Programme

Monday October 17, 2016

9.00 h Opening of Registrations

09.30 – 12.00 h ESTIV-EURL ECVAM Pre-Congress Workshop
Moving forward in carcinogenicity assessment
Chairs: Raffaella Corvi & Paul Jennings
(Main auditorium)

09.30 – 09.50 h Carcinogenicity testing for regulatory purposes in the European Union
Federica Madia, European reference Laboratory on Alternative Methods
(EIFL-ECVAM), JRC, Ispra, Italy

09.50 - 10.15 h The key characteristics of human carcinogens
Kate Guyton, International Agency for Research on Cancer (IARC), WHO,
Lyon, France

10.15 – 10.40 h Carcinogenicity assessment of pharmaceuticals: currently discussed
alternatives to rodent long-term studies
Peter Kasper, Federal Institute for Drugs and Medical Devices (BfArM),
Bonn, Germany

10.40 - 11.05 h Identifying likely breast carcinogens using complementary mechanistic
approaches
Ruthann Rudel, Silent Spring Institute, Newton, Massachusetts, USA

11.05 – 11.30 h Investigations to better understand the mechanisms leading to in vitro cell
transformation: contribution the development of an IATA for non-genotoxic
carcinogenicity
Annamaria Colacci, Environmental Protection and Health Prevention
Agency, Emilia Romagna, Italy

11.30 – 11.55 h Cross-omics approaches in vitro for predicting chemical carcinogenicity
Jos Kleinjans, Department of Toxicogenomics, Maastricht University, the
Netherlands

11.55 – 12.00 h Concluding remarks

12.00 - 13.00 h ESTIV / CAAT Pre-Congress Workshop
Good Cell Culture Practices

Chairs: Chantra Eskes & Thomas Hartung
(Main auditorium)

12.00 - 12.15 h 21st century cell culture for 21st century toxicology
Thomas Hartung, Johns Hopkins Bloomberg School of Public Health,
CAAT, Baltimore, MD, USA

12.15 - 12.30 h How to smartly apply GxP regulations to in vitro toxicology
Alain Piton, ALP Quality Systems, Sophia Antipolis, France

12.30 - 12.45 h Guidance document on good in vitro method practices (GIVIMP)
Speaker to be confirmed

12.45 - 13.00 h Round table discussions

13.00 – 14.00 h Lunch

14.00 – 14.15 h Opening of ESTIV2016
Chantra Eskes (ESTIV)
Alain Simonnard (SFT, LOC ESTIV2016)
Marc Pallardy (SPTC)

14.15 – 15.15 h Keynote lecture
Predictive Toxicology: a future for in vitro toxicology?
Dominique Lison, Catholic University of Louvain, Louvain, Belgium
(Main auditorium)

15.15 – 16.00 h Björn Ekwall Memorial Award lecture and prize ceremony
From the "basal cytotoxicity"concept to the development of a novel in vitro model
for detecting liver-specific toxicity
Vera Rogiers, Vrije Universiteit Brussel, Belgium
(Main auditorium)

16.00 – 16.30 h Coffee break and Poster viewing

16.30 - 19.00 h Session 1: New developments in cell bioengineering and self assembly
Session chairs: Sophie Lelièvre & Nathalie Alépéé
(Main auditorium)

16.30 - 17.00 h Cellular Arrangements in Standard and Organ-on-a-Chip 3D Cultures:
Geometry and Mechanical Constraints Matter for in vitro Toxicology
Sophie Lelièvre, Purdue University College of Veterinary Medicine,
Indiana, USA

17.00 - 17.20 h CON4EI: CONsortium for in vitro Eye Irritation testing strategy
Els Adriaens, Adriaens Consulting bvba, Aalter, Belgium

17.20 - 17.40 h Advanced Hepatotoxicity Assessment in a Perfused Microbioreactor Using
Real-Time Metabolic Monitoring

**Sebastian Prill**, Fraunhofer IZI-BB, Postdam, Germany

**17.40 - 18.00 h** Human 3D-cocultures for the study of toxicant induced liver fibrosis

**Laura Suter-Dick**, University of Applied Sciences Northwestern Switzerland FHNW, Switzerland

**18.00 - 18.15 h** 3D human hepatic organoids for testing Fibrosis, Cholestasis and Phospholipidosis

**Sofia Batista Leite**, BSWE-LIVR, Vrije Universiteit Brussel, Belgium

**18.15 - 18.30 h** Development of a 3D in vitro model for the assessment of repeated dose hepatotoxicity

**Anne Riu**, L’Oréal, Research & Innovation, Aulnay-sous-Bois, France

**18.30 - 18.45 h** 3D co-culture of human hepatocytes and mesenchymal stem cells in bioreactors for long-term toxicity testing

