

TUESDAY, NOVEMBER 6

9:30-10:45 *Arrival and Registration*

10:45-11:00 *Opening*

11:00-12:00 **O1- FEBS NATIONAL LECTURER: REINHARD LÜHRMANN**

Novel mechanistic insights into the inner workings of the human spliceosome by combined biochemical and Cryo-EM studies.

12:00-13:15 **SESSION 1- RNP STRUCTURE AND ASSEMBLY**

Chairs: M. Graille, N. Leulliot, B. Charpentier

O2- Magali Blaud

DEAH/RHA helicase activity decrypted by a single molecule approach.

O3- Christine Allmang

Role of the SMN complex and the methylosome in selenoprotein mRNP assembly and translation.

O4- Jonathan Bizarro

Nopp140 knockdown depletes scaRNPs from Cajal bodies impairing spliceosomal snRNA modification and promoting telomere lengthening.

O5- Yoan Abel

A structure-function study shows a possible role for the R2TP complex in RISC assembly and/or function.

O6- Céline Verheggen

The RPAP3 C-terminal domain identifies R2TP-like quaternary chaperones.

13:15-14:30 *Lunch*

14:30- 16:00 **SESSION 2- SPLICING AND RNA PATHOLOGY**

Chairs: D. Auboeuf, L. Paillard, P.E. Gleizes, B. Bardoni

O7- Hervé Moine

DGKk dysregulation establishes a link between lipid signaling and local translation control in Fragile X Syndrome pathology.

O8- Thomas Maurin

New insights into the FMRP-containing RNP complexes. Implications for the pathophysiology of Fragile X syndrome.

O9- Marianne Bénard

De novo missense changes in the helicase DDX6 cause intellectual disability and dysmorphic features by disrupting RNA regulation and P-body assembly.

O10- Franck Mortreux

Exonic DNA-binding of the NF-kb transcription factor RelA/p65 regulates alternative splicing by recruiting the RNA helicase DDX17.

O11- David Rebutier

Conserved regulation of p63 C-terminal isoforms production by PTBP1 is involved in the control of the epithelial-mesenchymal transition.

O12- Isabelle Behm-Ansmant

Changes of phosphorylation drive alternative splicing modulation by mild heat shock in human cells.

16:00-16:30 *Coffee Break*

16:30- 17:45 **SESSION 3- RNA CHEMISTRY AND EPITRANSCRIPTOMIC**

Chairs: M. Helm, Y. Motorin

O13- Patrice Vitali

Box C/D RNA-guided 2'-O-methylation protects human tRNA^{Met(e)} from stress-induced cleavage.

O14- Virginie Marchand

Single nucleotide resolution mapping of m⁷G, m³C and D RNA modifications by deep sequencing.

O15- Jérémy Scutenaire

The YTH domain protein ECT2 is an m⁶A reader required for normal trichomes branching in *Arabidopsis thaliana* and is regulated by phosphorylation.

O16- Pierre Barraud

Time-resolved NMR monitoring of RNA maturation in cellular extracts revealed complex circuits of modifications in tRNAs.

O17- Michael Ryckelynck

Ultrahigh-throughput characterization and evolution of RNA using droplet-based microfluidics.

17:45-18:45 **O18- LECTURE: MARY A. O'CONNELL**

Evolutionarily conserved biological roles of ADAR RNA editing enzymes.

18:45-22:00 *Dinner and POSTER SESSION 1 (even numbers)*

WEDNESDAY, NOVEMBER 7

9:00-10:45 **SESSION 4- RNA STABILITY AND MATURATION**

Chairs: D. Weil, J. Saez-Vasquez

O19- Clémentine Delan-Forino

Substrate specificity of the TRAMP and exosome complexes *in vivo*.

O20- Sébastien Chamois

The No-Go Decay endoribonuclease acts in the ribosomal mRNA exit tunnel.

O21- Vincent Mocquet

Retroviral Tax plugs and freezes UPF1 helicase leading to Nonsense Mediated mRNA Decay (NMD) inhibition during HTLV-1 infection.

O22- Thalia Salinas-Giegé

Peculiar mitochondrial mRNAs in the green alga *Chlamydomonas reinhardtii*.

O23- Dominique Weil

GC content shapes mRNA decay and storage in human cells.

O24- Aude Trinquier

Coupling of transfer RNA and 16S ribosomal RNA processing in *B. subtilis* via stringent control.

O25- Béatrice Clouet-d'Orval

The archaeal β -CASP aRNase J ribonuclease cross-talks with the ribosome, the archaeal exosome and the archaeal specific helicase ASH of the Ski2 family, in Thermococcales.

10:45-11:15 *Coffee Break*

11:15-12:15 O26- LECTURE: ANNE EPHRUSSI

Assembly and transport of *oskar* mRNPs in the *Drosophila* germline.

