton

US-EPA, ISTD, NHEERL, Durham, NC, United States

#### W03-4

### 10 years of metabolomics research: the importance of quality control

\*Hennicke Kamp¹, Eric Fabian¹, Markus Frericks¹, Michael Herold², Gerhard Krennrich¹, Ralf Looser², Werner Mellert¹, Gina Montoya¹, Erik Peter², Tzutzuy Ramirez¹, Michael Spitzer², Volker Strauss¹, Alexander Strigun², Tilmann Walk², Bennard van Ravenzwaay¹

<sup>1</sup>BASF SE, Ludwigshafen, Germany <sup>2</sup>metanomics GmbH, Berlin, Germany

### W03-5

### Metabolomics: an opportunity for systemic toxicity assessment in vitro

Thomas Hartung

The Johns Hopkins University, Center for Alternatives to Animal Testing, Baltimore, United States

### 12h00 - 14h00

### Lunch Break, Exhibition & Poster Viewing

### **HESI CITE Lecture**

Chair: Syril D Pettit, United States

### 12h00 - 13h00 Despachantes Hall

#### K-2

## Phylotoxicology: breaking the artificial divide between human- and ecotoxicology

\*John Colbourne<sup>1</sup>, Mark Viant<sup>1</sup>, Joseph Shaw<sup>1,2</sup>

<sup>1</sup>University of Birmingham, Birmingham, United Kingdom

<sup>2</sup>Indiana University, School of Public and Environmenal affairs, Bloomington, United States

## SpS Sponsored Symposium of the European research initiative SEURAT:

## Predicting Long Term Toxic Effects Using Computer Models Based on Systems Characterization of Organotypic Cultures – The NOTOX Project

Chairs: Elmar Heinzle, Germany and Fozia Noor, Germany

### 13h30 - 15h30 **Infante Hall**

### Welcome and introduction

Elmar Heinzle, Germany

### SpS-1

### Improved in vitro systems for prediction of hepatotoxicity

\*Magnus Ingelman-Sundberg<sup>1</sup>, Lisa Fredriksson Puigvert<sup>1</sup>, Sebastian Klein<sup>2</sup>, Peter



Peters<sup>3</sup>, Sabrina Moro<sup>1</sup>, Catherine Bell<sup>1</sup>, Delilah Hendriks<sup>1</sup>, Daniel Müller<sup>2</sup>, Viola Schweitzer<sup>2</sup>, Fozia Noor<sup>2</sup>, Elmar Heinzle<sup>2</sup>

<sup>1</sup>Department of Physiology and Pharmacology, Karolinska Institutet, Stockholm, Sweden

<sup>2</sup>Saarland University, Biochemical Engineering, Saarbruecken, Germany <sup>3</sup>Institute of Nanoscopy, University of Maastricht, Maastricht, Netherlands

### SpS-2

## Toxicoproteomics applied to in vitro investigation of liver toxicity using HepaRG cells

\*Fabrice Bertile<sup>1</sup>, Georg Tascher<sup>1</sup>, Daniel Müller<sup>2</sup>, Sebastian Klein<sup>2</sup>, Lisa Fredricksson<sup>3</sup>, Inger Johansson<sup>3</sup>, Valery Shevchenko<sup>4</sup>, Christophe Chesne<sup>4</sup>, Magnus Ingelmann-Sundberg<sup>3</sup>, Elmar Heinzle<sup>2</sup>, Fozia Noor<sup>2</sup>, Alain Van Dorsselaer<sup>1</sup> CNRS-IPHC, Université de Strasbourg, Strasbourg, France <sup>2</sup>Saarland University, Biochemical Engineering, Saarbruecken, Germany <sup>3</sup>Karolinska Institutet, Physiology & Pharmacology, Stockholm, Sweden <sup>4</sup>Biopredic International, St Gregoire, France

### SpS-3

### Model and in vitro based prediction of human hepatotoxicity

\*Jan Georg Hengstler³, Dirk Drasdo¹.², Geraldine Cellière¹, Raymond Reif³, Marcel Leist⁴, Jörg Rahnenführer⁵, Regina Stöber³,

<sup>1</sup>INRIA, Institute for Research in Computer Science, Le Chesnay Cedex, France <sup>2</sup>Universität Leipzig, Interdisciplinary Center for Bioinformatics, Leipzig, Germany <sup>3</sup>Leibniz Research Centre for Working Environment and Human Factors, Toxicology, Dortmund, Germany <sup>4</sup>University of Konstanz, TheDorenkamp-Zbinden Chair, Konstanz, Germany <sup>5</sup>University of Dortmund, Department of Statistics, Dortmund, Germany

### SpS-4

### Prediction of long term toxic effects by genome based network models

\*Lothar Terfloth<sup>1</sup>, Joachim Bucher<sup>1</sup>, Sebastian Klein<sup>2</sup>, Georg Tascher<sup>3</sup>, Inger Johansson<sup>4</sup>, Silvia Magioni<sup>5</sup>, Fabrice Bertile<sup>3</sup>, Magnus Ingelman-Sundberg<sup>4</sup>, Alain van Dorsselaer<sup>3</sup>, Emilio Benfenati<sup>5</sup>, Fozia Noor<sup>2</sup>, Elmar Heinzle<sup>2</sup>, Klaus Mauch<sup>1</sup> Insilico Biotechnology AG, Stuttgart, Germany <sup>2</sup>Saarland University, Saarbrücken, Germany <sup>3</sup>CNRS Strasbourg, Strasbourg, France <sup>4</sup>Karolinska Institute, Stockholm, Sweden <sup>5</sup>Instituto di Ricerche Farmacologiche Mario Negri, Milan, Italy

