

# Preface to the Third Edition

This Third Edition of the *Color Atlas of Periodontology* now emerges, more than 13 years after the Second. The reasons for the long delay are many, but the saddest was the passing of our colleague and friend, and co-author Edith's husband, Klaus Rateitschak, on September 30, 2002. We dedicate this Third Edition to him, an edition on which he worked intensively, up to the very end, and in which he found immense joy and satisfaction in the almost innumerable innovations that the 1990s brought to our profession, while launching it into the 21st Century.

The turn of the century presented to us the opportunity to freshly analyze what had been achieved, and to define new goals for the future. Dentistry and especially periodontology received fresh and fervent impetus to integrate new and relevant scientific and clinical knowledge into our daily professional practices, including even total paradigm shifts. These facts in themselves presented sufficient basis for us to totally revise the Second Edition, maintaining of course those concepts and treatment modalities that have stood the test of time, but incorporating exciting new findings that have immediate clinical applicability.

The most noble task of a dentist—also the watchword of our now departed colleague—is to maintain the health and well-being of the patient. This translates in our profession into the prevention of oral diseases.

However, if, despite our best efforts in prevention, damage to tooth structure and the periodontium occur, treatment of the periodontal condition must be the fundamental endeavor, even before any further dental therapy. Each and every restorative effort—from the smallest filling through removable partial dentures and to complex fixed bridge constructions, regardless of whether these are tooth-borne or implant-borne—must be undertaken only when the supportive periodontal tissues are inflammation-free and healthy.

Inflammatory periodontal diseases today represent some of the most widespread health problems in the world. The effects of periodontal diseases upon systemic health are becoming clearer almost daily. To ignore these now obvious associations is quickly becoming unacceptable.

Because of this fact, the following chapters or sections have been rearranged, expanded, sometimes shortened, or in many cases completely rewritten:

- An introduction for the “layperson,” the patient
- Etiology—Dental plaque as a “biofilm”; the periodontopathic microorganisms
- Pathogenesis—Host response, risk factors
- Oral pathological changes in gingiva and periodontium
- Oral manifestations of HIV-disease. Treatment possibilities
- Gingival recession—“Prevention before surgical treatment”
- The “systemic pre-phase” of periodontal therapy
- Non-surgical, “closed” periodontal therapy—Promising new techniques
- Pharmacologic strategies for the treatment of periodontitis
- Surgery—Principles of access flaps for “open” root debridement
- Regenerative and resective surgical methods
- Furcation involvement—Classifications and treatment options
- Esthetic surgery—Mucoplastic operations
- Risk-managed maintenance therapy—Success and failure
- Periodontics and prosthetics—Standard and esthetic possibilities
- Ridge augmentation using soft tissue
- Indication for implants in the periodontally treated dentition
- Periodontal tissues in the elderly
- Comprehensive classification of periodontal diseases—Original 1999 text, AAP/EFP

As always before, every effort was made in this Third Edition to fully integrate the text and the illustrations, to make it pleasant (or at least easier) for the reader as she/he studies or simply peruses the book. Nevertheless, the comprehensive nature and thus the very weight of this new treatise, this Third Edition, have essentially removed it from the ranks of a bedside reader. For this we apologize!

Herbert F. Wolf, Zürich  
Edith M. Rateitschak-Plüss, Basle  
Thomas M. Hassell, Flagstaff

## Foreword to the Third Edition—I

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Diagnosis and treatment of the diseases of the periodontium remain as one of the critical components of the practice of dentistry. However, implementation of periodontal therapy as a component of comprehensive oral care remains today a significant challenge. One major aspect of understanding contemporary concepts of periodontology is locating an appropriate resource that contains the time-proven fundamentals of therapy while providing the recipient with cutting edge, new information. The dental practitioner community continues to seek clarity in a discipline that moves into the 21<sup>st</sup> Century with lightening speed. Moreover, today's clinician—whether it be the dental student or the seasoned dentist—desires information in a format that is time-effective, not verbose, and visually appealing. This Third Edition of the *Color Atlas of Periodontology* bears a title that could be considered by some to be a misnomer, for it is far from merely a collection of illustrations, diagrams, and clinical photographs. There exists also a more than adequate text, whereby passages and illustrations blend together in a synergistic fashion and with harmony.

