

Topical Collection

Application of Natural and Pseudo Natural Products in Drug Discovery and Development

Message from the Collection Editor

Natural products (NPs) and NP-based semi-synthetic compounds have recently regained increased attention by the scientific community due to their great structural and chemical diversity. Notably, NP-based molecules are valid sources for drug lead compounds because 60% of chemotherapeutic agents originate from natural products. On the other hand, pseudo-natural products (PNPs) combine natural product (NP) fragments in novel and intriguing arrangements which are not accessible via biosynthesis pathways. Moreover, they can be regarded as non-biogenic fusions of NP-derived fragments. Scientists have established new synthesis principles to go beyond the chemical space explored by nature by combining the principles of biology-oriented synthesis (BIOS) and fragment-based compound design. Interestingly, scaffolds from different NPs are combined and reconnected into new alternative molecular scaffolds, so-called pseudo-natural products. The aim of this topical collection on natural product (NP)- and pseudo-natural product (PNP)-based drug discovery is to underline the most recent discoveries and progress in all fields of biological sciences dealing with NPs and PNPs.

Collection Editor

Dr. Hidayat Hussain

Department of Bioorganic Chemistry, Leibniz Institute of Plant Biochemistry, Weinberg 3, D-06120 Halle (Salle), Germany



Current Issues in Molecular Biology

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 3.7
Indexed in PubMed



mdpi.com/si/88421

Current Issues in Molecular Biology
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
cimb@mdpi.com

mdpi.com/journal/cimb





Current Issues in Molecular Biology

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 3.7
Indexed in PubMed



[mdpi.com/journal/
cimb](https://mdpi.com/journal/cimb)



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Madhav Bhatia

Department of Pathology and Biomedical Science, University of Otago,
Christchurch, 2 Riccarton Avenue, P.O. Box 4345, Christchurch 8140,
New Zealand

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PMC,
PubMed, Embase, CAPus / SciFinder, FSTA, AGRIS, and
other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is
provided to authors approximately 17.8 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).

Recognition of Reviewers:

APC discount vouchers, optional signed peer review, and
reviewer names are published annually in the journal.