RiboClub 2022
September 18-22, Manoir des Sables, Orford, Québec

The next revolution in RNA-based medicine and technologies

Sunday, September 18th

15:00 – 18:00  Registration
18:00 – 19:30  Welcome reception
19:30 – 21:30  Opening dinner and welcome note by a representative of the Canadian Consortium of RNA Research (C2R2) outreach committee
Monday, September 19th

08:00 – 09:00  Registration

09:00 – 09:10  Opening Notes and Announcements
   Sherif Abou Elela, Université de Sherbrooke, Sherbrooke

09:10 – 09:15  Presentation of Keynote speaker
   François Major, Université de Montréal, Montréal

09:15 – 10:15  Keynote presentation
   Modeling and design of RNA-only structures
   Rhiju Das, Stanford University, Palo Alto

10:15 – 10:45  Coffee break

Session 1: Ribosome biogenesis and translation
Chair: Melissa Léger-Abraham, Harvard Medical School, Boston

10:45 – 10:50  Introduction by
   Melissa Léger-Abraham, Harvard Medical School, Boston

10:50 – 11:05  Single cell quantification of ribosome occupancy in early mouse development
   Can Cenik, University of Texas, Austin

11:05 – 11:20  Discovery of factorless internal ribosome entry sites using metagenomic data mining
   Eric Jan, UBC, Vancouver

11:20 – 11:35  Ribosome changes by FXR1 reprogram translation for tumor survival in quiescent leukemic cells
   Shobha Vasudevan, MGH-Harvard Medical School, Boston

11:35 – 11:50  Regulation of ribosome biogenesis, translation, and cellular adaptation by rRNA 2’-O-methylations
   Homa Ghalei, Emory University, Atlanta

11:50 – 12:05  Unfolding, modification and processing of ribosomal RNA by H/ACA small nucleolar Ribonucleoproteins
   Ute Kothe, University of Manitoba, Winnipeg
12:05 – 12:25  Panel discussion moderated by Melissa Léger-Abramham, Harvard Medical School, Boston


12:35 – 13:35  Mentoring Lunch organized by Eric Jan, UBC Vancouver

13:35 – 14:25  Networking time

Session 2: RNA modifications
Chair: Michelle Scott, Université de Sherbrooke, Sherbrooke

14:25 – 14:30  Introduction by Michelle Scott, Université de Sherbrooke, Sherbrooke

14:30 – 14:45  Coupling of chemical treatment and next generation sequencing for RNA modification mapping Yuri Motorin, Université de Lorraine, Vandoeuvre-les-Nancy

14:45 – 15:00  rRNA modification dynamics in development Ivan Milenkovic, Center for Genomic Regulation, Barcelona

15:00 – 15:15  Diversity in ribosomal RNA 2’-O-methylation in cancer Frédéric Catez, Cancer research center of Lyon, Lyon

15:15 – 15:30  An A-to-I editing analysis approach customized for repetitive elements unveils a novel type of epi-transcriptome response to amyloid beta neurotoxicity Athanasios Zovoilis, University of Lethbridge, Lethbridge

15:30 – 16:00  Coffee Break

16:00 – 16:15  A role for the RNA modification m^6A at the virus-host interface Stacy Horner, Duke University School of Medicine, Durham

16:15 – 16:30  Human Trmt1-mediated m2G/m22G modification regulates mitochondrial RNA processing Ru-Juan Liu, Shanghai Tech University, Shanghai

16:30 – 16:50  Panel discussion moderated by Michelle Scott, Université de Sherbrooke, Sherbrooke
Poster Flash Talks #1

16:50 – 16:55  Pretty Sly for a White Fly: Investigating an Atypical Viral Internal Ribosome Entry Site in a Novel Positive-strand RNA Virus
Yihang Chen, UBC, Vancouver

16:55 – 17:00  Characterization of a non-coding RNA interacting system essential to flaviviral replication
Tyler Mrozowich, University of Lethbridge, Lethbridge

17:00 – 17:05  Understanding the contribution of snoRNA-mediated rRNA 2’-O-methylations to cell growth and metastasis in a model of non-small cell lung carcinoma
Sarah Webster, Emory University, Atlanta

17:05 – 17:10  Long-read translatome analysis reveals multi-dimensional regulatory modules for translation
Ari Hong, Seoul National University, Seoul

17:10 – 18:10  Poster competition IA: (Odd numbers)

18:10 – 19:10  Poster competition IB: (Even numbers)

