Minutes of ARSACS researchers meeting
June 03, 2015

On June 3, 2013 was held the meeting of the team of researchers "ARSACS – CIHR" working on the Ataxia of Charlevoix-Saguenay at the Montreal Neurological Institute. The following doctors attending the meeting: Alana Watt, Anne McKinney, Jason Young, Heidi McBride, Eric Shoubridge, Peter McPherson, Kalle Gehring, Roxanne Larriere, Cynthia Gagnon, Bernard Brais and several other people from their teams.

The purpose of this meeting was to share the most recent results from each lab. Most particularly, the better electrophysiological knowledge of the anomalies of the Purkinje cells of the cerebellum, work achieved by Drs. Alana Watt and Anne McKinney. These findings could, for the first time, enable to see if therapeutic molecules could modify the electrophysiological pattern of the cells for the KO mouse. There were many discussions about the functional implications of the first results on interacome(interaction protein to protein) generated by the teams DrsBrais, Shoubridge and Anne-Claude Gingras of the Lunenfeld-Tanenbaum Research Institute in Toronto. Using a novel technic of cellular proximity, a large number of proteins which appear to be close to Sacsin have been identified. For the first time, a broader series of proteins are therefore available. This discovery forces the researchers to refine certain elements of the functional model of the Sacsin protein. These discoveries highlights once again the importance of the Sascin as a participant to a chaperon function; that is the modification of the structure of the proteins or their degradation.

The meeting therefore enable to progress in terms of hypothesis which will greatly influence the work of several teams in the upcoming months. The team committed to start the organization of the new ARSACS Symposium which will be held in 2017 and which will bring together experts interested in the chaperon and cytosquelleticfunctions of the Sacsin. Again, this meeting demonstrated the collaboration amongst researchers and the fast pace this collective project moves along enabling new hypothesis which could lead to therapeutic trials. For example, the recent interacome results helped identify a new molecule that will be shortly tried on the KO mice.