



biology



an Open Access Journal by MDPI

Neurogenetics of Behaviour

Guest Editors:

Prof. Dr. Charalambos Kyriacou

Department of Genetics,
University of Leicester, Leicester
LE1 7RH, UK

Prof. Dr. Ezio Rosato

Department of Genetics and
Genome Biology, University of
Leicester, Leicester LE1 7RH, UK

Deadline for manuscript
submissions:

closed (31 March 2023)

Message from the Guest Editors

More than 50 years ago, Benzer and Suzuki initiated a new approach to dissecting the function of the nervous system by using genetics and behaviour. This approach was called ‘neurogenetics’, and was initially applied to *Drosophila*. The fly has seen the most breath-taking advances in the development of a molecular genetic toolkit that can be applied to studying brain and behaviour in ways that would have appeared inconceivable in 1970, culminating with the 2017 Nobel Prize in Physiology or Medicine awarded to Hall, Rosbash and Young for their neurogenetic dissection of the fly’s circadian behaviour. However, work in other genetic model species, particularly nematodes and mice, has also made significant advances in the neurogenetic analysis of behavioural phenotypes and includes the use of flies, worms and mice as powerful models for studying human neurodegenerative disorders. Non-model species, often of more ecological interest, where the underlying genetics is less tractable, can now also be studied with ‘omic’ approaches. Understanding relationship between brain and behaviour will provide one of the most difficult challenges to 21st century biology.



mdpi.com/si/89395

Special Issue



an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Jukka Finne

Research Programme in
Molecular and Integrative
Biosciences, Faculty of Biological
and Environmental Sciences,
University of Helsinki, P.O. Box
56, FI-00014 Helsinki, Finland

Prof. Dr. Andrés Moya

Integrative Systems Biology
Institute, University of Valencia
and CSIC, 46980 Valencia, Spain

Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

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, PubAg, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Biology*) / CiteScore - Q1 (*General Agricultural and Biological Sciences*)

Contact Us

Biology
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/biology
biology@mdpi.com
[@Biology_MDPI](https://twitter.com/Biology_MDPI)