



UNIVERSITÀ DEL PIEMONTE ORIENTALE

## DIRECTORS

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### Antonio Sica

Dipartimento di Scienze del Farmaco  
UPO - Università del Piemonte Orientale, Novara

## ORGANISING SCIENTIFIC COMMITTEE

### Federica Biello

### Mario Pirozzi

# INTERNATIONAL SUMMER SCHOOL ON MOLECULAR ONCOLOGY

## 4<sup>th</sup> edition

Under the patronage of



# VERBANIA

04-07 September 2024

Villa San Remigio  
Università del Piemonte Orientale





INTERNATIONAL **SUMMER SCHOOL ON**  
**MOLECULAR ONCOLOGY** 4<sup>th</sup> edition

### Course Objectives

The field of oncology has undergone a transformative shift with the advent of molecular biology and precision medicine, altering how we understand and treat cancer. This advanced Course in “Molecular Oncology and Targeted Innovative Cancer Treatments – 4th edition” is designed to delve deeply into the molecular mechanisms that drive tumorigenesis and the cutting-edge therapies that target these processes.

By exploring the interplay between genetic mutations, signaling pathways, metabolism and tumor microenvironments, students will gain an in-depth understanding of cancer biology.

The Course focuses on the development and application of targeted therapies, such as small molecules, monoclonal antibodies, and immune checkpoint inhibitors, alongside the latest breakthroughs in immunotherapy, gene-editing technologies and artificial intelligence.

As precision oncology continues to evolve, this Course will provide participants with the knowledge and skills necessary to stay at the forefront of cancer research and personalized treatment strategies.

Wednesday, September 04



- 14.00 Opening address  
**Menico Rizzi, Gianluca Gaidano**
- 14.10 Introduction to the school and program presentation  
**Marisa Gariglio, Alessandra Gennari, Antonia Follenzi, Antonio Sica**
- 14.20 **Opening lecture: Massimo Dominici**  
Gene therapies for solid tumors: prime time is coming?  
**Chairs: Gianluca Gaidano, Menico Rizzi**
- 14.40 **New target directed agents I**  
**Chairs: Renzo Boldorini, Valentina Guarneri**
- Innovative Drugs in Breast Cancer **Alberto Zambelli**
  - New target assessments to address treatment options in breast cancer  
**Nicola Fusco**
  - Molecular Imaging as an in vivo predictor of response **Carolien Schroder**
- Discussion*
- 16.00 **Coffee break**
- 16.30 **Chairs: Alessandra Gennari, Valentina Guarneri**  
Metabolic traits of cancer inflammation  
Lecture: **Antonio Sica**
- 17.00 **New target directed agents II**  
**Chairs: Federica Biello, Alessandra Gennari**
- The current and future role of PARP-inhibitors in breast, gynecological and prostate cancer **Laura Cortesi**
  - New treatment options in lung cancer **Francesco Passiglia**
  - Innovative drugs and new biomarkers in Colorectal Cancer  
**Federica Morano**
- Discussion*
- 18.20 **Chairs: Luca Boni, Paolo Bruzzi**  
Innovative drugs & conventional trial design methodology  
PRO: **Paolo Bruzzi**  
AGAINST: **Luca Boni**
- 19.00 Closing of the day

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Thursday, September 05

**09.00** **Traslational Oncology I**

*Chairs:* **Ciro Isidoro, Antonio Sica**

- Triple negative breast cancer subtyping and precision oncology  
**Giovanna Chiorio**
- Bioengineering, Organoids and Tissue Fragments at the forefront of Personalized Oncology **Salvatore Piscuoglio**
- The potential of correlative light-electron microscopy to study diseases in organoids **Edoardo D'Imprima**
- The Impact of Tissue Fluidification on Anti-tumor Immunity in Breast Cancer  
**Giorgio Scita**