### Final remarks and closure

Fozia Noor, Germany

14h00 - 16h00	Posier session 1 - In the Posier Aleas on the Ground roof (Exhibition Alea, Poyers &
	Miniaturas Hall) and 1st Floor (Republic Room and Foyers)

15h30 - 16h00 | Coffee Break, Exhibition & Poster Viewing

16h00 - 18h00 Workshop W04: New approaches to repeated dose toxicity assessment - are we ready to replace animal testing?

Noble Hall Chairs: Amaia Irizar, United Kingdom and David Bell, Finland

### W04-1

## Safety Evaluation Ultimately Replacing Animal Testing: the SEURAT-1 approach? Maurice Whelan

European Commission Joint Research Centre, Institute for Health and Consumer Protection, Ispra, Italy

W04-2



## A High Throughput Microscopy Toxicity Pathway Reporter Platform for Chemical Safety Assessment

\*Steven Wink<sup>1</sup> , Bob van de Water<sup>2</sup>

<sup>1</sup>Leiden University, Division of Toxicology & Leiden Cell Observatory High Content Imaging Screening Facility Leiden Academic Centre for Drug Research (LACDR), Leiden, Netherlands

<sup>2</sup>Leiden University, Leiden Academic Centre for Drug Research, Leiden, Netherlands

### W04-3

## Functional intravital imaging of hepatotoxicity: comparing intact livers to 3D in vitro systems

\*Jan Georg Hengstler<sup>1</sup>, Dirk Drasdo<sup>2</sup>, Geraldine Celliere<sup>2</sup>, Seddik Hammad<sup>1</sup>, Ahmed Ghallab<sup>1</sup>, Raymond Reif<sup>1</sup>, Rosemarie Marchan<sup>1</sup>, David A. Fluri<sup>3</sup>, Jens M. Kelm<sup>3</sup>, Patricio Godoy<sup>1</sup>

<sup>1</sup>Leibniz Research Centre for Working Environment and Human Factors, Toxicology, Dortmund, Germany

<sup>2</sup>Institute National de Recherche en Informatique et en Automatique (INRIA), Le Chesnay Cedex, France

<sup>3</sup>InSphero AG, Schlieren, Switzerland

#### W04-4

## A 3D Liver Co-Culture System for Evaluating Drug-Induced Adverse Outcome Pathways Leading to Fibrosis

Leo van Grunsven

Vrije Universiteit Brussel, Liver Cell Biology Laboratory, Brussels, Belgium

### W04-5

## **Exploiting data derived from non-standard methods for chemical risk assessment** George Daston

Procter & Gamble, Victor Mills Society Research Fellow, Cincinnati, United States

## 16h00 - 18h00

## Symposium S02: New Advances in *In Vivo* Mutagenicity Testing and Application in the Regulatory Setting

### Despachantes Hall

### Chairs: Frank Le Curieux, Finland and David Kirkland, United Kingdom

### S02-1

### The Transgenic Rodent Gene Mutation Test

Carol Beevers

Covance Laboratories Ltd, Harrogate, United Kingdom

### **S02-2**

## The comet assay – Peculiarities, pitfalls and interpretation

Brian Burlinson

Huntingdon Life Sciences / Harlan Laboratories, Huntingdon, United Kingdom

### S02-3

## The Pig-A Assay – Its potential applications in regulatory mutagenicity testing Roland Froetschl

BfArM Federal Institute for Drugs and Medical Devices, Genetic and Reproductive Toxicology, Bonn, Germany

### **S02-4**

Application of in vivo assays in a regulatory setting

David Kirkland



Kirkland Consulting, Tadcaster, United Kingdom

### **S02-5**

New advances in vivo mutagenicity tests: application of the guidance of the European Food Safety Authority

\*Riccardo Crebelli<sup>1</sup>, Maria Carfi<sup>2</sup>, Juan Manuel Parra Morte<sup>2</sup>, Anna Maria Rossi<sup>2</sup>, Maria Vittoria Vettori<sup>2</sup>, Daniela Maurici<sup>2</sup>

<sup>1</sup>Istituto Superiore di Sanità, Rome, Italy

<sup>2</sup>European Food Safety Authority, Parma, Italy

### 16h00 - 18h00

Workshop W05: Drug Induced Liver Injury: Prediction Based on Preclinical Approaches

#### **Archive Hall**

Chairs: Bob van de Water, The Netherlands and Richard Weaver, France

### W05-1

Predicting risk of human drug-induced liver injuries from non-clinical studies in R&D

Richard Weaver

Institut de recherches internationales servier, Scientific Dept, Paris, France

### W05-2

DILI: from chemical and metabolism to man

Brian K. Park

University of Liverpool, Tanslational Medicine, Liverpool, United Kingdom

#### W05-3

Mechanistic Insights in TNF signaling and Drug-induced Liver Injury: Towards a Predictive Preclinical Toolbox

