

BOOK PROPOSAL

Recent Advances in Dentistry

A Comprehensive Reference Volume for Clinicians and Researchers

Edited Volume | Multi-Authored Reference Book

1. Overview

Recent Advances in Dentistry is a rigorously curated, multi-authored reference volume designed to serve as an authoritative resource for the dental research community. The volume compiles comprehensive, peer-reviewed review chapters spanning the most dynamic and rapidly evolving frontiers of contemporary dental science. Each chapter is conceived as a self-contained, in-depth scholarly review — equivalent in scope and rigour to a high-quality journal review article — while collectively contributing to a unified and coherent body of knowledge.

The discipline of dentistry has witnessed transformative progress over recent decades, driven by convergent advances in materials science, molecular biology, digital technologies, regenerative medicine, and artificial intelligence. This volume brings together leading experts from around the world to synthesise current evidence, evaluate emerging methodologies, and articulate future directions across critical subdisciplines of dental science. Topics range from digital dentistry and implant innovations to the oral microbiome, regenerative endodontics, nanomaterials, oral oncology, and beyond.

Each contributing chapter follows a structured scholarly framework, encompassing a critical review of the existing literature, synthesis of recent experimental and clinical findings, identification of knowledge gaps, and a forward-looking perspective on the trajectory of the field. The resulting volume will serve both as a daily reference for practising clinicians and as a foundational scholarly resource for postgraduate students and active researchers.

2. Target Readership

This reference volume is intended for a broad yet specialised readership that includes, but is not limited to, the following audiences:

- Dental researchers and academic scientists working in basic, translational, and clinical dental science
- Postgraduate students and doctoral candidates in dentistry, oral biology, and related biomedical disciplines
- Specialist clinicians in endodontics, periodontology, oral and maxillofacial surgery, orthodontics, prosthodontics, and restorative dentistry
- Dental educators and faculty members seeking up-to-date, evidence-based content for curriculum development and teaching
- Biomedical engineers, materials scientists, and biotechnologists engaged in dental applications
- Medical and healthcare professionals with an interest in the systemic dimensions of oral health
- Public health professionals and policy-makers working at the interface of oral health and broader health systems

The volume is equally suited to institutional library acquisition by dental schools, medical universities, research institutes, and hospitals with active oral health programmes, making it a cornerstone reference in both academic and clinical settings.

3. Rationale and Need

The landscape of dental science has undergone a paradigm shift in recent years. The convergence of digital technologies, molecular diagnostics, regenerative biology, and precision medicine has redefined the boundaries of what is achievable in clinical dentistry and dental research. Yet, despite this remarkable pace of progress, there remains a conspicuous gap in the literature: a single, comprehensive, multi-author reference work that systematically reviews these advances across the full breadth of the discipline does not currently exist in an accessible and up-to-date form.

Existing dental textbooks tend to be either narrowly focused on clinical technique or broadly introductory in nature, rarely engaging with the depth of current scientific evidence demanded by the research community. Conversely, the primary literature — while rich in detail — is fragmented across hundreds of journals and thousands of individual studies, making synthesis and contextualisation a time-intensive challenge for researchers, educators, and clinicians alike.

Recent Advances in Dentistry addresses this gap directly. By consolidating authoritative, expert-authored reviews under a single cover, the volume provides readers with a curated, critically evaluated, and immediately accessible compendium of contemporary dental science. It does not merely describe what is known — it situates that knowledge within its historical context, evaluates its clinical and scientific significance, and projects it towards future innovation.

Furthermore, the interdisciplinary nature of modern dental research demands a reference resource that bridges traditional disciplinary boundaries. This volume is structured to reflect that interdisciplinarity, ensuring that advances in one domain — such as the oral microbiome or nanotechnology — are presented in a manner that illuminates their implications across multiple areas of dental practice and research.

4. Editorial Control and Review

The editorial team is committed to maintaining the highest standards of scholarly integrity, scientific accuracy, and publication ethics throughout every stage of the editorial process. The following measures will be implemented to ensure that all contributions meet the rigorous quality benchmarks befitting a flagship reference work in the field.

4.1 Reference Validation

All citations and bibliographic references submitted within each chapter will undergo a thorough validation process. This includes verification of source accuracy, accessibility, and relevance. Authors will be required to ensure that references are drawn from peer-reviewed, credible scholarly sources and that all cited works are correctly attributed. The editorial team will cross-check reference lists against established academic databases to identify and resolve inaccuracies, missing citations, or the inclusion of retracted or unreliable sources prior to final acceptance.

4.2 Plagiarism Checking

Every submitted manuscript will be subjected to rigorous plagiarism screening using industry-standard detection software. This process will be applied at both the initial submission stage and following any substantive revision. Chapters must demonstrate a high degree of originality, with all borrowed ideas, data, or text fragments appropriately cited and attributed. Self-plagiarism, including the unacknowledged re-use of the authors' own previously published material, will also be subject to review. Manuscripts that do not meet the required originality threshold will be returned to authors for revision before any further editorial consideration.

4.3 Expert Peer Review

Each chapter will undergo double-blind external peer review by a minimum of two independent reviewers with recognised expertise in the relevant subdiscipline. Reviewers will be selected from an international panel of specialists to ensure diversity of perspective and freedom from potential conflicts of interest. In addition to the external reviewers, a dedicated academic editor with broad expertise in dental science will provide an overarching evaluative review of each contribution, assessing its coherence with the volume's thematic scope, its scholarly rigour, and the accuracy of its scientific content. Chapters will proceed to final acceptance only after all substantive reviewer comments have been satisfactorily addressed and the academic editor has confirmed the manuscript's suitability for inclusion.

Together, these editorial safeguards reflect the volume's unwavering commitment to scientific excellence, reproducibility, and the trust of its readership.

5. Closing Statement

Recent Advances in Dentistry represents a timely and significant contribution to the global dental research literature. By bringing together the collective expertise of leading scientists, clinicians, and scholars from around the world, this volume aspires to become an indispensable reference for all those engaged in advancing the science and practice of dentistry. It is a project conceived not merely as a publication, but as a living testament to the intellectual vitality and collaborative spirit that define the modern dental research community.

The editorial team is confident that this volume will make a lasting and meaningful impact — enriching academic discourse, informing clinical practice, and inspiring the next generation of dental researchers.

Open Invitation from the Editorial Desk

We warmly invite prospective authors — researchers, clinicians, and academic experts with a demonstrated record of scholarship in dentistry and related biomedical disciplines — to contribute to this landmark reference volume. If you possess deep expertise in any of the thematic areas addressed by this book and are interested in contributing a comprehensive, state-of-the-art review chapter, we would be delighted to hear from you.

We encourage all interested contributors to reach out to the editorial desk to discuss proposed topics, authorship details, and submission timelines. Collaborative authorship is welcome. Early expressions of interest are particularly encouraged, as chapter allocations will be confirmed on a rolling basis.

This is your opportunity to share your expertise with the global dental research community, contribute to a definitive scholarly resource, and help shape the future of dental science. We look forward to welcoming you as a valued contributor to Recent Advances in Dentistry.

The Editorial Team
Recent Advances in Dentistry