



SAPIENZA
UNIVERSITÀ DI ROMA

Stem cells and Molecular Medicine

International WINTER SCHOOL

Programme

Monday 13-12-2021 Zoom Platform - Serra I/II

Opening

10.00-10.30

A. Musarò, Sapienza University of Rome

I. Saggio, Sapienza University of Rome

Stem cells, differentiation and aging

Discussant A. Rosa, Sapienza University of Rome and I. Chimenti, Sapienza University of Rome

10.30-11.45 M. Gouti, MDC, Berlin

Generation of human neuromuscular organoids to model development and disease

11.45-13.00 P. Madeddu, University of Bristol, UK

Learning from the genetic code of healthy centenarians to delay the heart's aging and age-related cardiac disease

14.00-15.45 O. Dreesen, A-STAR, Singapore

Role of telomere dysfunction and senescence in human skin aging and disease

15.45-17.00 B. van Meer, Leiden University, Netherlands and M. Mastrangeli, Delft, University of Technology, Netherlands

Enhancing advanced cardiac differentiation of iPS through organs-on chip technology for effective in vitro modelling

Tuesday 14-12-2021 Zoom Platform - Serra I/II

Stem cells cancer and aging

Discussant A. Musarò, Sapienza University of Rome

10.00-11.45 M. Giacca, King's College, London, UK

Novel biological drugs for cardiac regeneration

11.45-13.00 A. Alimonti, ETH Zurich, Switzerland

New pro-senescence approach to cancer therapy

14.00-17.00 Poster session - best international poster competition

Committee: A. Musarò, D. Raimondo, A. Rosa, I. Saggio, R. Burla, I. Chimenti, hosts

Wednesday 15-12-2021 Zoom Platform - Serra I/II

Genome architecture and genome function in stem cell and aging diseases

Discussant I. Saggio, Sapienza University of Rome and Burla R, IBPM-CNR

10.00-11.45 W. Zhao, NTU, Singapore

An engineering tool to probe the nucleus at nanoscale

10.00-11.45 C. Brighi, CRESTOPTICS, Italy

Approaching the unknown: From standard fluorescent microscopy to super-resolution techniques

14.00-15.45 G.V. Shivashankar, ETH-Zurich, Switzerland

Mechanical regulation of chromatin organization and gene expression

15.45-17.00 S. Gonzalo, Saint Louis University School of Medicine, USA

The danger of self-DNA accumulation in the cytoplasm during aging

Thursday 16-12-2021 Zoom Platform - Serra I/II

Cell Biology and Bioinformatics

Discussant D. Raimondo, Sapienza University of Rome

10.00-11.45 L. Grassi AstraZeneca R&D, Cambridge, UK

Improving the cell line development process by using a combination of high-throughput sequencing and proteomic analyses

11.45-13.00 L. De Colibus, Oxford University, UK

Virus assembly: A lesson learnt from structural biology

14.00-17.00 Poster session - best italian poster competition

Committee: A. Musarò, D. Raimondo, A. Rosa, I. Saggio, R. Burla, I. Chimenti, hosts

Friday 17-12-2021 Zoom Platform - Serra I/II

10.00-13.00 Exams, Orienteering and outreaching

I. Saggio, Sapienza University of Rome and Burla R, IBPM-CNR

14.00-17.00 course evaluation

I. Saggio, Sapienza University of Rome and Burla R, IBPM-CNR