In recent decades, periodontology has benefited from a mainstay of infusion of clinical and laboratory science into a discipline whose goal is *retaining* the dentition. This Third Edition contains very comprehensive sections in the area of microbiology, and more importantly host defense mechanisms in the subject of pathogenesis. When one peruses these respective chapters, it becomes evident that the text is illustrated in such a clear manner that what can be difficult in comprehension can be readily grasped in understanding. Terminology and definitions are current and in alignment with today's published concepts. Serious attention is given to data collection and diagnosis. There are accurate descriptions of current diagnostic tests, whether they are from a microbiologic venue or in a host response category. What is particularly gratifying is a strong section in oral pathological alterations of the periodontium. The current and future

scope of periodontology has as its domain *all* of the oral cavity, and especially as it relates to the patient's systemic health.

However, the most comprehensive section is that of therapy, where all phases of surgical and non-surgical treatment are covered in all facets. While most authors would abhor the similarities of a "cook book," the practitioners who desire to expand their repertoire will be delighted with the attention to detail. And while the accepted concept is that textbooks are already "history," the therapy sections defy this concept, including areas involving mucogingival procedures that are very current, even progressive. Few texts can compare with the quality of illustrations superimposed upon the truly excellent intraoral photography. One also notes that all procedures are presented with objectivity and with no predilection to any particular philosophy. References to products are handled in a manner that allows the clinician to make unbiased choices.

Today's clinician must be knowledgeable in esthetic dentistry. The reader will find a seamless integration of periodontal concepts with the discipline of prosthodontics. Well documented cases provide a clear understanding of what can be achieved in the perio/restorative esthetic environment. For the restorative dentist, step-by-step procedures are presented in the areas of basic biologic width, enhancement of interdental papillae, and dealing with alveolar ridge defects.

In summary, few practitioners will find a more all-inclusive text on periodontology that will appeal to all levels of clinicians, dental students, and periodontics graduate students. The format is very user-friendly, with intent to provide the reader with a comprehensive reference in a time-effective manner. I suggest this Third Edition as required reading for all who are engaged in rendering periodontal therapy.

## Foreword to the Third Edition—II

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The *Color Atlas of Periodontology*, first published in 1984, has come to its third, thoroughly revised and extensively expanded edition, being a cherished classic in the library of practitioners, students, and teachers of this discipline. Having used the First Edition as one of the reference textbooks during my specialist training, and having “borrowed” many diagrams from the Second Edition to illustrate difficult concepts to my students, it is with particular pleasure that I write this Foreword to the new edition of the *Color Atlas of Periodontology*.

This new edition represents both an element of evolution and of revolution with respect to the previous ones. Evolution since the authors have expanded and brought to perfection what has rendered the *Atlas* a true classic: The clarity of a synthetic up-to-date discussion of the critical topics in periodontology based on text, diagrams, and generous, detailed illustration. It is the ideal media to capture both theoretical and clinical concepts in an effective, time-efficient manner. The *Atlas* continues to be a didactic masterpiece making both scientific discovery and clinical progress accessible.

The *Atlas* is also an element of revolution since the authors have tried to implicate in clinical practice the paradigm changes that have originated from the last 20 years of fundamental and clinical research. It is this attempt that makes

this book particularly attractive: As progress in the science of periodontology steamed along, the gap between this and the reality of practice has grown ever wider. The *Atlas* offers students and clinicians the opportunity to reflect on the profound changes that have occurred and illustrates concise and practical approaches to *use* the new and emerging knowledge for the benefit of periodontal patients today.

