

- FORMAT -

2 days training

From Thursday morning to Friday evening



Lectures

Thursday morning



Laboratory practices

Rest of the time



Training certificate

can be used to document continuous education in toxicology



Training provided in English

- REGISTRATION FEE -



590 euros*
without VAT

also includes :

- free wifi,
- coffee,
- lunch breaks,
- social dinner
(on Thursday evening)

*The fee is identical
for every event

TOPICS 2017

- **APRIL 2017** Current Applications of Organs-on-a-Chip for the Pharmaceutical Industry
- **JUNE 2017** In vitro Skin & Eye models - Part 1
- **JUNE 2017** Update on the cell systems available for hepatotoxic prediction in the AOP era
- **SEPT 2017** Hands-on training in quantitative human cell and effect based in vitro bioanalysis for assessing endocrine disrupting compounds (EDCs)
- **SEPT 2017** In vitro-in vivo extrapolation (IVIVE) to support accurate prediction of hepatic drug disposition
- **OCT 2017** In silico tools in chemical's hazard assessments
- **OCT 2017** In vitro Skin & Eye models - Part 2
- **OCT 2017** Kidney toxicity testing & best practices
- **NOV 2017** In vitro lung models

Current Applications of Organs-on-a-Chip for the Pharmaceutical Industry

The training will take place during a congress focused on human models dedicated to the Pharma sector. The workshop will be attached before or after the congress. European Medicine Agency would provide the keynote, CN-bio & MIMETAS, will provide training on their kidney and lung models.

Two other companies (Insphero and Tissuse) have been approached to complete the session.



APRIL
tbc



Leiden
NETHERLAND



15 seats

In vitro Skin & Eye models Part 1

This toxicological course with focus on hands-on training will, thanks to a number of companies engaged in the field of 3Rs, guide you through some of the validated OECD guidelines on local toxicity testing: 3 different skin models will be used to show practical applicability either in the field of skin irritation (EpiSkin, OECD TG 439), skin sensitization (Immunosearch) or skin permeability (Eurosafte).

An eye irritation model as developed by Mattek will be used to demonstrate its applicability for eye irritation detection (OECD TG 492).



Vrije
Universiteit
Brussel



1st-2nd
JUNE



Brussels
BELGIUM



10 seats

Update on the cell systems available for hepatotoxic prediction in the AOP era

Prediction of hepatotoxicity remains a challenge nowadays.

Focusing on the mechanisms instead of relying on generic readouts (cell death free radicals...) is the way to go and implies using cell systems that are shown to have intact molecular pathways for a given mechanism. In parallel the progress in cell biology that deliver new models derived from the iPSC or new culture methods such as 3D or flow through devices make available many new assay systems.

And the question is: Which is the relevant system for addressing a certain hepatotoxicity project? The session will cover those new systems that are commercially available together with their relevance for predicting issues related to genotoxicity, reactive metabolites and cholestasis.



BIOPREDIC
INTERNATIONAL



22nd-23rd
JUNE



Rennes
FRANCE



10 seats

Hands-on training in quantitative human cell and effect based in vitro bioanalysis for assessing endocrine disrupting compounds (EDCs)

You will learn in a 2 day extensive hands-on training how you can use a panel of standardized stable human- and yeast reporter cell lines for rapid screening of hazards of pure chemicals and complex mixtures on multiple adverse outcome pathways. This includes those pathways prioritized in the current regulatory context of EDC assessment, including interference with estrogen-, androgen-, and thyroid hormone signaling. This will include assessment of metabolic conversions (S9, metabolically competent liver cells) of EDCs using various approaches and assessment of their effects on steroidogenesis. You will learn more about modern robotic and automated highthroughput screening using down-scaled 96-wells to 384-wells formats. The chemical activated luciferase (CALUX) assays are available for testing of relevant matrices such as food, blood, urine, mother milk and many different environmental matrices. All steps needed from extraction, clean-up, cell culture handling, luminometer analysis and calculations of effect concentrations and toxic equivalents will be presented in state of the art manner following current guidelines (e.g. ISO 17025, OECD TG455-like, ISO 19040-3). Additionally in several oral presentations the current applications in chemicals, mixture toxicity, food, environmental and public health testing are presented.



