



September 26-27, 2016

PhD Program in Biomolecular Sciences



Monday, September 26 – Aula Magna

10:00 – 14:55 **Session 1.**



Structure and Function of Biomolecules

Chairman: A. Lettieri, D. Barone, F. Russo, M. Cerreta

Sara Ragucci 10:00 – 10:10

Isolation of novel bioactive proteins from the edible mushroom *Agrocybe aegerita*
Tutor: Antimo Di Maro

Valeria Sivo 10:10 – 10:20

Metal ion replacement in prokaryotic zinc-finger domain by the xenobiotic Pb(II)
Tutor: Carla Isernia

Camilla Rega 10:20 – 10:35

Using mass spectrometry for protein structural and functional studies: studying the Gadd45 β /MKK7 complex, a new target in Multiple Myeloma.
Tutor: Angela Chambery

Cristina Di Donato 10:35 – 10:50

Alpha- and beta-cyclodextrin inclusion complexes with 5-fluorouracil: structural characterization and cytotoxic activity evolution.
Tutor: Rosa Iacovino

Emanuela Iaccarino 10:50 – 11:05

Novel highly constrained peptide ligands for modulating the activity of Cripto-1 and Activin-like receptors.
Tutor: Menotti Ruvo

Roberto Sirica 11:05 – 11:20

De novo variant calling from RNA-seq in non-model species: a promise land
Tutor: Vincenza Colonna

Tommaso Nuzzo 11:20 – 11:35

Altered free D-aspartate, but not free D-serine, levels in the post-mortem brain of patients with schizophrenia
Tutor: Alessandro Usiello

Vittoria Graziani 11:35 – 11:50

NMR characterization and antiproliferative activity of secondary metabolites from Fabaceae species
Tutor: Antonio Fiorentino

Annamaria Lettieri 11:50 – 12:10

Neuro-nutraceutical potential of Thyme and Sage Phenol-enriched Extracts
Tutor: Pietro Monaco

Daniela Barone 12:10 -12:30

Structural and dynamic properties of the Hepatitis C Virus proteins: E1 and NS5A proteins
Tutor: Luigi Vitagliano

Federica Cali 12:30 – 12:50

Unveiling the cellular role of DDX11, a Fe-S cluster DNA helicase, involved in genome maintenance
Tutor: Francesca Maria Pisani

12 :50 – 14:00 **Lunch Break**

14:00 – 14:40

Mariangela Cerreta 14:00 –14:20

The human Paraoxonase 2: biochemical and functional characterization
Tutor: Giuseppe Manco

Martina Buonanno 14:20 – 14:40

Insights into the structural and functional features of the tumor associated protein hCA IX
Tutor: Simona Maria Monti

14:40 – 17:05 **Session 2.**



Human genetics

Chairman: A. Padula, F. Napolitano, M. Germoglio, G. Di Fruscio

Federica Scotto di Carlo 14:40 – 14:50

Disclosing the molecular mechanism underlying Early Onset Paget's Disease of bone.
Tutor: Fernando Gianfrancesco

Gabriella Reggina 14:50 – 15:00

Alzheimer's Disease and allelic variants in late onset forms: focusing on CD33 and TREM2.
Tutor: Emilia Vitale

Sabrina Napolitano 15:00 – 15:10

Molecular mechanisms of pathogenic mutations in Frontotemporal dementia
Tutor: Emilia Vitale

Federica Maria Valente 15:10 – 15:25

Identification and characterization of molecular defects causing the Beckwith-Wiedemann syndrome
Tutor: Flavia Cerrato

Agnese Padula 15:25 – 15:45

Finding new connections in the transcriptional regulation of Lysine-specific demethylase 5C (KDM5C), a disease gene involved in Neurodevelopmental disorders (NDDs)
Tutor: Maria Giuseppina Miano

Filomena Napolitano 15:45 – 16:05

A novel extracellular matrix multisystem syndrome due to a dominant mutation in LAMA5 gene: implication for ECM functioning and remodeling and its interplay with other connective proteins
Tutor: Teresa Esposito

Giuseppina Di Fruscio 16:05 – 16:25

Targeted Next Generation Sequencing strategies for genetic heterogeneous disorders
Tutor: Vincenzo Nigro

Giuseppina Divisato 16:25 – 16:45

Molecular, biochemical and histological characterization of Giant Cell Tumor arising on Paget's disease of Bone
Tutor: Fernando Gianfrancesco

Marcello Germoglio 16:45 – 17:05

Genetic interactions among Fanconi Anaemia repair genes
Tutor : Adele Adamo

Tuesday, September 27 – Aula Magna

9:30 – 12:00 **Session 3.**



Molecular Cell Biology

Chairman: M. Buonanno, L.Schembri, D. La Prathyush, .Filigrana

Emilia Pascale 9:30 – 9:40

The Ultraconserved Long Noncoding RNA, T-UCstem1, is required to preserve transcriptional identity and maintain Embryonic Stem Cell self-renewal
Tutor: Annalisa Fico

