SMBE SATELLITE MEETING ON RNA MODIFICATION AND ITS IMPLICATION ON ADAPTATION AND EVOLUTION

TUESDAY 17 MAY 2016

19.30 – 20.30	Dinner and Reception
20.30 – 22.00	Poster Session 1 – odd numbers

WEDNESDAY 18 MAY 2016

SESSION 1: RNA EDITING AND MODIFICATION IN HUMANS: DISEASE AND THERAPY

08.45 – 09.00	Welcome
09.00 - 09.30	**ELI EISENGERG**. Profiling the cancer editome.
09.30 - 10.00	**MICHAEL JANTSCH**. Editing of filamin A controls smooth muscle cell contraction and colitis.
10.00 - 10.30	**SUSANA RODRIGUEZ-NAVARRO**. RNA structures modulate the expression of the mRNA biogenesis factor Sus1.
10.30 - 11.00	Coffee break
11.00 - 11.20	**RACHID BOUTOUAL**. Adaptive and maladaptive responses triggered by MTO1-dependent hypomodification of mitochondrial tRNAs.
11.20 - 11.40	**LINDA MOLLA**. Characterization of APOBEC2's molecular function.
11.40 - 12.00	**PAVEL IVANOV**. Angiogenin-mediated RNA cleavage in cellular stress adaptation and survival.
12.15 - 13.30	LUNCH

SESSION 2: ADAPTIVE FINE TUNING OF GENETIC INFORMATION BY RNA EDITING AND MODIFICATION (I)

13.30 - 14.00	**EREZ LEVANON**. Editing of retrotransposons by APOBECs and ADARs in genome evolution.
14.00 - 14.30	**JIN BILLY LI**. Identifying functional A-to-I RNA editing events in *Drosophila* by evolutionary analyses.
14.30 - 15.00	**GRAZIANO PESOLE**. Computational investigation of epigenetic regulation mechanisms by simultaneous analysis of genome and transcriptome data.
15.00 - 15.30	Coffee break
15.30 - 15.50	**ANTHONY POOLE**. Emergence of slippage-type 'editing' revealed by experimental evolution.
15.50 - 16.10	**YI XING**. The contribution of Alu exons to the human proteome.
16.10 - 16.30	**ANTONIO MARCO**. Selection against microRNA target sites.
16.30 - 18.00	Leisure time

KEYNOTE SPEAKER

18.00 - 19.00	**JIANZHI ZHANG**. Diversity in post-transcriptional modifications: adaptive or not?
19.15 - 20.30	Dinner
20.30 - 22.00	Poster Session 2 - even numbers

THURSDAY 19 MAY 2016

SESSION 3: ADAPTIVE FINE TUNING OF GENETIC INFORMATION BY RNA EDITING AND MODIFICATION (II)

09.00 - 09.30	**MIGUEL GALLACH**. Adaptive A-to-I RNA editing in *Drosophila.*
09.30 - 10.00	**JOSH ROSENTHAL**. Sepia, pulpo y calamar: los campeones de edición.
10.00 - 10.30	**PABLO VERA**. Mediated plastid RNA editing in plant immunity.
10.30 - 11.00	Coffee break
11.00 - 11.20	**ALICIA GALLEGO**. Elucidating the evolutionary implications of microRNA editing through a deep analysis of mir-376a-1 across human tissues and primate species.
11.20 - 11.40	**MARIA WARNEFORS**. Functional contributions of miRNAs to the evolution of mammalian organ development.
11.40 - 12.00	**EDUARDO LARRIBA**. Bioinformatic analysis of piRNAs in mouse zygote and gametes reveal new potential origins and functions.
12.15 - 13.30	LUNCH

SESSION 4: FINE TUNING AND DIVERSIFICATION OF GENE EXPRESSION (I)

13.30 - 14.00	**YI TAO YU**. RNA pseudouridylation and gene regulation.
14.00 - 14.30	**THORSTEN STAFFORST**. Harnessing RNA editing to reprogram mRNA content in specific transcripts.
14.30 - 15.00	**ANN EHRENHOFER-MURRAY**. Regulation of Dnmt2-dependent tRNA methylation by the micronutrient queuine.
15.00 - 15.30	Coffee break
15.30 - 15.50	**SAMSON SIMON**. The Brassicaceae self-incompatibility system: where miRNA and siRNA pathways meet.
15.50 - 16.10	**ALESSANDRO MICHIENZI**. ADAR1 restricts the LINE1 retrotransposition in human cell lines.
16.10 - 16.30	**LLUIS RIBAS DE POUPLANA**. Biological function and evolutionary relevance of ADAT.
16.30 - 18.00	Leisure time

KEYNOTE SPEAKER

18.00 - 19.00	**GIDEON RECHAVI**. The expanding epitranscriptome landscape.
20.30 - 22.00	Gala dinner. Restaurant DUKALA.

