

## Special Issue

# The Physiology and Pharmacology of Dopamine Receptors: From Normal Signaling to Pathology

### Message from the Guest Editor

The neurotransmitter dopamine, belonging to catecholamines, is an important molecule that activates two classes of receptors: D1-like and D2-like. These groups also differ in signaling—while D1-like mostly activates adenylyl cyclase, D2-like receptors inhibit this enzyme. Dopamine receptors are expressed in many tissues in the organisms. In the central nervous system, they affect locomotion, they play a role in reward behavior, in neuroendocrine control, and in emotion. However, they also play an important role in the periphery: they have immunomodulatory effects in inflammatory diseases, they affect important functions of the cardio-pulmonary system, as well as renal functions. Pathologies in dopamine receptor, thus, have led to many diseases such as schizophrenia, addiction, Parkinson's disease, genetic hypertension and others. This Special Issue on “The Physiology and Pharmacology of Dopamine Receptors: From Normal Signaling to Pathology” will present a selection of original research papers or reviews that address these topics.

### Guest Editor

Prof. Dr. Jaromír Mysliveček

Institute of Physiology, 1st Faculty of Medicine, Charles University,  
Albertov 5, 128 00 Prague, Czech Republic

### Deadline for manuscript submissions

closed (28 October 2022)



## Life

an Open Access Journal  
by MDPI

Impact Factor 3.4  
CiteScore 6.0  
Indexed in PubMed



[mdpi.com/si/91660](https://mdpi.com/si/91660)

*Life*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[life@mdpi.com](mailto:life@mdpi.com)

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

[life](https://life.mdpi.com)





# Life

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.4  
CiteScore 6.0  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

*Life* (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

---

### Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona  
Institute of Science and Technology, 08028 Barcelona, Spain

---

### 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, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)