



ANNUAL MEETING OF THE PhD PROGRAMME “BIOMEDICAL SCIENCES AND TECHNOLOGIES” (STB)

January 22nd - 23rd, 2024

Lecture hall 2, Department of Science, Viale G. Marconi 446, Rome

January 22nd, 2024

9:30 - 9:45 Prof. Fabio Polticelli - Welcome and opening remarks of the Director of the PhD Programme

XXXVI PhD Programme STB (25 min presentation; 5 min discussion)

Cell Physiology and Pharmacology

Chairs: Prof. PALLOTTINI, Prof. TREZZA

9:45 - 10:15 PARENTE MARTINA

Cholesterol metabolism in health and disease: in search of new pathways of regulation (tutor PALLOTTINI)

10:15 - 10:45 PIASTRA VALENTINA

Drug repurposing approach to inhibit MKK3/p38MAPK signaling for therapeutic strategies in CRC (tutor ACCONCIA; co-tutor BOSSI)

10:45 - 11:15 BUZZELLI VALERIA

Preclinical studies on new pharmacological targets for neurodevelopmental disorders (tutor TREZZA)

11:15 - 11:30 Coffee Break

Microbiology and Immunology

Chairs: Prof. IMPERI, Prof. LEONI

11:30- 12:00 CAPECCHI GIULIA

Study of the molecular mechanisms at the basis of desiccation resistance in the pathogenic bacterium *Acinetobacter baumannii* (tutor VISCA)

12:00 - 12:30 CARUSO LORENZO

Role of hydrogen sulphide in *Pseudomonas aeruginosa* physiology and virulence (tutor RAMPIONI)

12:30 - 13:00 CERVONI MATTEO

Role of LPS modifications in *Pseudomonas aeruginosa* colistin resistance (tutor IMPERI)

13:00 - 13:30 RICCI DANIELA

Dissecting SARS-CoV-2 immunopathogenetic mechanisms making use of *ex vivo* and *in vitro* models of infection, immunotherapies and vaccination (tutor AFFABRIS; co-tutor COCCIA)

13:30 - 14:30 Lunch

XXXVII PhD Programme STB (15 min presentation; 5 min discussion)

Biochemistry and Cell Physiology

Chairs: Prof. FIOCCHETTI, Prof. MARINO

14:30 - 14:50 DE LAURO ALFREDO

Development of a software platform for the design of therapeutic antibodies (tutor POLITICELLI)

14:50 - 15:10 VARRICCHIO ROMUALDO

Human Serum Albumin and innate immunity: from molecular aspects to biotechnological applications (tutor DI MASI)



15:10 - 15:30 BASTARI GIOVANNA

Role of extracellular trafficking of Neuroglobin in neurodegeneration and neuroprotection (tutor FIOCCHETTI)

15:30 - 15:50 BENIGNI FEDERICA

Generation of isogenic lines using CRISPR/Cas9 technology from induced pluripotent stem cells (iPSCs) (tutor PALLOTTINI; co-tutor COMPAGNUCCI)

15:50 - 16:10 CALCONI GIULIA

Evaluation of individual ATM variants to validate p53 mitotic centrosome localization as a functional test to predict pathogenicity of ATM VUS (tutor AFFABRIS; co-tutor SODDU)

16:10 - 16:30 Coffee Break

Microbiology and Immunology

Chairs: Prof. RAMPIONI, Prof. SACCHI

16:30 - 16:50 TOMASSETTI FEDERICA

Optimization, prototyping and validation of a new device for the microbiological monitoring of water (tutor ANTONINI)

16:50 - 17:10 D'ORSO SILVIA

The immune landscape of antiviral responses in multiple sclerosis (tutor VISCA; co-tutor BATTISTINI)

January 23rd, 2024

XXXVIII PhD Programme STB (10 min presentation; 5 min discussion)

