

RNA Club 2019
September 6, 2019, IOCB CAS, Prague, Czech Republic
Program

8:00-9:00 **Registration**

9:00-9:10 **Opening remarks**

Session 1

Born this way: regulation of gene expression

Chair: Mary O'Connell (CEITEC)

Keynote Lecture 1

9:10-10:10 **Claudia Kutter** (Karolinska Institute, Sweden)

Yin Yang of coding and noncoding transcriptomes

10:10-10:25 **Shubhangini Kataruka** (Svoboda Lab)

miRNA pathway activity in mammalian female germline

10:25-10:40 **Petra Sudzínová** (Krásný lab)

Regulation of rRNA transcription by DNA topology in Bacillus subtilis

10:40-10:55 **Pavel Abaffy** (Šindelka Lab)

Changes in gene expression during dissociation of the tissue into single-cell suspension and preservation of information of original cell state and cell type composition

10:55 -11:25 **Coffee Break**

Session 2

Ch-Ch-Changes: RNA Editing, splicing, and genome modification

Chair: Petr Svoboda (IMG, CAS)

11:25-11:40 **Jiří Sedmík** (O'Connell Lab)

The effects of biallelic variants in ADAR2 on enzymatic activity and their neurological implications

11:40-11:55 **Ales Obrdlik** (Ephrussi Lab)

The Transcriptome-wide Landscape and Modalities of EJC Binding in Adult Drosophila

11:55-12:10 **Michaela Krausová** (Stanek Lab)

Aberrant variants of splicing factor Prpf8 in degenerative transformation of the cerebellum

12:10-12:25 **Martina Hálová** (Folk Lab)

Genetic interactions of PRP45 alleles highlight the dependence of splicing on H2A.Z

12:25-12:35 **Lucie Ulrychová** (BioTech a.s.)

CRISPR/Cas9 & Targeted Genome Editing: New Era in Molecular Biology

12:35-12:45 **Agnieszka Ciesielska** (Bio Rad)

It starts with a droplet and ends in discovery

12:45 -15:00

Lunch and poster session

Session 3

Tattoo'd Lady: DNA and RNA modification

Chair: Michal Hocek (IOCB Prague)

Keynote Lecture 2

15:00-16:00 **Mark Helm** (University of Mainz)

Predict and validate: detection of RNA modifications

16:00-16:15 **Roberto Benoni** (Cahová Lab)

*Identification of new class of 5'-RNA caps in *E. coli* using LC-MS*

16:15-16:30 **Pedro Güixens-Gallardo** (Hocek Lab)

Linker-free Bodipy as lifetime fluorescent nucleotide probe: Exploring applications for viral and microRNA detection

16:30-17:00 Coffee Break

Session 4

I'll be there for U: RNA-protein friendships

Chair: Štěpánka Vaňáčová (CEITEC)

17:00-17:30 **Zdeněk Paris** (Institute of Parasitology and University of South Bohemia)

*Intricate subcellular trafficking of tRNAs in *Trypanosoma brucei**

17:30-17:45 **Tomas Kouba** (Cusack lab)

Molecular movie of transcribing influenza polymerase

17:45 -18:00 **Ondrej Gahura** (Zikova Lab)

*Mitoribosome of *Trypanosoma brucei*: structural insight into the action and biogenesis of a divergent protein synthesis machine*

18:00-18:15 **Kateřina Linhartová** (Štefl Lab)

Recognition of RNA Polymerase II C-terminal domain by RPRD2

18:15-18:30 **Pavla Gajduskova** (Blazek Lab)

CDK11 is required for transcription of replication-dependent histone genes

18:30-18:40

Closing remarks

18:40-22:00

Dinner and party