

# Non-coding RNA in health and disease



UNIVERSITÉ  
DE NAMUR

March  
18  
2022

KEYNOTE SPEAKERS

**Dr. Julieta APREA**

Center for Regenerative Therapies, TU Dresden

**Prof. Pierre CLOSE**

Laboratory of Cancer Signaling, GIGA, ULiège

**Prof. Denis LAFONTAINE**

RNA Molecular Biology, ULB

**Prof. Eleonora LEUCCI**

Laboratory for RNA Cancer Biology, KU Leuven

**Prof. Pieter MESTDAGH**

OncoRNALab, UGhent

**Dr. Antonin MORILLON**

Institut Curie, Paris

**Dr. Sébastien PFEFFER**

Architecture and Reactivity of RNA, Université de Strasbourg

**IN-PERSON MEETING!**

A joint meeting of the Belgian Society for Cell and Developmental Biology (BSCDB) and the Namur Research Institute for Life Sciences (NARILIS)



NAMUR RESEARCH INSTITUTE FOR LIFE SCIENCES

Université de Namur, So1 auditorium

Registration & Abstract submission: [www.narilis.be/noncodingrna](http://www.narilis.be/noncodingrna)



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## PROGRAM



- 08:45 *Registration & Welcome coffee*
- 09:30 *Introduction to the Conference: Prof. Patsy Renard, UNamur*
- 09:35 **Non-coding RNA, the dark side of the genome.** INAUGURAL LECTURE  
**Dr. Antonin MORILLON**, ncRNA, Epigenetic and Genome Fluidity, Institut Curie, Sorbonne Université, Paris, France
- 10:05 **Translation as an unexpected player in the metabolism of long non-coding RNAs**  
**Dr. Maxime WERY**, ncRNA, Epigenetic and Genome Fluidity, Institut Curie, Sorbonne Université, Paris, France
- 10:20 **LncRNAs in melanoma: lost in Translation?**  
**Prof. Eleonora LEUCCI**, Laboratory for RNA Cancer Biology, Department of Oncology, KU Leuven, Belgium
- 10:50 **SCOPE technologies: Visualizing non-coding RNA** SPONSOR TALK  
**Mathias VAN BULCK**, Sales specialist Genomics at Advanced Cell Diagnostics, Bio-Techne
- 11:00 *Coffee break*
- 11:30 **Ribosomopathies: human diseases of ribosome biogenesis dysfunction**  
**Prof. Denis LAFONTAINE**, RNA Molecular Biology, Université Libre de Bruxelles, Belgium
- 12:00 **Differential 2'-O-methylation of U14 in 5.8S rRNA affects translation regulation and promotes a disease cellular phenotype**  
**Alzbeta CHABRONOVA**, Laboratory for Experimental Orthopedics, Department of Orthopedic Surgery, MUMC+, Maastricht, The Netherlands
- 12:15 **Mitochondrial dynamic regulates miRNA expression in breast cancer**  
**Dr. Stéphanie HERKENNE**, Laboratory of Molecular Angiogenesis, GIGA-Institute, University of Liège, Belgium
- 12:30 **New Bio-Rad long non-coding RNA qPCR workflow** SPONSOR TALK  
**Dr. Caroline WEYDERT**, Sales Specialist Genomics at Bio-Rad
- 12:40 **Promega tools for Cell Health studies : Viability and Cytotoxicity in Real Time** SPONSOR TALK  
**Dr. Vincent VAN HEE**, Client support Specialist at Promega Corporation

12:50 *Lunch & poster session*

14:00 **A novel lncRNA, B13, regulates progenitor amplification and cerebral cortex expansion**

**Dr. Julieta APREA**, Center for Regenerative Therapies, School of Medicine, Technische Universität Dresden, Germany

14:30 **X chromosome dosage compensation: a lncRNA-mediated regulation**

**Irène TALON**, Department of Development and Regeneration, Institute for Single Cell Omics (LISCO), Leuven Stem Cell Institute (SCIL), KULeuven, Belgium

14:45 **Wobble tRNA modification: a new vulnerability in cancer**

**Dr. Pierre CLOSE**, Laboratory of Cancer Signaling, GIGA Stem Cells, University of Liège, Belgium

15:15 **TRMT10A deficiency-induced 5'-tRNAGln fragments modulate gene expression in pancreatic  $\beta$ -cells**

**Maria Nicol ARROYO**, ULB Center for Diabetes Research, Université Libre de Bruxelles, Belgium

15:30 *Coffee break*

16:00 **Roles and regulation of non-coding RNAs in viral infections**

**Dr. Sébastien PFEFFER**, Architecture and Reactivity of RNA, Institut de Biologie Moléculaire et Cellulaire du CNRS, Université de Strasbourg, France

