

#### **EUROCORES Programme** European Collaborative Research

#### **RNAQuality**

Quality Control of Gene Expression – RNA Surveillance

# **RNAQuality Meeting**

Granada, Spain, 11-13 June 2008

#### Final Programme

### Wednesday 11th of June 2008

18:30 Arrival and registration

Buffet dinner

19:40-20:00 Welcome and Introductory remarks

Michael Kiebler and Astrid Lunkes

#### Session 1: QC of nascent RNA PolII transcripts Part I

Chair: Elisa Izaurralde

20:00-20:25	Dmitry	Belostotsky	(University	of Missouri, US)	
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Genome-wide high-resolution mapping of the plant

exosome substrates

20:25-20:50 **Thomas Gingeras** (Affymetrix, Inc., US)

New Classes of Functional Short RNAs and Chromosome-

wide Transcriptional Networks

20:50-21:15 **Alain Jacquier** (Institut Pasteur, Paris, FR)

The complete map of CUTs in Saccharomyces

cerevisiae: implications for CUTs metabolism and

functions.

21:15-21:40 **Torben Heick Jensen** (University of Aarhus, DK)

Robust transcription activity immediately upstream

the majority of active mammalian promoters

21:40 **Welcome drinks** 

# Thursday 12<sup>th</sup> of June 2008

### **Session 1: QC of nascent RNA PolII transcripts Part II**

Chair: **Hervé Le Hir** 

08:45-09:10	<b>Steve Buratowski</b> (Harvard University, US)  Exosome and the Nrd1/Sen1 Complex
09:10-09:35	<b>Domenico Libri</b> (CNRS, CGM, Gif-sur-Yvette, FR) From transcriptional noise to the sound of regulation
09:35-10:00	Steve West (University of Oxford, UK)  Transcriptional termination of RNA polymerase II enhances gene expression  Ana Rondon (University of Oxford, UK)  Failsafe mechanisms in Pol II termination
10:00-10:25	Neus Visa (Stockholm University, SE) Cancelled
10:00-10:25	Coffee break

### Session 2: mRNA QC pathways Part I

Chair: **David Tollervey** 

10:45-11:05	<b>Allan Jacobson</b> (University of Massachusetts, US)  Nonsense-mediated mRNA decay in yeast
11:05-11:25	<b>Hervé Le Hir</b> (CNRS, CGM, Gif-sur-Yvette, FR)  Reconstitution of the human NMD surveillance complex
11:25-11:45	<b>Andreas Kulozik</b> (University of Heidelberg, DE)  Alternative pathways in mammalian NMD
11:45-12:05	Stuart Peltz (UMDNJ, US). Cancelled (replaced by Allan Jacobson)
12:05-12:25	<b>Andrzej Dziembowski</b> (Warsaw University, PL)  Novel endonuclease activity of the exosome contributes to digestion of its physiological substrates.
12:30-13:30	Lunch
13:30-15:00	Poster presentation

### Session 2: mRNA QC pathways Part II

Chair: Torben Heick Jensen

15:00-15:25	Elisa Izaurralde (MPI Tübingen, DE). Cancelled (replaced by Hélène Gaillard, Uni Sevilla, ES)
15:25-15:50	<b>Oliver Mühlemann</b> (University of Bern, CH)  SMG6 induced endonucleolytic cleavage of nonsense mRNA in human cells
15:50-16:00	Mariangela Morlando (University of Rome, IT) Short talk: Drosha processing and microRNA transcription
16:00-16:10	<b>Gadi Schuster</b> (Technion, IL) Short talk: <i>The evolution of RNA Polyadenylation; Different Tails Tell Different Tales</i>
16:10-16:30	Coffee break

## **Session 3: Structural organization of QC players**

Chair: Nick Proudfoot

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16:55-17:20	Haiwei Song (Inst. Molecular & Cell Biology, SG).  Cancelled (replaced by Nicholas Proudfoot, Uni Oxford, UK)
17:20-17:45	<b>Ailong Ke</b> (Cornell University, US)  Architecture of the yeast exosome complex suggests routes of RNA recruitment for 3' processing
17:45-18:10	Marc Graille (University Paris-Sud, FR) Structural studies of proteins involved in mRNA quality control pathways
18:10-18:35	<b>Esben Lorentzen</b> (Birkbeck College, London, UK)  Crystal structure of the active subunit of the yeast exosome core, Rrp44, bound to RNA
18:35-18:45	<b>Laura Milligan</b> (University of Edinburgh, UK) short talk: A new yeast exosome cofactor Mpp6 and redundant activities contribute to the rapid degradation of ncRNA transcripts
19:00-20:00 20:00-21:30	Dinner poster presentation and discussion

# Friday 13th of June 2008

### **Session 4: Localization and translation Part I**

Chair: Michael Kiebler

09:10-09:35	<b>Ilan Davis</b> (University of Oxford, UK)  The Mechanism of mRNA Localisation and Anchoring in Drosophila
09:35-10:00	<b>Stefan Hüttelmaier</b> (University of Halle-Wittenberg, DE)  ZBP1, the postman controlling spatially restricted B-actin translation in primary neurons?
10:00-10:25	<b>Rob Singer</b> (Albert Einstein College of Medicine, NY, US)  Following the mRNA regulation and quality control in living cells
10:25-10:50	Sadanand Vodala (Brandeis Uni, US) Cancelled
10:25-10:50	Coffee break

### **Session 4: Localization and translation Part II**

Chair: Bertrand Séraphin

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11:10-11:35	<b>Eric Phizicky</b> (University of Rochester, US)  Degradation of several hypomodified mature tRNA species in Saccharomyces cerevisiae is mediated by Met22 and the 5'-3' exonucleases Rat1 and Xrn1
11:35-12:00	Joel Richter (University of Massachusetts, US)  Translational Control of Cellular Senescence
12:00-12:25	James Anderson (Marquette University, US) TRAMP mediated degradation of RNA in yeast
12:25-12:50	<b>David Tollervey</b> (University of Edinburgh, UK)  Getting Systematic with Ribosome Synthesis
12:50-13:15	<b>Michael Kiebler</b> (University of Vienna, AT)  mRNA transport, mRNA decay and miRNA silencing in neurons
13:30-14:30	Lunch and departure