

RiboClub 11th Annual meeting 2010

Program

Monday, September 20th

- 08:00 - 09:00 Registration
- 09:00 - 09:10 Welcoming notes (Sherif Abou Elela)
- 09:10 – 09:15 Presentation of Keynote speaker (Sherif Abou Elela)
- 09:15 - 10:15 Keynote presentation: Marvin Wickens, University of Wisconsin, Madison. Proteins that control mRNAs: from finding a partner to making a memory
- 10:15 - 10:40 Coffee break

Session 1A:
Splicing Mechanism and annotation of alternative events

Chair: Benoit Chabot, Université de Sherbrooke, Québec

- 10:40 - 10:45 Introduction
- 10:45 - 11:10 Structural insights on PRP8: master regulator the spliceosome
Andrew McMillan, University of Alberta, Alberta
- 11:10 - 11:35 Spliceosomal U4: Investigations into the function of the forgotten snRNP
Stephen Rader, University of Northern British Columbia, British Columbia
- 11:35 - 12:00 Characterization of an alternative splicing event that promotes embryonic stem cell self-renewal and somatic cell reprogramming
Mathieu Gabut, University of Toronto, Ontario
- 12:00 – 12:25 Identification of novel splicing events associated with loss of neuronal microRNA function in vivo
Sébastien Hébert, Université Laval, Québec

12:25 - 14:00 Lunch

Session 1B:

Splicing Regulation

Chair: Benoit Chabot, Université de Sherbrooke, Québec

14:00- 14:25 A genome-wide RNAi screen in *Drosophila* identifies the exon junction complex as a novel regulator of RAS / MAPK signaling
Mark Therrien, Université de Montréal, Québec

14:25 - 14:50 Components of the exon-junction complex control the alternative splicing of Bcl-x and a network of apoptotic regulators
Benoit Chabot, Université de Sherbrooke, Québec

Session 2A:

Translation apparatus

Chair: Hans Joachim Wieden, University of Lethbridge, Alberta

14:50 – 14:55 Introduction

14:55 - 15:20 Crystal structure of the ribosome with EF-Tu and aminoacyl-tRNAs
Thomas Martin Schmeing, McGill University, Québec

15:20 - 15:45 Targeting of nucleoli protein phosphatase activity to pre-ribosomal subunits
Laura Trinkle-Mulcahy, University of Ottawa, Ontario

15:45 – 16:10 Coffee Break

Session 2B:

Translation mechanism

Chair: Hans Joachim Wieden, University of Lethbridge, Alberta

16:10 - 16:35 Using a combined molecular dynamics and rapid kinetics approach to study the 3 dimensional communication networks in elongation factor Tu.
Hans Joachim Wieden, University of Lethbridge, Alberta

- 16:35 - 17:00 Peculiarities in the translation of HIV-1 full-length messenger RNA
Léa Brakier-Gingras, Université de Montréal, Québec
- 17:00 – 17:25 Transcriptional-translationl offsets in the circadian cell cycle of the marine cyanobacterium Prochlorococcus
Sébastien Rodrigue, Université de Sherbrooke, Québec
- 17:25 – 17:50 Winner of the Best Seminar Award RiboWest 2010
Introduction by Jean-Pierre Perreault
- 17:50 - 18:50 Poster competition IA: (Odd numbers)
- 18:50 - 19:50 Poster competition IB: (Even numbers)
- 19:50 - 21:15 Dinner
- 21:15 – 21:30 Seeing into the future (Benoit Chabot)
- 21:30 – 21:40 Introduction of the After-dinner-speaker (Stephan Rader)
- 21:40 - 22:10 After-dinner speaker:
PZ Myers, University of Minnesota, Minnesota
Communicating science to a fickle public

Tuesday, September 21st

Session 3:

RNA dependent gene regulation

Chair: Brendan Bell, Université de Sherbrooke, Québec

- 08:30 - 08:35 Introduction
- 08:35 – 09:00 Analysis of the RNA chaperone activity of La proteins
Mark Bayfield, York University, Ontario
- 09:00 - 09:25 Novel pre-initiation complexes at the HIV core interact
specifically with TAR RNA
Brendan Bell, Université de Sherbrooke, Québec
- 09:25 - 09:50 Modular domains of a viral intergenic internal ribosome
entry site
Eric Jan, University of British Columbia, British
Columbia
- 09:50 - 10:15 miRNA topoisomer subspaces predict the effect of
SNPs on their maturation
François Major, Université de Montréal, Québec
- 10:15 - 10:40 Coffee break

Session 4:

RNA processing and degradation

Chair: François Bachand, Université de Sherbrooke, Québec

- 10:40 - 10:45 Introduction
- 10:45 - 11:10 Genome regulation in fission yeast
Jürg Bähler , University College London, UK
- 11:10 - 11:35 Control of gene expression by polyadenylation-
dependent pre-mRNA turnover
François Bachand, Université de Sherbrooke, Québec