19:10 – 20:00  Dinner

20:00 –  Free Social Gathering
Tuesday, September 20th

07:00 – 08:50  Breakfast

Session 3: Non-coding RNAs
Chair: Marc Fabian, McGill University, Montréal

08:50 – 08:55  Introduction by
Marc Fabian, McGill University, Montréal

08:55 – 09:10  Antagonism by Seedless Sites Expands Rules of microRNA-Mediated Gene Regulation
Jun Lu, Yale University, New Haven

09:10 – 09:25  Specific Argonaute phosphorylation regulates the miRNA binding and function during C. elegans development
Martin Simard, Université Laval, Québec

09:25 – 09:40  Functional mechanisms of enhancer and promoter noncoding RNAs in transcriptional regulation
Yuanchao Xue, Chinese Academy of Sciences, Beijing

09:40 – 09:55  Intergenic non-coding RNAs regulating nucleolar structure and function
Karim Mekhail, University of Toronto, Toronto

09:55 – 10:10  Cell state specific isoforms of the conserved IncRNA Tuna differentially influence pluripotency and neurogenesis
Valérie Watters, Université Laval, Québec

10:10 – 10:40  Coffee Break

10:40 – 10:55  TERRA RNA in epigenetic regulation
Jeannie Lee, Harvard Medical School, Boston

10:55 – 11:10  Imprinted box C/D small nucleolar RNA genes at the Prader-Willi / Angelman syndrome domain
Jérôme Cavaillé, Center for Integrative Biology, Toulouse

11:10 – 11:25  Investigations of the biology and chemistry of twister ribozymes from rice
Philip Bevilacqua, The Pennsylvania State University, University Park
11:25 – 11:40  Known non-coding RNAs in bacteria; just the tip of the iceberg  
Jonathan Perreault, INRS, Laval

11:40 – 12:00  Panel discussion moderated by  
Marc Fabian, McGill University, Montréal

12:00 – 13:00  Lunch

Session 4: Looking at RNA  
Chair: William Zerges, Concordia University, Montréal

13:00 – 13:05  Introduction by  
William Zerges, Concordia University, Montréal

13:05 – 13:20  Localized translation of cell junction mRNAs is required for epithelial cell organization  
Éric Lécuyer, IRCM, Montréal

13:20 – 13:35  Imaging single mRNAs uncovers neuronal mechanisms to sustain protein homeostasis  
Maria Vera Ugalde, McGill University, Montréal

13:35 – 13:50  Illuminating the Transcriptome  
Andrej Luptak, University of California, Irvine

13:50 – 14:05  Stress granules promote chemoresistance by triggering cellular quiescence  
Anthony Khong, University of Colorado Boulder, Boulder

14:05 – 14:20  Maturation and transport proteins involved in the early nucleocytoplasmic trafficking of the budding yeast telomerase RNA, Tlc1  
Hannah Neumann, Université de Sherbrooke, Sherbrooke

14:20 – 14:35  Panel discussion moderated by  
William Zerges, Concordia University, Montréal

14:35 – 14:55  Coffee Break
Poster Flash Talks #2

14:55 – 15:00  The yeast endonuclease Rnt1 processes and degrades a wide range of messenger RNAs
Lee-Ann Notice, University of Texas, Austin

15:00 – 15:05  miR-642a-3p decreases HIV-1 production by targeting AFF4, but its silencing capacity is hindered by a Dicer-Gag complex
Sergio Paulo Alpuche-Lazcano, McGill University, Montreal

15:05 – 15:10  The lysC riboswitch as a regulatory nexus
Tithi Ghosh, Université de Sherbrooke, Sherbrooke

15:10 – 15:15  Structure Elucidation of RNA Aptamers Bound to Derivative Hoechst Dyes
Natasha Evans, University of Waterloo, Waterloo

15:15 – 16:15  Poster competition IIA: (Even numbers)

16:15 – 17:15  Poster competition IIB: (Odd numbers)

17:15 – 18:00  Special Canadian Consortium of RNA Research (C2R2) information and discussion session by the C2R2 Advocacy Committee
Pascale Legault, Université de Montréal, Montréal

18:00 – 19:00  Dinner

19:00 – 20:30  Equity diversity and inclusion (EDI) Activity
Organized by the C2R2 EDI committee
Featuring Shobha Vasudevan, Chair of the EDI Committee of the RNA Society
Animated by Michelle Scott, Université de Sherbrooke, Sherbrooke
Wednesday, September 21st

07:00 – 09:00 Breakfast

Session 5: RNA complexes and processing
Chair: Stéphane Richard, McGill University, Montréal