Biochemistry, Cell Physiology and Pharmacology

Chairs: Prof. ACCONCIA, Prof. DI MASI

9:00 - 9:15 FRANZA MARIA

In vitro and *in vivo* characterization of new molecular targets for the treatment of acute promyelocytic leukemia (tutor DI MASI)

9:15 - 9:30 LAVECCHIA DI TOCCO FRANCESCO

Development of a bioFET-based platform for the detection of clinical microRNAs (tutor BIZZARRI)

9:30 - 9:45 CALVINO GIULIA

(Epi)genomic analysis for the search of biomarkers of susceptibility and progression in the field of neurodegenerative diseases and development of computational systems for the integration of precision medicine into clinical practice (tutor VISCA; co-tutor BATTISTINI)

9:45 - 10:00 SOZZI SILVIA

Exploring HIPK2 inhibition as a viable strategy to prevent and treat fibrosis (tutor PALLOTTINI; co-tutor SODDU)

10:00 - 10:15 FRASCOLLA CARLOTTA

Generation of bladder cancer organoids from patients undergoing diagnostic TURB and cystectomy (tutor DI MASI; co-tutor BLANDINO)

10:15 - 10:30 ASCONE FABRIZIO

Development of innovative treatments in preclinical models of Autism Spectrum Disorder and Fragile X Syndrome (tutor TREZZA)

11:30 - 10:45 FEO ALESSANDRO

Role of Neuroinflammation in Autism Spectrum Disorder (tutor TREZZA)

10:45 - 11:00 OLIVIERI ELENA

Study of innovative therapies for multiple sclerosis (tutor VENDITTI; co-tutor BATTISTINI)



11:00 - 11:20 Coffee Break

Microbiology and Immunology

Chairs: Prof. AFFABRIS, Prof. VENDITTI

11:20 - 11:35 SPAGNOLI CINZIA

Transition to the viable but not culturable state as an adaptive strategy of bacterial pathogens to survive the osmotic stress (tutor VISCA)

11:35 - 11:50 SPOSATO DAVIDE

The outer membrane of Gram-negative bacteria: mechanisms of biogenesis and target for antibacterial drugs (tutor IMPERI)

11:50 - 12:05 VERDIANI ALICE

Study of adaptive immune responses induced by viruses in multiple sclerosis (tutor SACCHI; co-tutor BATTISTINI)

12:05 - 12:20 PIRRONELLO MARTA

Study of B lymphocytes after treatment in PwMS (tutor SACCHI; co-tutor BATTISTINI)

XXXIX PhD Programme STB (6 min presentation; 4 min discussion)

Chairs: Prof. POLTICELLI, Prof. VISCA

12:20 - 12:30 CAPUTO SARA

12:30 - 12:40 CARLETTA OLGA

12:40 - 12:50 CIOLFI SERENA

12:50 - 13:00 DI PLACIDO DANIELE

13:00 - 13:10 DI TRAPANO MELANIA

13:10 - 13:20 ERCOLANO CHIARA

13:20 - 13:30 FALCE CHIARA

13:30 - 14:30 Lunch

14:30 - 14:40 FUMAGALLI GIULIA

14:40 - 14:50 GRECO MARIANTONINA

14:50 - 15:00 GUIDUCCI ALESSANDRA

15:00 - 15:10 IONTA MARTA

15:10 - 15:20 QUADROTTA VIRGINIA

15:20 - 15:30 RANALDI MARCO

15:30 - 15:40 RENNA ALESSANDRO

15:40 - 15:50 RIGGIO FILIPPO PASQUALE

15:50 - 16:00 ROSSI GIULIA

16:00 - 16:10 Concluding remarks of the Director of the PhD Programme

16:10 - 16:20 Awarding Ceremony

16:20 - 16:30 Coffee Break

16:30 - 18:00 Meeting of the *BIOMEDICAL SCIENCES AND TECHNOLOGIES* (STB) Scientific Board