PREFACE

by Claude Bouchard

It is an honor for me to be given the opportunity to contribute to this Festschrift recognizing the many accomplishments and the global legacy of Professor Robert M. Malina. Over the last 40 years, I have had the privilege of being able to observe from a front-row seat the numerous contributions made or spearheaded by Professor Malina, and this commentary is inspired by sustained contacts with him over these decades.

Anyone who has reviewed the curriculum vitae of RMM realizes that his research interests extend from human biology in the broad sense to exercise science, with a particular focus on growth and a variety of pediatric issues. His contribution to science spans a period of 50 years. He published his first research paper in 1962 in the Journal of Bone and Joint Surgery (Rarick et al., 1962). Since then, he has contributed to the advancement of knowledge in areas as diverse as the morphological growth of children; motor development and motor skills across the growing years; maturation, including age at menarche; skeletal age; growth and sports performance; the risk factor profile for common chronic diseases in children; and the role of social, cultural and economic circumstances as seen in developed and developing countries on growth and maturation.

Robert M Malina has published almost 400 peer-reviewed research papers and about 300 book chapters, technical papers, book reviews and other reports. He has also written several monographs and books. His publications have been cited more than 7,600 times in the world literature.
CHARACTERISTICS OF CONTRASTING SKELETAL MATUREITY STATUS AT THE BEGINNING OF LONG-TERM SOCCER TRAINING

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(a) This chapter substantially overlaps a previously published manuscript (Figueiredo et al., 2009, in references). It is reproduced with permission: License number, 3157590204287; Content publisher: Informa Healthcare; Content publication: Annals of Human Biology.

INTRODUCTION

Participation in youth team sports is based primarily on chronological age groups which often span two years. Variation in size, function and skill associated with age per se and with maturity status within two-year age groups can be considerable. Studies of young athletes are often limited to growth and maturity status independent of functional capacities and sport-specific skills; the same is true of studies of function and skill (Malina 1994, Malina, Bouchard & Bar-Or 2004). As a result, potential interactions among size, maturity, function and skill are often overlooked as youth progress in a sport.

Behavioral dimensions such as goal orientation, motivation, and perceptions of ability and success, have not ordinarily been considered in studies of young athletes that focus on biological and performance characteristics. Interactions between biological and behavioral variables may influence sport performance per se and persistence in a sport, and thus merit consideration. Observations of boys in the Adolescent Growth Study of the University of California (Berkeley), for example, indicated variation in behavioral characteristics associated with biological (skeletal age) maturity status (Jones 1949, 1958, 1965, Jones & Bayley 1950, Eichorn 1963). Early maturing boys received greater social recognition from peers, were more at ease in social interactions, were considered more physically attractive and physically efficient, and were treated more favorably by adults compared to late maturing boys. On the other hand, late maturing boys were generally considered more eager, expressive and more attention seeking but lower in social prestige than early maturing boys. Although dated, the results highlight the potential relevance of interactions between biological maturity and behaviors among adolescent boys which are implicit in commonly used models of adaptations to puberty (Petersen &