

Special Issue

Islet Function and Dysfunction in Diabetes Mellitus and Transplantation

Message from the Guest Editor

Since the discovery and isolation of insulin in 1921, this has been the mainstay of diabetic treatment, although its exogenous administration cannot mimic normal metabolic control. Islet transplantation is a promising therapeutic option for type 1 diabetics. However, widespread application and long-term success is limited. The reality of the current transplant technique is challenging—more than 50% of islets are destroyed in the initial post-transplant period, multiple stress responses (hypoxia, inflammation, lack of angiogenesis) diminish islet function, and the immunosuppression required is itself diabetogenic. This Special Issue will focus on derangements in islet cell biology in diabetes and following islet transplantation. Keywords

- type 1 diabetes mellitus
- type 2 diabetes mellitus
- islet transplantation
- islet dysfunction
- insulin

Guest Editor

Dr. Natasha M. Rogers

1. Centre for Transplant and Renal Research, Westmead Institute for Medical Research, Westmead, NSW 2145, Australia
2. Renal and Transplant Unit, Westmead Hospital, Westmead, NSW 2145, Australia
3. Faculty of Medicine and Health, University of Sydney, Sydney, NSW, Australia

Deadline for manuscript submissions

closed (30 June 2023)



Cells

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed



mdpi.com/si/126940

Cells
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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, 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).