UNIVERSITÀ DEGLI STUDI
DI GENOVA

Università degli Studi di Genova
DIMES
Dipartimento di Medicina Sperimentale

DOTTORATO DI RICERCA IN "BIOTECNOLOGIE IN MEDICINA TRASLAZIONALE"
Coordinatore: Prof. Rodolfo Quarto

SEMINARIO

Dr. Alessandra Ghigo, PhD

Assistant Professor
University of Torino
Molecular Biotechnology Center
Dept. of Molecular Biotechnology and Health Sciences

"Integrating PI3K and cAMP Signaling: What's Bad for the Heart might be Good for the Lung!"

The seminar will explore the double nature of PI3K enzymes that have been demonstrated in the last decade to work both as lipid kinases and scaffold proteins. The talk will focus on the role of the kinase activity of the PI3Kγ isoform in the context of the cardiotoxicity of anticancer therapies and will highlight the potential of small molecule inhibitors of PI3Kγ "to kill two birds with one stone" in cancer patients, i.e. preventing anticancer drug cardiotoxicity and reducing tumor growth. In the second part of the talk, recent and unpublished evidence from Dr. Ghigo's group will demonstrate that, by acting as a scaffold protein, PI3Kγ dictates cAMP compartmentalization, a process which is critical for cardiac excitation-contraction coupling. Dr. Ghigo will show how targeting the scaffold function of PI3Kγ with a cell-permeable peptide is deleterious for the heart but might be a promising therapeutic avenue for lung pathologies, including asthma, COPD and the genetic disease, cystic fibrosis.

16 Aprile 2019, ore 14.00

Auletta Clinica Chirurgica – Via A. De Toni 16, 16132 Genova

Introduce: Prof.ssa Sveva Bollini