


Edition: 1st Edition 2015  
pages: 256  
Images: 700  
Cover: Hardcover  
ISBN: 978-0-86715-684-3  
Published: December 2015

**Quintessence Publishing Company, Inc.**

 411 North Raddant Road  
IL 60510 Batavia  
United States of America

 +1 (0)630 / 736-3600

 +1 (0)630 / 736-3633

 [contact@quintbook.com](mailto:contact@quintbook.com)

 <https://www.quintessence-publishing.com/usa/en>

## Book information

**Authors:** Martin Chin

**Title:** Surgical Design for Dental Reconstruction with Implants

**Subtitle:** A New Paradigm

**Short text:**

This book presents a novel strategy to improve the outcome of maxillofacial reconstruction by combining evolving principles of neurophysiology and tissue engineering with an integrated surgical and laboratory technique. The objective of this book is to bridge the gap between the routine practice of maxillofacial surgery and theoretical laboratory science. The early chapters set down clear, specific treatment-planning principles that should be considered in every surgical design to optimize healing. Subsequent chapters detail the laboratory and surgical techniques that make precise skeletal movements predictable. This methodology is validated with comprehensively illustrated clinical examples, including long-term follow-up. This integrated approach to reconstructive therapy offers the potential to solve clinical problems that are known to be resistant to conventional treatments. Guided by this book, the reader will be able to exploit emerging biotechnical discoveries to establish a working model that can be applied to real problems affecting real patients.

**Contents**

Chapter 01. Introduction to Surgical Design Using Embryologic Processes

Chapter 02. Establishing and Maintaining Osseointegration Within the Functional Matrix

Chapter 03. Engineering Environments for Simultaneous Bone Growth and Osseointegration

Chapter 04. Using Bone Morphogenetic Protein to Generate Bone

Chapter 05. Using Developing Teeth to Generate Bone

Chapter 06. Using Osteotomies to Generate Bone in Defects of Local Origin

Chapter 07. Using Osteotomies to Generate Bone in Patients with Systemic Disorders

Chapter 08. Designing Bone-Forming Constructs for Major Skeletal Reconstruction

Chapter 09. Controlling the Accuracy of Osteotomy Fragment Repositioning

Chapter 10. Comparing Mechanical and Virtual Surgical Planning

Chapter 11. Design and Surgical Technique in Detail: A Clinical Demonstration

**Categories:** Implantology, Oral/Maxillofacial Surgery, Oral Surgery