

EpiRNA workshop – November 10, 2023

IBMP, Strasbourg

Structure, dynamics and regulation of ribonucleoparticles and epitranscriptomics:
impact on environmental adaptation, human pathologies, and host-pathogen interactions

9:00 Welcome – coffee

9:30 Pascale Romby, Coordinator of EpiRNA
Grand Est region representative

Session I: Microscopy approaches

9:45 Bruno Klaholz, IGBMC, Strasbourg: “Structure of the human 80S ribosome at 1.9 Å resolution – the molecular role of chemical modifications and ions in the RNA architecture »

10:05 Yves Mely, LBP, Strasbourg: “Characterization and Applications of an Ultimate Fluorescent Nucleoside Analog for Nucleic Acid Labeling »

10:25 Julien Proust, L2n, Troyes: “DNA as a probe for biotoxic molecular detection”

10:45 Mathieu Ehrardt, IBMP, Strasbourg: “Overview of microscopy and imaging facility at IBMP”

11h05 Coffee break

11h30 Short talks (10 min)

- Léo Fréchin (IGBMC, Illkirch): Pushing resolution by advanced cryo-EM for visualization of chemical modifications
- Zhen Liao (GMGM, Strasbourg) How does *E. coli* evolve with impaired regulatory networks?

12h00-13h15 Lunch buffet

Session II: RNA modification analysis approaches

13:15 Iouri Motorin/Virginie Marchand, IMoPA, Nancy: « Detection of epitranscriptomic RNA modifications : challenges and perspectives »

13:35 Philippe Wolff, IBMC, Strasbourg: « Characterization of RNA modifications by mass spectrometry »

13:50 Bertrand Seraphin, IGBMC, Illkirch « The yeast m⁶A-reader promotes timely meiotic recombination by controlling methylated transcripts

14:10 Natacha Dreumont, NGERE, Nancy: « Nutritional status and epitranscriptomics : a vitamin B story »

14:30 Carine Meignin, IBMC Strasbourg: « Viral RNA modifications during infection »

14:50 Short talks 10 min

- José Jaramillo (IBMC, Strasbourg): Dynamics of RNA modifications in *Staphylococcus aureus* during oxidative stress response
- Jackson Peter (IBMP, Strasbourg): Investigation of mRNA uridylation using nanopore sequencing.
- Hugo Rolando Vaca (IGBMC, Illkirch): tRNA recognition by the mouse ADAT2/ADAT3 complex
- Vasileios Scaltsoyiannes (IBMP, Strasbourg): Specificities of plant mitochondria translation apparatus

- 15:45 Awards selection and break
- 16:00 Debriefing
Short talk presentation awards (RNA Society)
- 16h30 End of the workshop