Special Issue

Biophysics of Amyloid Aggregation

Message from the Guest Editors

The amyloid state is associated with human conditions that are still incurable and becoming increasingly prevalent, such as Alzhimer's and Parkinson's diseases and type II diabetes. In these diseases, a range of peptides and proteins aberrantly convert from their soluble native states into intractable amyloid aggregates that disrupt cellular functions. To design effective therapeutics to prevent, delay or combat these devastating pathologies, it is imporant to further resolve the fundamental processes underpinning the aggregation reactions of specific biomolecules. In this Special Issue, we invite contributions that leverage biophysical approaches to study the fundamental biology and chemistry underlying protein aggregation in neurodegenerative diseases. All submissions that extend our knowledge of the amyloid state and its links to pathology are welcome. Examples of topics include, but are not limited to, disease models, diagnostics, drug discovery, antibody discovery, structural biology, chemical kinetics, structure-toxicity relationships, and high-resolution imaging.

Guest Editors

Prof. Dr. Michele Vendruscolo

Centre for Misfolding Diseases, Yusuf Hamied Department of Chemistry, University of Cambridge, Cambridge CB2 1EW, UK

Dr. Ryan Limbocker

Department of Chemistry and Life Science, United States Military Academy, West Point, NY 10996, USA

Deadline for manuscript submissions

closed (28 February 2022)

Biology

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed

mdpi.com/si/71185

Biology
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biology@mdpi.com

mdpi.com/journal/biology

Biology

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed

mdpi.com/journal/biology

About the Journal

Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

Editors-in-Chief

Prof. Dr. Jukka Finne
Research Programme in Molecular and Integrative Biosciences, Faculty of Biological and Environmental Sciences, University of Helsinki, P.O. Box 56, FI-00014 Helsinki, Finland

Prof. Dr. Andrés Moya
Integrative Systems Biology Institute, University of Valencia and CSIC, 46980 Valencia, Spain

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (General Agricultural and Biological Sciences)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.4 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).

MDPI