International NetRNA Meeting
« RNA in gene control across kingdoms »
Bischenberg Center, May 2-5th 2022

Program

Monday May 2nd

11:00-13:00 Registration and lunch time

***13:30-13:40* Opening Remarks: Pascale ROMBY**

RNA & EVOLUTION Chair: 13:40-14:00 Witold FILIPOWICZ

14:00-14:45 Opening keynote lecture: Thomas CECH *The RNA world research*

14:45-15:15 **IUBMB Jubilee Lecture Sarah WOODSON** *Making a turnaround in a competitive landscape for RNA-protein interactions*

15:15-15:45 **Michael RYCKELYNCK** *Ultrahigh-throughput molecular and cellular biology using droplet-based microfluidics*

15:45-16:15 **Mathias HENTZE** *Exploring the underground of the RBP world: Riboregulation*

16:15-16:45 Coffee break

RNA & TRANSCRIPTION Chair: Carine MEIGNIN

16:45-17:15 **Albert WEIXLBAUMER** *Structural insights into RNA-mediated transcription regulation*

17:15-17:45 **Quentin VICENS** *The lost city of Z"(-RNA)*

17:45-18:15 **Todd BLEVINS** *Evolution of the Pol IV targeting machinery that silences transposons in plants*

RNA MACHINERIES IN REGULATION Chair: Laurence DROUARD

18:15-18:45 **Günter MEISTER** *Regulation of miRNA biogenesis*

18:45-19:15 **Benoît MASQUIDA** *Anticodon-like loop-mediated dimerization in the crystal structures of HdV-like CPEB3 ribozymes*

19:15-19:45 **Tom TUSCHL** *Regulatory RNAs and their machineries in response to inflammatory diseases and cancer*

20:00 Get together-Aperitif
20:30 Dinner

21:30 – 23:00 Posters

Tuesday May 3rd

9:00 RNA & CHEMISTRY Chair: Sarah WOODSON

9:00-9:30 **David LILLEY** *The extent of RNA catalysis – are there any limits?*

9:30-10:00 **The NovAliX Keynote Lecture Tsutomu SUZUKI** *Expanding world of tRNA modifications and human diseases*

10:00-10:30 Coffee break

RNA & IMMUNITY Chair: Jean-Luc IMLER

10:30-11:00 **The Jules Hoffmann Keynote Lecture Brenda BASS** *Divergent Roles of Dicer's Helicase Domain in Antiviral Defense*

11:00-11:30 **Joao MARQUES** *Invading viral DNA triggers dsRNA synthesis by RNA polymerase II to activate antiviral RNA interference*

11:30-12:00 **Sébastien PFEFFER** *Regulation of RNA-based antiviral innate immunity*

12:15 Lunch

14:00 RNA & MOLECULAR RECOGNITION Chair: Quentin VICENS

14:00-14:30 **The Urania Therapeutics Keynote Lecture Thomas HERMANN** *Targeting RNA in viral translation*

14:30-15:00 **Jiro KONDO** *RNA structural biomimetics for designing functional molecules*

15:00-15:30 **Peter UNRAU** *A Topologically Clamping RNA Polymerase Ribozyme with DNA dependent RNA polymerase like attributes*

15:30-16:00 **Luc JAEGER** *Emergence of the ribosome by modular evolution*

16:00-16:30 Coffee break

RNA & TRANSLATION Chair: Zoya IGNATOVA

16:30-17:00 **Moran SHALEV-BENAMI** *When the Heat Is On - Turn Up the Ac(4C) - A Near Atomic Resolution Glance into RNA Acetylation*

17:00-17:30 **Daniel WILSON** *David vs Goliath: Ribosome-targeting antibiotics and bacterial resistance mechanisms*

17:30-18:00 **Erik BOETTGER** *Error-prone protein synthesis: aging, life span, and age-related diseases*

18:00-18:30 **Franck MARTIN** *Viral and cellular translation during SARS-CoV-2 infection*

18:30-19:00 **Timor BAASOV** *Ribosomal RNA as a Target for Catalytic Antibiotics and for the Treatment of Genetic Diseases*

20:00 Dinner / 21:30 – 23:00 Poster session

Wednesday May 4th

9:00 RNA & BACTERIA Chair: Pascale ROMBY

9:00-9:30 **The SFBBM Keynote Lecture Pascale COSSART** *Amazing bacterial RNA-mediated regulations in m.f.o.!*
9:30-10:00 **Wolfgang HESS** *RNA-binding proteins and sRNA-based regulation in cyanobacteria*

10:00-10:30 Coffee break

10:30-11:00 **Ben LUISI** *Dynamic ribonucleoprotein complexes in the control of bacterial gene expression*

11:00-11:30 **Dieter SOLL** *tRNAs decoding with errors*

11:30-12:00 **Felix RITORT** *RNA force spectroscopy*

12:30 Lunch

14:00 RNA & DECODING Chair: Matthias ERLACHER

14:00-14:30 **The EMBO Keynote Lecture Marina RODNINA** *Decoding and recoding of genetic information by the ribosome*

14:30-15:00 **The UFA Keynote Lecture Zoya IGNATOVA** *Ribosomal stalling and alterations of translation dynamics in disease*

15:00-15:30 **Mark HELM** *RNA modifications: how to find and how to use*

15:30-16:00 **Juliette GODIN** *tRNA deamination: a key process to regulate brain development*

16:00-16:30 Coffee break

16:30-17:00 **Sebastian LEIDEL** *Chemical modifications of tRNA wobble uridines mediate virulence of yeast in vivo*

17:00-17:30 **Jörg VOGEL** *The promises and challenges of programmable RNA antibiotics*

17:30 CLOSING SESSION Chair: Catherine FLORENTZ

17:45-18:15 **Eric WESTHOF** *Interactions between Gs and Us*

18:15-19:00 Closing keynote lecture: John MATTICK *RNA, the epicentre of genetic information*

19:30: Aperitif followed by Dinner

Thursday May 5th

Breakfast (7h-8h45) and End of meeting

ABSTRACTS OF POSTERS