7th-8th
SEPTEMBER



Amsterdam
NETHERLANDS



10 seats

In vitro-in vivo extrapolation (IVIVE) to support accurate prediction of hepatic drug disposition

The goal of this workshop is to make attending scientists familiar with the design and conduct of typical in vitro experiments that are performed to profile the hepatic disposition characteristics of new drug candidates and/or xenobiotics.

Focus will be on sound protocols for generating high quality in vitro data that can subsequently be used as input in physiologically-based pharmacokinetic (PBPK) models.

Importantly, the workshop program will also cover adequate in vitro data processing as required before input into PBPK. Combination of data from various in vitro models will also aid in getting novel and mechanistic insights in drug disposition.

For instance, combining rich in vitro data sets obtained in liver microsomes and hepatocytes supports determination of intrahepatic drug exposure as well as phenotyping in terms of disposition pathways. The workshop will offer opportunities for attendees to become familiar with recently developed in vitro model systems and their applications. As the workshop will focus on the IVIVE part of IVIVE-PBPK, it is relevant to scientists working in the field of 'classical' PBPK as well as scientists working with in vitro models.

KATHOLIEKE UNIVERSITEIT
LEUVEN



14th-15th
SEPTEMBER



Leuven
BELGIUM



16 seats

In silico tools in chemical's hazard assessments

In light of the limitations of existing non-animal based hazard assessment methodologies, particularly in the area of repeated dose as well as developmental and reproductive toxicity, readacross is currently considered to be the most applicable strategy in support of chemical's hazard assessment. In this context, in silico tools play a critical role in identifying and justifying analogues suitable for the assessment of chemicals for which hazard data are lacking.

This training is designed to give the necessary background along with tailored case studies to provide hands-on experience how in silico tools can be used in supporting a chemical's hazard assessments: for example as stand-alone tools or for the identification and justification of analogues for use in read-across.

TOXminds 
Product Safety & Regulatory Affairs



1st week
OCTOBER



Brussels
BELGIUM



10 seats

In vitro Skin & Eye models Part 2

In Part-2, more emphasis will be put on skin sensitization models such as h-clat (OECD TG 442E), DPRA (OECD TG 442C) or LuSens. The participants will also perform the BCOP eye irritation test (OECD TG 437) at that occasion.



Kidney toxicity testing & best practices

This 2-days training will give a comprehensive overview of the most relevant and robust 2D and 3D kidney cell culture models and in vitro applications for the assessment of kidney-associated cytotoxicity.

Topics that will be covered during the course include:

1) Regulatory aspects

2) In vitro models and techniques that are valuable to measure toxicity:

- Normal, hTERT immortalized and iPSC-derived kidney cells
- 2D and 3D kidney culture (high density transwell culture, spheroids, microfluidic chips)
- Toxicity assessment using e.g. multi-well plates and Raman microspectroscopy with deep insight into read-out and interpretation of data



In vitro lung models

The program will cover practical use of respiratory in vitro 3D tissues and exposure devices to evaluate acute and repeated dose inhalation toxicity. To mimic systemic context, interconnection strategies of lung tissues will be presented. Activities will be split into four sections:

- In vitro models and tests for inhalation toxicity assessment (human and rodent 3D models): **Epithelix**
- In vitro models and assays to detect lung carcinogenesis: **OncoTheis**
- Exposure strategies and devices for testing at the Air-Liquid. Interface: **Vitrocell**
- Interconnection of respiratory tissues and online detection of their integrity: **Hepia**





presents

H **Hands-On Training** **Tools dissemination for toxicologists**

CAAT has decided to further strengthen dissemination of alternatives test methods by launching CAAT-Academy.

- Validation of new methods has delivered 100s of protocols. The challenge remains to produce them and train staff to apply and implement the new technologies
- Shortage of trained staff in the public and private sector
- Scattered offers from tool providers (e.g. SMEs)
- Gap between test developers, future end-users and non-identified potential customers


HOSTS
environment
and
network




SUPPLIERS
expertise
and
solutions


TRAINEES
the receptacle
and the engine to the future

Contact us - mail : caat-academy@uni-konstanz.de - tel : +32 495 10 40 37

<http://caat-academy-2017.eventbrite.com>