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Insulin-Like Growth Factors in Development, Cancers and Aging

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Message from the Collection Editor

Since their discovery in the late 1950s, insulin-like growth factors (IGF) have generated a significant level of interest in many areas of biology and medicine, including endocrinology; pediatrics; growth and development; metabolism; nutrition; aging and longevity; and, finally, cancer research. IGF1, which was initially identified as the mediator of growth hormone action, is regarded as a key player in numerous cellular and organismal processes. The signaling pathways elicited by IGF1 have been extensively characterized in biochemical and molecular terms over the past 40 years. However, fundamental questions regarding basic differences between mechanisms of action of IGF1 and the closely related insulin molecule are yet to be resolved. IGF1 displays one of the most potent anti-apoptotic and pro-survival activities amongst all growth factors identified to date. Therefore, the IGF1 axis and, in particular, the IGF1 receptor emerged as a promising therapeutic target in oncology. In addition, the IGF1 system plays an important role in aging processes and abrogation of the growth hormone-IGF1 endocrine axis is associated with increased lifespan.



mdpi.com/si/64151

Topical Collection



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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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