*Discussion*

**11.00** **Coffee break**

**11.20** **Traslational Oncology II**

*Chair:* **Antonio Sica**

- CAR-Clk Lymphocytes as Innovative Strategy against Solid Tumors  
**Dario Sangiolo**
- The mechanics of cancer **Stefano Piccolo**
- Molecular determinants of resistance to biological breast cancer  
**Paolo Vigneri**
- The world beyond CAR-T cells: engineering T lymphocytes with newly identified anti-tumor TCRs **Eliana Ruggiero**

*Discussion*

**12.45** **Genes and Lifestyle: Food, Nutraceuticals and Dietary Supplementation**

*Chairs:* **Sandra D'Alfonso, Claudio Vernieri**

- Genomic Risk, Target Agents and Pregnancy **Matteo Lambertini**

**13.15** **Lunch**

**14.15** • Overweight, Metabolic Syndrome and Cancer:  
is there a role for GLP-1 agonists? **Paolo Marzullo**

- Iron metabolism in cancer **Domenico Girelli**

- Fasting-Mimicking diet and cancer metabolism **Claudio Vernieri**

*Discussion*

15.45 *Three selected abstracts presentation by young researchers*

*Chairs:* **Marcello Manfredi, Chiara Porta**

16.00 **Coffee break**

16.30 **New Drugs and Targets II**

*Chair:* **Benedetta Conte, Giovanni Fucà**

- Genomic signatures and molecular predictors of response and prognosis  
**Benedetta Conte**
  - Innovative drugs and new biomarkers in Gynecological Cancers  
**Giovanni Fucà**
  - Innovative Drugs and new biomarkers in Melanoma **Michele Del Vecchio**
- Discussion*

18.20 *Three selected abstracts presentation by young researchers*

*Chairs:* **Federica Biello, Veronica Martini**

18.50 Closing of the day

Friday, September 06

09.00 **Innovative Strategies to cure cancer**

*Chairs:* **Gianluca Baldanzi, Antonia Follenzi**

- Exploiting immune surveillance to target colorectal cancer evolution  
**Alberto Bardelli**
  - In vivo macrophage engineering for cancer immunotherapy **Mario Squadrino**
  - Colorectal cancer genomic medicine: from human tumors to preclinical models, and back **Enzo Medico**
  - Molecular and spatial control of macrophages in cancer **Renato Ostuni**
- Discussion*

11.15 **Coffee break**

11.30 **Cellular and Molecular determinants of response**

*Chairs:* **Alessandra Gennari, David Pinato**

- New predictive assays of response **Michele Milella**
  - New approaches in HCC **David Pinato**
- Discussion*

12.30 *Three selected abstracts presentation by young researchers*

*Chairs:* **Mario Pirozzi, Ida Tagliatela**

13.00 **Lunch**



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**14.00 Tumor virology**

*Chairs:* **Marisa Gariglio, Cristina Rigamonti**

- HCV: from replicon to a cure **Mirko Cortese**
- Novel biomarkers in HCV-related liver diseases **Maria Lina Tornesello**
- The epigenetic landscape in virus-induced head and neck cancers  
**Susanna Chiocca**

*Discussion*

**16.00 Coffee break**

- 16.20**
- Imaging bimolecular condensates at meso and nanoscale **Ranieri Bizzarri**
  - Arboviruses of pandemic potential **Mauro Pistello**

*Discussion*

**18.00 Three selected abstracts presentation by young researchers**

*Chairs:* **Cinzia Borgogna, Marco De Andrea**

**18.30** Closing of the day

**Saturday, September 07**

**09.00 Translational insight and treatment options**

*Chair:* **Antonio Sica**

- Artificial intelligence for predictive biomarker discovery in immuno-oncology  
**Arsela Prelaj**
- Translational Insights and new treatment options in rare cancers **Giovanni Grignani**

