# **Resource Summary Report**

Generated by dkNET on Apr 23, 2025

## **MBInfo**

RRID:SCR\_006768

Type: Tool

### **Proper Citation**

MBInfo (RRID:SCR\_006768)

#### **Resource Information**

URL: http://www.mechanobio.info/

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**Description:** Portal that deals with the process of mechanotransduction, providing in-depth, regularly updated reviews on the mechanics of cellular and molecular function. Each review is written by scientists and subsequently peer reviewed by experts in the field to ensure the content is accurate, reliable and up to date. Each review emphasizes the functional and mechanical aspects of a process, rather than the genetic aspects, with the aim of making this resource accessible to a wider audience. MBInfo is an ideal resource for scientists working in alternative fields, individuals working in industries where products are based on biological principles or students seeking a reliable introduction to a given cellular process. Each topic is written in a pyramid structure. The top of the pyramid is represented by an overview page. providing a basic description of a given function or process. These pages target a broad spectrum of readers and assume only a basic understanding of biology. Further down the pyramid, the reader will encounter the steps involved in the process described and functional modules that address specific mechanical aspects. These pages outline the protein complexes involved and the mechanisms by which they achieve the given process or function. These pages assume the readers have a more in-depth knowledge of scientific terms and principles. For every topic, a series of graphics and/or animations are available. These supplement the reviews, clarify information and guide the reader through complex processes pictorially. This makes MBInfo an ideal teaching resource, whether in the classroom or for clients trying to understand your product. All images and text are copyright protected and are for personal use only. Current Topics include: \* Cellular Structures in Mechanosensing and Cell Motility \* Methods in the Study of Mechanobiology \* Nuclear Mechanotransduction Almost 100 stand alone Glossary Terms are now available. These include short definitions or summaries of proteins and processes that relate to broader topics discussed within the site. Browse an extensive range of figures, tables and videos in our resources section. New guizzes and other interactive content can also be found.

Abbreviations: MBInfo, MCMF

**Synonyms:** MBInfo: A modular approach to cellular functions, Manual of Cellular and Molecular Function

**Resource Type:** training resource, topical portal, video resource, image collection, portal, data or information resource

**Keywords:** cell, molecule, function, cellular function, molecular function, mechanics, cellular process, mechanobiology, biochemistry, mechanotransduction, review, protein, cellular structure, mechanosensing, cell motility, protein-protein interaction, cytoskeletal system, filopodia, lamellipodium, lamellum, stress fiber, dendritic spine, protein-protein interaction, nucleic acid-protein, small molecule-protein, protein, nucleic acid, small molecule, interaction

**Funding:** Ministry of Education - Singapore ; National Research Foundation - Republic of Singapore

Availability: Acknowledgement requested, Use of images requires consent

Resource Name: MBInfo

Resource ID: SCR\_006768

**Alternate IDs:** nif-0000-06680

**Record Creation Time:** 20220129T080238+0000

**Record Last Update:** 20250423T060322+0000

### **Ratings and Alerts**

No rating or validation information has been found for MBInfo.

No alerts have been found for MBInfo.

#### **Data and Source Information**

Source: SciCrunch Registry

#### **Usage and Citation Metrics**

We found 10 mentions in open access literature.

Listed below are recent publications. The full list is available at dkNET.

Koço?lu C, et al. (2022) Protein interaction network analysis reveals genetic enrichment of immune system genes in frontotemporal dementia. Neurobiology of aging, 116, 67.

Messina F, et al. (2021) Looking for pathways related to COVID-19: confirmation of pathogenic mechanisms by SARS-CoV-2-host interactome. Cell death & disease, 12(8), 788.

Vavouraki N, et al. (2021) Integrating protein networks and machine learning for disease stratification in the Hereditary Spastic Paraplegias. iScience, 24(5), 102484.

Kluss JH, et al. (2021) Preclinical modeling of chronic inhibition of the Parkinson's disease associated kinase LRRK2 reveals altered function of the endolysosomal system in vivo. Molecular neurodegeneration, 16(1), 17.

Kara E, et al. (2021) An integrated genomic approach to dissect the genetic landscape regulating the cell-to-cell transfer of ?-synuclein. Cell reports, 35(10), 109189.

Tomkins JE, et al. (2020) PINOT: an intuitive resource for integrating protein-protein interactions. Cell communication and signaling: CCS, 18(1), 92.

Messina F, et al. (2020) COVID-19: viral-host interactome analyzed by network based-approach model to study pathogenesis of SARS-CoV-2 infection. Journal of translational medicine, 18(1), 233.

Sathe M, et al. (2018) Small GTPases and BAR domain proteins regulate branched actin polymerisation for clathrin and dynamin-independent endocytosis. Nature communications, 9(1), 1835.

Remmele CW, et al. (2015) Integrated inference and evaluation of host-fungi interaction networks. Frontiers in microbiology, 6, 764.

Villaveces JM, et al. (2015) Merging and scoring molecular interactions utilising existing community standards: tools, use-cases and a case study. Database: the journal of biological databases and curation, 2015.