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The Research on Neuroscience in *C. elegans*

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Deadline for manuscript
submissions:

31 October 2024

Message from the Guest Editors

The nematode *Caenorhabditis elegans* has long been a model organisms for neuroscience research due to its simple nervous system and genetic tractability. Advances in technology have allowed researchers to further explore the neural mechanisms underlying behavior in *C. elegans*, providing new insights into fundamental questions in neuroscience.

This Special Issue brings together a collection of original research articles, reviews, and perspectives. The articles cover a wide range of topics, including synaptic transmission, neural circuitry, behavior, neural development, plasticity, and disease. The studies presented utilize a variety of techniques, including optogenetics, imaging, microfluidics, and genetics, to uncover the intricate workings of the nematode nervous system. This Special Issue also highlights some of the key challenges and future directions for the field of neuroscience in *C. elegans*.

Overall, this Special Issue provides the latest research on neuroscience in *C. elegans*. The studies presented highlight the power of this model organism for unraveling the complexities of the nervous system and advancing our understanding of basic neurobiological processes.



mdpi.com/si/172100

Special Issue



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Message from the Editorial Board

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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