**Margarida Serra**, iBET, ITQB-UNL, Oeiras, Portugal

**18.45 -19.00 h** Generation of human iPSC-derived renal proximal tubular cells and podocytes with the application for drug toxicity screening

**Anja Wilmes**, Medical University of Innsbruck, Austria

**19.00 - 20.30 h** Welcome reception

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**Tuesday October 18, 2016**

**08.30 - 10.30 h** Session 2: Extrapolation dose, modeling and biodistribution

*Session chairs: Emanuela Testai & Bas Blauboer*

(Main auditorium)

08.30 - 09.00 h  In vitro biokinetics and modeling in an animal-free testing strategy; the way forward to IVIVE

**Emanuela Testai**, Istituto Superiore di Sanità (ISS), Rome, Italy

09.00 – 09.20 h  Toxicokinetics Strategy for individual and combined exposure to chemicals highlighting vitro to In vivo Extrapolation

**Alicia Paini**, European Commission, Joint Research Centre, Ispra, Italy

09.20 - 09.40 h  Impact of skin metabolism on bioavailability and consequences for risk assessment of personal care ingredients

**Paul Quantin**, Departement of Toxicology, THOR Personal Care, Compiègne, France

09.40 - 10.00 h  PBTK modeling of potential endocrine modulators: In vitro-in vivo extrapolation (IVIVE) and in silico-in vitro based risk assessments

**Robert Landsiedel**, BASF SE, Ludwigshafen, Germany

10.00 - 10.20 h  A mechanism-based hepatotoxicity simulation model to capture dose-dependent cell death dynamics in response to the drugs amiodarone and valproate

**Alina Crudu**, L’Oréal, Research & Innovation, Paris, France

10.20 - 10.30 h  General discussion
10.30 - 11.00 h  Coffee break and Poster viewing

11.00 - 12.30 h  **Session 3-I: Systemic toxicity I**
**Session chairs: Gladys Ouédraogo & Mathieu Vinken**
(Main auditorium)

11.00 - 11.30 h  Repeated dose systemic toxicity: what alternative approaches?
*Gladys Ouédraogo, L’Oréal, Paris, France*

11.30 - 11.45 h  Use of bioprinted 3D Human Tissues for the Assessment of Drug Toxicity and Metabolism and as a Model of Complex Disease Phenotypes
*Deborah Nguyen, Organovo Inc., San Diego, California, USA*

11.45 – 12.00 h  Exploration of drug-induced mitochondrial toxicity mechanisms on hepatic mitochondria and cultured cells
*Reine Note, L’Oréal, Research & Innovation, Paris, France*

12.00 - 12.15 h  Quantifying stress responses and adversity: refined gene signatures to classify chemicals based on their mechanisms of toxicity
*Alice Limonciel, Medical University of Innsbruck, Austria*

12.15 – 12.30 h  Impact of silver nanowire length, diameter, and surface chemistry on rainbow trout cells (RTgillW1 and RTgutGC) and larvae
*Devrah Arndt, University of Florida, USA*

12.30 - 14.00 h  Lunch and Poster viewing

14.00 - 15.00h  **Student session 1: Young speaker session**
**Session chair: Chantra Eskes**
(Main auditorium)

14.00 - 14.05 h  Opening of session

14.05 - 14.15 h  Novel mathematical model for estimation of the estrogenic activity of chemical mixtures
*Martin Ezechias, Laboratory of Environmental Biotechnology, Institute of Microbiology of the CAS, v.v.i., Prague, Czech Republic*

14.15 - 14.25 h  Comparison and validation of an in vitro skin sensitization strategy using a data set of 33 chemical references
*Elodie Clouet, Safety Assessment Department, Pierre Fabre Dermo Cosmétique, Toulouse, France*

14.25 - 14.35 h  Exposure to a cocktail of pharmaceuticals, pesticides and environmental pollutants exacerbates disruption of androgen action in human fetal testes
*Pierre Gaudriault, Inset-Inserm U1085, Rennes, France*

14.35 - 14.45 h  Reprogramming of umbilical cord-derived mesenchymal stem cells towards hepatocyte-like cells by repeated transfection with in vitro transcribed mRNA of hepatic transcription factors
*Karolien Buyl, Department of In Vitro Toxicology & Dermato-Cosmetology, Faculty of Medicine and Pharmacy, Vrije Universiteit Brussel, Belgium*
Biocompatible Label-free Detection of Carbonaceous Particles to Assess their In Vitro Toxicology in Biological Environments

