

## Special Issue

# Sensory Neurons and Pain Signals

### Message from the Guest Editor

Sensory neurons decode peripheral mechanical and chemical stimuli. They are characterised by unique physiological properties and firing patterns that transmit distinct sensory modalities to the central nervous system. Although three main subtypes of sensory neurons can be distinguished according to their different conduction velocities, genetic mapping has identified neurons with distinct gene expression profiles. While specific subsets of neurons are devoted to the transduction of acute painful stimuli, pain chronicization and allodynia cause the recruitment of a larger number of neurons, with rapid plasticity following injury or inflammation. In addition, the persistence of algogenic stimuli is transduced at molecular and genetic levels, resulting in lower threshold for firing and therefore generating the conditions for peripheral and central sensitisation. Due to the intrinsic complexity of chronic pain against individual genetic backgrounds, the pharmacological treatment of pain is very complex and still poorly effective for many patients.

---

### Guest Editor

Dr. Elsa Fabbretti  
Independent scholar

---

### Deadline for manuscript submissions

closed (20 September 2020)



## Brain Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.6  
Indexed in PubMed



[mdpi.com/si/43938](https://mdpi.com/si/43938)

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

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





# Brain Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.6  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

---

### Editor-in-Chief

Prof. Dr. Stephen D. Meriney

Department of Neuroscience, University of Pittsburgh, Pittsburgh, PA  
15260, USA

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, PSYINDEX, PsycInfo, CAPlus / SciFinder, and other databases.

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.6 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).

#### Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.