Fourth International Symposium on ARSACS
(Autosomal Recessive Spastic Ataxia of Charlevoix-Saguenay)

Thursday 10th and Friday 11th of November, 2016
Montreal Neurological Institute, McGill University
3801 University Street, Montreal
Jeanne Timmins Amphitheater (ground floor)

Purpose

This International symposium brings together researchers, clinicians and international experts to review the most recent advances in our understanding of ARSACS (Autosomal Recessive Spastic Ataxia of Charlevoix-Saguenay). The goal is to increase the interactions and collaborations between international researchers to accelerate the discovery of treatments for ARSACS. On the Friday researchers will discuss with international experts and members of the Board of the Ataxia of Charlevoix-Saguenay Foundation how to accelerate research and funding on ARSACS.

Talks will be of either 20 minutes with 10 minutes of questions or 10 minutes with 5 minutes of questions.

Thursday 10th of November

8:30-12:15 Sacsin: from structure to function (Chairman Bernard Brais)

8:30-9:00 Welcome by Bernard Brais
9:00-9:30 An Update on Sacsin Function
   Vincent Francis and Peter McPherson, McGill University

9:30-10:00 Structural studies of Sacsin
   Marie Menade and Kalle Gehring, McGill University

10:00-10:30 Sacsin and Hsp70 as Chaperone Partners
   Jason Young, McGill University

10:30-10:45 Coffee break

10:45-11:15 Evidence for disrupted proteostasis in ARSACS
   Paul Chapple, Barts and the London School of Medicine, London, UK

11:15-11:45 Sacsin is a chaperone involved in intermediate filament dynamics
   Benoit Gentil and Heather Durham, McGill University

11:45-12:00 Investigating the link between impaired mitochondrial trafficking and calcium dysregulation in Sacs−/− Purkinje neurons
   Francesca Maltecca, Università Vita-Salute San Raffaele, Milano, Italy

12:00-12:15 The role of Sacsin in autophagy offers novel therapeutic opportunities
   Federica Morani, IRCCS Stella Maris, Pisa, Italy
12:15-13:00 Lunch

13:00-16:30 From the study of mice models of ARSACS to clinical trials function (Chairmen Peter McPherson and Kalle Gehring)

13:00-13:30 Synaptic and Intrinsic alterations precede cerebellar alterations in a mouse model of ARSACS
Alanna Watt and Anne McKinney, McGill University

13:30-14:00 The sacs KI mice model of ARSACS: some protein may mean a milder phenotype
Roxanne Larivière and Bernard Brais, McGill University

14:00-14:15 High Throughput Screen (HTS) using a Fibroblast cytoskeletal bundling assay
Nicolas Sgarioto and Bernard Brais, McGill University

14:15-14:30 Screening for Compounds that Enhance Mitochondrial Transport
Thomas Schwarz, Harvard, Boston, USA

14:30-15:00 Rescuing mitochondrial division in ARSACS
Stefan Strack, Iowa City, USA

15:00-15:30 Coffee Break

15:30-16:00 Towards clinical readiness: preliminary results of a natural history study and validation of outcome measures in ARSaCS
Cynthia Gagnon, University of Sherbrook, Saguenay

16:00-16:30 PREPARE n ERare project on recessive ataxias: Access to a European ARSACS cohort
Bernard Brais, McGill University

16:30-17:00 Wrap-up

19:00 Supper for Principal Investigators (Venue to be announced)
Friday 11th of November

9:00-12:00  The future of ARSACS research (Chairman Bernard Brais)

The morning meeting will consist in an Open Discussion Work Session structured around the following 7 questions chaired by Bernard Brais with the participation of the International experts and Sonia Gobeil and Jean Groleau of the Ataxia of Charlevoix-Saguenay Foundation.

1) What experiments are the most likely to uncover the key molecular events responsible for the neurodegeneration in ARSACS?
2) Do you think the mitochondrial, cytoskeletal or chaperone dysfunction is key in the pathophysiology of ARSACS?
3) What are the most promising methods to uncover new therapeutic target for ARSACS?
4) What are the most promising methods to uncover therapeutic molecules for ARSACS?
5) Is there a need to develop an international registry of ARSACS cases?
6) What other local, national or international partnerships should be explored to ensure a leverage effect for the Foundation’s resources?
7) Would you agree to sign a formal collaboration partnership with the approval of your institution if this guaranteed resources for your research on ARSACS?

12:00-13:00 End of symposium Lunch

13:00-17:00 On invitation only work sessions with international experts and small team meetings

Financial support
The Forth International Symposium on ARSACS was generously supported by the Ataxia of Charlevoix-Saguenay Foundation, The Neuro and the CIHR/ Ataxia of Charlevoix-Saguenay Foundation ARSACS Emerging Team on Rare Diseases.