Special Issue

Genomic Medicine and Rare Undiagnosed Diseases in Children: New Developments in Precision Healthcare

Message from the Guest Editor

Rare diseases, with over 7000 identified types, impact approximately 10% of the global population and are often chronic, complex, and multisystemic. About 80% have a genetic basis, with nearly 50% manifesting at birth or during childhood. While advances in clinical genetics and precision medicine have improved molecular diagnostic capabilities, half of individuals remain undiagnosed. Moreover, even when diseases are diagnosed, only 5% of rare diseases are curable, and nearly 30% of affected children die before the age of five. This Special Issue aims to demonstrate how translational and precision medicine can enhance healthcare for pediatric patients with rare diseases. By focusing on multi-omics technologies, including genomics, proteomics, and metabolomics, we seek to highlight research that connects innovative discoveries with clinical applications.

Guest Editor

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Message from the Editor-in-Chief

You are invited to contribute a research article or comprehensive review for consideration and publication in *Children* (ISSN 2227-9067). *Children* is an open access journal—research articles, reviews, and other content are published online immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. The journal focuses on sharing clinical, epidemiological, and translational science relevant to children's health. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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