*Discussion*

**10.30 Coffee break**

**11.00 Best young researcher abstract award and presentation**

**11.30** Conclusions and Adjournment

**Antonia Follenzi, Marisa Gariglio, Alessandra Gennari, Antonio Sica**



## INVITED FACULTY

Gianluca **Baldanzi** *Novara*  
Alberto **Bardelli** *Torino*  
Federica **Biello** *Novara*  
Ranieri **Bizzarri** *Pisa*  
Renzo **Boldorini** *Novara*  
Luca **Boni** *Genova*  
Cinzia **Borgogna** *Novara*  
Paolo **Bruzi** *Savona*  
Susanna **Chiocca** *Milano*  
Giovanna **Chiorino** *Biella*  
Benedetta **Conte** *Novara*  
Mirko **Cortese** *Napoli*  
Laura **Cortesi** *Modena*  
Sandra **D'Alfonso** *Novara*  
Edoardo **D'Imprima** *Milano*  
Marco **De Andrea** *Torino*  
Michele **Del Vecchio** *Milano*  
Massimo **Dominici** *Ferrara*  
Antonina **Follenzi** *Novara*  
Giovanni **Fucà** *Milano*  
Nicola **Fusco** *Milano*  
Gianluca **Gaidano** *Novara*  
Marisa **Gariglio** *Novara*  
Alessandra **Gennari** *Novara*  
Domenico **Girelli** *Verona*  
Giovanni **Grignani** *Torino*  
Valentina **Guarneri** *Padova*  
Ciro **Isidoro** *Novara*  
Matteo **Lambertini** *Genova*

Marcello **Manfredi** *Novara*  
Veronica **Martini** *Novara*  
Paolo **Marzullo** *Novara*  
Enzo **Medico** *Torino*  
Michele **Milella** *Verona*  
Federica **Morano** *Milano*  
Renato **Ostuni** *Milano*  
Francesco **Passiglia** *Orbassano*  
Stefano **Piccolo** *Padova*  
David **Pinato** *Novara*  
Mario **Pirozzi** *Novara*  
Salvatore **Piscuoglio** *Milano*  
Mauro **Pistello** *Pisa*  
Chiara **Porta** *Novara*  
Arsela **Prelaj** *Milano*  
Cristina **Rigamonti** *Novara*  
Menico **Rizzi** *Vercelli*  
Eliana **Ruggiero** *Milano*  
Dario **Sangiolo** *Candiolo*  
Carolien **Schröder** *Groningen*  
Giorgio **Scita** *Milano*  
Antonio **Sica** *Novara*  
Mario **Squadrito** *Milano*  
Ida **Tagliatalata** *Novara*  
Maria Lina **Tornesello** *Napoli*  
Claudio **Vernieri** *Milano*  
Paolo **Vigneri** *Catania*  
Alberto **Zambeli** *Milano*

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**Addressed to**

**40 attendees:** Physicians and Resident doctors specialised in Oncology, Pathological anatomy, Clinical immunology and Allergology, Hematology, Microbiology and Virology, Radiotherapy; **Biologists, Pharmacists**, but also **PhD students**, students and graduates of the degree programme in **Pharmaceutical Chemistry and Technology and Biotechnology**.

**Registration fees (VAT included)**

€ 300,00 In-class course

€ 200,00 In-class course for UPO Staff, Students and AIOM members

Full information and registration on [www.symposiacongressi.com](http://www.symposiacongressi.com)

**Course Venue**

Villa San Remigio  
Università del Piemonte Orientale  
Via San Remigio 20 - 28922 Verbania

**Abstract**

Click here for detailed information:  
[www.symposiacongressi.com](http://www.symposiacongressi.com)

Remember:

**Aug 19, 2024** Abstract submission deadline

**Aug 30, 2024** Date of acceptance

**CME**

Based on the in force regulations approved by the CNFC, Symposia Organizzazione Congressi Srl (provider n. 486) will assign to the activity CME (486-**423383**) **23 CME points**.

Training objective: professional and technical content (knowledge and skills) specific to each profession, specialisation and highly specialised activity. Rare disease.

**Organizing Secretariat and  
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