



**Sapienza University of Rome
Department of Biology and Biotechnology**

**International Winter School
Molecular Medicine
December 14-18, 2020**

Programme

Monday 14-12-2020 Zoom Platform

Opening

10.00-10.30

A. Musarò, Sapienza University of Rome

I. Saggio, Sapienza University of Rome

New frontiers in stem cell research

Discussants A. Rosa, Sapienza University of Rome

10.30-11.15

G. Martello, University of Padua

Pluripotent stem cell self-renewal and reprogramming

11.30-12.15

E. Di Pasquale, Humanitas Research, Milan

iPSC technology applied to cardiac diseases: from mechanisms to therapies

12.15-13.00

O. Gagliano, University of Padua, Onyel Biotech

High-efficiency reprogramming of human somatic cells through microfluidics

15.00-16.00

B. Arduini, Stem Cell Research Core Center for Biotechnology & Interdisciplinary Studies Rensselaer Polytechnic Institute, Troy, NY

Contextualizing gene regulatory network activity through high-content analysis of human cancer and stem cell lines

16.00-17.00

S. Velasco, Stanley Center for Psychiatric Research at the Broad Institute of MIT and Harvard

Brain organoids to model neurodevelopment and disease

Tuesday 15-12-2020 Zoom Platform

Stem cells and carcinogenesis

Discussant A. Musarò, Sapienza University of Rome

10.00-11.00

M. Sampaolesi, KU Leuven, Belgium

Single cell OMICS, cell reprogramming and gene editing to challenge muscular dystrophies

11.00 -12.00

L. Canettieri, Sapienza University of Rome

Hunting the Hedgehog in Cancer: Targeting Metabolic Vulnerabilities

15.00-17.00

Virtual poster session - best international poster competition

Committee: A. Musarò, D. Raimondo, A. Rosa, I. Saggio, R. Burla, hosts (online)

Wednesday 16-12-2020 Zoom Platform

Modeling stem cells and Pathology

Discussant D. Raimondo, I. Saggio, Sapienza University of Rome

10.00-11.00

F.S. Tedesco, UCL, UK

Engineering human iPS cells for neuromuscular disease modelling and therapy development

11.00 -12.00

L. De Colibus, Oxford, UK

Locking the door on virus entry: A lesson learnt from structural biology

15.00-16.00

F. Spagnoli King's College London, London, UK

Engineering pancreatic cells: cell fate choices and plasticity

Thursday 17-12-2020 Zoom Platform

New challenges in the (post) COVID era

10.00-12.00

Virtual Participatory Table. Anti-COVID vaccine

Coordinates S. Iannaccone, Wired, Repubblica, Galileo

G. Sciumé, Sapienza University of Rome

15.00-17.00

Virtual poster session - best italian poster competition

Committee: A. Musarò, D. Raimondo, A. Rosa, I. Saggio, R. Burla, hosts
(online)

Friday 18-12-2020 Zoom Platform

10.00-16.00

Conclusions and Exams

Practical info and deadlines

Online modality. During the Winter School, the students will attend seminars on Zoom Platform. All participants will have the opportunity to actively follow and interact with the speakers through the Zoom platform (<https://zoom.us/>). The links to access to the lessons will be sent the day before by email.

Poster session. Students or groups interested to participate in the poster competition have to send the power point slides (max 12 slides) of the poster by December 7, 2020. Participants in poster competition will present their work during the virtual poster session. Participants will be notified for the schedule of the poster session in advance. Time for project presentation will be five minutes plus five minutes for poster discussion with scholars and audience. Best posters will be selected through online voting. Guidelines for poster preparation are available on <https://www.saggiolab.com/who-else-for-students/biologia-delle-cellule-staminali-ed-applicazioni/bcs-teaching-materials/>

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