Special Issue

Advances in Genetic and Epigenetic Gene Therapy for Diabetic Wound Healing

Message from the Guest Editor

Diabetic ulcers (DUs), complicated by infection/ischemia/high levels of reactive oxygen species, often suffer from poor perfusion, delayed healing and wound recurrence. Gene therapy is emerging as a promising approach for treating DUs by targeting specific genes to promote healing. This involves using genes, proteins, or peptides to stimulate tissue regeneration, improve angiogenesis and reduce inflammation at the wound site. Recently it has been noted that in addition to changes in gene expression, epigenetic changes also play a role in impaired diabetic wound healing, and thus epigenetic gene therapy has emerged as a promising avenue for treating DUs. This collection will focus on potential genetic and epigenetic gene therapy, including genes, proteins, peptides, DNA methylation modifiers, histone modifiers, microRNAs and others to treat and manage DUs.

Guest Editor

Dr. Kanhaiya Singh
McGowan Institute for Regenerative Medicine, Department of Surgery, University of Pittsburgh, Pittsburgh, PA 15219, USA

Deadline for manuscript submissions

21 October 2026

Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/252443

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

mdpi.com/journal/biomolecules

Biomolecules

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed

mdpi.com/journal/biomolecules

About the Journal

Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

Editors-in-Chief

Prof. Dr. Peter E. Nielsen
Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan
Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

Author Benefits

Open Access

— free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

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

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)

MDPI