



Editorial

Cell Insight: An exciting new channel looking into life and diseases



In the past years, we have witnessed many breakthroughs on the cellular and molecular mechanisms in life and diseases. To meet the increasing demand for fast and professional publication of the most exciting advances in the field, Elsevier in partnership with Wuhan University, founded *Cell Insight* in 2021. Today, we are extremely pleased to announce the launch of our first issue.

Cell Insight is an open access international journal that aims to present not only cutting-edge research of molecular and cellular mechanisms essential to biological processes and diseases, but translational research as well. We have assembled an international team of 47 distinguished editorial members who will assure a timely publication process through professional peer review, all the while maintaining a high standard of scientific rigor. This is evident in the publication of this inaugural issue, and we will keep the same standard and quality in future issues.

This very first issue published five excellent papers, including three reviews, one research article and one letter to the editor. In the cover story, we invited Dr. Li Yu (together with his colleague Dr. Yuwei Huang) to provide an expert review on migrasome, an organelle of migrating cells recently discovered by his group (Huang and Yu, 2022). This review covers the mechanisms of migrasome biogenesis and their diverse physiological roles including mitochondrial quality control as well as delivery of signaling molecules, which will certainly orient the readers into this exciting new field of cell biology.

Human genome encodes a large numbers of long noncoding RNAs (lncRNAs), which play important roles in divergent cellular processes. In the second review paper, Dr. Erwei Song and his colleagues describe how lncRNAs interact with proteins to regulate intracellular signaling of cancer cells as well as intercellular signaling in the tumor microenvironment. In addition, they also discuss how non-coding nucleic acids, such as DNA found in neutrophil extracellular trap or endogenous cellular DNA and RNA, act as signal molecules in the networks of tumor ecosystem (Lin et al., 2022).

Sensing of cytosolic DNA is critically important for host defense of aberrantly located cellular DNA (mitochondrial and genomic DNA) or invaded microbial DNA. Since the discoveries of the critical adaptor protein MITA/STING and the DNA sensor cGAS, the regulation of the cGAS-MITA/STING axis in innate immune response to DNA as well as related diseases has been extensively investigated. In this issue, Dr. Bo Zhong and his colleague Dr. Zhi-Dong Zhang provide a comprehensive review on the regulatory mechanisms of cGAS-MITA/STING axis as well as its deregulation in autoimmune diseases and cancers (Zhang and Zhong, 2022).

Coinfection has become a serious medical problem with *Mycobacterium tuberculosis* leading to the primary death in persons with HIV-1

infection. Using single-cell RNA sequencing analysis, Dr. Guoliang Zhang's group demonstrates that certain monocyte subsets in peripheral blood serve as discriminating biomarkers for diagnosis of HIV-1-TB coinfection, and which may be used for investigation of protective immunity against HIV-1-TB co-infection (Guo et al., 2022).

Osteoclast-driven bone resorption is critically involved in bone homeostasis. In a letter to editor, Dr. Yan Yang's group demonstrates a critical role of the RNA binding protein Mex3B in inhibiting the expression of DC-STAMP, a master determinant of osteoclast cell fusion. Consistently, Mex3B plays a critical role in osteoclastogenesis (Yang et al., 2022). This study points to Mex3B as a potential therapeutic target for the treatment of human bone diseases.

The studies reported in this inaugural issue of *Cell Insight* cover a diversity of areas from cell biology, cancer biology, immunology, virology to development, and represent well the scientific scope and standard for manuscripts published by *Cell Insight*. With the explosive growth in the field of biomedicine at the molecular and cellular levels, *Cell Insight* is determined to provide a forum for prompt and professional communications of highly significant discoveries. Again, we would like to invite you to join this new adventure as audience and contributors.

Finally, we are also very pleased to mention that the open access publication fees for manuscripts accepted before 2025 are waived.

References

- Guo, Qinglong, Zhong, Yu, Wang, Zhifeng, Cao, Tingzhi, Zhang, Mingyuan, Zhang, Peiyan, Huang, Waidong, Jing, Bi, Yue, Yuan, Ou, Min, Zou, Xuanxuan, Xiao, Guohui, Yuan, Yang, Liu, Shiping, Liu, Longqi, Wang, Zhaoqin, Zhang, Guoliang, & Wu, Liang (2022). Single-cell transcriptomic landscape identifies the expansion of peripheral blood monocytes as an indicator of HIV-1-TB coinfection. *Cell Insight*, 1. <https://doi.org/10.1016/j.cellin.2022.100005>
- Huang, Yuwei, & Yu, Li (2022). Tetraspanin-enriched microdomains: t1 he building blocks of migrasomes. *Cell Insight*, 1. <https://doi.org/10.1016/j.cellin.2021.100003>
- Lin, Xiaorong, Luo, Man-Li, & Song, Erwei (2022). Long non-coding RNA and non-coding nucleic acids: signaling players in the networks of the tumor ecosystem. *Cell Insight*, 1. <https://doi.org/10.1016/j.cellin.2022.100004>
- Yang, Yan, Wang, Su-Yun, Li, Zhen-Qi, & Wu, Huang-Ning (2022). Mex3B inhibits DC-STAMP mRNA level and osteoclastogenesis. *Cell Insight*, 1. <https://doi.org/10.1016/j.cellin.2021.100002>
- Zhang, Zhi-Dong, & Zhong, Bo (2022). Regulation and function of the cGAS-1 MITA/STING axis in health and disease. *Cell Insight*, 1. <https://doi.org/10.1016/j.cellin.2021.100001>

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