Hannelore Bové, Hasselt University/KU, Leuven, Belgium

14.55 - 15.00 h  Closure of session

15.00 – 16.30 h  Session 3-II: Systemic toxicity II

Session chairs: Magda Chlebus & Philippe Bourrinet
(Main auditorium)

15.00 – 15.30 h  A ToxCast/ExpoCast Based Analysis of Woman Ovarian Cycle Disruption by Aromatase Inhibitors
Frederic Y. Bois, INERIS, Verneuil-en-Halatte, France

15.30 – 15.45 h  Toxic properties of nitrogen-containing polycyclic aromatic hydrocarbons PANH as compared to PAH analogues
Myriam Coulet, Nestle Research Center, Lausanne, Switzerland

15.45 – 16.00 h  In vitro verification of an adverse outcome pathway of cholestasis
Robim M. Rodrigues, Dept. In Vitro Toxicology and Dermato-Cosmetology, Vrije Universiteit Brussel, Brussels, Belgium

16.00 – 16.15 h  The Adverse Outcome Pathways Knowledge Base (AOP-KB) – State of Play
Clemens Wittwehr, European Commission, Joint Research Centre, Ispra, Italy

16.15 – 16.30 h  Differential effects of consecutive exposure-recovery periods on renal proximal tubule cells physiology and defence mechanisms
Alice Limonciel, Medical University of Innsbruck, Austria

16.30 – 17.00 h  Coffee break and Poster viewing

17.00 – 19.00 h  Session 4: Endocrine disruptors

Session chairs: Jean Pierre Cravedi & Patrick Balaguer
(Main auditorium)

17.00 – 17.25 h  An integrated approach for the characterization of the Interaction between nuclear receptors and endocrine disruptors
Patrick Balaguer, INSERM, Montpellier, France

17.25 – 17.45 h  Metabolomic approaches related to endocrine disruptors: a dead end or a promising avenue?
Jean-Pierre Cravedi, INRA, Toulouse, France

17.45 – 18.00 h  State of the art human cell based testing of endocrine disrupting chemicals
Peter Behnisch, BioDetection Systems BV, Amsterdam, Netherlands

18.00 – 18.15 h  Screening methodology for identification of endocrine disrupting substances
Alfonso Lostia, European Commission, Joint Research Centre, Ispra, Italy

18.15 – 18.30 h  New markers for the evaluation of endocrine disruptors on microplate using
a human placental model

Anaïs Wakx, UMR CNRS 8638 COMETE, Université Paris Descartes, Paris, France

18.30 - 18.45 h The chlordane pesticide component trans-nonachlor modulates in vitro the microRNA miR-141-3p in human melanocytes and in vivo its Drosophila ortholog miR-8, triggering melanoma cell characteristics and multigenerational inheritance

Patrick Verrando, INRA / INRA-PACA (TCMX team), Sophia Antipolis, France

18.45 - 19.00 h Association between phthalates and reproductive biomarkers in infertile male

Rashmi Tomar Rana Dept of Biophysics, All India Institute of Medical Sciences (AIIMS) New Delhi, India

Wednesday October 19, 2016

08.30 – 10.30 h Session 5: Biopharmaceuticals

Session chairs: Marc Pallardy & Franck Brennan

(Main auditorium)

08.30 - 09.00 h How to use in vitro models for safety assessment of biopharmaceuticals during their development?

Marc Pallardy, University Paris Sud, Châtenay-Malabry, France

09.00 - 09.35 h In vitro assays to assess the immunosafety of monoclonal antibodies

Frank Brennan, UCB-Celltech, Slough, Berkshire, United Kingdom

09.35 - 10.10 h In vitro T cell response to biopharmaceuticals in healthy donors as a tool of prediction of immunogenicity

Bernard Maillère, CEA, Gif sur Yvette, France

10.10 - 10.30 h Towards improved predictability in pre-clinical research: Human 3D neural in vitro model for assessment of gene therapy vectors

Daniel Simão, iBET – Instituto de Biologia Experimental e Tecnológica, Oeiras, Portugal

10.30 - 11.00 h Coffee break and poster viewing

11.00 - 12.30 h Session 6: Emerging technologies for in vitro tissue/organ formation and toxicity testing

Session chairs: Reyk Horland & Leonora Buzanska

(Main auditorium)

11.00 - 11.30 h Multi-organ-chip developments: towards a paradigm shift in drug development

Reyk Horland, Technical University of Berlin, Germany

11.30 – 11.45 h Combined Blood Brain Barrier and a Human Brain Microphysiological System as a tool for drug screening for Parkinson’s disease.

