
Wednesday 09 September 2015

12:30 - 14:30	Arrival and Registration ATC Reception	
14:30 - 14:45	Welcome remarks ATC Auditorium	
14:45 - 16:30	Session 1: Non-coding and viral RNAs Chair: Shobha Vasudevan ATC Auditorium	
14:45 - 15:15	A Specialized Mechanism of MicroRNA-mediated Translation in Quiescence Shobha Vasudevan <i>MGH Cancer Center-Harvard Medical School, United States of America</i>	1
15:15 - 15:30	Key role of RNA structural context and its dynamic structural transformations promoted by miR-122 in the hepatitis C virus IRES-40S pre-initiation complex Maria Ascension Ariza-Mateos <i>Instituto de Parasitologia y Biomedicina "Lopez-Neyra" CSIC, Spain</i>	2
15:30 - 15:45	Deconvoluting the distinct functions of DEAD-box helicases miRNA-mediated translational repression Ania Wilczynska <i>MRC Toxicology Unit, United Kingdom</i>	3
15:45 - 16:00	The dead-box helicase DHH1 promotes translation of highly structured mRNAs Jennifer Jungfleisch <i>UPF, Spain</i>	4
16:00 - 16:15	The Levels of a Universally Conserved tRNA Modification Modulates TOR Activity and Regulates Growth in Drosophila Diego Rojas-Benítez (Presenter: Alvaro Glavic) <i>Universidad de Chile, Chile</i>	5

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- 16:15 - 16:30 **Optimization of codon translation rates via tRNA modifications maintains proteome integrity** 6
Danny Nedialkova
MPI for Molecular Biomedicine, Germany
- 16:30 - 17:00 **Coffee Break**
ATC Foyer
- 17:00 - 18:30 **Keynote session**
ATC Auditorium
- 17:00 - 17:45 **Molecular Mechanism of Scanning and Start Codon Selection** 7
Alan Hinnebusch
National Institutes of Health, United States of America
- 17:45 - 18:30 **The CPEB-family of RNA-binding proteins, mechanisms of action and new somatic functions** 8
Raúl Méndez
IRB Barcelona, Spain
- 18:30 - 20:00 **Dinner**
ATC Canteen
- 20:00 - 21:00 **Keynote session (continued)**
ATC Auditorium
- 20:00 - 21:00 **SnRNPs: from the spliceosome to virus-infected cells** 9
Joan Steitz
Yale University School of Medicine, United States of America
- 21:00 - 22:00 **Welcome reception**
ATC Foyer and Rooftop Lounge

Thursday 10 September 2015

09:00 - 12:30	Session 2: Translation initiation Chair: William Merrick ATC Auditorium	
09:00 - 09:10	Introduction: William Merrick ATC Auditorium	
09:10 - 09:25	Translation initiation on consecutive ribosomes upon polysome formation Irena Andreeva <i>MPI for Biophysical Chemistry, Germany</i>	10
09:25 - 09:40	eIF3 stabilizes the translation pre-initiation complex at both the mRNA entry and exit channels, collaborating with eIF4F at the entry channel Colin Aitken <i>NICHHD/NIH, United States of America</i>	11
09:40 - 09:55	Structures reveal budding yeast eIF3 preparing the 40S for translation initiation Christopher Aylett <i>ETH Zurich, Switzerland</i>	12
09:55 - 10:10	Mechanistic insights into Eukaryotic Translation Initiation by Cryo-EM reconstructions Tanweer Hussain <i>MRC Laboratory of Molecular Biology, United Kingdom</i>	13
10:10 - 10:25	The β-hairpin of 40S exit channel protein Rps5/uS7 promotes efficient and accurate translation initiation in vivo Jyothsna Visweswaraiah <i>National Institutes of Health, United States of America</i>	14
10:25 - 10:55	Coffee Break ATC Auditorium	

