







# 11th

# Bordeaux RNA Club Symposium

JUNE № 27-28 8

**IECB Auditorium** 

2, rue Robert Escarpit 33600 Pessac, France







# 8:20 - 8:40 Registration

# 8:40 – 8:50 Opening remarks (Y. Hashem)

# 8:50 – 10:35 1<sup>st</sup> Session - Ribosome and translation (Chair: Y. Hashem)

8:50 – 9:30 **Christine Clayton** (invited speaker)

Mechanisms of selective translation stimulation and suppression by the multiple eIF4E isoforms of *Trypanosoma brucei* 

# 9:30 – 9:50 **Philippe Giegé**

Composition and architecture of Arabidopsis mitochondrial ribosome

#### 9:50 - 10:10 Hakim Mireau

The translational landscape of plant mitochondria and control by PPR proteins

#### 10:10 – 10:25 **Natalia Korniy**

Modulation of HIV-1 Gag/Gag-Pol Frameshifting by tRNA abundance

10:25 – 10:35 *Sponsor talk (NEB)* 

#### 10:35 - 10:55 Coffee break

# 10:55 – 13:10 2<sup>nd</sup> Session - Ribosome and translation (Chair: F. Darfeuille)

10:55 – 11:35 **Sarah Woodson** (invited speaker)

The dynamics of Hfq-small RNA interactions and mRNA targeting

# 11:35 – 11:55 **Grégory Boël**

ABC-F type translation factors modulate the stereochemistry of the peptidyl transferase center in the ribosome and are necessary for bacteria to adapt to their environment

#### 11:55 – 12:10 Victoriia Murina

Antibiotic resistant ABCFs: straight from structure to mechanism?

# 12:10 - 12:30 **Daniel Wilson**

Structures of antibiotic-resistance ABCF proteins in complex with the ribosome

# 12:30 – 13:10 **Zoya Ignatova** (invited speaker)

Alterations of translation (components) with age

# 13:10 - 15:00 Lunch break and poster session

# 15:00 – 16:40 3<sup>rd</sup> Session - RNA Biology (Chair: A. Innis)

15:00 – 15:40 **Alessandro Vannini** (invited speaker)

Watching (class III) gene transcription in HD

# 15:40 – 16:00 **Suparna Sanyal**

Bimodal effect of RNA on aggregation of the tumor suppressor protein p53

#### 16:00 – 16:20 **Dmitri Ermolenko**

mRNAs and IncRNAs intrinsically form secondary structures with short end-to-end distances

#### 16:20 – 16:40 Sanjeev Shukla

Interplay between epigenetics, alternative splicing, and cancer metabolism

# 16:40 - 17:00 Coffee break

# 17:00 – 18:30 4th Session - RNA Biology (Chair: C. Mackereth)

17:00 – 17:40 **Eduardo Eyras** (*invited speaker*)

Long read transcriptomics - beyond model organisms

# 17:40 – 18:00 **Grégoire de Bisschop**

Unwinding of HIV RNA dimers by DDX3 questions its role during infection

#### 18:00 - 18:15 Lina Hamouche

Dynamics of RNase Y membrane localization in Bacillus subtilis

# 18:15 – 18:30 **Jorg Morf**

Spatial transcriptome organization in the nucleus

# 20:00 - Dinner in Bordeaux for invited and selected speakers

# Friday, June 28, 2018 | Cité du Vin, joined session

# 8:20 – 10:30 5<sup>th</sup> Session - Aptamers (Chair: C. Mackereth)

# 8:20 - 8:40 James Attwater

Emergence of cooperativity during in vitro selection of a self-synthesising ribozyme

# 8:40 - 9:00 Florian Bernard

Full-length analysis of Caenorhabditis elegans transcriptome using Nanopore sequencing technology

# 9:00 - 9:20 **Josef Wachtveitl**

Structure guided fluorescence labeling reveals a two-step binding mechanism of neomycin to its RNA aptamer

#### 9:20 – 9:40 **P. Johnson**

Fine-tuning the binding affinity of a structure-switching aptamer using dangling nucleotides

### 9:40 – 10:30 **Judy Lieberman** (invited speaker)

Aptamer delivery of siRNAs to knockdown cancer

#### 10:30 - 11:10 Coffee break

# 11:10 – 12:30 6<sup>th</sup> Session - Aptamers (Chair: L. Azéma)

# 11:10 - 11:30 Murat Sunbul

Genetically encoded light-up aptamers for live-cell super-resolution RNA imaging

#### 11:30 – 11:50 **Arghya Sett**

Light-up aptasensors - A tool for the detection of RNA hairpins and small molecules

# 11:50 - 12:10 Farah Bouheda

Evolution of efficient RNA-based fluorescent probes using ultrahigh-throughput functional screening

# 12:10 – 12:30 Olga Puchta

High-throughput screening of fluorescent RNA aptamers

# 12:30 Departure