

INTERNATIONAL SUMMERSCHOOL PROGRAMME



ALMA MATER STUDIORUM
UNIVERSITY OF BOLOGNA

CHEMICAL AND GENOMICS-BASED STRATEGIES IN THE DISCOVERY OF NOVEL DRUG TARGETS

BOLOGNA 25 JUNE – 3 JULY 2018

SCHOOL DIRECTOR - PROF SANTI MARIO SPAMPINATO

Program

Monday, 25 June

- 10,00-10,45 Registration
- 10,45-11,00 Opening Address **Santi Spampinato (Dept. Pharmacy and Biotechnology - University of Bologna)**
- 11,00-12,30 **Opening lecture**

John M. Sedivy
(Department of Molecular Biology, Cell Biology and Biochemistry, Brown University, USA)

Epigenetic Changes and Somatic Retrotransposition in Cellular Senescence and Aging

Tuesday, 26 June

- 9,30-13,00 Laboratory practical experience – Trasversal skills experiences **Marco De Cecco**
- 14,30-15,45 **Giorgio Spedicato (Dept. Pharmacy and Biotechnology - University of Bologna)**
Intellectual property and biotechnological innovation
- 15,45-16,00 Break
- 16,00-17,30 **Marco De Cecco (Department of Molecular Biology, Cell Biology and Biochemistry, Brown University, USA)**
Cellular Senescence, inflammation and cell-intrinsic initiation of autoimmunity: new molecular paradigms *in vitro* and *in vivo*

Wednesday, 27 June

- 9,30-13,00 Laboratory practical experience – **Marco De Cecco**
- 14,30- 16,30 **Round Table Pierluigi Martelli, John Sedivy, Andrea Cavalli**
Perspective in drug discovery
- 16,30-16,45 Break
- 16,45-18,00 **Jurgen Kraus (Department of Pharmacology and Toxicology, University of Magdeburg)**
Effects of opioids on immune functions

Thursday, 28 June

- 9,30-10,45 **Monica Baiula (Dept. Pharmacy and Biotechnology - University of Bologna)**
Integrins as therapeutic targets
- 10,45-11,00 Break
- 11,00-12,15 **Andrea Bedini (Dept. Pharmacy and Biotechnology - University of Bologna)**
Biased agonism at GPCRs as a novel avenue for more effective and safer drugs: the paradigm of opioid receptors



14,30-16,00 **Maurizio Crestani (University of Milano - School of Pharmacy)**
Genetic and epigenetic pathways in drug discovery (1): Nuclear receptors as pharmacological targets

16.00-16,15 Break

16,15-17,45 **Maurizio Crestani (University of Milano - School of Pharmacy)**
Genetic and epigenetic pathways in drug discovery (2): Epigenetics of energy metabolism in diabetes

Friday, 29 June

9,30 -11,00 **Catherine Lindon (Department of Pharmacology – University of Cambridge)**
Targets for drug development in ubiquitin-proteasome pathways

11,00-11,15 Break

11,15-12,45 **Rita Morigi (Dept. Pharmacy and Biotechnology - University of Bologna)**
Targeting G-quadruplex structures: an attractive strategy for anticancer drug discovery

14,30-16,00 **Nico Mitro (University of Milano - School of Pharmacy)**
Strategies to unravel, validate and confirm a novel mitochondrial regulator (Part I)

15,30-15,45 Break

15,45-17,00 **Nico Mitro (University of Milano - School of Pharmacy)**
Strategies to unravel, validate and confirm a novel mitochondrial regulator (Part II)

Monday, 2 July

9,30-13,00 Laboratory practical experience - Trasversal skills experiences **Monica Baiula-Andrea Bedini**

14,30-16,00 **Andrea Banfi (Department of Biomedicine, Basel University Hospital)**
Therapeutic angiogenesis from vascular biology to regenerative medicine

16,00-16,15 Break

16,15-17,45 **Milteny Biotech (Bologna)**
From biotechnology to cell & gene therapy: the history of a translational company

Tuesday, 3 July

9,30-13,00 Laboratory practical experience - **Monica Baiula-Andrea Bedini**

14,30-16,00 **Maurizio Pellecchia (Center for Molecular and Translational Medicine UCR School of Medicine, Riverside USA)**

NMR- computer- and enthalpy-based design of novel potent covalent XIAP inhibitors

16,00-17,00 Written examination

