

Special Issue

Harnessing the Immune System to Fight Pediatric Cancer—Second Edition

Message from the Guest Editor

This Special Issue will review how the genomes and epigenomes of pediatric patients are unique and potentially targetable. Recently, cutting-edge advances include efforts to prevent the exhaustion of anti-cancer T cells, particularly those expressing chimeric antigen receptors (CARs) targeting tumor cells. Related investigations include research on enigmatic populations of stem-like T cells. CRISPR has also become a powerful tool for genome-wide screens and can be used to achieve an unprecedented level of highly specific genetic manipulation. New immune checkpoints and corresponding inhibitors are being discovered, and advances in bispecific antibodies and CAR constructs are being explored to prevent treatment failure. Furthermore, the tumor microenvironment, characterized as immunologically “hot” or “cold”, is being deciphered to better employ these immunotherapies or (re)activate endogenous immunotherapies. Identifying rare genetic and epigenetic variants that contribute to pediatric cancer using these new tools and concepts will lead to new treatment options for this vulnerable population.

Guest Editor

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About the Journal

Message from the Editorial Board

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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