Francescopaolo Iavarone 9:40 – 9:50

Unraveling the inflammatory cells contribution of Cripto to skeletal muscle regeneration
Tutor: Gabriella Minchiotti

Maria Mangini 9:50 – 10:00

Secretory phospholipase A₂ role in osteoclastogenesis
Tutor: Stefania Mariggio

Marta Panella 10:00 – 10:10

Antiproliferative activity of miR-125a toward human hepatocellular carcinoma cells
Tutor: Aniello Russo

Rita Polito 10:10 – 10:20

Evaluation of adiponectin profile in Common Variable Immunodeficiency patients
Tutor: Aurora Daniele

Simona Cataldi 10:20 – 10:30

Regulation of PPAR γ signaling through alternative splicing and dominant negative isoforms
Tutor: Alfredo Ciccodicola

Alessandra Varavallo 10:30 -10:45

Control Systems of the secretory pathway
Tutor:Alberto Luini

Sara Mancinelli 10:45 – 11:00

Insights into neuroectoderm and mesoderm cell lineage segregation during early vertebrate development from *Cripto* gene
Tutor: Giovanna Liguori

Angela Filigrana 11:00 – 11:20

CtBPI-S/BARS regulates Lipid Droplet biogenesis
Tutor: Daniela Corda

Laura Schembri 11:20 – 11:40

Potential role of the mono-*adp*-ribosyltransferase *parp12* in the regulation of intracellular membrane traffic
Tutor: Daniela Corda

La Prathyush Deepth Roy Pothukuchi 11:40 – 12:00

Organization of Golgi glycosylation reactions by matrix proteins
Tutor: Seetharaman Parashuraman

12:00 – 13:00 **Faculty meeting**

13:00 – 14:00 **Lunch Break**

14:00 – 15:30 **Session 4.**



Gene regulation

Chairman: A.. Oneglia, M. M. Marino, F. Perrone, F. Cali
Daniela Esposito 14:00 –14:10

Functional studies of a novel long non-coding RNA (MET-AS) in papillary thyroid carcinoma.
Tutor: Valerio Costa

Daniela Punzo 14:10 – 14:20

Age-Related Changes in D-Aspartate Oxidase Promoter Methylation Control Extracellular D-Aspartate Levels and Prevent Precocious Cell Death during Brain Aging
Tutor: Alessandro Usiello

Kumar Parijat Tripathi 14:20 – 14:30

Development of novel approaches and algorithms for the integration and analysis of high throughput transcriptomics data.
Tutor: Mario Rosario Guarracino

Anna Sorrentino 14:30 – 14:45

Dominant Negative Isoforms of PPAR γ lacking the LBD: mechanism of action
Tutor: Valerio Costa

Marina Piccirillo 14:45 – 15:00

Reconstructing a Genetic Network from Gene Perturbations in Secretory Pathway of Cancer Cell Lines
Tutor: Mario Rosario Guarracino

Andrea Oneglia 15:00 – 15:20

Molecular mechanisms for maintenance of genomic imprinting in mouse embryonic stem cells
Tutor: Andrea Riccio

Filomena Perrone 15:20 – 15:40

Characterization of a *Mycobacterium smegmatis* TetR-like protein
Tutor: Lidia Muscariello

Maria Michela Marino 15:40 – 16:00

Study of a CTCF mutant able to bind methylated DNA
Tutor: Paolo Vincenzo Pedone

16:00 – 17:40 **Session 5.**



Cancer biology and immunology

Chairman: F. Mantile, S. Vitale, G. Divisato

Deborah Cipria 16:00 – 16:10

Optimization of adoptive T cell therapy by promoting the correct pairing of T cell receptor chains
Tutor: Piergiuseppe De berardinis

Valeria Gaudieri 16:10 – 16:20

Assessment of Left Ventricular Remodeling by Gated SPECT Myocardial Perfusion Imaging in Diabetic Patients: a Propensity Matched Cohort Analysis
Tutor: Wanda Acampa

Olga Pastorino 16:20 – 16:30

Glioblastoma: The role of REST and molecular compounds targeting tumor cells
Tutor: Luca Colucci D'Amato

Sara Terreri 16:30 – 16:45

Expression and functional characterization of ultraconserved non-coding regions 339+ and 8+ in bladder cancer.
Tutor: Amelia Cimmino

Stefania Belli 16:45 – 17:00

Analysing tumor-stroma crosstalk through the application of a novel 3D Organotypic invasion assay
Tutor: Maria Patrizia Stoppelli

Francesca Mantile 17:00 – 17:20

How different adjuvants and immunization protocols affect the immune response induced by Alzheimer's Disease vaccine (1-11)E2.
Tutor: Antonella Prisco

Serena Vitale 17:20 – 17:40

Differential intestinal cell phenotype and cytokine profiles in overt and potential celiac disease
Tutor: Carmen Gianfrani

