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## Molecular and Behavior Relationship in Gene-Manipulated Model Organisms

Collection Editor:

**Prof. Dr. Katsuhiko Tabuchi**

Department of Molecular & Cellular Physiology, Shinshu University School of Medicine, Matsumoto 390-8621, Japan

### Message from the Collection Editor

Neuropsychiatric disorders, such as autism, epilepsy, schizophrenia, and Alzheimer's disease, are primarily associated with a genetic predisposition. Over the past two decades, human genetic studies have identified candidate genes for the pathogenesis of these disorders. Behavioral studies using genetically modified animal models are widely used to verify the causal relationship between human mutations and disorders. In recent years, advances in genome editing technology have allowed recapitulating human mutations in various species, including worms, flies, fishes, rodents, and monkeys, and this enables us to study the large-scale collective behavior or higher cognitive functions. Viral-mediated region-specific gene manipulation also broadens the application of behavioral studies in various model organisms. In parallel, a wide variety of methods for behavioral studies combined with modern computer programming, such as machine learning, have also been established.

In this research topic, we invite original research articles or reviews related to behavioral studies using gene-manipulated model organisms. Research that is not directly related to diseases is also welcomed.



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**Topical** Collection



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*Cells* has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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*Cells* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

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