

**6th Workshop IRE on Translational Oncology:
“Cancer organoids as Reliable Disease Models to Drive Clinical Development of Novel
Therapies”**

September, 23-24 2024

Istituti fisioterapici Ospitalieri

Istituto Tumori Regina Elena e Istituto Dermatologico San Gallicano - Roma

Organizing committee

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RAZIONALE

Modelling the dynamic tumor ecosystems with many elements that display spatial and temporal evolution represents a central challenge in precision oncology. Patient-derived 3D culture models, including organoids, explants, and engineered or bioprinted models, have recently emerged as sophisticated viable systems for studying complex and diverse populations of cancer cells interacting within their microenvironments that can address a myriad of unmet needs in precision medicine for clinical decision making. There has been a recent explosion of techniques and platforms of these human tissue avatars that enable modelling cellular alterations in disease states and screening of compounds and molecules to discover new pathways. This workshop will bring together experts in 3D models from various tissues and will create valuable cross-fertilization of ideas and approaches that will benefit many fields, providing a critical overview at both clinical and preclinical levels. The workshop program will also include engineering approaches that will highlight next generation 3D model technology to recapitulate the complexity of human cancer. An additional aim of this workshop is to evaluate 3D models in the immuno-oncology field as a way to study the interaction of the immune system with epithelial tumors to develop new diagnostic and therapeutic tools. As a result of this meeting, it is anticipated that both senior and junior participants will have a much better understanding of the capabilities of 3D model systems and see new avenues for drug screening exploration.

PROGRAMMA

6th Workshop IRE on Translational Oncology:

“Cancer organoids as Reliable Disease Models to Drive Clinical Development of Novel Therapies”

23/24 September 2024, Rome, Italy

Programme

Monday, 23 September 2024

13.30-14.00

Welcome Address

14.00-15.30

Session I: Organoids in cancer modeling

Chairperson:

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14.00-14.30

Ronit Satchi-Fainaro (Cancer Biology Research Center, Tel Aviv University Tel Aviv, Israel)- 3D bioprinted cancer models. *Title TBD*

14.30-15.00

Ingeborg Tinhofer (Charité - Universitätsmedizin Berlin, GE)- Organoids and radiotherapy. *Title TBD*

15.00-15.30

Giovanni Tonon (Vita Salute San Raffaele University; Center for Omics Sciences, IRCCS San Raffaele Scientific Institute, Milan, Italy)- Molecular profiling of tumor organoids. *Title TBD*

15.30- 16.00

Coffee break

16.00-17.30

Session II: Next generation 3D cancer models

16.00-16.30

Sarah C. Heilshorn, (Stanford University, CA, USA. Stanford) – Spatially controlled construction of assembloids. *Title TBD*

16.30-17.00

Daniela S. Thommen, (Division of Molecular Oncology & Immunology, The Netherlands Cancer Institute, Amsterdam, the Netherlands)- An ex vivo patient-derived tumor fragment platform. *Title TBD*

17.00-17.30

Yong-Jun Kwon (Luxembourg Institute of Health) Luxembourg- Cancer Modeling & Screening Platform. *Title TBD*

Tuesday, 24 September 2024

Young Investigator Session

Chairperson

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9,30-12.00

9.30-9.45

1rst speaker

9.45-10,00

2nd speaker

10.00-10,15

3rd speaker

10,15-10,30

4th speaker

10,30-10,45

5th speaker

10.45-11.00

Coffee break

11.00-11,15

6th speaker

11.15-11.30

7th speaker

11.30-11,45

8th speaker

11.45-12.00

9th speaker

12.00-13.00

Meet the Editor

13.00-14.00

Light lunch

14.00-15.30

Session III: Towards precision oncology with 3D models

Chairperson:

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14.00-14.30

Giovanni Blandino, (IRCCS Regina Elena National Cancer Institute-Rome, Italy)- Drug screening in tumor organoids. *Title TBD*

14.30-15.00

Karuna Ganesh (Memorial Sloan Kettering Cancer Center, NY) - Organoids as 3D models to study metastasis. *Title TBD*

15.00-15.30

Antonio Iavarone (the Sylvester Comprehensive Cancer Center University of Miami, Miller School of Medicine)- Glioblastoma and 3D precision medicine. *Title TBD*

15.30-16.00

Coffee break

16.00-18.00

Session IV: 3D models in immuno-oncology

16.00-16.30

Massimiliano Pagani (IFOM, Mi, Italy)- Spatial transcriptomic in organoids. *Title TBD*

16.30-17.00

Kruihof-de Julio, Marianna (Department for BioMedical Research (DBMR). Cellular interactions and immune cell dynamics within immunological niches in 3D models. *Title TBD*

17.00-17.30

Xiling Shen (Department of Biomedical Engineering, Pratt School of Engineering, Duke University, Durham, NC, USA)- Micro-organospheres for testing immuno-oncology therapies. *Title TBD*

17.30- 18.00

Closing remarks

