

# RNA metabolism in Health and Disease

Spring meeting RSCDB 2025

June 6<sup>th</sup> 2025

Chateau de Colonster, ULIEGE  
Allée des Érables  
4000 Liège

## Program

8.30-9.00: arrival and registration

9.00-9.45: Keynote: **Reuven Agami**, NKI, Oncode Institute, NL

*“Genetic drivers of amino acid substitutants in cancer”*

9.45-10.00: short talk selected from the abstract

10.00-10.45: Keynote: **Kostas Tzelepis**, Wellcome Trust, Cambridge Stem Cell Inst., UK

*“Therapeutic targeting of epitranscriptome-associated proteins”*

10.45-11.15: ----- coffee break & poster presentation -----

11.15-12.00: Keynote: **Sandra Blanco**, Cancer Research Centre - U. Salamanca, ES

*“Exploring the Role of the Epitranscriptome in Cancer”*

12.00-12.15: short talk selected from the abstract

12.15-12.30: short talk selected from the abstract

12.30-14.00: -----Lunch and poster presentation-----

14.00-14.45: **Raphael Morscher**, University Children's Hospital Zurich, UZH, CH

*“From pediatric cancer metabolism to metabolic regulation of translation”*

14.45-15.00: short talk selected from the abstract

15.00-15.30: ----- coffee break & poster presentation -----

15.30-16.15: Keynote: **François Fuks**, University of Brussels, BE

*“RNA modifications in Health and Disease »*

16.15-16.30: short talk selected from the abstract

16.30-16.45: short talk selected from the abstract

16.45-17.00: Conclusions and poster prize

**17.00: end of the day**

## Speakers

### **Reuven Agami**, NKI, Oncode Institute, NL

Reuven Agami heads the Division of Oncogenomics at the Netherlands Cancer Institute. He is a professor at the Molecular Genetics Department at the Erasmus MC Rotterdam, an Oncode Institute member, and a member of the Royal Netherlands Academy of Arts and Sciences. Agami has made unique contributions to the RNA and cancer genetics fields. From inventing pSUPER, the first genetic tool to knock down genes using RNAi, through studies on microRNAs, RNA binding proteins, alternative mRNA isoforms, transcriptional enhancers, and mRNA mis-translation. During his career, Agami won several prizes and awards, including the NKI-AvL prize, the Dr. Joseph Steiner Prize, the ESCI Prize for Basic/Translational Research, as well as the European Young Investigator (EURYI), ERC-Starting, and multiple ERC-Advanced Grant Awards.

### **Kostas Tzelepis**, Wellcome Trust, Cambridge Stem Cell Inst., UK

Konstantinos Tzelepis is a Wellcome Trust Principal Investigator at the Cambridge Stem Cell Institute and the University of Cambridge (UK). Prior to this, he was a Wellcome Trust Sir Henry Wellcome Fellow at Harvard University (USA) and the University of Cambridge (UK). He obtained his Ph.D. in Molecular Genetics from the Wellcome Sanger Institute and the University of Cambridge, in 2017, where he developed one of the first genome-wide CRISPR screening platforms for the identification and therapeutic translation of novel cancer vulnerabilities. His lab is focusing on the mechanistic understanding and therapeutic targeting of the epitranscriptome. Recently, his group co-developed and characterised first-in-class pre-clinical and clinical RNA methyltransferase inhibitors.

### **Sandra Blanco**, Cancer Research Centre - U. Salamanca, ES

Dr. Sandra Blanco is an emerging group leader of the Epitranscriptomics and Cancer Lab at the Cancer Research Centre (National Research Council and University of Salamanca), and Associate Researcher at the Institute for Biomedical Research of Salamanca (IBSAL), Spain. She is also the scientific lead of the Genomic and Bioinformatic Units at the Cancer Research Centre.

Her research has been pivotal in demonstrating how tRNA methylation regulates essential processes in stem cell and cancer cell maintenance, migration, and stress survival in both humans and mouse models. She has also established that mutations or aberrant expression of tRNA methyltransferases contribute to tumorigenesis, and that their inhibition represents a promising strategy to selectively eliminate cancer cells, enhance sensitivity to chemotherapy, and modulate tumor-immune system interactions.

**Raphael Morscher**, University Children's Hospital Zurich, UZH, CH

Raphael J. Morscher is a pediatric oncologist and principal investigator at the University of Zurich. His main research interests are in understanding personalized metabolic programs in pediatric cancers and fundamental principles in metabolic regulation of translation. Raphael grew up in Austria and received his MD and PhD from the Paracelsus Medical University in Salzburg. During his graduate research he focused on inborn errors of metabolism and reprogramming of metabolism neuroblastoma tumors. In 2016 he moved to Princeton for a postdoctoral fellowship with Joshua Rabinowitz to develop *in vivo* stable isotope tracing approaches for the study of metabolic operation in health and disease. It was also at that time his work on folate-dependent tRNA modifications sparked interest to better understand how metabolism regulates protein translation at the tRNA /mRNA intersection. In 2022 Raphael established his own research group passionate about spanning from fundamental principles in metabolism to applications in the human system. When not studying metabolism, Raphael is often found on his bike or outside enjoying nature with his family.

**François Fuks**, University of Brussels, BE

François is the Director of the Laboratory of Cancer Epigenetics and Professor at the Faculty of Medicine, ULB. His lab is interested to investigate epigenetic and epitranscriptomic mechanisms in health and disease, with a particular focus in cancer.