

## Special Issue

# Molecular and Cellular Mechanisms of Type 1 Diabetes (T1D)

### Message from the Guest Editors

Type 1 diabetes (T1D) is an extremely complex disease, where pathogenesis is highly debated. Many different genetic meta-analyses and full-genome sequencing have divulged a wide range of genetic risk factors, where single-nucleotide polymorphisms (SNPs) and other anomalies have been associated with the disease. However, many of these mutations have not been properly connected towards how precisely they contribute to pancreatic beta cell destruction on a molecular or cellular level. It is also unclear how exactly environmental pressures and pathogens contribute as triggers of an autoimmune response towards beta cells. The connection between both genetic and environmental triggers towards T1D development needs to be better identified and how on a mechanistic level do these two factors lead towards pancreatic cellular destruction.

This Special Issue will highlight recent findings on how both the genetic and environmental factors contribute towards T1D and how do they contribute towards targeting pancreatic beta cells on a cellular level.

---

### Guest Editors

Dr. Robert Sharp

College of Medicine, University of Florida, Gainesville, FL, USA

Prof. Dr. Itamar Raz

Diabetes Unit, Department of Endocrinology and Metabolism, Hadassah Medical Center, The Faculty of Medicine, Hebrew University of Jerusalem, Jerusalem 91120, Israel

---

### Deadline for manuscript submissions

15 October 2025



## Cells

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.2  
CiteScore 10.5  
Indexed in PubMed



[mdpi.com/si/228771](https://mdpi.com/si/228771)

*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 10.5  
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

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, CAPus / 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).