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- 10:55 - 11:10 **CK2 and mTORC1 coordinate ternary and the eIF4F complex assembly** 15
Ivan Topisirovic
Lady Davis Institute, McGill University, Canada
- 11:10 - 11:30 **eIF4F: The disassembly hypothesis** 16
William Merrick
Case Western Reserve University, United States of America
- 11:30 - 11:45 **The Evolution of Initiator tRNA carriers: eIF2A is the mate of eIF5B** 17
Eunah Kim
POSTECH, Korea, Republic of
- 11:45 - 12:00 **Stimulation of translation initiation on a poor start codon by downstream nascent peptide-induced elongation pause** 18
Ivaylo Ivanov
NIH, United States of America
- 12:00 - 12:15 **IRESs as translational enhancers of gene expression in hypoxic stress** 19
Anne-Catherine Prats
University of Toulouse, France
- 12:15 - 12:30 **Identification of an IRES element in the human mTOR transcript that insures its expression and function during inhibition of global translation** 20
Luísa Romão
Instituto Nacional de Saúde Doutor Ricardo Jorge, Portugal
- 12:30 - 14:00 **Lunch**
ATC Foyer
- 14:00 - 17:30 **Session 3: Interconnections between translation and other processes**
Chair: Mordechai Choder
ATC Auditorium

14:00 - 14:30	A system view of gene expression Mordechai Choder <i>Technion - Israel Institute of Technology, Israel</i>	21
14:30 - 14:45	Massive RNAi screening identifies key drivers of transcriptome 3' end diversity with prognostic relevance in human neuronal tumors Anton Ogorodnikov <i>University Medical Centre of the Johannes Gutenberg-University, Germany</i>	22
14:45 - 15:00	HSF1 critically attunes proteotoxic-stress sensing by mTORC1 to combat stress and promote growth Kuo-hui Su (Presenter: Chengkai Dai) <i>The Jackson Laboratory, United States of America</i>	23
15:00 - 15:15	A note of caution: on the importance to distinguish active regulation from passive changes in translation efficiency Johanna Schott <i>German Cancer Research Center (DKFZ) and Center for Molecular Biology of the University of Heidelberg (ZMBH), DKFZ-ZMBH Alliance, Heidelberg, Germany</i>	24
15:15 - 15:30	Ribosome profiling to decipher translational consequences of [PSI+] in yeast Olivier Namy <i>CNRS, France</i>	25
15:30 - 16:00	Coffee Break and Meet the Speakers ATC Foyer	
16:00 - 16:15	Mechanisms of Circadian Translation Jonathan Lipton <i>Boston Children's Hospital/Harvard Medical School, United States of America</i>	26

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- 16:15 - 16:30 **Ubiquitylation of ribosomal proteins governs the fate of stalled ribosomes** 27
Toshifumi Inada
*Graduate School of Pharmaceutical Sciences,
Tohoku University, Japan*
- 16:30 - 16:45 **Upf1 Interacts with Release Factors to Stimulate Peptide Hydrolysis at Termination Codons** 28
Anthony Schuller
*Johns Hopkins University School of Medicine,
United States of America*
- 16:45 - 17:00 **Codon optimality and 3'UTR length determine maternal mRNA stability in zebrafish** 29
Yuichiro Mishima
The University of Tokyo, Japan
- 17:00 - 17:15 **Dhh1 regulates translation by monitoring codon optimality** 30
Aditya Radhakrishnan
Johns Hopkins Medical Institute, United States of America
- 17:15 - 17:30 **The Ski complex binds 80S ribosomes for 3' to 5' decay of mRNA in NSD** 31
Christian Schmidt
Genzentrum LMU Munich, Germany
- 17:30 - 18:00 **Pre-dinner drinks**
ATC Foyer
- 18:00 - 19:30 **Dinner**
ATC Canteen
- 19:30 - 21:30 **Poster Session I**
ATC Helices
- 21:30 - 22:30 **Wine & Cheese**
ATC Foyer

