

6 - 11 June 2022



## APPLIED IN VITRO TOXICOLOGY TRAINING COURSE

organized by



### SCOPE

*In vitro* toxicity methods are gaining importance, in particular as a response to a number of European legislative changes which call for more mechanistically-based decision-making and limit or even prohibit the use of animal experimentation for risk assessment purposes. Hence, there is an urgent demand for toxicologists and risk assessors to implement *in vitro* testing results into regulatory safety evaluation of chemicals. This course aims at meeting this ubiquitous need by training individuals who wish to start or pursue a career in this direction or to gain an update on the state-of-the-art of applied *in vitro* toxicology. This course can be considered to fulfill the criteria for one of the elements of the European Registered Toxicologist (ERT) training program.

### TARGET AUDIENCE

This course is intended for (post)doctoral students and early-stage scientists from industry, academia or regulatory agencies who recently became active in the field of *in vitro* toxicology. Applicants should ideally have a background in toxicology, biology, chemistry, (bio)medical sciences, pharmaceutical sciences, veterinary sciences or equivalent. Attendees are expected to be proficient in English. A maximum of 30 participants will be enrolled in the course on a first-come/first-served basis, yet priority will be given to members of ESTIV and ESTIV affiliated societies.

### COURSE ORGANIZATION

This 6-day course is organized by the European Society of Toxicology *In Vitro* (ESTIV) in collaboration with Luxembourg Institute of Science and Technology (LIST) and ESTIV corporate members. It combines cutting-edge lectures by leading experts with highly interactive group exercises. The lectures cover a broad spectrum of subjects pertinent to regulatory, screening and investigative *in vitro* toxicology. The group exercises consist of real-life case studies in which the participants will apply the principles of *in vitro* toxicology to the risk assessment of chemical substances. Course examination will be based upon presentation and discussion of the case studies. The participants will receive a certificate in case of a positive evaluation. Furthermore, the participants will be given the opportunity to gain hands-on experience with respect to *in vitro* modelling.

## COURSE TOPICS

- European legislative framework and international guidelines for *in vitro* toxicity testing of chemicals.
- Use and validation of 3R-alternative methods in Europe.
- *In vitro* methods for assessing cytotoxicity, skin sensitization, skin/eye/lung/intestinal irritation/corrosion, immunotoxicity, genotoxicity and carcinogenicity.
- Development and application of cell lines, organ-specific models, tridimensional models, bioreactors and stem cell models in *in vitro* toxicology.
- Use of “omics”-based methods in *in vitro* toxicology.
- Good cell culture practice.
- *In vitro* kinetics and *in vitro-in vivo* extrapolation.
- *In vitro* aspects of pathway-based toxicology.
- *In vitro* models used in the field of nanotoxicology.
- Hands-on exercise in assembling tridimensional cell culture models and advanced microfluids systems.

## PRACTICAL INFORMATION

- Course dates: 6-11 June 2022
- Course location: LIST
- Course language: English
- Course capacity: 30 participants.
- Registration: [www.estiv.org](http://www.estiv.org)
- Course fee: covers participation in lectures and group exercises, course notes and other materials, lunches, coffee breaks, social event and dinner.

	Registration before 15 January 2022	Registration after 15 January 2022
<b>Academia*</b>	€850	€950
<b>Industry*</b>	€1150	€1350

\* ESTIV members benefit from an additional €50 reduction.

## CONTACTS

### Dr. Helena Kandarova, ERT

ESTIV President

Centre of Experimental Medicine, Slovak Academy of Sciences

Dúbravská cesta 9

814 41 Bratislava

Slovakia

Tel.: +421 917 358 567

E-mail: [helena.kandarova@outlook.sk](mailto:helena.kandarova@outlook.sk)

### Prof. Arno Gutleb, ERT, HDR

LOC of the course

Environmental Research and Innovation Department

Luxembourg Institute of Science and Technology

5, avenue des Hauts-Fourneaux

4362 Esch-sur-Alzette

Luxembourg

Tel.: +352 275 888 481

E-mail: [arno.gutleb@list.lu](mailto:arno.gutleb@list.lu)

## ESTIV MEMBERSHIP

The membership fee is €30 for individual members, €10 for students, and €18 for members of affiliated societies.

Membership benefits are:

- Reduced registration fee for the ESTIV congresses, workshops and courses
- Reduced membership fee for affiliated societies
- Reduced fee for the official journal of ESTIV Toxicology *In Vitro*
- Free access to ESTIV newsletters
- Membership of the ESTIV Facebook page and LinkedIn group
- For membership applications, please consult the ESTIV website ([www.estiv.org](http://www.estiv.org)) or contact the ESTIV secretary ([secretary@estiv.org](mailto:secretary@estiv.org)).