



UNIVERSITÀ DEL PIEMONTE ORIENTALE

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International Summer School on **Molecular Oncology** *5th edition*



Under the patronage of



Pallanza (Verbania)
10-13 September 2025

Villa Giulia

International 5th edition

Summer School on Molecular Oncology

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 10



14.00 Opening address
Gianluca Gaidano, Stefano Scarpetta

Introduction to the school and program presentation
Antonia Follenzi, Marisa Gariglio, Alessandra Gennari, Antonio Sica

14.10 **Opening lecture: Massimo Dominici**
Extracellular vesicles as a biomarker for early diagnosis
and tumor activity in breast cancer
Chair: Annalisa Chiocchetti, Gianluca Gaidano

14.40 **New targets in advanced breast cancer**
Chairs: Pierfranco Conte, Alessandra Gennari

- Innovative Drugs in Breast Cancer **Alberto Zambelli**
- New target assessments to address treatment options in breast cancer
Caterina Marchiò
- Liquid biopsy in advanced breast cancer as an in vivo predictor
of response **Maria Scatolini**
- Fasting-Mimicking diet and cancer metabolism **Claudio Vernieri**

Discussion

16.30 *Coffee break*

16.50 **New target directed agents**
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 **Paolo Bironzo**
- Innovative drugs and new biomarkers in colorectal cancer
Alessandro Pastorino

Discussion

17.50 **Academic versus company driven translational and clinical trials**
Interview with: Silvia Marsoni, Filippo Montemurro, Oriana Nanni

18.15 Closing of the day

Thursday, September 11

09.00 **Genes, Food and Lifestyle**

Chairs: Alessandra Gennari, Cristina Rigamonti

- The intersection of cancer care and pregnancy in the era of the target agents **Chiara Molinelli**
- Lifestyle and supportive therapies in breast cancer: from what we eat to what we need **Luca Arecco**
- Genomic signatures and molecular predictors of response and prognosis **Benedetta Conte**

Discussion

10.00 *Chairs: Matteo Bauckneht, Arnoldo Piccardo*

Lecture: What nuclear medicine physician can do for the medical oncologist? **Paola Anna Erba**

10.40 *Coffee break*

11.00 **Traslational Oncology**

Chairs: Antonio Sica, Paolo Vigneri

- CAR-T lymphocytes as novel immunotherapy approach against chemoresistant solid tumors **Dario Sangiolo**
- Molecular determinants of response to immunotherapy **Paolo Vigneri**

Discussion

12.30 *Three selected abstracts presentation by young researchers*

Chairs: Simone Nardin, Chiara Porta

13.00 *Lunch*

14.00 **New Drugs and Targets**

Chairs: Alessandra Gennari, Arnoldo Piccardo

- Innovative drugs and new biomarkers in urological cancers **Vincenza Conteduca**
- Theranostic approach in Prostate Cancer and NET **Matteo Bauckneht**
- Theranostic approach in Breast Cancer **Arnoldo Piccardo**

Discussion



- 15.20 Cellular and Molecular determinants of response**
Chairs: Alessandra Gennari, Davi James Pinato
- Translational Insights and new treatment options in rare cancers **Giovanni Grignani**
 - Overcoming interpatient heterogeneity in glioblastoma by targeting shared core programs in Tumor-Initiating Cells **Giuliana Pelicci**
- Discussion*

16.20 Coffee break

- 17.00 Cellular and Molecular determinants of response**
Chairs: Alessandra Gennari, David James Pinato
- New predictive assays of response in solid tumors **Michele Milella**
 - New approaches in HCC **David James Pinato**
- Discussion*

18.20 Three selected abstracts presentation by young researchers
Chairs: Federica Biello, Veronica Martini

19.00 Closing of the day

Friday, September 12

- 09.00 Translational Oncology I**
Chairs: Ciro Isidoro, Antonio Sica
- Complement activation in cancer: effects on cancer-related inflammation and immunosuppression **Cecilia Garlanda**
 - ecDNAs promote intratumor heterogeneity and plasticity in PDAC **Vincenzo Corbo**
 - Analysis of circulating biomarkers for the early detection and prognosis prediction of prostate cancer **Giovanna Chiorino**
- Discussion*
- 10.20 Human papillomavirus infection and head and neck cancer**
Chairs: Marisa Gariglio, Laura Masini
- Mechanistic insights into Viral - Associated Head and Neck Cancer **Susanna Chiocca**
 - Virus related Head and Neck Cancer - Where do we stand? **Luigi Lorini**
- Discussion*
- 11.20 Coffee Break**

11.30 Innovative Strategies to cure cancer

Chairs: Gianluca Baldanzi, Antonia Follenzi

- Leveraging DNA Damage Response Pathways to identify therapeutic opportunities in cancer **Giovanni Germano**
- Gastric cancer in the age of targeted agents: identification and validation of novel targets and therapeutic strategies **Silvia Giordano**
- CAR-based therapeutic approaches against colorectal cancer: target repurposing and combinatorial strategies **Enzo Medico**