Friday 11 September 2015

09:00 - 12:00	Session 4: The Ribosome Chair: Christian Spahn ATC Auditorium	
09:00 - 09:30	To be presented onsite Christian Spahn <i>Charité Berlin, Germany</i>	32
09:30 - 09:45	The Human Mitochondrial Ribosome Alexey Amunts <i>MRC Laboratory of Molecular Biology, United Kingdom</i>	33
09:45 - 10:00	Defining the Landscape of Ribosome Interacting Proteins in Stem Cells Deniz Simsek <i>Stanford university, United States of America</i>	34
10:00 - 10:15	“Molecular movie” of ribosome-elongation factor dynamics by high-resolution cryo-EM Niels Fischer <i>MPI for Biophysical Chemistry, Germany</i>	35
10:15 - 10:45	Coffee Break ATC Foyer	
10:45 - 11:00	Multi-angle view of EF-G-dependent translocation Riccardo Belardinelli <i>MPI for Biophysical Chemistry, Germany</i>	36
11:00 - 11:15	The activity of PTC inhibitors linezolid and chloramphenicol relies on the sequence context of the nascent peptide James Marks III <i>The University of Illinois at Chicago, United States of America</i>	37
11:15 - 11:30	Functional dynamics of the human ribosome determined by smFRET Angelica Ferguson <i>Weill Cornell Medical College, United States of America</i>	38

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- 11:30 - 11:45 **Structure of a human translation termination complex reveals an inverted decoding geometry** 39
Roland Beckmann
LMU Munich, Germany
- 11:45 - 12:00 **Structural basis of hypusine-induced protein synthesis by the eukaryotic ribosome** 40
Sergey Melnikov (Presenter: Justine Mailliot)
IGBMC, France
- 12:00 - 16:30 **Free time / Sightseeing**
- 16:30 - 19:00 **Session 5: Ribonucleoprotein complexes**
Chair: Markus Landthaler
ATC Auditorium
- 16:30 - 17:00 **The mRNA-bound proteome of the early fly embryo** 41
Markus Landthaler
Max-Delbrück-Center for Molecular Medicine, Germany
- 17:00 - 17:15 **Trailing membrane protein mRNAs on their way to the membrane in Escherichia coli** 42
Daniel Benhalevy
Weizmann Institute of Science, Israel
- 17:15 - 17:30 **Deciphering of the protein-RNA recognition code: Cooperative RNA binding proteins and novel RNA binding motifs active during translational regulation** 43
Janosch Hennig
EMBL Heidelberg, Germany
- 17:30 - 18:00 **Coffee Break and Meet the Speakers**
ATC Foyer
- 18:00 - 18:15 **Selective cap-dependent translation during cell stress is maintained by the RNA helicase A-CBP80/20 translation RNP** 44
Sarah Fritz
The Ohio State University and Antioch College, United States of America

- 18:15 - 18:30 **Hrp48 interferes with eIF3d to repress msl2 mRNA translation** 45
 Emilia Szostak (Presenter: Marina García-Beyaert)
Centre for Genomic Regulation (CRG), Spain
- 18:30 - 18:45 **Catalytically active DDX6 mediates translational repression by 4E-T** 46
 Nancy Standart
University of Cambridge, United Kingdom
- 18:45 - 19:00 **A splicing factor component SF3b4 plays a key role in selective assembly system for polyribosomes on the endoplasmic reticulum** 47
 Kiyoko Ogawa-Goto
Nippi Research Institute of Biomatrix, Japan
- 19:00 - 20:30 **Dinner**
 ATC Canteen
- 20:30 - 22:30 **Poster Session II**
 ATC Helices
- 22:30 - 23:30 **Wine & Cheese**
 ATC Foyer

