

Preface

The aim of this text is to enable the student of dentistry to learn the fundamentals underlying clinical treatment of the patient. Oral structures are described in microscopic detail in this book. As in the past editions the book is divided into six sections. The first section describes developmental details of the head and neck and how these structures relate to the body as a whole. Also described is the relationship of cells to tissues, how tissues make up organs, and how organs relate to the total being. The developing body is followed postnatally through postadolescence. The second section describes the developing crowns and roots of the teeth and the tissues surrounding and supporting them. Tooth eruption and shedding is also included in this section. The third section is a description of the structure and function of the teeth in their mature form as well as a comparison of the primary and permanent dentitions. The fourth section describes the supporting tissues of the teeth including the gingiva and the periodontium, which consists of the cementum, alveolar bone, and periodontal ligament. These structures, including their innervation, are fully described. The fifth section describes the glands of the oral cavity and their products. The sixth and final section

describes the perioral tissues, such as the bilateral nasal sinuses and the temporomandibular joints. Also considered in this section are tooth movement, tooth implantation, and healing of oral tissues. In comparison with the past edition, we believe this organizational pattern is more relevant to the teaching of these subjects.

This new edition is updated and expanded, bringing forth new information gained since production of the last edition. We have included more “Clinical Applications” to better relate basic and clinical information. The text contains a large number of illustrations that enhance understanding of the written descriptions. In this edition color has been added to further clarify the histologic photomicrographs and the diagrams. This should assist in gaining information about the structure of complex tissues. A glossary is again included to assist in defining terms that may be unfamiliar to the student. All of the authors wish to express their hope that the materials presented are clear and understandable. Please send any questions that arise to me or to the authors directly.

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Again, the medical illustrations in this book were produced by students of dentistry. The first was Jeff Clark who produced much of the art throughout the book. The second was Alayne Evans, then a dental student, who listened to the needs of each of the authors and provided excellent illustrations. Both are practicing dentistry today. Much of the photography was also

done by students such as Steve Olsen, Gary Bilyk, and Thomas Simmons, all of whom created the photography for yearbooks at the university and found it a challenge to produce the detailed illustrations required to publish this book.

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