Bob van de Water

Leiden University, Leiden Academic Centre for Drug Research, Leiden, Netherlands

### W05-4

Role of the immune system in DILI; lessons learned from animal studies

Raymond Pieters

Utrecht University-IRAS, Utrecht, Netherlands

### W05-5

Unravelling the impact of hepatotoxic drugs by dynamic pathway modelling

Ursula Klingmueller

DKFZ, B200, Heidelberg, Germany

## 16h00 - 18h00

Workshop W06: Needs and Challenges in Developing a Weight of Evidence Approach for Endocrine Disrupters

### Infante Hall

Chairs: Matthias Öberg, Sweden and Anna Beronius, Sweden

#### W06-1

Endocrine disruptors and PCOS: Pathophysiological aspects

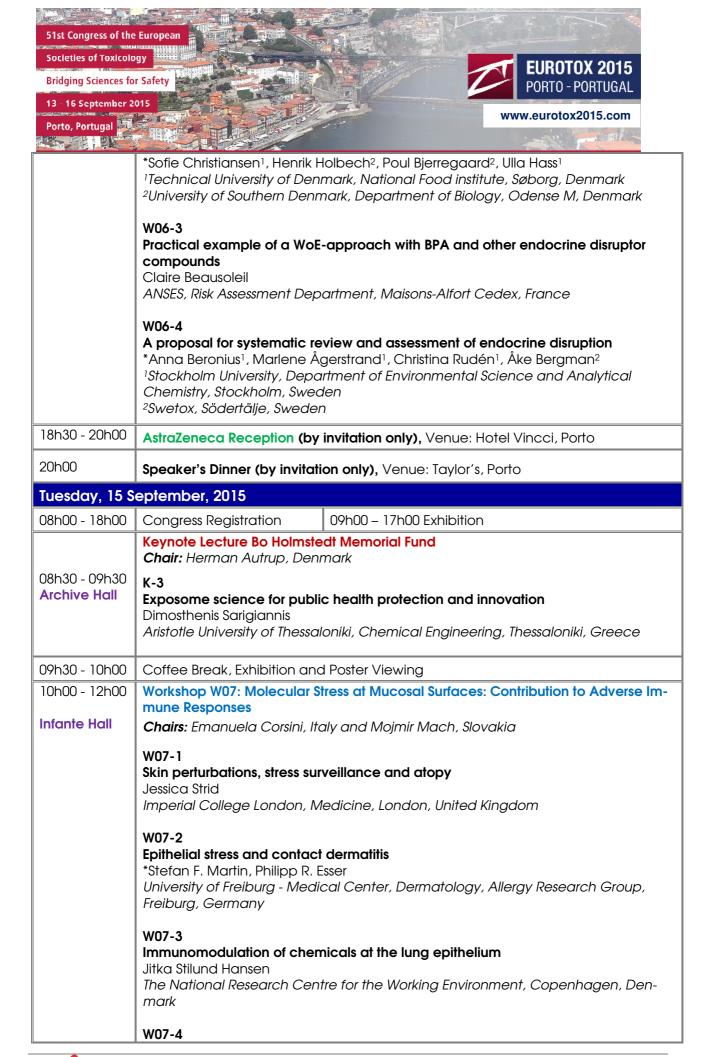
Evanthia Diamanti-Kandarakis

University of Athens, Medicine, Athens, Greece

### W06-2

Information/testing strategies for identification of substances with endocrine disrupting properties







## Interaction between intestinal epithelial cells and intraepithelial lymphocytes in food allergy

\*Marianne Bol-Schoenmakers<sup>1</sup>, Saskia Braber<sup>1,2</sup>, Joost J. Smit<sup>1</sup>, Raymond H. H. Pieters<sup>1</sup>

<sup>1</sup>Utrecht University, Institute for Risk Assessment Sciences (IRAS), Utrecht, Netherlands

<sup>2</sup>Utrecht University, Utrecht Institute for Pharmaceutical Sciences, Utrecht, Netherlands

### 10h00 - 12h00

### Workshop W08: Doping in Sports: A Toxicological Perspective

### **Noble Hall**

### Chairs: Christina Tsitsimpikou, Greece and Luis Horta, Brazil

### Reported Target Organ Toxicity of Doping Substances: Animal Studies and Human Case Reports

Arif Ahmet Başaran<sup>1,2</sup>

<sup>1</sup>Hacettepe University Faculty of Pharmacy, Pharmacognosy, Ankara, Turkey <sup>2</sup>Hacettepe University, Turkish Doping Control Center, Ankara, Turkey

### W08-2

W08-1

## Detection of doping substances residues in biological material: a comparative approach

\*Andreas Tsakalof<sup>1</sup>, Manolis Tzatzarakis<sup>2</sup>, Christina Tsitsimpikou<sup>3</sup>

<sup>1</sup>University of Thessaly, Faculty of Medicine, Larisa, Greece, <sup>2</sup>University of Crete, Medical School, Heraklion, Greece, <sup>3</sup>General Chemical State Laboratory of Greece, Athens, Greece