Discussion

12.40 Three selected abstracts presentation by young researchers

Chairs: Mario Pirozzi, Nastassja Tober

13.10 Lunch

14.00 Translational Oncology II

Chairs: Benedetta Conte, Ciro Isidoro

- AI and big data analysis **Davide Corà**
- Autophagy-lysosomal proteolysis differentially affects the growth in 2D and 3D of neuroblastoma cells **Ciro Isidoro**
- UPO biobank: challenges and research opportunities **Daniela Capello**

Discussion

15.40 Mechanistic Insights into Cancer

Chairs: Antonia Follenzi, Marisa Gariglio

- Metabolic reprogramming: unveiling the role of amino acid metabolism in the cancer microenvironment **Alessio Menga**
- Overweight, metabolic syndrome and cancer: is there a role for GLP-1 incretin analogs? **Paolo Marzullo**
- Engineered hematopoietic stem cells as weapons against cancer **Bernard Gentner**

Discussion

16.30 Three selected abstracts presentation by young researchers

Chairs: Cinzia Borgogna, Marco De Andrea

17.00 Closing of the day



Saturday, September 13

09.00 Cancer and host metabolism

Chairs: Marisa Gariglio, Alessandra Gennari

- Metabolomics and cancer **Marcello Manfredi**
 - Diet, food and supplements in cancer patients **Marina Caputo**
- Discussion*

10.00 Radiation Biomarkers

Chairs: Alessandra Gennari, Marco Krengli

- Biomarker-Directed Radiotherapy in solid tumors **Laura Masini**
 - Biomarker driven radiosurgery in brain tumors **Francesco Pasqualetti**
- Discussion*

11.00 Coffee break

11.20 Closing lecture

Chairs: Benedetta Conte, Alessandra Gennari

TBD **Pier Giuseppe Pelicci**

Best young researchers abstract award and presentation

12.30 Conclusions and Adjourment

Antonia Follenzi, Marisa Gariglio, Alessandra Gennari, Antonio Sica

Invited Faculty

Luca Arecco *Bruxelles*
Gianluca Baldanzi *Novara*
Matteo Bauckneht *Genova*
Federica Biello *Novara*
Paolo Bironzo *Torino*
Cinzia Borgogna *Novara*
Daniela Capello *Novara*
Marina Caputo *Novara*
Susanna Chiocca *Milano*
Annalisa Chiocchetti *Novara*
Giovanna Chiorino *Biella*
Benedetta Conte *Novara*
Pierfranco Conte *Padova*
Vincenza Conteduca *Foggia*
Davide Corà *Novara*
Vincenzo Corbo *Verona*
Laura Cortesi *Reggio Emilia*
Marco De Andrea *Torino*
Massimo Dominici *Modena*
Paola Anna Erba *Bergamo*
Antonia Follenzi *Novara*
Gianluca Gaidano *Novara*
Marisa Gariglio *Novara*
Cecilia Garlanda *Milano*
Alessandra Gennari *Novara*
Bernard Gentner *Losanna*
Giovanni Germano *Milano*
Silvia Giordano *Torino*
Giovanni Grignani *Torino*
Ciro Isidoro *Novara*
Marco Krengli *Padova*
Luigi Lorini *Milano*

Caterina Marchiò *Torino*
Paolo Marzullo *Novara*
Marcello Manfredi *Novara*
Veronica Martini *Novara*
Laura Masini *Vercelli*
Silvia Marsoni *Milano*
Enzo Medico *Torino*
Alessio Menga *Novara*
Michele Milella *Verona*
Chiara Molinelli *Genova*
Filippo Montemurro *Basel*
Oriana Nanni *Forlì*
Simone Nardin *Novara*
Francesco Pasqualetti *Padova*
Alessandro Pastorino *Genova*
Giuliana Pelicci *Novara*
Pier Giuseppe Pelicci *Milano*
Arnoldo Piccardo *Genova*
David James Pinato *Novara*
Mario Pirozzi *Novara*
Chiara Porta *Novara*
Cristina Rigamonti *Novara*
Dario Sangiolo *Torino*
Stefano Scarpetta *Novara*
Maria Scatolini *Biella*
Antonio Sica *Novara*
Nastassja Tober *Novara*
Claudio Vernieri *Milano*
Paolo Vigneri *Catania*
Alberto Zambelli *Bergamo*

Scientific Information



Addressed to

40 attendees: Physicians and Resident doctors (specialised in: Oncology, Pathologic Anatomy, Clinical Immunology and Allergology, Hematology, Microbiology and Virology, Radiation Therapy); **Biomedical laboratory health technician, Biologists, Pharmacists, Chemists.**

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 at:

www.symposiacongressi.com/summer-school-5thedition/

Course Venue

Villa Giulia

Corso Zanitello, 10
28922 Pallanza (VB)

Abstract Titles

- New anticancer targets and drugs
- Translational immuno-oncology
- Mechanistic insights into cancer
- Cellular and molecular determinants of response

Remember:

Aug 19, 2025 *Abstract submission deadline*

Aug 29, 2025 *Date of acceptance*

Click here for detailed information:

www.symposiacongressi.com/summer-school-5thedition/

CME

Based on the in force regulations approved by the CNFC, Symposia Organizzazione Congressi Srl (provider n. 486) will assign to the activity CME (**486-456802**) **22** 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 CME Provider

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