Special Issue

Peptides and Amino Acids in Drug Development: Here and Now

Message from the Guest Editor

Peptides and amino acids are ubiquitously found as important building blocks and are attracting interest in pharmaceutical research and drug development. Peptide chemistry is extensively utilized for the preparation of therapeutic peptides, signaling peptides, penetrating peptides, peptide-drug conjugates, cyclic peptides, and peptidomimetics. Over 150 peptidebased drug candidates are in clinical trials. In recent vears, a paradigm shift has taken place in the pharmaceutical industry for peptide and amino acidbased drugs because of high selectivity for targets, improved bioavailability, and reduced toxicity. Peptides and amino acids have the potential to offer the versatility needed for a successful drug discovery approach. Peptide-drug conjugates (PDCs) are an emerging targeted therapeutic that is composed of a drug candidate, peptide, and a linker. Alternatively, to enhance penetration and selectivity, peptides and amino acids are also used as linkers in molecular hybridized compounds.

Guest Editor

Dr. Siva Panda

Department of Chemistry and Physics, Augusta University, Augusta, GA, USA

Deadline for manuscript submissions

closed (6 June 2025)



an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed



mdpi.com/si/159052

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

mdpi.com/journal/biomedicines





an Open Access Journal by MDPI

Impact Factor 3.9 CiteScore 6.8 Indexed in PubMed





About the Journal

Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

- Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA
- 2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Medicine (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).