# **Special Issue**

# Function, Regulation, and Dysfunction of Intrinsically Disordered Proteins, Volume II

## Message from the Guest Editors

It has become acknowledged that a significant portion of proteins encoded in eukaryotic and prokaryotic genomes feature a partial or total degree of structural disorder. Disordered regions can regulate the biological activity of protein molecules, such as the propensity to generate molecular complexity, including the regulation of phase separations. The involvement of intrinsically disordered proteins in fundamental biological processes, including cellular signaling, protein translation, and transcriptional regulation, is increasingly reported to be crucial in functional and pathological mechanisms. The remarkable ability of these molecules to establish macromolecular interactions with multiple biomolecular partners is likely promoted by their inherent flexibility and ability to adapt their shape. While the functional role of IDPs is attracting an increasing research focus, understanding the underlying structural and mechanistic principles of their biological activity remains a crucial research challenge. The role of kinetic versus thermodynamic control is the key to understand the way by which these elusive systems are regulated to solve their intriguing biological functions.

#### **Guest Editors**

Dr. Giuliana Fusco

Department of Chemistry, University of Cambridge, Lensfield Road, Cambridge CB2 1EW, UK

Prof. Dr. Stefano Gianni

Department of Biochemical Sciences, Sapienza University of Rome, 00185 Rome, Italy

### Deadline for manuscript submissions

closed (25 June 2021)



# Life

an Open Access Journal by MDPI

Impact Factor 3.4
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/70650

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

mdpi.com/journal/ life





# Life

an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.0 Indexed in PubMed



# **About the Journal**

# Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

#### **Editor-in-Chief**

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

#### **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, CAPlus / SciFinder, and other databases.

### **Journal Rank:**

JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)

