

Special Issue

Phenotypic Screening

Message from the Guest Editors

Phenotypic drug discovery (PDD) relies on methods where the molecular mechanism is not known or assumed and uses empirical lead generation to deliver novel drug candidates. Though target-based approaches have dominated drug discovery in the past, there is recently a resurgence of PDD. This appears to be related to the frequent disconnect between in vitro and in vivo systems, as a result of stirring away from physiologically relevant conditions. PDD may be more costly and slow in early stages, but with better understanding of the risks and challenges it can be a powerful tool leading not only to increased probability of success for drug candidates, but also to the identification of novel drug targets that can be used alone or in combination with existing therapeutics.

This special issue aims to cover improvements in library design, screening, assay cascade, and chemoinformatics tools that expedite modern PDD, presenting successful medicinal chemistry efforts in PDD, and further target identification campaigns that originated from PDD. Looking forward to receiving these and other relevant contributions.

Guest Editors

Dr. Maria Chatzopoulou

UCB, 216 Bath Rd, Slough SL1 3WE, UK

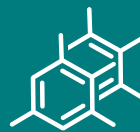
Prof. Dr. Angela Russell

1. Department of Chemistry, University of Oxford, 12 Mansfield Road, Oxford OX1 3TA, UK

2. Department of Pharmacology, University of Oxford, Mansfield Road, Oxford OX1 3PQ, UK

Deadline for manuscript submissions

closed (28 February 2022)



Molecules

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed

mdpi.com/si/63518

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

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





Molecules

an Open Access Journal
by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed

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



About the Journal

Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarInLit, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).