### W08-3

## **Doping substances in nutritional supplements: a possible risk for public health** Christina Tsitsimpikou

General Chemical State Laboratory of Greece, Directorate of Energy, Industrial and Chemical Products, Athens, Greece

#### W08-4

## Medical conditions or pathologies that could require treatment with prohibited substances: the Therapeutic Use Exemption approach

Luis Horta

Autoridade Brasileira de Controle de Dopagem, SAN Edificio DNIT, Brasília, Brazil

### W08-5

## Fighting doping during Olympic Games: the experience gained and a glance in the future

Sasho Popovski

Macedonian Olympic Committee, Skopje, Former Yugoslavic Republic of Macedonia (FYROM)

## 10h00 - 12h00

# Symposium S03: Reactive Metabolites and Molecular Mechanisms of Adverse Drug Reactions

### **Archive Hall**

Chairs: Hilmi Orhan, Turkey and Heather M Wallace, United Kingdom

#### S03-

Reactive metabolites: In vitro screening techniques and potential extrapolation to in vivo

Olavi Pelkonen

University of Oulu, Pharmacology and Toxicology, Oulu, Finland



### **S03-2**

### Reactive electrophiles: Toxicity to target

Michael Cameron

Scripps Research Institute, Molecular Therapeutics, Jupiter, United States

#### S03-3

## Role of genetic polymorphism of protective enzymes in the inactivation of reactive drug metabolites

Jan Commandeur

VU University Amsterdam, Molecular Toxicology, Amsterdam, Netherlands

### S03-4

## Pharmacogenomic factors affecting adverse drug reactions involving reactive metabolites

Ann Daly

Newcastle University, Institute of Cellular Medicine, Newcastle upon Tyne, United Kingdom

### 10h00 - 12h00

### Despachantes Hall

## Symposium S04: Challenges for Combined Effects of Chemical Mixtures in Risk Assessment

Chairs: Claudio Colosio, Italy and Antonio Hernández-Jerez, Spain

### **S04-1**

### Modelling risk for chemical mixtures

\*Athanasios Alegakis<sup>1</sup>, Vasilis Androutsopoulos<sup>1</sup>, Spyros Karakitsios<sup>2</sup>, Dimosthenis Sarigiannis<sup>2</sup>

<sup>1</sup>University of Crete, Laboratory of Toxicology, Heraklion, Greece

<sup>2</sup>Aristotle University of Thessaloniki, Department of Chemical Engineering, Thessaloniki, Greece

### **S04-2**

## A prototype algorithm to calculate health-based exposure limits for a safe use of pesticides

\*Claudio Colosio, Stefan Mandic-Rajcevic, Federico Maria Rubino Department of Health Sciences of the University of Milan, International Centre for Rural Health of the University Hospital San Paolo, and Laboratory for Analytical Toxicology and Metabonomics, Milan, Italy

### S04-3

### Interpretation of biological monitoring data in exposure to complex mixtures

\*Lode Godderis<sup>1,2</sup>, Radu-Corneliu Duca<sup>1</sup>, Nathalie Grova<sup>3</sup>, Katrien Poels<sup>4</sup>, Jeroen Vanoirbeek<sup>1</sup>, Brice MR Appenzeller<sup>3</sup>

<sup>1</sup>KULeuven, Centre for Environment and Health, Leuven, Belgium <sup>2</sup>IDEWE, Heverlee, Belgium

<sup>3</sup>Luxembourg Institute of Health, LABH, Esch sur Alzette, Luxembourg <sup>4</sup>KULeuven-IDEWE, Centre for Environment and Health, Leuven, Belgium

### **S04-4**

## Assessment of chemical mixtures toxicity by novel target organ-specific biomarkers

\*Antonio Hernández-Jerez<sup>1</sup>, David Lozano<sup>1</sup>, Fernando Gil<sup>1</sup>, Tesifón Parrón<sup>1,2</sup>, Raquel Alcarcón<sup>2</sup>, Mar Requena<sup>2</sup>, Marina Lacasaña<sup>3</sup>

<sup>1</sup>University of Granada School of Medicine, Legal Medicine and Toxicology, Granada, Spain

<sup>2</sup>University of Almeria School of Health Sciences, Neurosciences and Health Sciences, Almería, Spain