- 11:35 – 12:00 Post-transcriptional regulation by widespread retroposon elements located within 3'UTRs of Leishmania transcripts
Barbara Papadopoulou, Université Laval, Québec
- 12:00 - 12:25 Understanding dynamic maturation of different RNPs
Marlene Oeffinger, IRCM, Quebec
- 12:25 - 12:40 2010 Group Photo
- 12:40 - 13:50 Lunch
- Session 5:
RNA Localization and transport
Chair: Pascal Chartrand, Université de Montréal, Québec
- 13:50 – 13:55 Introduction
- 13:55 - 14:20 Post-transcriptional defect in spinal muscular atrophy motoneurons
Jocelyn Côté, University of Ottawa, Ontario
- 14:20 - 14:45 Messenger RNA nuclear retention as a novel facet of the DNA damage response in Drosophila
Eric Lecuyer, IRCM, Québec
- 14:45 - 15:10 Coupling transcription with cytoplasmic mRNA localization
Pascal Chartrand, Université de Montréal, Québec
- 15:10 - 15:30 Coffee break
- 15:30 - 16:00 Best student seminar.
Introduction by Mathieu Lavoie and Jean-Denis Beaudoin

16:00 - 16:30 Alumnus of the year award
Molecular insights into the ligand-controlled organization
of SAM-sensing riboswitches
Daniel Lafontaine, Université de Sherbrooke

Session 6:

RNA tools and evolution

Chair: Gerardo Ferbeyre, Université de Montréal, Québec

16:30 – 16:35 Introduction

16:35 – 17:00 Designing small multiple-target artificial RNAs
Gerardo Ferbeyre, Université de Montréal, Québec

17:00 – 17:25 Predicting the targets of mRNA-binding proteins
Quaid Moriss, University of Toronto, Ontario

17:25 – 17:50 Studying gene expression dynamics in yeast – a single
molecule approach
Daniel Zenklusen, Université de Montréal, Québec

17:50 – 18:15 From ancient to modern RNA world and vice versa
Marie-Christine Maurel, Paris 6 University, France

18:15 - 19:15 Poster competition IIA (Odd numbers)

19:15 - 20:15 Poster competition IIB (Even numbers)

20:15 – 21:30 Banquet

21:30 – 21:50 Presentation by Sherbrooke Film Orchestra part I
Introduction by Raymund Wellinger

21:50 – 22:05 Poster prizes and the Blue Jacket Award
Martin Bisailon and Eric Massé

22:05 – 22:25 Presentation by Sherbrooke Film Orchestra part II

22:25 - 24:00 Dance

Wednesday, September 22nd

Session 7 Part I:

Long non-coding RNA (Flavor of the year)

Chair: Gordon Carmichael, University of Connecticut, Connecticut

- 09:00 - 09:05 Introduction
- 09:05 - 09:30 dsRNA and noncoding RNAs in human embryonic stem cells
Gordon Carmichael, University of Connecticut, Connecticut
- 09:30 – 09:55 7SK small nuclear RNA is a direct effector of HMGA1 function in transcription regulation
Arndt Benecke, Institut des Hautes Etudes Scientifiques and CNRS, France
- 09:55 - 10:20 Random monoallelic expression across mammalian genomes
Andrew Chess, Harvard medical School, Massachusetts
- 10:20 - 10:45 Paraspeckles: subnuclear bodies with long noncoding RNA at their heart
Archa Fox, Western Australian Institute for Medical Research, Australia
- 10:45 – 11:05 Coffee Break

Session 7 Part II:

Long non-coding RNA (Flavor of the year)

Chair: Gordon Carmichael

- 11:05 - 11:30 How do “architectural” noncoding RNAs act in nuclear body construction?
Testsuro Hirose, National Institute of Advanced Industrial Science and Technology, Japan
- 11:30 - 11:55 Epigenetic regulation of transcription by long noncoding RNAs

Chandrasekhar Kanduri, Uppsala University, Sweden

11:55 - 12:20 A long noncoding RNA Gomafu regulates behavior of animals
Shinichi Nakagawa, Riken Advanced Science Institute, Japan

12:20 – 12:45 The c-Myc oncogene directly induces the H19 noncoding RNA by allele-specific binding to potentiate tumorigenesis
Linda Penn, University of Toronto, Ontario

12:45 – 13:50 Lunch

13:50 – 14:50 Student Choice Seminar
Introduction by Mathieu Lavoie and Jean-Denis Beaudoin
Bacterial small RNAs have come a long way
Jörg Vogel, University of Würzburg, Germany

Departure