

## Special Issue

# TRP Channels in Regulation of Mineral Homeostasis

### Message from the Guest Editor

Zn<sup>2+</sup>, Mg<sup>2+</sup>, and Ca<sup>2+</sup> are the most abundant divalent cations implicated in a plethora of physiological processes. The body's ability to tightly regulate the blood levels of Zn<sup>2+</sup>, Mg<sup>2+</sup>, and Ca<sup>2+</sup> is essential for normal embryonic and postnatal development, and overall health. The circulation system contains less than 1% of these metal's total organismal content, and such a balance is orchestrated by intestinal absorption, renal excretion, and backup storage in bones and soft tissues. Accumulating evidence indicates that several members of the transient receptor potential (TRP) family of ion channels play a critical role in the homeostatic balance of Zn<sup>2+</sup>, Mg<sup>2+</sup>, and Ca<sup>2+</sup> in a tissue-specific manner, including intestinal absorption (TRPV6, TRPM6, and TRPM7), renal reabsorption (TRPV5 and TRPM6), placental transport (TRPM6, TRPM7, and TRPV6), and storage in the bones (TRPV4 and TRPV5). Several known mutations in TRP channels are the molecular cause of inherited human diseases associated with the organismal deficiency of divalent cations. This Special Issue aims to highlight the recent advances in these research areas.

### Guest Editor

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### Deadline for manuscript submissions

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### Editor-in-Chief

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