Porto, Portugal			
	<sup>3</sup> Andalusian School of Public Health, Granada, Spain		
	\$04-5 Assessing the feasibility of mixture risk assessment – case studies with pesticides and environmental pollutants *Andreas Kortenkamp, Richard Evans, Olwenn V. Martin Brunel University London, Institute of Environment, Health and Societies, Uxbridge, United Kingdom		
10h00 - 10h30 <b>D. Luis Hall</b>	Exhibitor Hosted Session by QIAGEN		
	Maurice Whelan European Commission Joint Research Centre, EURL ECVAM, Ispra, Italy		
12h00 - 13h00 Archive Hall			
	From SOT: George Daston Procter & Gamble, Victor Mills Society Research Fellow, Cincinnati, United States		
	Board of Trustees Distinguished Professor Department of Pharmaceutical Sciences University of Connecticut Storrs, CT 06269-3092		
13h00 - 14h00	Lunch Break, Exhibition & Poster Viewing		
14h00 - 15h00 Archive Hall	Keynote Lecture: Chair: Jyrki Liesivuori, Finland K-4 Challenges for a full replacement of animal models to assess immunotoxicty Emanuela Corsini Università degli Studi di Milano, Dipartimento di Chimica, Milan, Italy		
15h00 - 17h00	<b>Poster Session 2</b> - in the Poster Areas on the Ground Floor (Exhibition Area, Foyers & Miniaturas Hall) and 1st Floor (Republic Room and Foyers)		
16h30 - 17h00	Coffee Break & Exhibition Viewing 17h00: Closing of the Exhibition		
17h00 - 19h00	Symposium S05: Environment, Epigenetic Mechanisms and Immunotoxicology		
Infante Hall	S05-1 Developmental origin of immune diseases – Environmental influences *Marin Strøm¹, Thorhallur Ingi Halldorsson¹, Susanne Hansen¹, Sjurdur Olsen¹, Ronald Dahl², Hans Jurgen Hoffmann³, Dorte Rytter⁴, Bodil Hammer Bech⁴, Allan Linneberg⁵, Panu Rantakokkoʻ, Hannu Kivirantaʻ ¹Statens Serum Institute, Department of Epidemiology Research, Statens Serum Institute, Copenhagen, Iceland ²Odense University Hospital, The Allergy Centre, Odense, Denmark ³Aarhus University Hospital, Department of Pulmonary Medicine and Allergy, Aarhus, Denmark ⁴Aarhus University, Department of Public Health, Section for Epidemiology, Aarhus, Denmark ⁵Department of Clinical Experimental Research, Glostrup University Hospital, Glostrup, Denmark ʻNational Institute for Health and Welfare, Department of Environmental Health, Kupio, Finland  S05-2		



### General introduction to epigenetic mechanisms and methods

Mariona Bustamante<sup>1,2</sup>

<sup>1</sup>Center for Research in Environmental Epidemiology, Barcelona, Spain

<sup>2</sup>Center for Genomic Regulation, Barcelona, Spain

#### S05-3

## Epigenetic mechanisms as tool for fetal programming and possible environmental influences

Eva Cecilie Bonefeld-Jørgensen

Aarhus University, Centre for Arctic Health, Department of Public Health, Aarhus, Denmark

#### **S05-4**

## Environmental exposures, epigenetics, and allergy

Wilfried Karmaus

University of Memphis, School of Public Health , Epidemiology, Biostatistics, and Environmental Health, Memphis, United States

#### **S05-5**

## Towards Understanding the Immune Mechanism of Air Pollution-Associated Asthma

Kari Nadeau

Stanford University, Pediatrics, Stanford, United States

### 17h00 - 19h00

## Symposium S06: Emerging Drugs of Abuse – An Increasing Problem also in Toxicology

## **Noble Hall**

Chairs: Hans H. Maurer, Germany and Marilyn Huestis, United States of America

### S06-1

## Responding to new psychoactive substances in Europe – the EU Early Warning System and risk assessment

\*Michael Evans-Brown, Roumen Sedefov *EMCDDA, Lisbon, Portugal* 

### **S06-2**

### In-vitro toxicokinetics of New Psychotropic Substances (NPS)

Hans H. Maurer

Saarland University, Dept. of Exper. & Clinical Toxicology, Homburg, Germany

### **S06-3**

### In vivo Toxicokinetics of Novel Psychoactive Substances (NPS) in Rats

\*Marilyn A. Huestis<sup>1</sup>, Marta Concheiro<sup>1</sup>; Karl B. Scheidweiler<sup>1</sup>; Sebastien Anizan<sup>1</sup>, Kurt R. Lehner<sup>2</sup>, Mohammad O. Bukhari<sup>2</sup>, Masaki Suzuki<sup>3,4</sup>, Kenner C. Rice<sup>3</sup>, Michael H. Baumann<sup>2</sup>

<sup>1</sup>Chemistry and Drug Metabolism, Baltimore, MD, United States <sup>2</sup>Designer Drug Research Unit, Baltimore, MD, United States <sup>3</sup>Drug Design and Synthesis Section, IRP, National Institute on Drug Abuse and National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, Baltimore, MD, United States, <sup>4</sup>Medicinal Chemistry Group, Qs' Research Institute, Otsuka Pharmaceutical Co., Ltd., Tokushima, Japan

#### **S06-4**

Sources of Data on the Acute Toxicity Associated with the use of New Psychoactive Substance (NPS)

Paul I. Dargan<sup>1,2</sup>



<sup>1</sup>Guy's and St Thomas' NHS Foundation Trust and King's Health Partners, London, United Kingdom

<sup>2</sup>King's College London, London, United Kingdom

#### **S06-5**

## Fatal poisonings caused by NPS, new psychoactive substances

Robert Kronstrand

National Board of Forensic Medicine, Forensic Toxicology, Linkoping, Sweden

### 17h00 - 19h00

## Workshop W09: Toxicological and Ecotoxicological Aspects of Metal Based Nanomaterials

### **Archive Hall**

Chairs: Syed Ali, United States of America and Anne Kahru, Estonia

### W09-1

## Intestinal handling of mineral nanoparticles: friends or foes from food?

Jonathan Powell

MRC Human Nutrition Research, Cambridge, United Kingdom

#### W09-2

## Engineered Metallic Nanoparticles: Pro-inflammatory response and effects on integrity of Blood-Brain-Barrier

\* Syed Ali<sup>1</sup>, Susan Lantz-Mc-Peak<sup>1</sup>, Bonnie Robinson<sup>1</sup>, Hector Rosas\_Hernandez<sup>1</sup>, Carmen Gonzalez<sup>2</sup>, William Trickler<sup>1</sup>, Saber Hussain<sup>3</sup>

