



INLIVETOX WORKSHOP: A PRACTICAL TRAINING COURSE ON INTEGRATED FLUIDIC MODELS FOR IN-VITRO TESTING

17-18 September 2012

Organized by

ISTITUTO SUPERIORE DI SANITÀ

Dipartimento Ambiente e connessa Prevenzione Primaria

e

**CENTRO INTERDIPARTIMENTALE DI RICERCA “E. PIAGGIO”
UNIVERSITÀ DI PISA**

Istituto Superiore di Sanità, Viale Regina Elena 299, Rome, Italy

Building 1, floor C, Room number 74

N° ID: 092C12

The establishment of new in-vitro models requires an evolution of technology in order to allow researchers to implement new and physiologically relevant situations. The word “relevant” refers to the correspondence between in-vitro models and human physiology. To this end, a modular fluidics system was developed in InLiveTox to model the response of cells and tissues to ingested nanomaterials. The system is more convenient and ethically less questionable than animal testing as well as more relevant than the in-vitro single cell culture /co-culture models currently being used.

This course has the goal of presenting the InLiveTox concept and fluidic systems to researchers involved in toxicity testing, barrier models and with a strong interest in refining in-vitro test systems as a means of reducing animal tests. These attractive and low cost devices will allow researchers to surpass the problems related to simulation of a physiological tissue in-vitro, in order to obtain a relevant model of an organ or multi organ system.

Language: the official language of the Course will be English



SCIENTIFIC PROGRAM

Monday, September 17

- 12.00 Participants Registration and snacks
- 14.30 Introductory Remarks - *Arti Ahluwalia*
- 14.50 Alternative testing and CELLTOX mission - *Isabella De Angelis*
- 15.10 Overview of research on in-vitro alternatives to animal testing - *Candida Nastrucci*
- 15.30 The business of alternatives - *Malcolm Wilkinson*
- 15.50 Overview of nanotoxicology - *Flavia Barone*
- 16.10 Theoretical description of fluidics and scaling - *Arti Ahluwalia*
- 16.30 InLiveTox system (ILT0 and ILT2) - *Sher Ahmed*
- 16.50 Logistics for laboratory - *Tommaso Sbrana*
- 17.10 General discussion
- 17.30 End of the day
- 19.30 Optional conference dinner

Tuesday, September 18

- 8.30 Nanoparticle handling (Lab - Module I) - *Arti Ahluwalia*
- 10.30 *Coffee break*
- 11.00 Microfluidics set up (Lab-Module II) - *Sher Ahmed and Tommaso Sbrana*
- 12.30 *Lunch*
- 14.00 Cell assays (Lab - Module III) - *Sher Ahmed and Tommaso Sbrana*
- 15.30 *Coffee Break*
- 16.00 TEER measurements (Lab - Module IV) *Sher Ahmed and Tommaso Sbrana*
- 17.30 General discussion and participants evaluation test



TUTORS

- Arti Ahluwalia** - Centro interdipartimentale di ricerca “E. Piaggio”, Università di Pisa, Pisa
- Sher Ahmed** - CSEM Centre Suisse d’Electronique et de Microtechnique, Neuchatel, CH,
- Flavia Barone** - Dipartimento Ambiente e Connessa Prevenzione Primaria, ISS, Roma
- Isabella De Angelis** - Dipartimento Ambiente e Connessa Prevenzione Primaria, ISS, Roma
- Candida Nastrucci** - Università “Tor Vergata”, Roma
- Tommaso Sbrana** - Centro Interdipartimentale di Ricerca “E. Piaggio”, Università di Pisa, Pisa
- Malcom Wilkinson** Kirkstall Ltd, Sheffield, UK

COURSE DIRECTORS

ISABELLA DE ANGELIS

Istituto Superiore di Sanità - Viale Regina Elena, 299- 00162 Roma

ARTI AHLUWALIA

Università di Pisa, via Diotalalvi, 2 – 56100 Pisa

SCIENTIFIC SECRETARIAT

OLIMPIA VINCENTINI Dip. Sanità Pubblica Veterinaria e Sicurezza Alimentare

Istituto Superiore di Sanità - Viale Regina Elena, 299- 00162 Roma

Tel: 06 4990 3631

Fax: 06 4990 3014

e-mail: olimpia.vincentini@iss.it

TOMMASO SBRANA Centro Interdipartimentale di Ricerca “E. Piaggio”

Università di Pisa, via Diotalalvi, 2 – 56100 Pisa

Tel: 050 2217050

Fax: 050 2217051

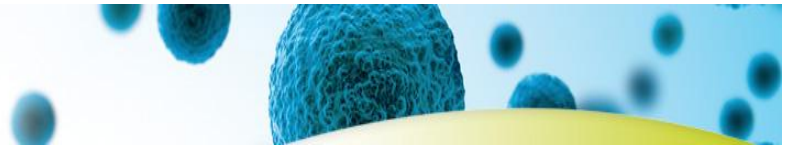
e-mail: tommaso.sbrana@centropiaggio.unipi.it

GENERAL INFORMATION

Course Venue: Istituto Superiore di Sanità, Viale Regina Elena 299, Rome, Italy

Building 1, floor C, room number 74.

Number of participants: maximum **25 participants** will be admitted



APPLICATION

The application form can be downloaded from:

<http://www.centropiaggio.unipi.it/index.php/news/358-inlivetox-workshop-17-e-18-settembre>

It should be duly filled, signed and sent, with a current CV, by e-mail or fax to: **ILT.info@centropiaggio.unipi.it**

Fax number 050 2217051.

Applicants who have been accepted will receive a confirmation of admittance by email.

Course fee: 125 euro (teaching materials and refreshments are included)

Travel and accommodation expenses are not included.

Payable to :

Bank name: Poste Italiane

Bank address: Pisa Centro, P.zza Vittorio Emanuele, Pisa, Italy

Bank account owner: Istituto Tecnologia E Vita

Bank account number: 7871350

IBAN: IT 28 I 07601 14000 000007871350

BIC-SWIFT: BPPIITRRXXX

The Istituto Tecnologia E Vita is a non-profit organization affiliated with the Interdepartmental Research Center "E.Piaggio" aimed at promoting and managing research activities. For information and registration contact: ILT.info@centropiaggio.unipi.it

IMPORTANT DATES

5 September 2012

Deadline for application submission

7 September, 2012

Confirmation of admittance

10 September 2012

Deadline for Registration fee payment