

## BUCHBESPRECHUNGEN

J.A. McNamara (ed.)

**Growth and treatment: a meeting of the minds.  
Vol. 41, Craniofacial Growth Series**

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The Moyers Symposium is an annually-held orthodontic conference of unique character. Organized by the Center for Human Growth and Development, University of Michigan, for the 30th time last year, many of these symposia focussed on craniofacial growth, but nonetheless were of interdisciplinary character and had a scope reaching far beyond orthodontics. Most of the lectures are rather long, allowing in-depth discussion of the subject. Thus, they differ substantially from the shorter contributions on other orthodontic conferences and articles in peer-reviewed journals. The contributions to the symposium, supplemented by additional papers, are traditionally published as a volume in the Craniofacial Growth Series, many of which have become

widely cited milestones in the orthodontic literature. As usual, the disciplines of the authors in the present volume reflect great diversity: neurosurgery, biomedical and electrical engineering, molecular biology, maxillofacial surgery and, of course, orthodontics. While this diversity is a prerequisite for vivid scientific discussions, something like a textbook with consistent chapters cannot be expected. Rolf Behrents starts with an overview of the life of Robert Moyers and the history of the Moyers Symposia, followed by a molecular biologist's contribution on the impact of the Humane Genome Project on dentistry. A current overview of the possibilities and limitations of orthognathic surgery is provided by Turvey and Proffit. Robert Isaacson discusses the foundation of orthodontics with evidence from examples of orthodontic mechanics and craniofacial growth. Wet-handed orthodontists in search of practically-relevant concepts will be satisfied by Bjorn Zachrisson's contribution on orthodontic tooth movements for esthetic repositioning of the gingival margins and implant site development. The same holds true for the subsequent paper by David Sarver on comprehensive smile diagnostics to achieve esthetically superior results, although it may be doubtful whether such efforts really satisfy the needs of most orthodontic patients. While numerous longitudinal studies on untreated Class II patients can be found in the literature, few reports have been published on untreated Class III patients. For such reasons, the article on the longitudinal data from 22 untreated subjects with Class III malocclusion, studied over more than six years, is remarkable, whereas the contribution by Ursi and Almeida on the initial effects of the pendulum appliance reiterates the findings of numerous previously published studies on this appliance. After these practically relevant topics, the last three contributions are on basic science and are largely of theoretical nature, dealing with remodeling of the cranial floor studied by histology and cephalometrics, the development of non-destructive methods for determining a skull's biomechanical properties, and a new theory on craniofacial growth called the spatial matrix hypothesis. The latter contribution seems somewhat speculative, but as Lysle Johnston states in his intellectually brilliant foreword, we cannot live on bread, that is, clinical presentations alone, and theory „is a sixth sense that helps to distinguish between treatments that merit consideration and those that deserve only to be shunned.“ The reader also learns in his short text that Moss' functional matrix hypothesis, which served as the theoretical foundation for the so-called functional appliances, is considered a mere historical curiosity nowadays. Finally, those readers seeking 'pearls' to take to the office next Monday will probably be disappointed reading this volume, and 85 US\$ may be a high price for a small book with relatively few black and white illustrations. However, orthodontists interested in background knowledge of their profession and who value the wide experience of most of the contributors will enjoy this book and should find it worth both the expense and the time required to read it.

H. Madsen, Ludwigshafen