# **Special Issue**

# Recent Advancements in Radiochemistry and PET Radiotracer Development

## Message from the Guest Editors

Positron Emission Tomography (PET) is a valuable imaging technique used in various applications, including clinical diagnosis, drug discovery, and neuroscience research. PET relies upon the administration of a chemical probe, that is labelled with a short-lived positron-emitting radionuclide. The development of novel radiotracers requires multiple considerations, and aspects like radionuclide selection, labeling position, metabolic stability, precursor synthesis, radiolabeling procedure, automation, quality control, and regulatory aspects have to be considered. This Special Issue aims to highlight the latest research on PET radiotracer synthesis and development, and we invite both original research and review articles on the following topics: (1) new radiolabeling strategies and isotopes for radiotracer production; (2) automation and clinical validation; (3) design and synthesis of novel PET radiotracers targeting specific biological processes, e.g., receptors, enzymes, and transporters; (4) strategies to enhance image quality and quantification; and (5) clinical translation and application of novel PET radiotracers.

## **Guest Editors**

Dr. Kenneth Dahl

1. PET Science Centre, Precision Medicine and Biosamples, Oncology R&D, AstraZeneca, Karolinska Institutet, SE-17176 Stockholm, Sweden 2. Department of Clinical Neuroscience, Centre for Psychiatry Research, Karolinska Institutet and Stockholm County Council, SE-17176 Stockholm, Sweden

## Dr. Sangram Nag

Department of Clinical Neuroscience, Center for Psychiatry Research, Karolinska Institutet and Stockholm County Council, 17164 Stockholm, Sweden

## Deadline for manuscript submissions

closed (25 August 2024)



# **Pharmaceuticals**

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/185245

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

mdpi.com/journal/ pharmaceuticals





# **Pharmaceuticals**

an Open Access Journal by MDPI

Impact Factor 4.8 CiteScore 7.7 Indexed in PubMed



# **About the Journal**

## Message from the Editor-in-Chief

Because of your expertise in the field of drug sciences, I kindly invite you to consider publishing your current work, in the form of a research article or a review, in the open access electronic journal *Pharmaceuticals*. *Pharmaceuticals* is characterized by an active editorial board and a dynamic editorial staff. Manuscripts are peer-reviewed and a final decision is provided to authors within 4–6 weeks after submission. Papers are published on the web immediately after acceptance. For details on the submission process or any other matter, please do not hesitate to contact us.

We hope to handle your contribution to *Pharmaceuticals* soon.

## Editor-in-Chief

## Prof. Dr. Amélia Pilar Rauter

Departamento de Química e Bioquímica (DQB) e Centro de Química Estrutural (CQE), Institute of Molecular Sciences, Faculdade de Cièncias, Universidade de Lisboa, Lisboa, Portugal

## **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, PMC, Embase, CAPlus / SciFinder, and other databases.

## Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Pharmaceutical Science)

