Advances in Biological Regulation (formerly Advances in Enzyme Regulation) reports cutting edge scientific progress on regulation at the molecular level since 1963 and now is at the 54th volume. The issue number 1 of each volume stems from the annual Symposium, after extensive peer reviewing. The volumes cover:

- the molecular biology of control of gene expression by hormones, drugs and growth factors in cancer cells and in clinical situations of metabolic diseases, inborn errors of metabolism and neoplasia.
- stem cell biology and regenerative medicine issues
- regulatory networks, mainly in cellular signalling, differentiation, cell cycle & growth control, structure-function relationships, cell fate and lineage commitment or assembly mechanisms in cells
- viruses, or supramolecular constructs, and signaling mechanisms mediating transcription
- genomic, proteomic, bioinformatics and systems biology approaches to identify and characterize steps of biological control in a cellular context.
- complex cellular, pathogenic, clinical, or animal model systems studied by biochemical, molecular, genetic, epigenetic or quantitative ultrastructural approaches
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PROGRAMME

MONDAY, SEPTEMBER 16

Welcome by
Dr. Lucio Cocco, Dept. of Biomedical Sciences, School of Medicine, University of Bologna
Dr. Dario Braga, Vice Chancellor for Research Affairs, University of Bologna
Dr. Raffaele Lodi, Dean, Dept. Biomedical Sciences, School of Medicine, University of Bologna

Room Archiginnasio

SESSION I: NUCLEAR PHOSPHOLIPASE C
(8:45 am)

Session Chair: J.D. YORK

COCCO
NUCLEAR PHOSPHOLIPASE C β1 SIGNALLING INTERACTIONS AND FUNCTION

SALLES
NUCLEAR PHOSPHOLIPASE C-β1 AND DIACYLGLYCEROL LIPASE-α IN BRAIN CORTICAL NEURONS

SESSION II: NUCLEAR ENVELOPE AND NUCLEAR RECEPTORS
(9:45 am)

Session Chair: C.P. DOWNES

BLIND
STRUCTURAL MECHANISMS OF NUCLEAR RECEPTOR REGULATION BY SIGNALING PHOSPHOLIPIDS

KANN
PARVOVIRUSES INDUCE LOCAL NUCLEAR ENVELOPE DISINTEGRATION UPON INTERACTION WITH THE NUCLEAR PORES

COFFEE BREAK
(10:45 am – 10:55 am)

SESSION III: CYTOPLASM AND DYNAMICS
(10:55 am)

Session Chair: E.A. DENNIS

MURATA
THE MECHANISM FOR MOLECULAR ASSEMBLY OF THE PROTEASOME

KANAHOKO
NOVEL ACTIVATION MECHANISM OF THE SMALL G PROTEIN ARF6

GENERAL DISCUSSION
(11:55 am – 12:05 pm)

PICTURE TAKING
12:10 PM
SESSION IV: CELLULAR SIGNALLING AND DISEASE  
(2:00 pm)  

*Session Chair: C. ERNEUX*  

SUH O-GlcNACYLATION IN CELLULAR SIGNALING AND HUMAN DISEASES  
WENTE Gle1 AND INOSITOL HEXAKISPHOSPHATE FUNCTION DURING mRNA EXPORT IN AN OLIGOMERIC COMPLEX THAT IS ALTERED IN HUMAN DISEASE

SESSION V: LIPIDOMICS  
(3:00 pm)  

*Session Chair: K. GOTO*  

WAKE lam LIPIDOMIC ANALYSIS OF CANCER CELLS AND TISSUES  
DENNIS LIPIDOMICS OF EICOSANOIDS IN INFECTION AND INFLAMMATION

SESSION VI: SPHINGOSINE METABOLISM IN CANCER AND INFLAMMATION  
(4:10 pm)  

*Session Chair: Y. KANAHO*  

SPIEGEL SPHINGOSINE KINASE 1: A KEY ROLE IN INFLAMMATION AND CANCER  
PYNE THE ROLE OF SPHINGOSINE 1-PHOSPHATE IN CANCER

SESSION VII: PHOSPHOINOSITIDES AND INOSITOL PHOSPHATES  
(5:10 pm)  

*Session Chair: S.R. WENTE*  

HAWKINS MEASURING PHOSPHOINOSITIDES BY MASS SPECTROMETRY  
ERNEUX SIGNALLING PROPERTIES OF THE SH2 DOMAIN-CONTAINING INOSITOL 5-PHOSPHATASES SHIP1/2

GENERAL DISCUSSION  
(6:10 pm – 6:20 pm)

TUESDAY, SEPTEMBER 17 MORNING SESSION 8:30 AM
SESSION VIII: PATHOPHYSIOLOGY OF HAEMOPOIETIC CELLS  
(8:30 am)  
Session Chair: N.J. PYNE

BOULTWOOD  THE ROLE OF SF3B1 MUTATIONS IN THE PATHOGENESIS OF THE MYELODYSPLASTIC SYNDROMES

PAYRASTRE  RESPECTIVE ROLES OF THE DIFFERENT PI 3-KINASES AND PHOSPHATASES IN PLATELET ACTIVATION AND FUNCTIONS

SESSION IX: CANCER CELLS  
(9:30 am)  
Session Chair: B. PAYRASTRE

McCUBREY  MULTIFUNCTIONAL ROLES OF GSK-3: TUMOR PROMOTER-TUMOR SUPPRESSOR, TARGET IN CANCER INITIATING CELLS

CAMBRONERO  REDUCTION OF METASTASIS AND GROWTH OF BREAST CANCER BY DELETING THE PLD GENE AND BY USING SMALL-MOLECULE INHIBITORS IN ANIMAL MODELS

COFFEE BREAK  (10:30 am – 10:40 am)

SESSION X: NUCLEOTIDE METABOLISM AND DNA REPAIR PATHWAYS  
(10:40 am)  
Session Chair: J. A. McCUBREY

YORK  ROLES FOR NUCLEOTIDE HYDROLASES IN THE PATHOPHYSIOLOGY OF DWARFISM AND IRON DEFICIENCY ANEMIA

ZHANG  REGULATION OF CELLULAR RESPONSE TO DNA-DAMAGING TREATMENTS BY FATTY ACID SYNTHASE

GENERAL DISCUSSION  (12:10 pm – 12:20 pm)
SESSION XI: LIPID METABOLISM
(3:00 pm)

Session Chair: P. HAWKINS

HAMA 2′-HYDROXY CERAMIDE IN MEMBRANE HOMEOSTASIS AND CELL SIGNALLING

GOTO CYTOPLASMIC LOCALIZATION OF DIACYLGLYCEROL KINASE ZETA EXERTS A PROTECTIVE EFFECT AGAINST p53-MEDIATED CYTOTOXICITY

COFFEE BREAK (4:00 pm – 4:10 pm)

SESSION XII: PHOSPHATIDYLINOSITOL TURNOVER
(4:10 pm)

Session Chair: N.M. MARALDI

DOWNES FROM PHOSPHATIDYLINOSITOL TURNOVER TO MYRIAD SIGNALS IN HEALTH AND DISEASE, A PERSONAL ACCOUNT

GENERAL DISCUSSION (4:45 pm – 5:00 pm)

GEORGE and CATHERINE WEBER SPECIAL SYMPOSIUM LECTURE 7:30 PM

Chair: F. A. MANZOLI

PHILIP W. MAJERUS

AN ASPIRIN A DAY