



16° PhD Workshop

21-22 September 2022, Online Via Teams and Aula 1, Via Belmeloro 6, Bologna

Organizers: V Scarlato, D Roncarati

Wednesday, September 21, 2022

Chair: Cinelli / Ulfo

- 14:00 **Paolo Cinelli** (35, Cozzi / Maione / Scarlato)
Extraintestinal *Escherichia coli* surface antigen displayed on nanoparticles scaffold elicited a potent functional antibody response in mice
- 14:20 **Luigia Cappelli** (35, Cozzi / Maione / Scarlato)
Exploring different self-assembling nanoparticles in displaying vaccine antigens
- 14:40 **Luca Ulfo** (36, Danielli / Calvaresi)
Selective photokilling of colon cancer cells using a spheroid-penetrating phage retargeted to the fibronectin receptor
- 15:00 **Annapaola Petrosino** (35, Danielli)
A potent modular phage vector platform for targeted photodynamic therapy of Gram-negative bacterial pathogens (*Virtual*)
- 15:20 **Tommaso Rossi** (37-PON, Danielli / Trevisi)
Natural and modified bacteriophages in the sustainable control of porcine post-weaning diarrhea

15:40 - 16:10 break

Chair: De Rosa / Zadran

- 16:10 **Piergiuseppe De Rosa** (35, Perini)
MYCN overexpression overcomes RB function leading to unconditional hyperactivation of E2F in high-risk neuroblastoma
- 16:30 **Suleman Khan Zadran** (36, Perini / Danielli)
Engineering of an orthogonal phage-vector platform for photodynamic therapy of Neuroblastoma
- 16:50 **Alberto Rigamonti** (37, Perini / Milazzo)
Investigation of PRDM12 gene's role in colorectal adenocarcinoma cells
- 17:10 **Sara Aloisi** (37, Perini / Milazzo)
Characterization of novel LSD1/CoREST complexes as fundamental transcriptional regulators in neuroblastoma
- 17:30 **Nicola Balboni** (36, Giorgi / Monti)
A novel information-theoretic and machine learning-based precision medicine approach to overcome the therapeutic resistance in glioblastoma

Thursday, September 22, 2022

Chair: Meloni / Bin

- 9:20 **Rachele Ingrisano** (37-PON, Sparla / Trost)
Microalgae: from photosynthetic scavengers to green biofactories
- 9:40 **Tancredi Bin** (37-PON, Ghelli / Francia)
Use of submitochondrial particles for studying the interactions of green chemicals with native membranes
- 10:00 **Maria Meloni** (36, Zaffagnini / Crozet / Trost)
Dissecting the physiological role of the enzyme phosphoribulokinase in the green microalga *Chlamydomonas reinhardtii*
- 10:20 **Edoardo Tosato** (37, Sparla / Trost)
The probable involvement of *Arabidopsis thaliana* cytochromes b561 in the intracellular ascorbate redox homeostasis and ROS-mediated signalling

10:40 - 11:10 break

Chair: D'Agostino / Antoniciello

- 11:10 **Vanessa Croatti** (37, Vitali / Parolin)
Vaginal *Lactobacillus* mode of growth influences anti-*Candida* activity
- 11:30 **Laura Sandoni** (37, Maestrini / Bacchelli)
Analysis of de-novo variants in Autism Spectrum Disorder highlights RAB11B as a new candidate gene
- 11:50 **Federico D'Agostino** (35, Scarlato / Roncarati)
RNase Y promotes the maturation and activity of a *cag*-PAI encoded small RNA in *Helicobacter pylori*
- 12:10 **Eva Donini** (37-PON, Cappelletti)
Interaction between microorganisms and biochar to pave the way for sustainable treatment strategies of contaminated waters
- 12:30 **Federico Antoniciello** (36, Scarlato / Roncarati)
Helicobacter pylori transcriptional regulator HP1043: a new antimicrobial target?

12:50 - 14:00 Lunch break

Chair: Lombardi / Maestri

- 14:00 **Luca Grillini** (37, Perini / Gardini)
Roles of PPP2R1A mutations in transcriptional regulation and developmental disorders
- 14:20 **Ilan Kirkel** (37, Perini / Gardini)
The mechanistic role of INTS3 in transcriptional regulation and DNA damage repair
- 14:40 **Martina Gatto** (36, Gardini / Perini)
PP2A A subunits play different roles during transcription

15:00 **Simona Lombardi** (36, Zhang / Perini)
Targeting invasion in ARID1A deficient Endometrioid Endometrial Cancer

15:20 **Davide Maestri** (36, Tempera / Perini)
Viral latency maintenance in EBV-positive gastric cancer

15:40 - 16:10 break

Chair: De Chirico / Morelli

16:10 **Andrea Arleo** (35, Capranico / Marinello):
Topoisomerase1 poison-triggered immune gene activation is markedly reduced in human small-cell lung cancers by impairment of the cGAS/STING pathway

16:30 **Francesca De Chirico** (35, Monti)
Microglial extracellular vesicles (sEVs): could cargos tip the neuroinflammation spreading?

16:50 **Sara Morelli** (37, Capranico / Russo)
Immune activation associates with expression of repressed ERV LTR elements and cytoplasmic RNA sensors in human small-cell lung cancers

17: 10 **Luigi D'Angelo** (36, Porcelli / Gasparre)
Deciphering metabolism and chemoresistance onset in ovarian cancer

17:30 **Giorgia Babini** (36, Monti / Massenzio)
Metabolic supplementations and epigenetic alterations in *in vitro* AGC1 deficiency models (*Virtual*)

17:50 Closing Remarks