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## Biochemical Society Focused Meetings

### Biogenesis and Turnover of Small RNAs

Royal Society, Edinburgh, U.K., 15–17 January 2013

Edited by Richard Bowater (University of East Anglia, U.K.), Amy Buck (Edinburgh, U.K.) and Javier Cáceres (Edinburgh, U.K.).

miRNAs in development and pathogenesis of the nervous system

Jakub S. Nowak and Gracjan Michlewski

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The primary target of *let-7* microRNA

Amy E. Pasquinelli

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The multifunctional RNase XRN2

Takashi S. Miki and Helge Großhans

825–830

Intron excision from precursor tRNA molecules in mammalian cells requires ATP hydrolysis and phosphorylation of tRNA-splicing endonuclease components

Barbara Mair, Johannes Popow, Karl Mechtler, Stefan Weitzer and Javier Martinez



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Cellular functions of the microprocessor

Sara Macias, Ross A. Cordiner and Javier F. Cáceres

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Biogenesis and function of non-coding RNAs in muscle differentiation and in Duchenne muscular dystrophy

Shyam Twayana, Ivano Legnini, Marcella Cesana, Davide Cacchiarelli, Mariangela Morlando and Irene Bozzoni

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Multiple products from microRNA transcripts

Antonio Marco, Maria Ninova and Sam Griffiths-Jones

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Argonaute and GW182 proteins: an effective alliance in gene silencing

Janina Pfaff and Gunter Meister

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Terminal loop-mediated regulation of miRNA biogenesis: selectivity and mechanisms

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Discovery of novel small RNAs in the quest to unravel genome complexity

Adam E. Hall and Tamas Dalmai

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Small nuclear RNAs and mRNAs: linking RNA processing and transport to spinal muscular atrophy

Judith Sleeman

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RNAi pathways in the recognition of foreign RNA: antiviral responses and host-parasite interactions in nematodes

Peter Sarkies and Eric A. Miska

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Functional diversification of Argonautes in nematodes: an expanding universe

**Amy H. Buck and Mark Blaxter**

**881–886**

## Talks About TORCs: Recent Advances in Target of Rapamycin Signalling

Charles Darwin House, London, U.K., 14–15 March 2013

**Organized by Dario Alessi (Dundee, U.K.) and Christopher Proud (Southampton, U.K.). Edited by Christopher Proud.**

On mTOR nomenclature

**Michael N. Hall**

**887–888**

Conserved sequence motifs and the structure of the mTOR kinase domain

**Evelyn Sauer, Stefan Imseng, Timm Maier and Michael N. Hall**

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Regulation of insulin receptor substrate-1 by mTORC2 (mammalian target of rapamycin complex 2)

**Michael A. DeStefano and Estela Jacinto**

**896–901**

Nutrients and growth factors in mTORC1 activation

**Alejo Efeyan and David M. Sabatini**

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A growing role for mTOR in promoting anabolic metabolism

**Jessica J. Howell, Stéphane J.H. Ricoult, Issam Ben-Sahra and Brendan D. Manning**

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Many roads from mTOR to eIF4F

**Carson C. Thoreen**

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Role of PI3K, mTOR and Akt2 signalling in hepatic tumorigenesis via the control of PKM2 expression

**Ivan Nemazanyy, Catherine Espellicac, Mario Pende and Ganna Panasyuk**

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mTORC1 regulates the efficiency and cellular capacity for protein synthesis

**Christopher G. Proud**

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Immune responses of macrophages and dendritic cells regulated by mTOR signalling

**Karl Katholnig, Monika Linke, Ha Pham, Markus Hengstschläger and Thomas Weichhart**

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**Manuel Saldivia, Antonio Barquilla, Jean-Mathieu Bart, Rosario Diaz-González, Michael N. Hall and Miguel Navarro**

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The kinase triad, AMPK, mTORC1 and ULK1, maintains energy and nutrient homoeostasis

**Elaine A. Dunlop and Andrew R. Tee**

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Akt/mTOR signalling in myelination

**Camilla Norrmén and Ueli Suter**

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**Marloes J. Groenewoud and Fried J.T. Zwartkruis**

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Adaptation to chronic mTOR inhibition in cancer and in aging

**Rebecca Gilley, Kathryn Balmanno, Claire L. Cope and Simon J. Cook**

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**Daniela Bakula, Zsuzsanna Takacs and Tassula Proikas-Cezanne**

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## **Exploring Kinomes: Pseudokinases and Beyond**

Robinson College, Cambridge, U.K., 24–26 March 2013

**Organized by Dario Alessi (Dundee, U.K.), Patrick Eyers (Liverpool, U.K.) and James Murphy (Walter and Eliza Hall Institute of Medical Research, Australia). Edited by Patrick Eyers and James Murphy.**

Dawn of the dead: protein pseudokinases signal new adventures in cell biology

**Patrick A. Eyers and James M. Murphy**

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Techniques to examine nucleotide binding by pseudokinases

**Isabelle S. Lucet, Jeffrey J. Babon and James M. Murphy**

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Pseudokinases from a structural perspective

**Susan S. Taylor, Andrey Shaw, Jiancheng Hu, Hiruy S. Meharena and Alexandr Kornev**

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A pickup in pseudokinase activity

**Arvin C. Dar**

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ILK: a pseudokinase with a unique function in the integrin–actin linkage

**Sushmita Ghatak, Jessica Morgner and Sara A. Wickström**

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New insights into the structure and function of the pseudokinase domain in JAK2

**Olli Silvennoinen, Daniela Ungureanu, Yashavanthi Niranjan, Henrik Hammaren, Rajintha Bandaranayake and Stevan R. Hubbard**

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Structural characterization of the cyclin-dependent protein kinase family

**Jane A. Endicott and Martin E.M. Noble**

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Structural constraints and functional divergences in CASK evolution

**Leslie LaConte and Konark Mukherjee**

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**Paul V. Attwood**

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**Jeannine M. Mendrola, Fumin Shi, Jin H. Park and Mark A. Lemmon**

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**Nadia J. Kershaw, James M. Murphy, Isabelle S. Lucet, Nicos A. Nicola and Jeffrey J. Babon**

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**Stefan N. Constantinescu, Emilie Leroy, Vitalina Gryshkova, Christian Pecquet and Alexandra Dusa**

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Nuclear receptor-binding protein 1: a novel tumour suppressor and pseudokinase

**Jason S. Kerr and Catherine H. Wilson**

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