

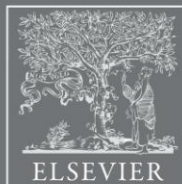


## ADVANCES IN BIOLOGICAL REGULATION

Editor-in-Chief, Lucio Cocco

Fifty-Fourth International Symposium on “Biological Regulation and Enzyme Activity in Normal and Neoplastic Tissues”

September 16-17, 2013, University of Bologna, Italy  
Aemilia Hotel Conference Centre, Via Zaccherini Alvisi



## Advances in Biological Regulation

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***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 54<sup>th</sup> 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
- 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

MORNING SESSION

8:30 AM

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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

8:30 AM

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## SESSION I: NUCLEAR PHOSPHOLIPASE C

(8:45 am)

*Session Chair:* J.D. YORK

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|--------|--|
| COCCO  | NUCLEAR PHOSPHOLIPASE C $\beta$ 1 SIGNALLING INTERACTIONS AND FUNCTION                           |
| SALLES | NUCLEAR PHOSPHOLIPASE C- $\beta$ 1 AND DIACYLGLYCEROL LIPASE- $\alpha$ IN BRAIN CORTICAL NEURONS |
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## SESSION II: NUCLEAR ENVELOPE AND NUCLEAR RECEPTORS

(9:45 am)

*Session Chair:* C.P. DOWNES

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|-------|---|
| BLIND | STRUCTURAL MECHANISMS OF NUCLEAR RECEPTOR REGULATION BY SIGNALING PHOSPHOLIPIDS                   |
| KANN  | PARVOVIRUSES INDUCE LOCAL NUCLEAR ENVELOPE DISINTEGRATION UPON INTERACTION WITH THE NUCLEAR PORES |
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COFFEE BREAK (10:45 am – 10:55 am)

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## SESSION III: CYTOPLASM AND DYNAMICS

(10:55 am)

*Session Chair:* E.A. DENNIS

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|--------|--|
| MURATA | THE MECHANISM FOR MOLECULAR ASSEMBLY OF THE PROTEASOME |
| KANAHO | NOVEL ACTIVATION MECHANISM OF THE SMALL G PROTEIN ARF6 |
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GENERAL DISCUSSION (11:55 am – 12:05 pm)

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PICTURE TAKING

12:10 PM

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**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

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**SESSION V: LIPIDOMICS**

(3:00 pm)

*Session Chair: K. GOTO*

WAKELAM LIPIDOMIC ANALYSIS OF CANCER CELLS AND TISSUES

DENNIS LIPIDOMICS OF EICOSANOIDS IN INFECTION AND INFLAMMATION

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COFFEE BREAK (4:00 pm – 4:10 pm)

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**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

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**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

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

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

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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

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COFFEE BREAK (10:30 am – 10:40 am)

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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

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GENERAL DISCUSSION (12:10 pm – 12:20 pm)

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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

