

## Special Issue

# Pathogenetic Mechanism and Therapy Strategies of Achondroplasia

### Message from the Guest Editor

Achondroplasia (ACH), the most common form of short-limbed skeletal dysplasia, is caused by activating mutations in the fibroblast growth factor receptor 3 (FGFR3) gene. Patients with ACH suffer from various neurological, otolaryngologic and orthopaedic problems for a lifetime. Multidisciplinary medical approaches from early childhood are required to maintain a long-term patient's quality of life. Several researches to develop therapeutic drugs have focused on target inhibition of the activated FGFR3 signaling in growth plate chondrocytes. Some of the drugs including BMN111, infigratinib, and TransCon CNP, are currently on-going clinical trials. In this special issue, we would like to review current therapeutic approaches for diverse disease-specific problems, including short stature, spinal canal stenosis, sleeping apnea, foramen magnum stenosis, and upper-airway obstruction. We will also discuss exciting advances of novel pharmacological development for future clinical applications and describe molecular mechanisms of these candidate drugs on the therapeutic potential.

---

### Guest Editor

Dr. Hiroshi Kitoh  
Aichi Children's Health and Medical Center

---

### Deadline for manuscript submissions

closed (30 April 2021)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/62728](https://mdpi.com/si/62728)

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

[mdpi.com/journal/  
ijms](https://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



[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)



## About the Journal

### Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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. José L. Quiles  
Department of Physiology, Institute of Nutrition and Food Technology  
"Jose Mataix", Biomedical Research Center, University of Granada,  
Avda. Conocimiento s/n, 18100 Armilla, Granada, 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, MEDLINE, Embase, CAPus / SciFinder, and other databases.

#### Journal Rank:

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