12:15-14:45 *Lunch and POSTER SESSION 2 (odd numbers)/ SESSION ON EDUCATION*

13:15-14:30 PARALLEL SESSION ON EDUCATION

O27- Jean-Luc Souciet

Le groupe de Travail Enseignement (GTE) de la SFBBM.

O28- Magali Blaud

ACIP et Light Board : tout un programme pour innover ses enseignements.

O29- Bertrand Séraphin

Présentation de l'Ecole Universitaire de Recherche IMCBio.

14:45-16:30 **SESSION 5- RIBOSOME BIOGENESIS**

Chair: D. Lafontaine

O30- Amlan Roychowdhury

The DEAH RNA helicase Dhr1 contains a remarkable carboxyl terminal domain essential for dynamics of small ribosomal subunit biogenesis.

O31- Yves Henry

The Npa1p complex chaperones the assembly of the earliest eukaryotic large ribosomal subunit precursor.

O32- Jorge Perez-Fernandez

Stoichiometric production of ribosomal subunits is sensed at the interface between early ribosomal precursors.

O33- Kundhavai Natchiar

High-resolution cryo-EM structure of the human 80S ribosome visualizes chemical modifications of its ribosomal RNA.

O34- Pascal Auffinger

Spb1p: a methyltransferase with a pre-60S remodeling activity modulates the H35a U-to-Z-turn tetraloop transition in yeast.

O35- Valérie Heurgué-Hamard

Dual function of yeast Mtq2-Trm112 protein complex in translation release factor methylation and ribosome biogenesis.

O36- Pierre-Emmanuel Gleizes

The path of pre-ribosomes through the nuclear pore complex revealed by electron tomography.

16:30-17:00 *Coffee Break*

17:00- 18:45 **SESSION 6- TRANSLATION**

Chair: O. Namy

O37- Anne Cammas

HnRNP HF maintains RNA G-quadruplexes unfolded to active stress response mRNA translation in glioblastoma.

O38- Kyle Tanner

Single-molecule analyses of the molecular mechanisms of the DEAD-box-helicase Ded1 involved in translation initiation with the use of magnetic tweezers.

O39- Karen Perronet

A comparative kinetic study of non-canonical eukaryotic translation initiation with IRES structures by single molecule fluorescence microscopy.

O40- Frédéric Catez

Evidence for rRNA 2'-O-methylation plasticity: control of intrinsic translational capabilities of human ribosomes.

O41- Anne-Marie Duchêne

RNA trafficking in plant cells: targeting of cytosolic mRNAs to the mitochondrial surface.

O42- Emmanuelle Schmitt

tRNA accommodation during archaeal translation initiation.

O43- Franck Martin

A microfluidic-based assay recapitulates eukaryotic ribosomal translation and identifies toxic tRNAs.

20:00 *Gala Dinner-Grands Salons de l'Hôtel de Ville de Nancy, Place Stanislas*

THURSDAY, NOVEMBER 7

9:00-10:00 **SESSION 7- SFBBM award talks**

Chair: A. Krol

O44- Amandine Bonnet- Article de l'année 2017 SFBBM

Introns protect eukaryotic genomes from transcription-associated genetic instability.

O45- Clément Charenton- Prix Dina Surdin 2018

Functional and structural studies of mRNA decapping in yeast.

O46- Hervé Seitz- Prix Maurice Nicloux 2018

Current microRNA target identification methods are heavily contaminated with false positives.

10:00-11:00 **O47- LECTURE: WITOLD FILIPOWICZ**

From tRNA and rRNA biogenesis to biology of microRNAs.

11:00-11:30 *Coffee Break*

11:30- 13:15 SESSION 8- NON CODING RNAs

Chairs: P. Romby, J. Cavallé

O48- Guillaume Hummel

Differential epigenetic regulation of clustered tRNAs nuclear genes expression in *Arabidopsis thaliana*.

O49- Charbel Alfeghaly

Molecular dissection of lncRNA activities: ANRIL as Model System.

O50- Cécilia Studniarek

Controlling RNAPII UV-induced transcriptional reprogramming with the 7SK/P-TEFb snRNP

O51- Odil Porrua Fuerte

Molecular mimicry in the complex life of the non-coding RNA.

O52- Jade Hebras

Biological functions of the paternally-expressed SNORD genes at the imprinted Prader-Willi syndrome (PWS) domain.

O53- Maxence Lejars

Adding and connecting layers of regulation on the master regulator of motility *flhDC*.

O54- Maxime Wery

Bases of antisense lncRNA-associated regulation of gene expression in fission yeast.

13:15- 13:30 POSTER AND ORAL AWARDS-CLOSING REMARKS

13:30 *Lunch (lunch bag)*

13:30-14h30 *Round table on Education*

15:00-16h30 *Guided tour of Nancy-Departure Place Stanislas*