



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

November 30<sup>th</sup> - December 1<sup>st</sup>, 2015

Lecture hall 1, Department of Science, Viale G. Marconi 446, Rome

### **November 30<sup>th</sup>, 2015**

8:45 - 9:00 Welcome and opening remarks of the Director of the PhD Programme Prof. Paolo Visca

### **XXVIII PhD Programme STB (20 min presentation; 10 min discussion)**

#### **Biochemistry, Cell Physiology, and Immunology Session**

**Chair: Prof. Paolo Ascenzi, Prof. Elisabetta Affabris**

9:00 - 9:30 COSENTINO DOMINGA

“The protective role of neuroglobin in hematopoietic system and its involvement in cancer” (tutor ASCENZI)

9:30 - 10:00 DI MUZIO ELENA

“Virtual screening for protein function annotation and drug discovery” (tutor POLITICELLI)

10:00 - 10:30 CANDELOTTI ELENA

“Cross-talk between thyroid hormones and IGF-1. Role of lipid messengers, chemokines, antioxidant compounds in different physiopathological situations” (tutor INCERPI)

10:30 - 11:00 NUZZO MARIA TERESA

“Role of estrogen-induced neuroglobin expression in neurodegeneration and neuroprotection” (tutor MARINO)

11:00 - 11:30 ARENACCIO CLAUDIA

“Exosomes in the pathogenesis of HIV-1” (tutor AFFABRIS)

11:30 - 11:45 Coffee Break

#### **Microbiology and Biotechnology Session**

**Chair: Prof. Paolo Visca, Prof. Giovanni Antonini**

11:45 - 12:15 RENNA GIOVANNA

“Genetic diversity of *Neisseria meningitidis* serogroup B invasive strains before the introduction of the MenB vaccine in Italy” (tutors VISCA-STEFANELLI)

12:15 - 12:45 BONCHI CARLO

“Promise and failures of gallium as an anti-bacterial agent” (tutor VISCA)

12:45 - 13:15 GENTILE VALENTINA

“New insights into the virulence potential of *Acinetobacter baumannii*” (tutor VISCA)

13:15 - 13:45 ARIENZO ALYEXANDRA

“Optimization and applications of the microbiological survey method MBS” (tutor ANTONINI)

13:45 - 14:30 Lunch



**XXIX PhD Programme STB (10 min presentation; 5 min discussion)**

**Biochemistry and Cell Physiology Session**

**Chair: Prof. Fabio Polticelli, Prof. Maria Marino**

14:30 - 14:45 ALTOMONTE GIOVANNA

“Structural and functional characterisation of globins in antarctic fish” (tutors ASCENZI-VERDE)

14:45 - 15:00 CARDINALE ANTONELLA

“Neuroprotective role of neuroglobin in Huntington's disease” (tutors MARINO-FUSCO)

15:00 - 15:15 SALVATI ANNAMARIA

“Analysis of the molecular mechanisms underlying the role(s) of microRNAs in breast cancer” (tutors MARINO-WEISZ)

**Immunology and Pharmacology session**

**Chair: Prof. Elisabetta Affabris, Prof. Viviana Trezza**

15:15 - 15:30 CRUCIANI MELANIA

“Human dendritic cells as a novel in vitro tool for the immunogenicity assessment of *Staphylococcus aureus* vaccine candidates and for dissecting host-pathogen interaction” (tutors AFFABRIS-COCCIA)

15:30 - 15:45 ROSSI ALESSANDRA

“Manipulation of tumor microenvironment as a strategy to fight cancer” (tutors AFFABRIS-BRACCI)

15:45 - 16:00 SERVADIO MICHELA

“Studying normal and atypical social behavior in animal models to shed light on social dysfunctions in psychiatric diseases” (tutor TREZZA)

16:15 - 16:30 Coffee Break

**Microbiology and Biotechnology Session**

**Chair: Prof. Livia Leoni, Dr. Giordano Rampioni**

16:30 - 16:45 ARMAS FEDERICA

“Use of protective cultures of lactic acid bacteria to control colonizing mastitis pathogens in the mammary gland of dairy small ruminants as an alternative to antibiotics” (tutors VISCA-MARIANELLI)

16:45 - 17:00 ROSSITTO MARTINA

“Individuation and evaluation of new bacteriophages for the treatment of cystic fibrosis lung infection caused by *Pseudomonas aeruginosa*” (tutors LEONI-FISCARELLI)

17:00 - 17:15 PORCARO FRANCESCO

“Metal nanoparticles as new radiosensitizers agents” (tutor POLZONETTI)

17:15 - 17:30 SIGNORELLI SARA

“Applying spectroscopy and nanotechnology for ultrasensitive detection and interaction of tumor suppressors and cancerous markers” (tutors BIZZARRI-CANNISTRARO)