<sup>1</sup>NCTR, Division of Neurotoxicology, Jefferson, United States <sup>2</sup>Universidad Autonoma de San Lois Potosi, Coordinacion para la Innovacion y la Aplicacion de la Ciencia y la Tecnologia, San Luis Potosi, Mexico, Mexico <sup>3</sup>WP Air Force Research Laboratory, Applied Biotechnology Branch, Human Effectiveness Directorate, AFB, OH, United States

### W09-3

### Novel developments in ecosafety of metal-containing nanomaterials

\*Anne Kahru, Irina Blinova, Angela Ivask, Kaja Kasemets, Olesja Bondarenko, Monika Mortimer, Villem Aruoja

National Institute of Chemical Physics and Biophysics, Laboratory of Environmental Toxicology, Tallinn, Estonia

### W09-4

### Metallic nanomaterials: From (eco)toxicity to risk assessment

\*Willie Peijnenburg<sup>1,2</sup>, Martina Vijver<sup>1</sup>

<sup>1</sup>University Leiden, Center for Environmental Sciences, Leiden, Netherlands <sup>2</sup>National Institute for Public Health and the Environment (RIVM), Center for Safety of Substances and Products, Bilthoven, Netherlands

### W09-5

### **Modeling of Toxicity of Metal Oxide Nanoparticles**

\*Robert Rallo<sup>1</sup>, Alberto Fernández<sup>2</sup>, Francesc Giralt<sup>2</sup>

<sup>1</sup>Universitat Rovira i Virgili, Departament d'Enginyeria Informatica i Matematiques, Tarragona, Spain <sup>2</sup>Universitat Rovira i Virgili Departament d'Enginyeria Química, Tarragona, Spain

### 17h00 - 19h00

# Workshop W10: Toxicokinetic Modelling as an Integrating Principle in Non-Animal Toxicity Testing

## Despachantes Hall

Chairs: Ursula Gundert-Remy, Germany and Heidi Foth, Germany

W10-1



Toxicokinetic modelling: a necessary tool for quantitative risk assessment in animal-free toxicity testing

Jos Bessems

until 2015-09-01 - EC Joint Research Centre, Systems Toxicology Unit - EURL ECVAM, Ispra, Italy

### W10-2

Building a toxicokinetic model using in vitro/in silico data: what is needed?

Olavi Pelkonen

University of Oulu, Pharmacology and Toxicology, Oulu, Finland

### W10-3

Building a non-animal toxicokinetic model: what can be done? Case studies and lessons learned

Ursula Gundert-Remy Charité, Berlin, Germany

### W10-4

Cosmetics as a test case for non-animal testing?

\*Vera Rogiers, Tamara Vanhaecke

Vrije Universiteit Brussel, In Vitro Toxicology and Dermato-Cosmetology, Brussels, Belgium

20h00 - 24h00 | Gala Dinner at The Stock Exchange Palace

## Wednesday, 16 September, 2015

08h00 - 13h00 Congress Registration

08h30 - 10h30 Workshop W11: ABC Transporters as Important Key in Xenobiotic (Pharma) Toxico-

### **Noble Hall**

Chairs: Fernando Remião, Portugal and Xavier Declèves, France

### W11-1

Induction and activation of P-glycoprotein efflux pump as a therapeutic strategy

\*Fernando Remião<sup>1</sup>, Renata Silva<sup>1</sup>, Vânia Vilas-Boas<sup>1</sup>, Helena Carmo<sup>1</sup>, Ricardo Jorge Dinis-Oliveira<sup>1,2,3</sup>, Félix Carvalho<sup>1</sup>, Maria de Lourdes Bastos<sup>1</sup>

<sup>1</sup>UCIBIO-REQUIMTE, Lab Toxicology, Fac. of Pharmacy - University of Porto, Porto, Portugal

<sup>2</sup>INFACTS - Institute of Research and Advanced Training in Health Sciences and Technologies, Advanced Institute of Health Sciences – North (ISCS-N), Gandra, Portugal

<sup>3</sup>Department of Legal Medicine and Forensic Sciences, Fac. of Medicine - University of Porto, Porto, Portugal

### W11-2

**ABC Transporters at the Blood-brain Barrier against Neurotoxicity of Xenobiotics** Xavier Declèves

University Paris Descartes, Department of Pharmacokinetics, Paris, France

### W11-3

Transporters and drug-drug interactions: important determinants of drug disposition and effects

Martin F. Fromm

Friedrich-Alexander-University Erlangen-Nuremberg, Institute of Experimental and



Clinical Pharmacology and Toxicology, Erlangen, Germany

### W11-4

## Thioxanthones derivatives as dual inhibitors of P-glycoprotein and tumor cell growth

\*Maria Emília Sousa<sup>1,2</sup>, Andreia Palmeira<sup>1</sup>, Ana Oliveira<sup>1</sup>, Vanessa Lopes-Rodrigues<sup>3,4,5</sup>, Marta Correia-da-Silva<sup>1,2</sup>, Raquel Lima<sup>3,4</sup>, Maria Helena Vasconcelos<sup>1,3,4</sup>, Madalena Pinto<sup>1,2</sup>

