Special Issue

Protein Folding Diseases— Molecular Mechanisms and Therapeutic Approaches

Message from the Guest Editors

Protein misfolding due to genetic, environmental or sporadic factors such as adverse intracellular conditions, is a hallmark of numerous pathologies, commonly referred to as protein folding diseases or conformational disorders. In these cases, a change in protein conformation may impair its biological function through functional deficiency or degradation (loss of function) or promote its accumulation as proteinaceous aggregates (toxic gain of function). Examples include metabolic diseases (phenylketonuria, cystic fibrosis), chaperonopathies (cataracts), and neurodegenerative conditions (Alzheimer's, Parkinson's). For most of these diseases, underlying molecular mechanisms remain scarcely understood, thus limiting the development of effective therapies. In this special issue, we look for contributions addressing the fundamental mechanisms and biochemistry of protein misfolding in a pathophysiological context. Research on approaches to mitigate protein misfolding, such as on proteostasis regulators (molecular chaperones), biologics (antibodies) and folding correctors (pharmacological chaperones), is also welcome.

Guest Editors

Prof. Dr. Cláudio M. Gomes

- 1. Biosystems and Integrative Sciences Institute, Faculdade de Ciências, Universidade Lisboa, 1749-016 Lisbon, Portugal
- 2. Departamento de Química e Bioquímica, Faculdade de Ciências, Universidade Lisboa, 1749-016 Lisbon, Portugal

Dr. Bárbara J. Henriques

- 1. Biosystems and Integrative Sciences Institute, Faculdade de Ciências, Universidade Lisboa, 1749-016 Lisbon, Portugal
- 2. Departamento de Química e Bioquímica, Faculdade de Ciências, Universidade Lisboa, 1749-016 Lisbon, Portugal

Deadline for manuscript submissions

closed (30 September 2022)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/43468

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed





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.

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

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 and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