FRIDAY 20 MAY 2016

SESSION 5: FINE TUNING AND DIVERSIFICATION OF GENE EXPRESSION (II)	
09.00 - 09.30	**SALVADOR MESEGUER**. Stress response mediated by mitochondrial-tRNA modification enzymes and their microRNA regulators.
09.30 - 10.00	**NINA PAPAVASILIOU**. RNA editing generates cellular subsets with diverse sequence within populations.
10.00 - 10.30	**AYELET LAMM**. A-to-I RNA editing promotes developmental-stage specific gene and lncRNA expression.
10.30 - 11.00	Coffee break
11.00 - 11.20	**MATEA HAJNIC**. Inosine nucleobase acts as guanine in interactions with amino-acid sidechain analogs.
11.20 - 11.40	**SANDRA BLANCO**. RNA post-transcriptional m5C-methylation in stem cells, stress responses and cancer.

POSTERS

1. VIRIDIANA AVILA MAGANA. Identification of Non-coding RNAs and their functional role in *Scleractinian Corals*.
2. AGNIESZKA BELTER. Natural intracellular mechanisms of miRNAs regulation and new molecular tools for miRNAs targeted therapy.
3. SANDRA BLANCO. RNA post-transcriptional m5C-methylation in stem cells, stress responses and cancer.
4. RACHID BOUTOUAL. Adaptive and maladaptive responses triggered by MTO1-dependent hypomodification of mitochondrial tRNAs.
5. JORDI DURBAN. Testing the hypothesis that miRNAs modulate ontogenetic changes in the venom of *Crotalus simus.*
6. NABEEL GANEM. Analysis of RNA editing regulation and function.
7. MATEA HAJNIC. Inosine nucleobase acts as guanine in interactions with amino-acid sidechain analogs.
8. DEWI HARJANTO. Elucidating the role of Apobec1-mediated C-to-U editing in intestinal cancer.
9. PAVEL IVANOV. Angiogenin-mediated RNA cleavage in cellular stress adaptation and survival.
10. UTKARSH KAPOOR. Global Interplay of RNA-Editing and pre-mRNA Splicing.
11. EDUARDO LARRIBA. Bioinformatic analysis of piRNAs in mouse zygote and gametes reveal new potential origins and functions.
12. ANTONIO MARCO. Selection against microRNA target sites.
13. LINDA MOLLA. Characterization of APOBEC2's molecular function.
14. EUGENE MUELLER. New Findings in the Synthesis of Pseudouridine and 4-Thiouridine.
15. EYAL PEER. Bioinformatic Characteristics of N1-methyladenosine decoration of mRNA.
16. ERNESTO PICARDI. Profiling RNA editing in Human Single Cells.
17. VIOLETA RAYON ESTRADA. Fine-tuning protein expression through RNA editing: functional consequences of APOBEC1 editing in macrophages.
18. SAMSON SIMON. The Brassicaceae Self-Incompatibility System: where miRNA and siRNA Pathways meet.
19. MORITZ SMOLKA. Teaser: Comprehensive read mapper benchmarking in 20 minutes for genomes, transcriptomes, methylomes and metagenomes.
20. MAGDA VILLARROYA. Understanding the pathogenic effects of clinical MTO1 mutations using the bacterial tRNA modification enzyme MnmG.
21. XINZHUANG YANG. Selectively Constrained RNA Editing Regulation Crosstalks with piRNA Biogenesis in Primates.
22. MARYAM ZARINGHALAM. Comparative analysis of high-throughput pseudouridine-detection techniques.
23. RUI ZHANG. Evolutionary Analysis Reveals Regulatory and Functional Landscape of RNA Editing.

MAP

Botanical Garden: C/ Quart, 80.
Hotel NH Valencia Center: C/ Ricardo Micó, 1.
Gala dinner – Restaurante DUKALA: C/ Dr. Sanchis Bergón, 27
Turia Metro Station: Av./ Pio XII with C/ Menendez Pidal

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