David Pamies, Johns Hopkins University, Baltimore, Marineland, USA
11.45 - 12.00 h  Toxicogenomics assessment of testicular toxicity induced by a mixture of fungicides in a rat ex vivo model
   Odette Prat, CEA/ DRF/ BIAM, Cadarache, France

12.00 - 12.15 h  A novel flow cytometry-based bone marrow assay for small and large molecule profiling for hematopoietic toxicity
   Claudia McGinnis, Roche, Basel, Switzerland

12.15 - 12.30 h  Focussing on foci: beyond the standard use of Cell Transformation Assays to improve in vitro carcinogenicity testing as a replacement.
   Giulia Callegaro, Department of Earth and Environmental Sciences, University of Milano - Bicocca, Italy

12.30 – 14.00 h  Lunch and poster viewing

14.00 – 15.00 h  Sponsors session
   (Main auditorium)

15.00 - 16.00 h  Debate session: Application of IATA in a regulatory context: prescriptiveness versus flexibility and cost versus coverage
   Maurice Whelan, Systems Toxicology Unit, IHCP, EC-JRC, EURLECVAM, Ispra, Italy
   Robert Landsiedel, BASF, Ludwigshafen, Germany
   (Main auditorium)

16.00 - 16.30 h  Coffee break and poster viewing

16.30 – 17.00 h  ESTIV General Assembly (Fitzgerald room)
   French Society of Toxicology General Assembly (Main auditorium)

17.00 - 18.30 h  Student session 2: Job opportunities and career exploration
   (Fitzgerald room)

19.00 h  Congress dinner

Thursday October 20, 2016

08.30 – 10.30 h  Session 7: Regulatory updates
   Session chairs: Anne Gourmelon & Martine Clauw
   (Main auditorium)

   08.30 – 09.00 h  Works at OECD on the regulatory acceptance of in vitro Test Guidelines
      Anne Gourmelon, OECD, Paris, France

   09.00 – 09.20 h  Progress in the implementation of the EURLECVAM strategy on skin sensitization
      João Barroso, EURLECVAM, European Commission, Joint Research Centre, Ispra, Italy

   09.20 – 09.40 h  Applicability domain of the U-SENS™ test method for skin sensitization testing over 175 chemicals
      Nathalie Alepée, L’Oréal, Research & Innovation, Paris, Paris, France
09.40 – 10.00 h  Appropriate Utilization of Current ToxCast/Tox21 Data
Natalia Ryan, Bayer SAS, Research Triangle Park, North Carolina, USA

10.00 – 10.15 h  The challenge of detecting developmental neurotoxicity: hazard prediction vs. mechanistic understanding
Andrea Terron, European Food Safety Authority, Parma, Italy

10.15 – 10.30 h  Development and validation of a new in vitro high throughput genotoxic screening strategy in human cells
Marc Audebert, INRA, Toulouse, France

10.30 - 11.00 h  Coffee break and poster viewing

11.00 - 12.30 h  Session 8: Mixtures
Session chairs: Stéphanie Bopp & Robert Barouki
(Main auditorium)

11.00 - 11.30 h  Novel approaches for assessing combined effects from exposure to multiple chemicals
Stéphanie Bopp, European Commission Joint Research Center, Ispra, Italy

11.30 - 11.45 h  The human exposome and contaminant mixture effects
Robert Barouki, INSERM, Université Paris Descartes, France

11.45 - 12.00 h  Assessment of mixture effects of estrogenic and anti-androgenic pesticide residues at low, consumer-relevant concentrations in vitro
Bettina Seeger, Institute for Food Toxicology and Analytical Chemistry, Hannover, Germany

12.00 - 12.15 h  In vitro biodetection and food chemical risk assessment
Benoit Schilter, Nestlé Research Center, Lausanne, Switzerland

12.15 - 12.30 h  Zebrafish as an alternative model to assess embryotoxicity of glyphosate-based formulation
Gisele Augusto Rodrigues de Oliveira, Faculty of Pharmacy, Federal University of Goias (UFG), Brazil

12.30 - 13.00 h  Congress closing

14.00 - 19.00 h  Post-Congress Workshop: Practical Training in In Vitro Methods for Dermal, Ocular, Lung and Liver Toxicity Testing (Theoretical session including the Developmental Toxicity model in Convention Center, 20 places available)