



SFB RNA DECO

ANNUAL RNA RETREAT

**17. – 19. SEPTEMBER 2021
INNSBRUCK**

FWF Der Wissenschaftsfonds.



Friday, 17th September 2021

13:00-13:30 Arrival in Mutters - Check-In

13:30-14:15 Lunch

14:15-15:40 Session 1 Chair: Michael Jantsch

14:15-14:20 Welcome

14:20-14:50 **Isabel Delazer** (Group Lusser, MUI)
5-methylcytosine in mRNA: its deposition and function

14:50-15:20 **Aleksej Drino** (Group Schäfer, MUW)
Understanding molecular processing of tRNA-derived small RNAs

15:20-15:40 **Laura Borac** (Group Schäfer, MUW)
Moving on from a Stressful Break-Up: Localizing Individual tRNA
Fragments in Cells by FISH

15:40-16:10 Coffee Break

16:10-17:35 Session 2 Chair: Alexandra Lusser

16:10-16:30 **Michaela Egger** (Group Micura, Uibk)
On structure, folding and molecular mechanism of two recently
discovered riboswitches

16:30-16:50 **Stefan Mair** (Group Micura, Uibk)
Biophysical studies of xanthosine-containing RNA

16:50-17:35 **Mark Helm** (JGU)
General Principles for the Detection of Modified Nucleotides in RNA by
Specific Reagents

18:30-19:30 Dinner

from 19:30 Project Discussions - Open End

Saturday, 18th September 2021

08:00-09:00 **Breakfast**

09:00-10:40 **Session 3** **Chair: Matthias Schäfer**

09:00-09:30 **Maria Kompatscher** (Group Erlacher, MUI)
Synthetic tRNAs to study the role of uridine wobble modifications on translation

09:30-09:50 **Danijela Radovanović** (Group Rossmanith, MUW)
Selectively removing the methyltransferase activity of human mtRNase P

09:50-10:20 **Tom Rappol** (Group Vilardo, MUW)
Detecting tRNA modification dynamics during zebrafish embryo development by Next Generation Sequencing

10:20-10:40 **Andrea Pauli** (IMP)
A molecular network of conserved factors keeps ribosomes dormant in the egg

10:40-11:10 **Coffee Break**

11:10-12:45 **Session 4** **Chair: Carrie Bernecky**

11:10-11:40 **Moritz Leitner** (Group Martinez, MPL)
The double life of the RNA 2',3'-cyclic phosphatase ANGEL2

11:40-12:00 **Nina Khaldieh** (Group Ameres, MPL)
Dissecting the molecular principles of exogenous siRNA homeostasis

12:00-12:45 **Štěpánka Vaňáčová** (MU)
The comprehensive interactomes of human adenosine RNA methyltransferases and demethylases reveal distinct functional and regulatory features

13:00-14:00 **Lunch**

from 14:00 **Social Activity**

18:30-19:30 **Dinner**

from 19:30 **Poster Sessions - Open End**

Sunday, 19th September 2021

08:00-09:00 **Breakfast**

09:00-10:35 **Session 5** **Chair: Andrea Pauli**

- 09:00-09:45 **Christoph Kreutz** (Uibk)
Probing RNA modifications by NMR – the effect of modified nucleotides on a molecular level
- 09:45-10:15 **Ronny Lorenz** (Group Hofacker, UniVie)
Free Energy Parameters for Non-Standard RNA Nucleotides
- 10:15-10:35 **Yuliia Varenyk** (Group Hofacker, UniVie)
Modified nucleotides in RNA sequences of tRNAdb database

10:35-11:05 **Coffee Break**

11:05-12:40 **Session 6** **Chair: Walter Rossmann**

- 11:05-11:35 **Hamid Reza Mansouri Khosravi** (Group Jantsch, MUW)
Structural consequences and cross-talk of A-to-I and m6A modifications
- 11:35-11:55 **Cornelia Vesely** (MUW)
The hunt for the non-activating pattern in endogenous RNA for innate immune sensors
- 11:55-12:15 **Andrea Tanzer** (MUW)
RNAmoD - RNA Structures and the Epitranscriptome
- 12:15-12:35 **David Michalik** (Group Bernecky, IST)
Role of MDA5 phosphorylation in RNA substrate specificity switch
- 12:35-12:40 Concluding Remarks

13:00-14:00 **Lunch**