Saturday 12 September 2015

09:00 - 12:00	Session 6: Development, disease and metabolism Chair: Maria Barna ATC Auditorium	
09:00 - 09:30	Heterogeneous ribosomes exist and selectively translate distinct subpools of mRNAs Maria Barna <i>Stanford University, United States of America</i>	48
09:30 - 09:45	Coordinate Regulation of Translation by a Conserved RNA Regulon Karuna Sampath <i>University of Warwick, United Kingdom</i>	49
09:45 - 10:00	The regulatory circuitry of spatiotemporal translational regulation of the genome during mammalian development Kotaro Fujii <i>Stanford University, United States of America</i>	50
10:00 - 10:15	Protein sequence depends on tissue expression and levels of expression Ariel Bazzini <i>Yale University, United States of America</i>	51
10:15 - 10:45	Coffee Break ATC Foyer	
10:45 - 11:00	Regulation of embryonic cell fates by the Bicaudal-C translational repressor Michael Sheets <i>University of Wisconsin, United States of America</i>	52
11:00 - 11:15	Direct translational control of macrophage inflammatory responses exerted by eobiotic neutrophil-derived alpha-defensins Matthew Brook <i>University of Edinburgh, United Kingdom</i>	53

11:15 - 11:30	Oncogenes cooperate to drive the translation of specific mRNA networks during distinct phases of tumor development Craig Stumpf <i>University of California, San Francisco, United States of America</i>	54
11:30 - 11:45	A non-canonical function of eIF4A inactivates TORC1 in response to amino acid starvation Marie-Astrid Albert <i>German Cancer Research Center, Germany</i>	55
11:45 - 12:00	Suppression of the oncogenic Mnk-eIF4E axis by C/EBPalpha Götz Hartleben (Presenter: Cornelis Calkhoven) <i>European Research Institute for the Biology of Ageing, The Netherlands</i>	56
12:00 - 13:30	Lunch ATC Canteen	
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15:30 - 18:30	Session 7: Systems approaches Chair: Thomas Preiss ATC Auditorium	
15:30 - 16:00	In vivo snapshots of eukaryotic translation initiation and termination captured by small ribosomal subunit profiling Thomas Preiss <i>The Australian National University, Australia</i>	57
16:00 - 16:15	The impact of the phosphomimetic eIF2aS/D on global translation, reinitiation and the integrated stress response is attenuated in N2a cells Joseph Curran <i>University of Geneva Medical School, Switzerland</i>	58

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- 16:15 - 16:30 **Specialized role for eIF3 in transcript-specific translational control** 59
Amy Lee
University of California, Berkeley, United States of America
- 16:30 - 16:45 **Computational analysis of high resolution Ribosome profiling detects thousands of high confidence ORFs and improves peptide identification** 60
Lorenzo Calviello
MDC-BIMSB, Germany
- 16:45 - 17:15 **Coffee Break**
ATC Foyer
- 17:15 - 17:30 **On the metabolic control of mRNA translation in transformed cells** 61
Paulo Gameiro
Harvard Medical School, United States of America
- 17:30 - 17:45 **Inhibitory Codon Pairs Affect Translation by distinct mechanisms** 62
Elizabeth Grayhack
University of Rochester Medical School, United States of America
- 17:45 - 18:00 **Codon optimality is a major determinate of mRNA stability** 63
Jeffery Collier
Case Western Reserve University, United States of America
- 18:00 - 18:15 **Platelets stabilize irreplaceable mRNAs by reducing post-termination ribosome recycling** 64
Eric Mills
Johns Hopkins University School of Medicine, United States of America
- 18:15 - 18:30 **Alternative polyadenylation induces posttranscriptional changes of gene expression in response to cellular stress** 65
Ina Hollerer
EMBL Heidelberg, Germany

- 18:30 - 18:45 **Closing remarks**
ATC Auditorium
- 18:45 - 19:15 **Pre-dinner drinks**
ATC Foyer
- 19:15 - 01:00 **Banquet Dinner and Party**
ATC Canteen and Foyer

Sunday 13 September 2015

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