09:00 – 09:05 Introduction by Stéphane Richard, McGill University, Montréal

09:05 – 09:20 Systematic, large-scale studies of RBP function, protein & RNA interactomes
Gene Yeo, University California, San Diego

09:20 – 09:35 Pre-mRNA splicing order across long multi-intronic transcripts
Karine Choquet, Harvard Medical School, Boston

09:35 – 09:50 Arg-tRNA synthetase links inflammatory metabolism to RNA splicing and nuclear trafficking via SRRM2
Haissi Cui, University of Toronto, Toronto

09:50 – 10:05 Systematic exploration of dynamic splicing networks reveals conserved multistage regulators of neurogenesis
Hong Han, University of Toronto, Toronto

10:05 – 10:20 Transcription and the nascent transcript
David Tollervey, University of Edinburgh, Edinburgh

10:20 – 10:50 Coffee Break

10:50 – 11:05 Quantifying negative selection in human 3'UTRs uncovers evolutionarily constrained targets of RNA-binding proteins
Scott Findlay, Massachusetts Institute of Technology, Boston

11:05 – 11:20 DEAD-box proteins' condensate integration and activity-sensing domains
Calo Eliezer, Massachusetts Institute of Technology, Boston

11:20 – 11:35 Altered tRNA processing is linked to a distinct and unusual La protein in Tetrahymena thermophila
Mark Bayfield, York University, Toronto
11:35 – 11:50  **Studying RNA structures in single cells**  
Yue Wan, *Genome Institute of Singapore, Singapore*

11:50 – 12:10  **Panel discussion** moderated by  
Stéphane Richard, *McGill University, Montréal*

12:10 – 12:25  **2022 Group Photo**

12:25 – 13:35  **Lunch**

**Session 6: RNA and disease**  
Chair: **Katherine Borden**, *Université de Montréal, Montréal*

13:35 – 13:40  **Introduction** by  
Katherine Borden, *Université de Montréal, Montréal*

13:40 – 13:55  **Discovery of cancer immunotherapy targets from splicing variations**  
Mathieu Quesnel-Vallières, *University of Pennsylvania, Philadelphia*

13:55 – 14:10  **Comprehensive analysis of hypoxia-regulated long non-coding RNAs in lung adenocarcinoma cells**  
Bernard Mari, *Université Côte d'Azur, Valbonne*

14:10 – 14:25  **Conserved role of the lncRNA CRNDE in regulating senescence and promoting colorectal cancer cell proliferation**  
Martin Sauvageau, *IRCM, Montréal*

14:25 – 14:40  **Viral RNA structures as regulators of gene expression and therapeutic targets**  
Silvi Rouskin, *Harvard Medical School, Boston*

14:40 – 14:55  **Design and evaluation of siRNAs targeting the SARS-CoV-2 genome**  
Robert Scarborough, *McGill University, Montréal*

14:55 – 15:15  **Panel discussion** moderated by  
Katherine Borden, *Université de Montréal, Montréal*

15:15 – 15:35  **Coffee Break**

15:35 – 15:40  **Presentation of Travel awards**  
François Bachand, *Université de Sherbrooke, Sherbrooke*
15:40 – 15:45  **Poster prizes**  
Jean-Philippe Brosseau, *Université de Sherbrooke, Sherbrooke*

15:45 – 15:50  **Presentation of the Alumnus of the year**  
Students’ Representatives

15:50 – 16:10  **Alumnus of the Year Presentation** (15 min + 5 min questions)  
Jean-Denis Beaudoin, *UConn Health, Farmington*

16:10 – 16:15  **Presentation of the Best Monthly Seminar Award**  
Students’ Representatives

16:15 – 16:35  **Best Monthly Seminar Award Presentation** (15 min + 5 min questions)  
To be announced during the meeting

16:35 – 18:00  **Networking and cocktail**

18:00 – 19:30  **Industry Gala Dinner**

19:30 – 19:35  **Blue Jacket Award**  
Stephen Rader, *UNBC, Prince George*

19:35 – 19:45  **C2R2 Introduction: A forum for networking and translation of RNA research**  
Sherif Abou Elela, *Université de Sherbrooke, Sherbrooke*

19:45 – 20:45  **After Dinner Presentation**  
Melissa Moore, *Moderna, Inc., Cambridge, Mass, USA*  
Introduction by Jonathan Perreault, *INRS, Laval*

21:00 – **Entertainment**
Thursday, September 22\textsuperscript{nd}

07:00 – 09:30  Breakfast and Departure