



Advances in Difficult Protein–Protein Interaction Determination

Guest Editors:

Dr. Alexandre G. De Brevern

Department of Biological
Research on the Red Blood Cells,
INTS, INSERM UMR_S 1134,
Université de Paris, Université de
la Réunion, 75739 Paris, France

Dr. Stéphane Téletchéa

US2B, Nantes University, 44322
Nantes, France

Dr. Jérémy Esque

Toulouse Biotechnology Institute
(TBI), CNRS, INRAE, INSA, 31077
Toulouse, France

Deadline for manuscript
submissions:

closed (30 September 2024)

Message from the Guest Editors

The field of structural biology has recently seen tremendous advances in the identification and characterization of macromolecules, with breakthroughs in cryo-microscopy at the angstrom level and the high-fidelity, large-scale prediction of protein structures using deep-learning approaches, as demonstrated by AlphaFold2. With the COVID-19 pandemic outbreak, it became very obvious that for some proteins, even if it was possible to routinely detect and express them, it is still very challenging to resolve their atomic arrangement. Many proteins are membranous and require dimerization or even a higher order of organization. Although difficult to resolve experimentally, these proteins are essential to cell function, for mediating transient protein–protein interactions, triggering cell activation after cytokine stimulation, or determining cell fate via apoptosis activation. Many membrane proteins are also key targets for pharmaceutical purposes; for instance, half of the drugs approved by the FDA target a GPCR member. Although important scientific breakthroughs have recently been made, there is still a fundamental need for adding knowledge in protein interactions in membranous...





Editor-in-Chief

Prof. Dr. Sergei Odintsov

ICREA, 08010 Barcelona and
Institute of Space Sciences (IEEC-
CSIC), C. Can Magrans s/n, 08193
Barcelona, Spain

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics)

Contact Us

Symmetry Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/symmetry
symmetry@mdpi.com
X@Symmetry_MDPI