Dear All,

Please, find enclosed the list of IBP Seminars for April and note next week's Seminars at the Institute of Protein Biochemistry, CNR, Via P. Castellino, 111 -80131 Napoli

Wednesday, April 4th, 2018

at 2:30 p.m.

CNR Conference Room

Prof. Fabio Mammano

Institute of Cell Biology and Neurobiology, International Campus "A. Buzzati-Traverso" - CNR, Monterotondo (Rome), Italy

will present:

Connexins of the inner ear and the skin: from biophysics to translational opportunities

Host: Dr. Alberto Luini Tel. 081/6132722; e-mail: <u>a.luini@ibp.cnr.it</u>

The *GJB2* gene has an estimated mutation prevalence of 3% in the general population. The encoded membrane protein, connexin 26 (Cx26) is expressed in the inner ear and the skin, together with the closely related connexin 30 (Cx30). Most mutations of these connexins cause nonsyndromic forms of hearing impairment, which are prevalently autosomal recessive and together affect ~1 in 2000 newborn children. In addition, a certain number of dominant mutations cause syndromic forms associated with an array of rare skin diseases, some of which can be devastating. Non-syndromic hearing impairment is mainly associated with mutations that cause complete loss of protein function, whereas most syndromic forms are causally linked to hyperactive mutant connexin channels. Both classes of mutations represent highly challenging and virtually uncharted translational opportunities. I will discuss the etiopathogenesis of hearing loss linked to

connexin mutations and highlight our attempts to treat relevant mouse models using recombinant adeno associated viral vectors with high tropism for inner ear non-sensory cells. I will also present a promising approach to treat skin disorders by contrasting channel hyperactivity with fully human monoclonal recombinant antibodies selected from a phage library.

AND

Friday, April 6th, 2018

at 2:30 p.m.

CNR Conference Room

Prof. Andrea Cossarizza

University of Modena and Reggio Emilia, Modena, Italy

will present:

New horizons in Flow Cytometry

Host: Dr. Carmen Gianfrani

Tel. 081/61327224, e-mail: c.gianfrani@ibp.cnr.it

In the last decade, terrific advancements in the field of biological and biochemical analysis at the single cell level have been reached. A number of new instruments has been created, and several technologies adapted to these machines, that allow the analysis of an unpredictable number of parameters at an incredible accuracy. Instruments indeed exist that can analyze up to 50,000 cells per second, or that can identify several dozens of markers at the single cell level, or that can sort cells and organelles with an incredible accuracy and speed. In my talk I will give an overview of the most recent advancements in this field, and on how advanced technology is today crucial for obtaining important scientific results.

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HAPPY EASTER WISHES!!!
Drs Maria Rosaria Coscia & Stefania Mariggiò
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