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Phenotypic Screening

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

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Message from the Guest Editors

Dear Colleagues,

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.

Dr. Maria Chatzopoulou

Prof. Angela Russell

Guest Editors



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Special Issue



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Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

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

Message from the Editor-in-Chief

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Molecules Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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