

Cite this as: Tingting LI, Shihua ZHANG, Yuxuan YANG, Lingli ZHANG, Yu YUAN, Jun ZOU. Co-regulation of circadian clock genes and microRNAs in bone metabolism[J]. Journal of Zhejiang University Science B, 2022, 23(7): 529-546.
<http://doi.org/10.1631/jzus.B2100958>

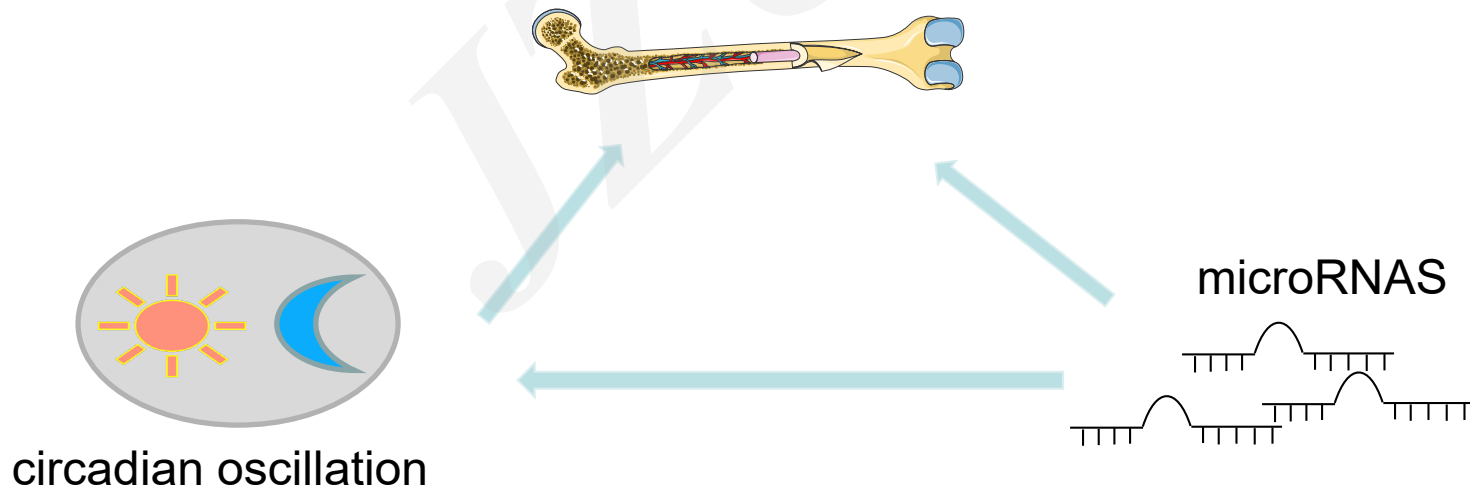
Co-regulation of circadian clock genes and microRNAs in bone metabolism

Key words: Circadian rhythm, Circadian clock genes, MicroRNAs, Bone metabolism

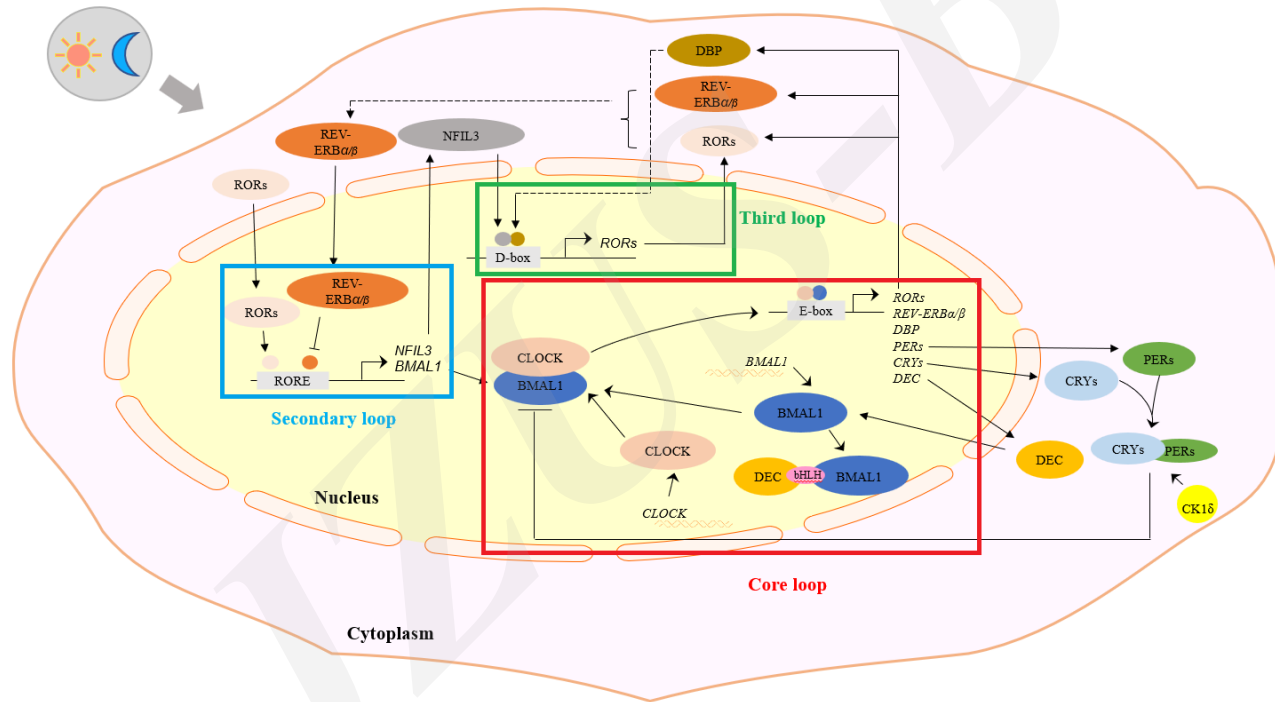
Research Summary

This review mainly focused on the role of circadian clock genes and microRNAs in the regulation of bone metabolism, with the following Highlights:

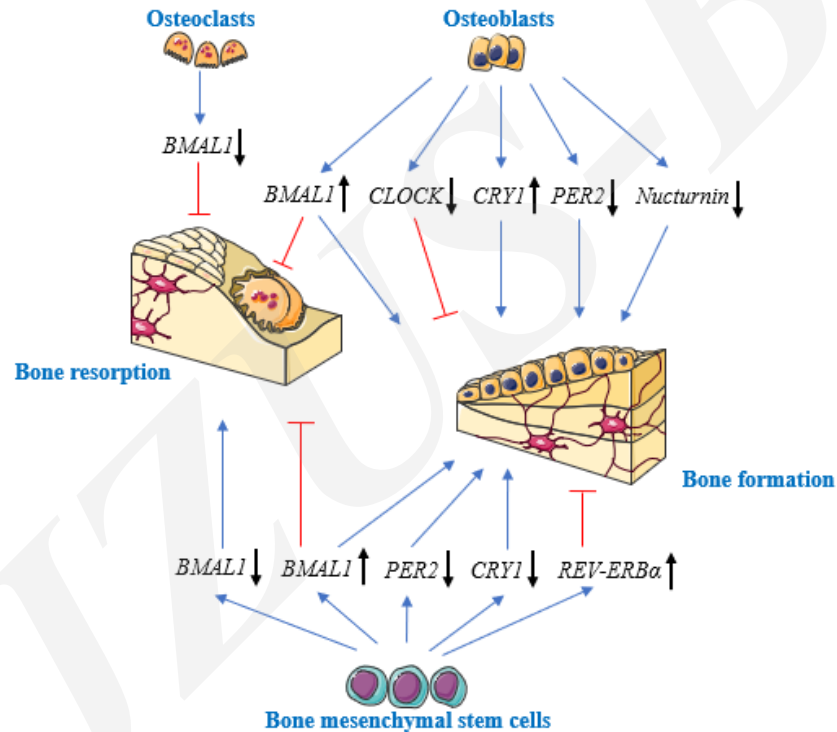
- Circadian clock genes and miRNAs are involved in the regulation of bone metabolism
- Circadian clock genes can be targeted by miRNAs to regulate bone metabolism
- A new regulation axis discovered-miRNA/circadian clock genes/bone metabolism



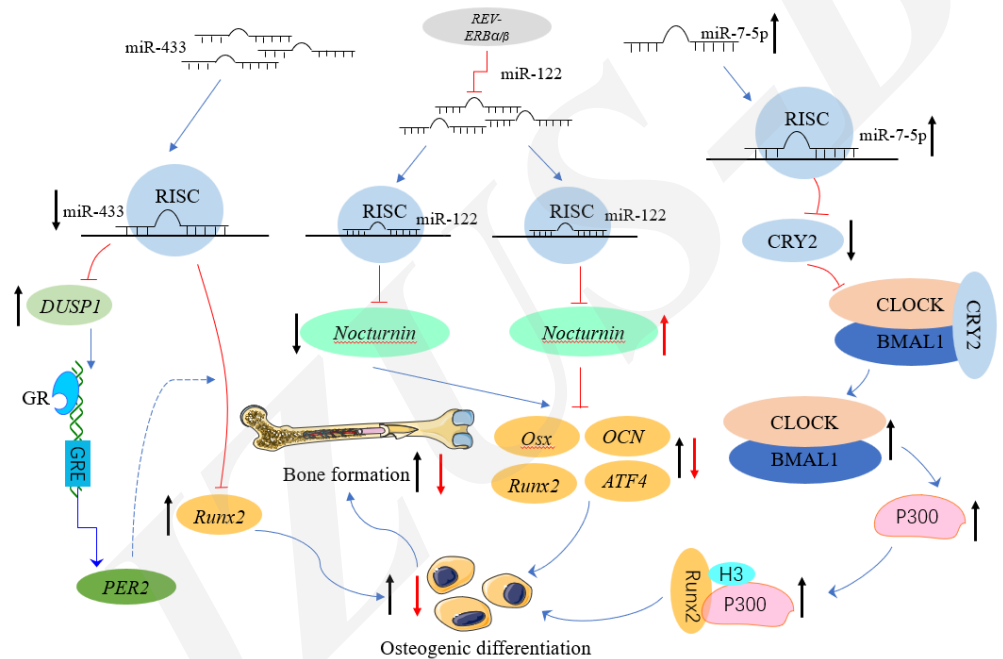
circadian rhythm oscillation regulation mechanism



Circadian clock genes regulate bone formation



miRNA/circadian clock genes/bone axis in bone metabolism



MicroRNAs exert positive or negative regulatory effects on bone formation by targeting circadian clock genes