



Programme

Monday October 17, 2016

8.30 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 (EURL-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 / IVTIP Pre-Congress Workshop
Good Cell Culture Practices
Chairs: Chantra Eskes & Thomas Hartung
(Main auditorium)

12.00 - 12.15 h Development of an OECD Guidance Document on Good In Vitro Method Practice (GIVIMP)
Ann-Charlotte Boström, European Commission, Joint Research Center (JRC), Ispra, Italy

12.15 - 12.30 h 21st century cell culture for 21st century toxicology
Thomas Hartung, Johns Hopkins Bloomberg School of Public Health, CAAT, Baltimore, MD, USA

12.30 - 12.40 h Application of stem cells and GCCP in mechanistic toxicity screening
Giel Hendriks, Toxys, Leiden, The Netherlands

12.40 -12.50 h How to smartly apply GxP regulations to *in vitro* toxicology
Alain Piton, ALP Quality Systems, Sophia Antipolis, France

12.50 - 13.00 h Round table discussions

13.00: Opening of Technical / Commercial Exhibition / Poster viewing area

13.00 – 14.00 h Lunch (Exhibition Hall)

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 (Exhibition Hall)

16.30 - 19.00 h Session 1: New developments in cell bioengineering and self assembly
Session chairs: **Sophie Lelièvre & Nathalie Alépée**
(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 (Exhibition Hall)

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 (Exhibition Hall)

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

- 11.00 - 11.30 h Repeated dose systemic toxicity: what alternative approaches?
Gladys Ouédraogo, L'Oréal, Paris, France
- 11.30 - 11.50 h A three-dimensional (3D) bioprinted model of the renal proximal tubule for evaluation of drug-induced nephrotoxicity
Christine Daly, Organovo Inc., San Diego, California, USA
- 11.50 - 12.10 h Exploration of drug-induced mitochondrial toxicity mechanisms on hepatic mitochondria and cultured cells
Reine Note, L'Oréal, Research & Innovation, Paris, France
- 12.10 - 12.30 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

12.30 - 14.00 h Lunch and Poster viewing (Exhibition Hall)

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, Irset-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*
- 14.45 - 14.55 h 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 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 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 (Exhibition Hall), sponsored by **CEFIC LRI**



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 Improvement of the value of an in vitro endocrine disruption assay by incorporating a metabolizing system
Anne Riu, L'Oréal, Research & Innovation, Aulnay-sous-Bois, France

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-Mallabry, France
- 09.00 - 09.35 h In vitro assays to assess the immunosafety of monoclonal antibodies
Franck 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 (Exhibition hall)

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.
Thomas Hartung, *Johns Hopkins Bloomberg School of Public Health, CAAT, Baltimore, MD, 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 Focusing on foci: beyond the standard use of Cell Transformation Assays to improve in vitro carcinogenicity testing
Giulia Callegaro, *Department of Earth and Environmental Sciences, University of Milano - Bicocca , Italy*

12.30 – 14.00 h Lunch and poster viewing (Exhibition hall)

14.00 – 15.00 h Sponsors session
(Main auditorium)

- 14.00 - 14.25 h In vitro proximal tubule cell monolayers as a predictive tool for nephrotoxicity using clinical biomarkers
Colin Brown, *Newcastle University, UK for SOLVO Biotechnology*



- 14.25 - 14.30 h Cell analysis using image cytometer for precise and specific cell counting, apoptosis measurement, cell cycle analysis, (no flow) cytometry
Cyril Masante, **CHEMOMETEC**



- 14.30 - 14.35 h Gene-editing of primary-like cells by CrispR/CAS9: CD26 knock-out in RPTEC/TERT1 cells as proof of principle
Johannes Grillari, **EVERCYTE**

14.35 – 15.00 h Characterization of Corning® HepatoCells and 3D Organotypic Spheroid Culture Systems for Predicting Drug-Induced Liver Toxicity
Rongjun ZUO, CORNING LIFE SCIENCES



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, EURL ECVAM, Ispra, Italy
Robert Landsiedel, BASF, Ludwigshafen, Germany
(Main auditorium)

16.00 - 16.30 h **Coffee break and poster viewing** (Exhibition hall), sponsored by
EC-JRC, EURL ECVAM



16.00 - 16.30 h **French Society of Cellular Pharmaco-Toxicology (SPTC) General Assembly** (Fitzgerald room)

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

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

19.00 h Departure of shuttle bus from the convention center for the Congress gala dinner

19.30 – 22.30 h **Congress gala dinner** (Marineland, Antibes)

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 EURL ECVAM strategy on skin sensitization
João Barroso, EURL ECVAM, 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** (Exhibition hall)
- 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 Goiás (UFG), Brazil
- 12.30 - 13.00 h **Congress closing ceremony** (Main auditorium)
- 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)

Friday October 21, 2016

8.30 - 16.00 h **Post-Congress Workshop:** Practical Training in *In Vitro* Methods for Dermal, Ocular, Lung and Liver Toxicity Testing (Continued)
(hosted by Bayer CropScience in Sophia Antipolis)

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Pierre Fabre
Dermo-Cosmétique