



## Glioma Cell Invasion

Guest Editor:

**Prof. Geoffrey J. Pilkington**

Cellular and Molecular Neuro-oncology Research Group,  
Institute of Biomedical and  
Biomolecular Sciences, School of  
Pharmacy and Biomedical  
Sciences, University of  
Portsmouth, St Michael's  
Building, White Swan Road,  
Portsmouth, PO1 2DT, UK

Deadline for manuscript  
submissions:

**closed (30 September 2017)**

### Message from the Guest Editor

Dear Colleagues,

Tumour cell invasion is a key hallmark in primary malignant brain cancer in both adults and children and remains one of the most critical factors involved in therapeutic resistance and recurrence. Lacking somewhat in the literature is how components of the tumour microenvironment (which change during tumour growth and in response to therapy) work together to support tumour growth, resistance, adaptation and recurrence. The aim of this Special Issue is to bring together specific areas and provide a broad overview on the topic of “Microenvironmental Influences on Glioma Cell Invasion” in the context of cell to cell bidirectional and unidirectional communication, molecular/signalling drivers, immunologic perspectives, metabolic influences, physical/mechanical perspectives, flow dynamics (vascular and CSF), radiation and therapeutic effects, mathematical models, and future perspectives on translational considerations. In addition, the types or modes of tumour dissemination will also be a topic.

Prof. Geoffrey J. Pilkington

Prof. Helen L. Fillmore

*Guest Editors*



[mdpi.com/si/6801](https://mdpi.com/si/6801)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Maurizio Battino**

Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

## 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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

## Contact Us

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI