INTERNATIONAL MAECI WORKSHOP 2024:

"*From macro to micro 3D high-content screening platform for anti-cancer drug testing using multicellular spheroids*"

10th July 2024, Bologna, Italy – onsite and online event

WORKSHOP AIM:
Join us for an engaging scientific workshop centred on advancing cancer drug testing methodologies through cutting-edge high-content screening (HCS) platforms. Our workshop aims to explore the dynamic interplay between macro and micro perspectives in cancer drug testing, focusing on the pivotal role of multicellular spheroids. These 3D cellular models mimic the complex microenvironments of tumours more accurately than traditional 2D cultures, providing invaluable insights into drug responses and tumour behaviour. Throughout the workshop, participants will delve into the latest advancements in HCS technology, leveraging sophisticated imaging and analysis techniques to decipher intricate cellular interactions from macroscopic views to microscopic insights. Distinguished speakers from academia, industry, and research institutes will share their expertise, presenting innovative approaches, case studies, and practical insights into the design and implementation of HCS platforms.

ORGANISING COMMITTEE:
- Filippo Piccinini, University of Bologna, Italy (f.piccinini@unibo.it).
- Gastone Castellani, University of Bologna, Italy (gastone.castellani@unibo.it).
- Jae-Chul Pyun, Yonsei University, Seoul, South Korea (jcpyun@yonsei.ac.kr).
- Mariachiara Stellato, University of Bologna, Italy (m.stellato@unibo.it).

INFORMATION:
- Venue: Room:
  Aula Magna Nuove Patologie, padiglione 5, Sant'Orsola Hospital, Bologna, Italy.
- Remote meeting address via Microsoft Teams:
  ID meeting: 353 133 941 979; Passcode: bGMWbb, or just copy and paste into a browser the following link:
  https://teams.microsoft.com/dl/launcher/launcher.html?url=%2F_%23%2Fl%2Fmeetup-join%2F19%3Ameeting_ZTdlZGEwODItOWNhNi00MzQ4LTg0YTEtZDFiMzZmNjdlN2Fj%40thread.v2%2F0%3Fcontext%3D%257b%2522Tid%2522%253a%2522e99647dc-1b08-454a-bf8c-699181b389ab%2522%252c%2522Oid%2522%253a%2522d24f6c9a-f088-4bd2-a652-fe38c5831aca%2522%257d%26anon%3Dtrue&type=meetup-join&deeplinkId=55c31373-4bbe-4745-809d-07122316e77a&directDl=true&msLaunch=true&enableMobilePage=true&suppressPrompt=true
- Costs:
  free entrance for all interested people.

PROGRAM (Italian - IT - and South Korean - SK - local time):
Chairs:
- Alessandro Bevilacqua (DISI, University of Bologna, Italy).
- Enrico Lucarelli (Rizzoli Orthopaedic Institute, Bologna, Italy).
- Daniel Remondini (DIFA, University of Bologna, Italy).

SPEAKER	MAIN AFFILIATION	TIME	PRESENTATION TITLE
Filippo Piccinini, Gastone Castellani	DIMEC, University of Bologna, Italy	09:30-09:40 IT 16:30-16:40 SK	Introduction to the workshop and opening greetings by Authorities: Prof. Massimo Passera (Science Counselor, Embassy of Italy, Seoul) and Prof. Seong-ho Lee (Ambassador, Embassy of South Korea, Rome).
Jae-Chul Pyun	Yonsei University, Seoul, South Korea	09:40-09:47 IT 16:40-16:47 SK	LDI-mass spectrometry for the analysis of TCA cycle.
Gianandrea Pasquinelli	DIMEC, University of Bologna, Italy	09:50-09:57 IT 16:50-16:57 SK	Electron microscopy, from basic research to translational and clinical application.
Misu Lee	Incheon National University, South Korea	10:00-10:07 IT 17:00-17:07 SK	Exploring mechanisms of overcoming anticancer drug resistance through 3D cell culture systems.
Peter Horvath, Akos Diosdi	Biological Research Centre (BRC), Szeged, Hungary	10:10-10:17 IT 17:10-17:17 SK	Life beyond the pixels: deep learning methods in cancer and virus research.
Bongseop Kwak	Dongguk University, Goyang-si, Gyeonggi-do, Korea	10:20-10:27 IT 17:20-17:27 SK	Optimization of spheroid fabrication for drug testing.
Maria Harmati, Krisztina Buzas	Biological Research Centre (BRC), Szeged, Hungary	10:30-10:37 IT 17:30-17:37 SK	Quantitative features of extracellular vesicle-mediated crosstalk in multi-cellular 3D tumor models.

ACTIVITY	DESCRIPTION	TIME	NOTE
COFFEE BREAK	COFFEE BREAK FOR ALL ATTENDEES	10:40-11:20 IT 17:40-18:20 SK	//

SPEAKER	AFFILIATION	TIME	PRESENTATION TITLE
Gopu Sriram	National University of Singapore, Singapore	11:20-11:27 IT 18:20-18:27 SK	Spheroid-on-chip: unravelling the impact of fluid dynamics on mesenchymal stem cell spheroids.
Martina Rossi, Emil Malucelli, Stefano Iotti	FABIT, University of Bologna, Italy	11:30-11:37 IT 18:30-18:37 SK	3D multicellular osteosarcoma models for drug screening.
Anna Tesei	IRCCS IRST, Meldola, Italy	11:40-11:47 IT 18:40-19:47 SK	Multicellular tumour spheroid models for anticancer drug discovery.
Bosung Ku	Central R&D Center, Medical & Bio Decision (MBD) Co., Ltd. Suwon, South Korea	11:50-11:57 IT 18:50-18:57 SK	Cancer Organoid-based Diagnosis Reactivity Prediction (CODRP) model predicting recurrence in patients with ovarian cancer through drug response and growth rate of the patient-derived organoids.
Francesco Alviano	DIBINEM, University of Bologna, Italy	12:00-12:07 IT 19:00-19:07 SK	Multilineage spheroids of perinatal stem cells for studying normal microenvironment interactions.
Olivier De Wever	Cancer Research Institute, Ghent, Belgium	12:10-12:17 IT 19:10-19:17 SK	Finding unknown unknowns in spheroid research to create minimum information guidelines and advance biological understanding.
Arne Peirsman	Cancer Research Institute, Ghent, Belgium	12:20-12:27 IT 19:20-19:27 SK	Data preservation in spheroid research.