<sup>1</sup>Faculty of Pharmacy, University of Porto, Porto, Portugal

<sup>2</sup>CIIMAR – Interdisciplinary Centre of Marine and Environmental Research, Porto, Portugal

<sup>3</sup>Cancer Drug Resistance Group, IPATIMUP - Institute of Molecular Pathology and Immunology of the University of Porto, Porto, Portugal

<sup>4</sup>Instituto de Investigação e Inovação em Saúde, Universidade do Porto, Porto, Portugal

<sup>5</sup>Institute of Biomedical Sciences Abel Salazar, University of Porto, ICBAS-UP, Porto, Portugal

### W11-5

### Pharmacogenomics of ABC drug transporters: Clinical implications

Eugenia Yiannakopoulou

Technological Educational Institute of Athens, Athens, Greece

### 08h30 - 10h30

## Symposium S07: MicroRNAs- Mediators and Markers of Chemically-Induced Toxicity

### **Infante Hall**

## Chairs: David Bell, Finland and Timothy Gant, United Kingdom

### **S07-1**

### miRNAs in toxicology; the link to epigenetic effects

\*Timothy Gant, Emma Marcxylo

Public Health England, Fermie Avenue, Didcot, United Kingdom

### **S07-2**

## MiRNAs in drug induced steatosis and its link to human non-alcoholic fatty liver disease

Juergen Borlak

Hannover Medical School, Centre for Pharmacology and Toxicology, Hannover, Germany

### S07-3

### miRNA as population variability-independent biomarkers of toxicity

Ivan Rusyn

Texas A&M University, College Station, United States

### **S07-4**

### MicroRNAs in drug-induced liver injury

Chris Goldring

University of Liverpool, MRC Centre for Drug Safety, Liverpool, United Kingdom

#### **SO7-5**

## Potential translational safety biomarkers for the small intestine: miRNA vs citrulline Philip Hewitt

Merck Serono, Non-Clinical Safety, Darmstadt, Germany





08h30 - 10h30

Workshop W12: Physiology of Infant Skin and Considerations for Quantitative Risk Assessment of Dermally Applied Substances

**Archive Hall** 

Supported by Procter & Gamble as well as Johnson & Johnson

Chairs: Susan Felter, United States of America and Georgios Stamatas, France

### W12-5

## Quantitative Risk Assessment in the EU of Cosmetics for Babies and Children

Vera Rogiers

Vrije Universiteit Brussel, In Vitro Toxicology and Dermato-Cosmetology, Brussels, Belgium

#### W12-1

## Infant Skin: Overview of Physiology and Maturation

Antonio Torrelo

Hospital Niño Jesús, Dermatology, Madrid, Spain

#### W12-2

## Dermal Penetration: Models and Non-Invasive Measurements for Clinical Studies

Georgios Stamatas

Johnson & Johnson Sante Beaute France, Issy-les-Moulineaux, France

#### W12-3

### Quantifying the skin barrier from infant to adult

Maeve Kelleher

University College Cork, Paediatrics and Child Health, Cork, Ireland

### W12-4

## Diapered Skin and Diaper Dermatitis: Implications for Risk Assessment

Susan Felter

Procter & Gamble, Central Product Safety, Mason, OH, United States

### 08h30 - 10h30

## Workshop W13: Non-Monotonic Dose-Response Curve in Hormonally Active Substances

### Despachantes Hall

### Supported by CEFIC LRI

Chairs: Bruno Hubesch, Belgium and Emanuela Testai, Italy

### W13-1

### Dose-response relationship: monotone vs non-monotone curve

Emanuela Testai

Istituto Superiore di Sanità, Environment and Primary Prevention, Rome, Italy

### W13-2

Low Dose/ Dose Response Relationship of Hormonally Active Substances and their Mixture - Testing Endocrine Disruptors in Classical and Molecular Endpoints at Human-Relevant Exposure Levels

\*Steffen Schneider<sup>1</sup>, Karma C. Fussell<sup>1</sup>, Stephanie Melching-Kollmuss<sup>2</sup>, Sibylle Gröters<sup>1</sup>, Volker Strauss<sup>1</sup>, Benazir Siddeek<sup>3</sup>, Mohamed Benahmed<sup>3</sup>, Markus Frericks<sup>2</sup>, Bennard van Ravenzwaay<sup>1</sup>

<sup>1</sup>BASF SE, Experimental Toxicology and Ecology, Ludwigshafen, Germany <sup>2</sup>BASF SE, Product Safety, Ludwigshafen, Germany

<sup>3</sup>Centre Méditerranéen de Médecine Moléculaire, INSERM U895, Nice, France



#### W13-3

Risk assessment of 'endocrine substances': Guidance on identifying endocrine disruptors

Richard Green

Syngenta, Global Product Safety, Bracknell, United Kingdom

#### W13-4

Risk assessment of endocrine disruptors: is there data support to deviate from the traditional approach relying on potency?

