



# SUMM3R SCHOOL



Centro 3R



Università  
di Genova

## ADVANCES IN BIOMEDICAL SCIENCES

### Human and environmental-related research and testing

A practical-theoretical course organised by  
Centro 3R and University of Genova

Students who have completed a Master's  
degree or PhD students, working in relevant  
fields of research and applications.

Open to up to 45 participants.

Students enrolled in the *PhD programmes in Experimental  
Medicine and Science and Technology for the Environment  
and Territory of the University of Genova* will be accredited 3  
CFU. Students enrolled in the *PhD programmes in  
Bioengineering and Robotics* of the University of Genova will  
be accredited 2 CFU.

9-10-11 July, 2025

Genova, Italy

Anna Maria Bassi, Giulia De Negri Atanasio, Elena  
Grasselli, Sonia Scarfi, Laura Pastorino, Stefania  
Vernazza, Sara Tirendi - *UNIGE*

Arti Ahluwalia, Chiara Magliaro - *UNIPI*

Valeria Chiono - *POLITO*

WHO

WHEN

WHERE

ORGANISERS

# DAY 1

THEORY

PRACTICE



**8.30 – 9.30 REGISTRATION**

**9.30  
10.00**

**KEYNOTE**  
S. Letasiova, "Reconstructed tissue models in toxicology and pharmacology"

**10.00  
10.20**

**RECONSTRUCTED TISSUES FOR TOXICOLOGY STUDIES**  
L. Dondero E. Grasselli, "Skin Homeostasis and Sustainable Cosmetic Products"

**10.20  
11.00**

**STEM CELL MODELS**  
V. Sottile, "Stem cell models of tissue and embryo development"  
E. Bottani, "Human induced pluripotent stem cell (iPSC)-derived Neural Precursor Cells for drug repurposing in rare genetic diseases"

**11.00 – 11.30 COFFEE BREAK**

**11.30  
12.10**

**ORGANOIDS AS DISEASE MODELS**  
S. Vernazza S. Tirendi, "Retinal organoids for neurorecovery approaches"  
I. Decimo F. Ciarpella, "Mouse and human brain organoids as innovative platforms for disease modelling and drug discovery"

**12.10 – 14.00 LUNCH**

**14.00  
16.00**

**RECONSTRUCTED TISSUES**  
S. Letasiova J. Markus, tbd

**16.00 – 16.30 COFFEE BREAK**

**16.30  
17.30**

**EMERGING TECHNOLOGIES**  
D. Di Lisa, tbd

## DAY 2

## THEORY

9.30

10.00

**KEYNOTE**

C. Rovida, "Regulatory space for NAMs"

10.00

10.40

**BIOLOGICAL BARRIERS**

G. De Negri Atanasio, "The Endocrine disruptors and their impact on human physiology"

G. Sancini, "Environmental stressors and barrier dysfunctions: assessing the impact on human health and diseases"

10.40 - 11.10

COFFEE BREAK

11.10

12.10

**ORGAN-ON-A-CHIP & MICROPHYSIOLOGICAL SYSTEMS**

C. Mattu, "In vitro models of cancer tissue: preclinical validation of advanced therapies for melanoma and glioblastoma"

T. Sbrana, "Fluidic platforms to simulate the human environment"

M. Innocenti, "Organ on chip based endothelium and tumor spheroids"

12.10 - 14.00

LUNCH

14.00

15.30

**MILLIFLUIDIC PLATFORMS**

S. Quaglia, "5D in-vitro models: how to gradually increase the correlation with human reality"

15.30 - 16.00

COFFEE BREAK

16.00

17.30

**TISSUE ENGINEERING & ORGAN-ON-A-CHIP MODELS**

C. Tonda Turo, "Setup and characterisation of thin and thick alveolar-capillary barriers"

C. Mattu, "Vascularised versus non-vascularised in vitro models of melanoma"

## PRACTICE

# DAY 3

## THEORY

9.30  
10.00

### KEYNOTE

G. Chirico, "Data analysis for in vivo optical label-free imaging"

10.00  
11.00

### EMERGING TECHNOLOGIES

E. Marcello, "Bioprinting for soft tissue modelling"  
D. Di Lisa, "The emerging role of micro-electrode array technologies for electrophysiological characterization of advanced 3D in vitro models of brain tissue"

11.00 - 11.30 COFFEE BREAK

11.30  
12.10

### NOVEL IN SILICO TOOLS

E. Botte, "Modelling mitosis, morphogenesis and metabolism in 3D tissues"  
C. Magliaro, "Image processing: a manual for survival"

12.10 - 14.00 LUNCH

14.00  
15.30

### 3D BIOPRINTING

E. Marcello G. Ruocco D Testore & G.P. Stola, "Printing hydrogel scaffolds for cardiac tissue modelling"

15.30-16.00 COFFEE BREAK

16.00  
17.30

### IMAGING

P. Mancini & C. Magliaro, "Honey, I shrunk the kids: tips and tricks for observing mini-organs"

## PRACTICE

SUPPORTED BY



**MATTEK**   
A BICO COMPANY

## SPEAKERS



Bottani E., Università di Verona  
Botte E., Università di Pisa  
Chirico G., Università di Milano Bicocca  
Ciarpella F., Università di Verona  
De Negri Atanasio G., Università degli Studi di Genova  
Decimo I., Università di Verona  
Di Lisa D., Università degli Studi di Genova  
Dondero L., Università degli Studi di Genova  
Sancini G., Università di Milano Bicocca  
Grasselli E., Università degli Studi di Genova  
Innocenti M., Università di Milano Bicocca  
Letasiova S., MatTek IVLSL, Slovakia  
Magliaro C., Università di Pisa  
Mancini P., Università di Pisa  
Marcello E., Politecnico di Torino  
Stola G.P., Politecnico di Torino  
Markus J., MatTek IVLSL, Slovakia  
Mattu C., Politecnico di Torino  
Quaglia S., IVTech srl, Italia  
Rovida C., Team Mastery  
Ruocco G., Politecnico di Torino  
Sbrana T., IVTech srl, Italia  
Sottile V., Università di Pavia  
Stola G.P., Politecnico di Torino  
Testore D., Politecnico di Torino  
Tirendi S., Università degli Studi di Genova  
Tonda Turo C., Politecnico di Torino  
Vernazza S., Università degli Studi di Genova

## REGISTRATION

The registration can be done online until June 30th, filling the form available on the [website](#).

After confirming the registration, the fee has to be paid through Bank Transfer, payable to: Ggallery srl – Banco di Credito Azzoaglio, Filiale di Cengio (SV), Via Bagnolo 1, 17056  
IBAN IT87Z0342549370CC0260111990, Re: SUMM3R SCHOOL  
2025

The receipt of payment has to be sent by email ([moira.nevins@gallerygroup.it](mailto:moira.nevins@gallerygroup.it)) or in person to Ggallery srl.