## December 1<sup>st</sup>, 2015

### XXX PhD Programme STB (8 min presentation; 2 min discussion)

#### Biochemistry, Cell Physiology, and Immunology Session

Chair: Prof. Filippo Acconcia, Prof. Alessandra di Masi

9:00 - 9:10 CARTOCCI VERONICA

"Cholesterol metabolism in Autism Spectrum Disorders" (tutor PALLOTTINI)

9:10 - 9:20 CIPOLLETTI MANUELA

"Estrogen/neuroglobin pathway as pharmacological target for hormone-related cancer" (tutor MARINO)

9:20 - 9:30 PENNISI ROSA

"Molecular aspects of DNA sensing and repair in cancer" (tutor DI MASI)

9:30 - 9:40 LUCARINI VALERIA

"Dissecting Interleukin-33/ST2-dependent pathway in antitumor immune response to melanoma" (tutors AFFABRIS-SCHIAVONI)

9:40 - 9:50 MANFREDI FRANCESCO

"Immunogen design and delivery: a new method based on exosomes" (tutors AFFABRIS-FEDERICO)

#### Microbiology and Biotechnology Session

Chair: Prof. Mariassunta Casalino, Prof. Chiara Battocchio

9:50 - 10:00 SAGRESTANI GIULIA

"Immunological characterization of novel adjuvants for generation of vaccines against pathogenic *Escherichia coli* strains" (tutors VISCA-GOBERT-BUONSANTI)

10:00 - 10:10 D'ANGELO FRANCESCA

"Generation of synthetic cells interfacing with bacterial pathogens for the development of innovative drug-delivery technologies" (tutor RAMPIONI)

10:10 - 10:20 GIALONARDI GIULIA

"Identification of anti-virulence drugs inhibiting the *Pseudomonas aeruginosa* quorum sensing system" (tutor LEONI)

10:20 - 10:30 GIGLIUCCI FEDERICA

"Shiga-toxin-producing *Escherichia coli* (STEC): Evolution of the different pathogenic clones and study of their interactions with the microbiota in the intestine and the environment" (tutors VISCA-MORABITO)

10:30 - 10:40 RUNCI FEDERICA

"*Acinetobacter baumannii* as human pathogen: host adaptation, pathogenicity and stress response" (tutor VISCA)

10:40 - 10:50 MONTEIRO RICARDO

"Identification of novel adhesins in pathogenic *Escherichia coli* strains as a strategy for preventing intestinal colonization" (tutors VISCA-DESVAUX-SORIANI)

10:50 - 11:00 OLDRINI DAVIDE

"Well-defined glycoconjugate via chemo-enzymatic synthesis of oligosaccharides for structure-based selection of vaccine candidates" (tutors BATTOCCHIO-ADAMO)

11:00 - 11:10 STALIO OTTAVIA

"New applications of the Micro Biological Survey Method (MBS)" (tutor ANTONINI)

11:10 - 11:30 Coffee Break



**XXXI PhD Programme STB (6 min presentation; 2 min discussion)**

**Chair: Prof. Paolo Visca, Prof. Paolo Ascenzi**

11:30 - 11:38 BRANDI VALENTINA

“Study of the ordered and disordered domains of Huntingtin”

11:38 - 11:46 BUSONERO CLAUDIA

“Selective modulation of the estrogen receptor alpha levels and degradation in the breast cancer”

11:46 - 11:54 DE SABATO LUCA

“Novel approaches to investigate zoonotic infectious agents in animal reservoirs, food and the environment”

11:54 - 12:02 DE SIMONE GIOVANNA

“Transient structural and functional properties of heme-carriers”

12:02 - 12:10 HIJAZI SARAH

“Virulence determinants in *Pseudomonas aeruginosa* for the development of antibacterial agents”

12:10 - 12:18 MELANCIA FRANCESCA

“The endocannabinoid system as a new therapeutic target for the fragile X syndrome”

12:18 - 12:26 SAGGESE PASQUALE

“Role of non-coding RNAs in breast cancer and other tumors”

12:26 - 12:34 SECCHI VALERIA

“Smart biomaterials for regenerative medicine: structural and biological properties”

12:34 - 12:42 SELBITTO ASSUNTA

“piRNAs: emerging biomarkers for diagnosis and prognosis”

12:42 - 12:50 TORTOSA VALENTINA

“Structure-function relationships in members of the Major Facilitator Superfamily Transporters”

**12:50 - 13:00 Concluding remarks of the Director of the PhD Programme Prof. Paolo Visca**

**13:00 - 13:30 Awarding Ceremony**

13:30 - 14:30 Lunch

**14:30 - 16:00 Meeting of the “BIOMEDICAL SCIENCES AND TECHNOLOGIES” (STB) Scientific Board.**