Helmut Greim

Technical University of Munich, Freising-Weihenstephan, Germany

#### W13-5

Regulatory Perspective on Non-Monotonic Dose-Response Curves and "Low dose effects"

Niklas Andersson

European Chemicals Agency (ECHA), Helsinki, Finland

#### 10h30 - 11h00

Coffee Break

### 11h00 - 13h00

Symposium S08: Long-Term Effects of Pre- and Early Postnatal Exposure to Environmental Contaminants

#### **Noble Hall**

Chairs: Thomas Weiser, Switzerland and Martin Wilks, Switzerland

### S08-1

## Exposure, effects and disease in the real world

Jyrki Liesivuori

University of Turku, Pharmacology, Drug Development and Therapeutics, Turku, Finland

#### **S08-2**

Use of biomarkers to unravel the risks from prenatal environmental exposures for later health outcomes

\*Greet Schoeters<sup>1,2</sup>, Eva Govarts<sup>1,2</sup>, Sylvie Remy<sup>1,2</sup>

<sup>1</sup>VITO, Environmental Risk and Health, MOL, Belgium

<sup>2</sup>University of Antwerp, Biomedical Dept, Antwerp, Belgium

### S08-3

Prenatal long term pesticide exposure and its association with pregnancy problems and birth defects

Aristidis Tsatsakis

University of Crete, Medical school, Heraklion, Crete, Greece

#### **S08-4**

Neurodevelopmental and neurobehavioural effects of polybrominated and perfluorinated chemicals

Martin Wilks

University of Basel, Swiss Centre for Applied Human Toxicology, Basel, Switzerland

## 11h00 - 13h00 Infante Hall

Symposium S09: Pharmacovigilance: Rational and Safe Use of Drugs Chairs: Eren (Civelek) Ozcagli, Turkey and Sini Eskola, Belgium

SU0\_1

Past, present and future of pharmacovigilance: an update for current aspect Eren Ozcagli



Istanbul University, Faculty of Pharmacy, Department of Pharmaceutical Toxicology, Istanbul, Turkey

### New features of the pharmacoviailance leaislation and their impact on pharmaceutical industry

Sini Eskola

European Federation of Pharmaceutical Industries and Associations, Regulatory Affairs, Brussels, Belgium

### The role of digital and social media on pharmacovigilance and their effect on personalised healthcare

\*Dionysios Vynias, Aristidis Tsatsakis, Manolis Tzatzarakis University of Crete, Medical School, Laboratory of Toxicology, Heraklion, Greece

#### S09-4

### Importance of pharmacogenetics in adverse drug reactions

Semra Sardas

Marmara University, Faculty of Pharmacy, Department of Pharmaceutical Toxicology, Istanbul, Turkey

### **S09-5**

### Drug interactions in pharmacovigilance

will be replaced: Alberico L. Catapano

### 11h00 - 13h00

### Despachantes Hall

## Workshop W14: Alternative Toxicity Testing Using Multicellular In Vivo Models

Chairs: Marjolein Wildwater, The Netherlands and Herman Spaink, Netherlands

### W14-1

### C. elegans as robust, high throughput in vivo system for hazard assessment

\*Marjolein Wildwater<sup>1</sup>, Engelien Kerkhof<sup>1</sup>, Christien Lokman<sup>1</sup>, Raymond Pieters<sup>2,3</sup> <sup>1</sup>University of Applied Sciences Arnhem and Nijmegen, BioCentre, Nijmegen, Netherlands <sup>2</sup>University of Applied Sciences, Utrecht, Innovative testing, Utrecht, Netherlands <sup>3</sup>Utrecht University, IRAS, Utrecht, Netherlands

### W14-2

### Automated zebrafish toxicology screening: effect assessment and uptake studies

\*Herman Spaink<sup>1</sup>, Peter Racz<sup>1,2</sup>, Anita Ordas<sup>1</sup>, Wouter Veneman<sup>1</sup>, Martina Vijver<sup>3</sup>, Marjolein Wildwater<sup>4</sup>, Raymond Pieters<sup>5</sup>, Harshal Zope<sup>6</sup>, Alexander Kros<sup>6</sup>, Vasu Kantae<sup>7</sup>, Elke Krekels<sup>7</sup>, Piet Hein van der Graaf<sup>7</sup>, Thomas Hankemeier<sup>7</sup> Leiden University, Institute of Biology, Leiden, Netherlands <sup>2</sup>ZF-screens, Leiden,

**Netherlands** 

<sup>3</sup>Leiden University, Institute of Environmental Sciences, Leiden, Netherlands 4Hogeschool Niimegen, Niimegen, Netherlands 5Utrecht University, Utrecht, Netherlands <sup>6</sup>Leiden University, Institute of Chemistry, Leiden, Netherlands <sup>7</sup>Leiden University, Institute of Pharmacy, Leiden, Netherlands

#### W14-3

### What determines chemical uptake by the zebrafish embryo model?

\*Till Luckenbach, Eberhard Küster, Wibke Busch, Stefan Scholz, Rolf Altenburger UFZ - Helmholtz Centre for Environmental Research, Bioanalytical Ecotoxicology, Leipzig, Germany





Detailed Online Programme: http://eurotox2015.abstract-management.de/program/

