Emerging Electromagnetic Medicine
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Editors

Emerging Electromagnetic Medicine

With 107 Illustrations

Springer-Verlag
New York Berlin Heidelberg London
Paris Tokyo Hong Kong Barcelona
To the memory of my father for his patience, understanding, dedication and love.  (MEO'C).

To the hope that patients around the world will one day truly benefit from the technology published in this volume.  (RHCB).

To my parents who gave so much of themselves and asked only that I try; and for my wife Gale for her encouragement and patience.  (JCM).
Preface

The contributors to this volume met at an international conference to share their ideas and research on emerging electromagnetic medicine. The purpose of this proceedings is to share their views with a wider audience. Collectively the individual contributors represent many diverse disciplines, with a mutual interest in the use of electromagnetic fields (EMF) in medicine.

The research in this proceedings includes theoretical mechanisms, laboratory experiments, and clinical evidence of beneficial applications. Both diagnostic and therapeutic use of EMF are discussed. The authors accepted the unusual invitation to go on record with their predictions and provide informed projections regarding future medical applications of EMF. The result for those who attended the conference was a lively and exciting scientific interaction. A proceedings can hope to capture only a fraction of that excitement.

Previous research on the bioelectrical effects of radio frequency and other forms of non-ionizing radiation concentrated on the potential hazard that might result from occupational or general environmental exposure to such fields. Prior discussion of the beneficial applications focused primarily on communication and food preparation. Current emphasis is shifting to an array of medical applications. Existing medical applications of EMF (eg, Magnetic Resonance Imaging, pulsed EMF for long bone non-union) have already received considerable attention. The chapters included here focus on future applications. The emphasis on the future demands equal attention to possible risks associated with the technology.

The US Food and Drug Administration (FDA) is preparing for what may develop in the near future. The FDA's involvement signals a growing awareness of the rapid technological developments in this area and the impending array of beneficial applications in medicine that soon will require decisions on effectiveness and safety.

This conference was made possible by the co-sponsorship of the Office of Continuing Education and the Office of Research of The University of Tulsa (TU) and the Center for Devices and Radiological Health of the FDA. Specifically we wish to thank Dr. Milt Jarrett, Dr. Allen Soltow, Dr. Janusz
Beer; the congenial staff of the Westin Hotel in Tulsa, OK; David Wall, Jacqueline Remondet, Tina Clanton and Winnie Stuart of the TU Psychology Department; Diana Beard and John Hamilton of Bioelectronics Corporation; and James Costello of Springer-Verlag.

The thoughtful and insightful comments of all the conference participants were instrumental in the preparation of this volume. We wish to thank the authors for the careful and timely preparation and submission of their chapters. Most importantly we hope that future conferences will expand the international participation, as well as the breadth of the subject matter.

Mary Ellen O'Connor
Richard H. C. Bentall
John C. Monahan

September 9th 1989
Rose Hill Farm, Port Tobacco, Maryland

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