The field of pediatric sports medicine has evolved from a wide array of different basic science and clinical disciplines. By its very nature, the practice of sports medicine requires collaboration among multiple disciplines. The primary goal of the field of sports medicine is to integrate and apply concepts and principles of basic and clinical sciences in order to promote lifelong health, to prevent injuries, and to manage medical problems within the context of sport participation. Physical activity is an integral part of sports participation; however, participation in sports has additional implications. Sports play a major role in the lives of children and adolescents, whether they engage in such activity as spontaneous play or organized sports. Participation in sports inherently occurs within a larger social context and variably influences physical, psychological, and social growth and development of children and adolescents. In the face of a global epidemic of pediatric obesity, engaging children in physical activity and sports is essential in order to cultivate a lifelong pursuit of healthy lifestyle.

The many benefits, both physiological and psychosocial, associated with regular exercise have been well documented. The contribution of sport participation to psychosocial development of children and adolescents deserves to be especially recognized. In terms of psychological development sport participation has been shown to improve self-esteem, self-perception, and self-confidence. It also enhances personal coping abilities and motivation. Sport participation, especially team sports, fosters independence and teaches children sportsmanship and fair play. Sport participation provides a setting for comparing self to peers, enhances social competence, teaches personal responsibility, and provides families and athletes a socializing experience.

Notwithstanding the many physiological and psychosocial benefits of exercise and sport participation, it is important to recognize that sport participation is inherently associated with risk for injuries. Children and adolescent may also suffer from undue stress, anxiety and other emotional and psychological disorders, if the reasons for playing sports shift away from having fun and healthy competition to win at all costs philosophy, increased parental pressure, and when disproportionate time is devoted to sports at the cost of other childhood activities.

The goal of this focused issue on the clinical practice of pediatric practice of sports medicine is to provide the reader with basic information on various topics directly relevant to clinical practice. Within the context of this issue of Translational Pediatrics, it is possible to focus only on selected topics of interest. The topics covered are based on some of the most common concerns for which young athletes seek medical attention in a general clinical practice setting. The range of topics covered in this issue addresses the relationship between child and adolescent growth and development and sports participation, effect of resistance training in skeletally immature athletes, sports participation by athletes with chronic diseases, and musculoskeletal injuries that are relatively more common in children and adolescents.