

# ARSACS NEWS

EDITOR : ATAXIA OF CHARLEVOIX-SAGUENAY FOUNDATION

[SGOBEIL@ARSACS.COM](mailto:SGOBEIL@ARSACS.COM)

[WWW.ARSACS.COM](http://WWW.ARSACS.COM)

We are excited to share the latest news from the Ataxia Charlevoix-Saguenay Foundation. In this edition, we highlight 2 published scientific reports on ARSACS. We announce our 2026 Research Grants Call for Proposals, and share details about our upcoming Symposium in Atlanta (USA). We are also pleased to introduce the new Action for ARSACS Foundation.

## ➔ CALL FOR PROPOSALS 2026 RESEARCH GRANT ➔



**Research Grants Call for Proposals – 2026**  
Ataxia of Charlevoix-Saguenay Foundation (ARSACS)

The Ataxia Charlevoix-Saguenay Foundation offers:

- ✓ up to a maximum of \$100,000 CAD per project
- ✓ up to \$25,000 CAD to support start-up initiatives (Seed Grant)

**Overview**

The purpose of the Autosomal Recessive Spastic Ataxia of Charlevoix-Saguenay (ARSACS) research grants is to further encourage and accelerate the development of treatment for ARSACS. Both fundamental and clinical research projects are accepted.

**Important dates**

Call for proposal	February 19, 2026
Application deadline	May 22, 2026
Review and selection process	June-July 2026
Announcement of funded projects	August 2026

This call for proposals is to fund ARSACS research projects. As part of this funding offer, the Ataxia Charlevoix-Saguenay Foundation offers up to a maximum of \$100,000 CAD per project and up to \$25,000 CAD per project to support start-up initiatives (Seed Grant).

FOR MORE INFORMATION:

[CALL FOR PROPOSALS](#)

[APPLICATION FORM](#)



## RESEARCH HIGHLIGHTS

### Alterations in the Na<sup>+</sup>/H<sup>+</sup> Exchanger NHE6 and Glutamate Transporters may Influence Purkinje Cell Fate in ARSACS

Louis-Charles Masson<sup>1</sup> · Atchaya S. Kanagasabai<sup>1</sup> · Brenda Toscano Márquez<sup>2</sup> · ulia Tourbina-Kolomiets<sup>1</sup> · Francois Charron<sup>1</sup> · Alanna J. Watt<sup>2</sup> · R. Anne McKinney

Patterned cell death is a common feature of many neurodegenerative diseases. This is apparent in cerebellar Purkinje cells (PCs) in patients and mouse models of Autosomal-recessive spastic ataxia of Charlevoix-Saguenay (ARSACS). In ARSACS, PCs in the anterior cerebellar vermis are vulnerable to degeneration while those in the posterior vermis are resilient. As the mechanisms underpinning cerebellar pathophysiology in ARSACS are not fully understood, we chose to investigate two important regulatory pathways for cellular health in neurons: (1) the autophagy-lysosome pathway which is important for the tracking of cargo essential for proper neuronal function, as well as (2) excitatory amino acid transporters (EAATs) that regulate extracellular glutamate levels. Using a mouse model of ARSACS (*Sacs*<sup>-/-</sup>), we found a significant decrease in the Na<sup>+</sup>/H<sup>+</sup> exchanger 6 (NHE6) in the PCs in the vulnerable anterior but not resilient posterior cerebellum. We looked at two EAATs that are highly expressed in the cerebellum: EAAT1 and EAAT4. Glial EAAT1 levels were significantly reduced in both anterior and posterior lobules, which could lead to excitotoxicity. However, the neuronal EAAT4 protein was elevated only in the resilient posterior PCs, likely counteracting the effects of reduced EAAT1 in posterior cerebellum. These results point to possible impairment in the endocytic pathway in the ARSACS cerebellum, and an elevation of EAAT4 glutamate transporters in the resilient posterior lobules of the cerebellar vermis that may contribute to neuroprotection.

[Read the full report here.](#)

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### Developing conditional mouse models and new approaches to treating ARSACS

Stefan Strack, Ph.D.

Evaluate Zanolmilast pharmacotherapy of cognitive sequelae of ARSACS. Zanolmilast is a negative allosteric modulator of PDE4D that has recently shown positive outcomes in a phase 2 clinical trial adolescent male with fragile X syndrome (FXS, (Berry-Kravis, Harnett et al. 2021)). Recently disseminated preliminary results from two phase 3 trials are even more encouraging (NPR). Because of our preclinical efforts, the same drug has entered, in May 2025, a phase 2 clinical trial for the treatment of the neurodevelopmental disorder Jordan's Syndrome (JS, Shionogi press release). Leveraging our expertise in preclinical development, we propose to test the effectiveness of Zanolmilast for treatment of both motor- and cognitive phenotypes of *Sacs* KO mice.

[Read the full report here](#)



## UPCOMING CONFERENCES FOR ARSACS

We are pleased to announce that the ARSACS Symposium will be held on November 9, 2026, as an official satellite meeting of the International Congress for Ataxia Research (ICAR 2026) in Atlanta. The in-person only symposium will bring together leading researchers and clinicians to share the latest scientific advances and perspectives on ARSACS, including emerging therapeutic approaches and ongoing research initiatives.

The Symposium program is currently in the early stages of development and is being shaped with the valuable collaboration of Dr. Alanna Watt, McGill.

For updates and registration : [ARSACS Satellite meeting](#). [Visit the ICAR webpage](#)



On March 23, 2026, Drs. Maltecca, Marangon and Ziviani will present their research projects during a webinar. Participants who wish to attend this meeting are invited to send an email to Susanna De Luca at [info@arsacsodv.it](mailto:info@arsacsodv.it). A link to access the meeting will then be provided. Please note that the presentations will be in Italian.



We are excited to share that the Action for ARSACS Foundation (AFA) has officially launched in the United States. This new initiative will help expand awareness, strengthen collaboration, and support research efforts for ARSACS beyond Canada.

Congratulations to the entire team, and thank you for your hard work and dedication in making this important initiative a reality.

[Visit Action for ARSACS](#)

