

DiBio Dipartimento di Biologia

First Scientific Retreat of the Department of Biology

30 years from foundation 1984-2014 February 26-27, 2015

Aula Magna - Vallisneri Building v.le Trieste, 3 - Padova

Program



Università degli Studi di Padova

Thursday, February 26

- 13.30 Registrazione
- 14.00 Saluto del Prof. Gerolamo Lanfranchi, Direttore del Dipartimento di Biologia
- 14.05 Proiezione
- 14.15 Saluto del Prof. Giuseppe Zaccaria, Magnifico Rettore dell'Università di Padova

Session 1 – Model organisms to study cell signalling - Chairman: Luca Scorrano

14.30 - 15.15 Conference

Massimo Zeviani, MRC Mitochondrial Biology Unit and University of Cambridge, UK New mitochondrial disease genes and mechanisms

• 15.20 - 15.40 Presentation 1 Tatiana Varanita

The mitochondria shaping protein Optic Atrophy 1 counteracts cellular damage and controls metabolism in vivo Research Unit: Biochemistry, Biology and Physiopathology of Mitochondria

- 15.40 16.00 Presentation 2 Luigi Leanza Selective killing of cancer cells by modulation of ion channels: from in vitro to in vivo models Research Unit: Biochemistry
- 16.00 16.20 Presentation 3 Nicola Franchi *Innate immunity in Tunicates* Research Unit: Developmental Biology and Morphogenesis
- 16.20 16.40 Presentation 4 Andrea Vettori *Generation and application of transgenic reporter lines to study signaling pathways in zebrafish* Research Unit: Regulative Biology and Translational Genetics
- 16.40 17.00 Presentation 5 Gabriella Mazzotta Cryptochrome and the temporal control of visual plasticity in Drosophila melanogaster Research Unit: Neurogenetics and Chronobiology

17.00 - 17.20 coffee break

Session 2 - Evolution & Ecology - Chairman: Andrea Pilastro

- 17.20 17.40 Presentation 6 Telmo Pievani *Two kinds of exaptation* Research Unit: Philosophy and History of Life Sciences
- 17.40 18.00 Presentation 7 Clelia Gasparini Sex in the tank: what guppies can tell us about sexual selection and sexual conflict before and after mating Research Unit: Ecoetology and Evolutionary Biology
- 18.00 18.20 Presentation 8 Leonardo Congiu *Sturgeon conservation: from ex-situ planning to next-generation sequencing* Research Unit: Molecular Ecology
- 18.20 18.40 Presentation 9 Gianfranco Santovito
 New perspectives in the study of the antioxidant defences in Antarctic fish: the peroxiredoxins Research Unit: Environmental Physiology and Experimental Zoology

 18.40 - 19.00 Presentation 10 Marco Munari
 Combined effects of seawater acidification and other stressors in marine bivalves at different stages of their life-history Research Unit: Marine Ecology

 19.00 - 19.20 Presentation 11 Maurizio G. Paoletti Sustainable use of biodiversity? Which food, which strategies to feed the 9 billion humans in 2050? Research Unit: Ecology of Biodiversity and Sustainability

19.20 drinks & snacks

Friday, February 27

Session 3 - Physiopathology & Molecular genetics - Chairman: Rodolfo Costa

 08.30 - 08.50 Presentation 12 Elena Stocco In vitro assessment of a novel composite scaffold for articular cartilage restoration Research Unit: Biology of Endothelial Cells and Regeneration

- 08.50 09.10 Presentation 13
 Elisa Palumbo
 Understanding DNA replication dynamics in the mammalian genome, and in loci specifically involved in genetic instability
 Research Unit: Cytogenetics and Molecular Genetics
- 09.10 09.30 Presentation 14 Giovanni Vazza Deciphering the genetic landscape of Schizophrenia and Bipolar Disorder: genomic approaches on a population-based cohort. Research Unit: Human Molecular Genetics
- 09.30 09.50 Presentation 15 Marco Bisaglia Dopamine and oxidative stress in Parkinson's disease: is an antioxidant therapy valuable?" Research Unit: Biophysics, Molecular and Cellular Physiology
- 09-50 10.10 Presentation 16 Tommaso Pozzobon Angiogenesis in secondary syphilis: role of the bacterioferritin TpF1, antigen of Treponema pallidum Research Unit: General Pathology

10.10 - 10.40 coffee break

Session 4 – Genomics & Bioinformatics - Chairman: Giorgio Valle

10.45 - 11.30 Conference Stefano Gustincich, Neurobiology sector, SISSA, Trieste SINEUPS: a new functional class of natural and synthetic antisense long non-coding RNAs that activate translation

- 11.30 11.50 Presentation 17 Francesco Filippini From bioinformatic design to regenerative medicine: enhanced neuronal differentiation combining biomimetic peptides and nanocomposite scaffolds Research Unit: Molecular Biology
- 11.50 12.10 Presentation 18 Nicola Vitulo *A deep survey of alternative splicing in grape* Research Unit: Genomics and Bioinformatics
- 12.10 12.30 Presentation 19
 Francesco Chemello
 MiRNA-mRNA networks at single cell level reveal the role of specific miRNAs in the regulation of metabolism of muscle fibers
 Research Unit: Functional Genomics

 12.30 - 12.50 Presentation 20 Maddalena Mognato MicroRNAs in the cellular response to stress Research Unit: Cell Biology

13.00 - 14.00 lunch

Session 5 – Plant Sciences - Chairman: Giorgio Casadoro

- 14.15 15.00 Conference Lucia Colombo, Department of Biosciences, University of Milano *From Ovule to Seed: the female contribution*
- 15.00 15.20 Presentation 21 Michela Zottini Organelles as critical players in plant cell communication network Research Unit: Plant Physiology and Molecular Biology
- 15.20 15.40 Presentation 22
 Alessandro Alboresi
 Molecular analysis of Nannochloropsis gaditana for the production of biofuels and high added value molecules
 Research Unit: Photosynthesis and Plant Biotechnology
- 15.40 16.00 Presentation 23 Lorella Navazio *Calcium-based communications in plant root endosymbioses: the microorganism perspective* Research Unit: Plant Cell Biology
- 16.00 16.20 Presentation 24 Livio Trainotti Molecular and hormonal regulation of fleshy fruit development and ripening Research Unit: Botany

16.30 - 17.00 coffee break

Session 6 – Systematics & Phylogeny - Chairman: Alessandro Minelli

- 17.00 17.20 Presentation 25 Katia Sciuto
 Barcoding P.A.T.H.S.: DNA barcodes for reference plant samples Research Unit: Biology and Systematics of Algae and Higher Plants
- 17.20 17.40 Presentation 26 Moreno Clementi
 A multidisciplinary approach to the study of the collection of Roberto de Visiani (1800-1878), Praefectus of the botanical garden
 of Padova
 Research Unit: Palynology and Archaeobotany
- 17.40 18.00 Presentation 27 Lucio Bonato *Geophilomorph centipedes: diversity, phylogeny and evolution* Research Unit: Evolutionary Biology of Arthropods

Concluding remarks

18.10 drinks & snacks