

## Topical Collection

# Spinocerebellar Ataxia (SCA): Molecular Mechanisms and Novel Treatment Strategies

### Message from the Collection Editor

Spinocerebellar ataxias (SCAs) are a group of autosomal dominant inherited diseases. While major clinical signs of SCAs are progressive gait ataxia, typically accompanied by dysarthria and visual problems, several other symptoms can appear.

Presently, 48 SCAs can be discerned by the identified mutation or the chromosomal location of their associated disease genes. The most prevalent group of SCAs, are caused by expansions of CAG repeats, encoding polyglutamine (polyQ) tracts in disease proteins, and designated as polyQ SCAs. Other less-common SCAs are caused by expansion of other nucleotide repeats, point mutations, deletions, insertions, and duplications in disease genes. Given the heterogenous genetic causes, specific therapeutic strategies for each SCA or subgroup may be more successful.

In this Special Issue we invite all scientists working on SCAs to contribute original research articles, reviews, communications, and short perspective articles related to molecular mechanisms and novel treatment strategies for SCAs. We particularly welcome articles describing mechanistic insights at the molecular, cellular, or organismal level, as well as those providing translational value.

---

### Collection Editor

Dr. Maria do Carmo Costa

Department of Neurology, Michigan Medicine, University of Michigan,  
Ann Arbor, MI, USA

---



## Cells

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.2  
CiteScore 11.4  
Indexed in PubMed



[mdpi.com/si/98085](https://mdpi.com/si/98085)

*Cells*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[cells@mdpi.com](mailto:cells@mdpi.com)

[mdpi.com/journal/  
cells](https://mdpi.com/journal/cells)





# Cells

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.2  
CiteScore 11.4  
Indexed in PubMed



[mdpi.com/journal/  
cells](https://mdpi.com/journal/cells)



## About the Journal

### Message from the Editorial Board

*Cells* has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

---

### Editors-in-Chief

Dr. Alexander E. Kalyuzhny

Neuroscience, UMN Twin Cities, 6-145 Jackson Hall, 321 Church St SE,  
Minneapolis, MN 55455, USA

Prof. Dr. Cord Brakebusch

Biotech Research & Innovation Centre, The University of Copenhagen,  
Copenhagen, Denmark

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Cell Biology) / CiteScore - Q1 (General Biochemistry, Genetics and Molecular Biology)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.5 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).