Special Issue

150 Years of Motor Endplate: Molecules, Cells, and Relevance of a Model Synapse

Message from the Guest Editor

More than 150 years after the terms ‘plaques nerveuses terminales’ and ‘motorische Endplatte’ were coined by Charles Rouget and Wilhelm Krause, respectively, the neuromuscular synapse continues to be crucial for the musculoskeletal and neural sciences. Having always served as a model in terms of morphological and molecular configuration of chemical synapses, recent research has renewed an interest in the involvement of the motor endplate in general systemic functions of muscle beyond inducing contraction. Along these lines, the endplate has lately also attracted increasing attention with respect to its role in pathophysiology and aging. This Special Issue of *Cells* will focus on the progress in understanding the molecular and cellular frameworks that regulate and mediate formation, maintenance, and repair of the motor endplate in normal physiology and upon pathological conditions. Further, it will address consequences of these insights on treatment of neuromuscular diseases and muscle wasting conditions. **Keywords**

- neuromuscular synapse
- muscle innervation
- neuromuscular disorders
- muscle wasting
- muscle regeneration

Guest Editor

Prof. Dr. Rüdiger Rudolf

1. Institute of Molecular and Cell Biology, Faculty of Biotechnology, Mannheim University of Applied Sciences, Mannheim, Germany
2. Interdisciplinary Center for Neuroscience, Heidelberg University, Heidelberg, Germany
3. Institute of Toxicology and Genetics, Karlsruhe Institute of Technology, Eggenstein-Leopoldshafen, Germany

Deadline for manuscript submissions

closed (30 June 2019)

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/17549

Cells
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cells@mdpi.com

mdpi.com/journal/cells

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

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
Dental Basic Sciences, University of Minnesota, 308 Harvard 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 16 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).