# **Special Issue**

### Function and Dysfunction of the Caveolar Network in Cell Signaling and Human Disease: An Update after 70 Years of the Discovery of Caveolae

#### Message from the Guest Editor

Caveolae (i.e., 50 to 80 nm cholesterol- and glycosphingolipid-rich, flask-shaped invaginations discovered nearly 70 years ago) have been observed in many differentiated cells. More than 60 years of investigation on the caveolar membrane system have strongly contributed to extending and enhancing our knowledge of the crucial cellular mechanisms, including vesicular transport, endocytosis, cholesterol homeostasis, signal transduction, cell metabolism, and cancer. However, although the generation of caveolin knockout animals has strongly contributed to deepening the biological role of the caveolar network in vivo, many issues related to the mechanisms regulated by caveolins, both under physiological and pathological conditions, remain open. The aim of this Special Issue is to gather up-to-date results that may expand our knowledge around the multifaceted role of caveolae and caveolin proteins in cell dysfunction and human diseases. Both research and review articles related to the current state of the art in this field are also welcome.

#### Guest Editor

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#### Deadline for manuscript submissions

closed (30 April 2025)



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*Cells* has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

#### Editors-in-Chief

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