16:30 **Are non-coding Simbuviruses RNA structures involved in transcription termination and translation?**

**Laura BONIL**, Veterinary Integrated Research Unit, Faculty of Sciences, Namur Research Institute for Life Sciences (NARILIS), University of Namur, Belgium

16:45 **Dissecting lncRNA functions in cancer**

**Prof. Pieter MESTDAGH**, OncoRNALab, Cancer Research Institute Ghent, Center for Medical Genetics, Ghent university (BE)

17:15 *Concluding remarks & Awards: Prof. Charles Nicaise, UNamur*

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## POSTER SESSION

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**Analysis of U34-tRNA modifications and blood vascular remodelling during pancreatitis**  
**Elias AAJIA**, de Duve Institute, UCLouvain, Belgium

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**Differential expression of microRNAs, miR-20a, miR-18b and miR-326 in patients with type 1 diabetes**  
**Zahra AZHIR**, Department of Cell and Molecular Biology and Microbiology, University of Isfahan, Isfahan, Iran

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**tRNA 2'-O-methylation and brain development**  
**Mira BRAZANE**, Transgenerational Epigenetics & Small RNA Biology, Sorbonne Université, Laboratoire Biologie du Développement, Institut de Biologie Paris-Seine, France

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**An activator microRNA : characterization in Marek's Disease Virus**  
**Alexis CHASSEUR**, URVI, NARILIS, UNamur, Belgium

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**Marek's disease virus virulence genes encode circular RNAs**  
**Dr. Damien COUPEAU**, URVI, NARILIS, UNamur, Belgium

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**Developing an *in vitro* asthma model based on bronchial epithelial cell culture to study lncRNAs in asthma**  
**Fien GYSENS**, OncoRNALab, Center for Medical Genetics Ghent, Department of Biomolecular Medicine, UGhent, Belgium

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**Specific microRNA signatures are associated with enteric glia status**  
**Amy Marie HOLLAND**, BIOMED, UHasselt, Belgium; Department of Pathology, GROW-School for Oncology and Developmental Biology, Maastricht UMC+, The Netherlands

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**Small noncoding RNA in cartilage from young and old sheep**  
**Dr. Fanny HONTOIR**, URVI, NARILIS, UNamur, Belgium

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**Deciphering the role of long noncoding RNAs in tumor-infiltrating CD8 T cells**  
**Svetlana IVANOFF**, de Duve Institute, UCLouvain, Belgium

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**Identification of a translational control mechanism involved in pancreatic tumorigenesis**  
**Maxime LIBERT**, de Duve Institute, UCLouvain, Belgium

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**Characterization of the role of KRAS and its splice isoforms, KRAS<sub>4A</sub> and KRAS<sub>4B</sub>, in embryonic development**  
**Marie-Albane MINATI**, de Duve Institute, UCLouvain, Belgium

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**A rationalized definition of tumor suppressor microRNAs excludes miR-34a**  
**Dr. Sophie MOCKLY**, Institut de Génétique Humaine, Université de Montpellier, France

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**Specification of precursor germ cells from somatic cells during early embryogenesis in *C. elegans***  
**Pauline PONSARD**, URPhyM-GEMO, NARILIS, UNamur, Belgium

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**Identification of mutational processes  
which drive the evolution of human viruses**

**Florian POULAIN**, URVI, NARILIS, UNamur,  
Belgium

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**Interactome of HIV proteins and their host  
RNA interaction partners**

**Tinus SCHYNKEL**, HIV Cure Research  
Center, UGhent, Belgium

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**Transcriptional Control of a  
developmental transition in *Caenorhabditis  
elegans***

**François-Xavier STUBBE**, URPhyM-GEMO,  
NARILIS, UNamur, Belgium

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**A Long non-coding RNA controls  
rapamycin sensitivity in fission yeast**

**Pauline TRICQUET**, URPhyM-GEMO,  
NARILIS, UNamur, Belgium

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**Effects of a 6-week sprint interval training  
protocol at different altitudes on circulating  
extracellular vesicles**

**Geoffrey WARNIER**, Institute of  
Neuroscience, UCLouvain, Belgium

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**Chip microfluidic bubble cell sorter for CTC  
isolation and characterization**

**Guillem WETHERELL MATEU**, IMEC & VIB,  
Belgium

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**Conservation and evolutionary origin of  
miRNAs: insight from the fission yeast**

**Dr. Carlo YAGUE-SANZ**, URPhyM-GEMO,  
NARILIS, UNamur, Belgium