Periodontology has reached a critical turning point: A better understanding of the etiology and pathogenesis of the different forms of periodontitis and the recognition of the critical role played by individual susceptibility traits have laid the foundations for new, more effective treatment strategies. Better diagnosis and risk assessment, new treatment alternatives, an unprecedented body of scientific evidence in support of what we should do (and perhaps more importantly what we should no longer do) will be useless if they do not find their way into daily clinical practice.

It is therefore my wish that the readers of this work will be open to the changes in their daily practice that current research in periodontology has to offer.

My thanks go the Wolf/Rateitschak/Hassell team for another masterful contribution.

Bravo and Encore!

# Acknowledgments

First and foremost, we thank our families and our friends for their unflagging encouragement and support, and for their deep understanding and even deeper patience over more than a decade of work as this Third Edition evolved and became a reality. I, Herbert Wolf, personally take this opportunity to thank Klaus "Pascha" Rateitschak who, years before his death, honored me with the knowledge that I would be first author on this completely revised Third Edition of our *Atlas*. Pascha and I became friends and collaborators in the early 1960s, when we started our careers under the mentorship of Dr. Hans R. Mühlemann, scientist and teacher at the University of Zurich.

The creation of this book, which became ever more comprehensive and detailed, was made possible only through the collaboration and assistance of the coworkers in Dr. Wolf's private dental practice (Zurich, Switzerland), our colleagues in the Center for Dental Medicine (Basle, Switzerland), and the faculty, staff, and students at the College of Health Professions, Northern Arizona University (Flagstaff, AZ). In our work, we were helped greatly by contributions from other universities and many private dental and periodontal practices. Contributions of clinical cases and photographs are acknowledged in detail on page 524.

We also thank especially *Dr. Samuel Low* (Gainesville, Florida) and *Dr. Maurizio Tonetti* (London, England) for their generous, original, and objective new forewords to this Third Edition.

Our thanks go to our many colleagues worldwide for their participation as contributors, assistants, photographers, therapists, problem-solvers, and "critics": *Andreas Adler, Basle—Sandra and Christian Augustin-Wolf, Zurich—Christine Baca, Flagstaff—Manuel Battegay, Basle—Jean-Pierre Ebner, Basle—Daniel Edelhoff, Aachen—Joachim Hermann, Zurich—Markus Hürzeler, Munich—Marco Imoberdorf, Zurich—Thomas Lambrecht, Basle—Niklaus Lang, Berne—Samuel Low, Gainesville—Pascal Magne, Geneva—Michael Marxer, Lucerne—Carlo Marinello, Basle—Martin Meyer, Zurich—Jürg Meyer, Basle—Andrea Mombelli, Geneva—Rainer Oberholzer, Suhr—Lucca Ritz, Basle—Hubert Schroeder, Zurich—Ulrich Saxer, Zurich—Peter Schüpbach, Horgen—Stephan Studer, Zurich—Maurizio Tonetti, London—Anton Wetzel, St. Gallen—Lennart Wieslander, Basle—Jakob Wirz, Winterthur—Nicola Zitzmann, Basle.*

All of the graphic illustrations, schematic diagrams, and tables conceived by Herbert Wolf were realized on the computer with great competence (and understanding for the authors' unending litany of desires) by *Joachim Hormann*, Graphic Design Co., Stuttgart. He deserves our special thanks. Also so worthy of our thanks and praise are Ms. *Censeri Abare* (Gainesville, FL) and Ms. *Heidi Hamberger* (Basle), who prepared the original typescript for this book and then also performed countless corrections and modifications of innumerable drafts, always with precision and with patience.

Since the initiation of the First Edition of this *Atlas* (1978), *Dr. Christa Durach* and photographer *Dieter Isch* have stood by our side faithfully and with critically important contributions. Our deepest thanks go to these two outstanding individuals.

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*Herbert F. Wolf  
Edith M. Rateitschak-Plüss  
Thomas M. Hassell*