Special Issue

The Role of Integrins in Health and Disease

Message from the Guest Editor

I focused on the structure-function studies of several integrins (how integrins interact with ligands and how integrins are activated) in the 1990s at the Scripps Research Institute. I then identified many integrin ligands (mostly growth factors) and studied how integrins crosstalk with growth factor signaling. We propose that several growth factors directly bind to integrins and induce integrin–growth factor–growth factor receptor ternary complex. We recently found that several integrin ligands we newly identified (e.g., fractalkine) directly bind to integrin and allosterically activate integrins. Fortunately, I have seen the field almost since the beginning for the past 40 years. Now the field is so diverse that it is not easy to understand the whole picture of integrin functions. It is also possible that current models of integrin functions may not be correct. Therefore, this issue will provide the current state of the field by collecting the opinions of as many experts as possible. Keywords

- integrins and diseases
- integrin activation
- integrin-ECM interaction
- integrin-growth factor crosstalk

Guest Editor

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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.

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