



James L. Oschman

ENERGY MEDICINE

The Scientific Basis

Second Edition

ELSEVIER

SECOND EDITION

Energy Medicine

The Scientific Basis

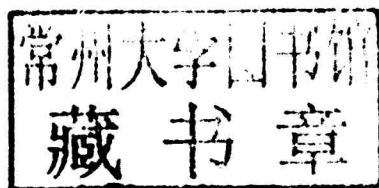
JAMES L. OSCHMAN, PhD

Nature's Own Research Association

Dover

New Hampshire

USA



ELSEVIER

Edinburgh London New York Oxford Philadelphia St Louis Sydney Toronto

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the publisher. Details on how to seek permission, further information about the Publisher's permissions policies and our arrangements with organizations such as the Copyright Clearance Center and the Copyright Licensing Agency, can be found at our website: www.elsevier.com/permissions.

Please note that Dr. Oschman retains the copyright to make derivative works in other categories of works of authorship as defined in 17 USC Sec. 101, including, but not limited to, musical works, dramatic works, motion pictures and other audiovisual works, and sound recordings.

This book and the individual contributions contained in it are protected under copyright by the Publisher (other than as may be noted herein).

First edition 2000

Second edition 2016

ISBN 978-0-443-06729-7

Notices

Knowledge and best practice in this field are constantly changing. As new research and experience broaden our understanding, changes in research methods, professional practices, or medical treatment may become necessary.

Practitioners and researchers must always rely on their own experience and knowledge in evaluating and using any information, methods, compounds, or experiments described herein. In using such information or methods they should be mindful of their own safety and the safety of others, including parties for whom they have a professional responsibility.

With respect to any drug or pharmaceutical products identified, readers are advised to check the most current information provided (i) on procedures featured or (ii) by the manufacturer of each product to be administered, to verify the recommended dose or formula, the method and duration of administration, and contraindications. It is the responsibility of practitioners, relying on their own experience and knowledge of their patients, to make diagnoses, to determine dosages and the best treatment for each individual patient, and to take all appropriate safety precautions.

To the fullest extent of the law, neither the Publisher nor the authors, contributors, or editors, assume any liability for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions, or ideas contained in the material herein.

ELSEVIER

your source for books,
journals and multimedia
in the health sciences

www.elsevierhealth.com



Working together
to grow libraries in
developing countries

www.elsevier.com • www.bookaid.org

The
Publisher's
policy is to use
paper manufactured
from sustainable forests

Energy Medicine

This book is dedicated to Nora

And to fond memories of Candace

For Elsevier

Content Strategist: Shelly Stringer

Content Development Specialist: Carole McMurray

Project Manager: Julie Taylor

Designer: Christian Bilbow

Illustration Manager: Ceil Nuyianes

There is no harm in doubt and skepticism, for it is thru these that new discoveries are made.

RICHARD FEYNMAN (LETTER TO ARMANDO GARCIA J, DECEMBER 11, 1985)

Those who have taken upon them to lay down the law of nature as a thing already searched out and understood, whether they have spoken in simple assurance or professional affectation, have therein done philosophy and the sciences great injury. For as they have been successful in inducing belief, so they have been effective in quenching and stopping inquiry; and have done more harm by spoiling and putting an end to other men's efforts than good by their own.

FRANCIS BACON (NOVUM ORGANUM, 1620)

It is necessary to think in a new way about science.

*Once the hope of mankind, modern science has now become the object of such mistrust and disappointment that it will probably never again speak with its old authority. The crisis of ecology, the threat of atomic war, and the disruption of the patterns of human life by advanced technology have all eroded what was once a general trust in the **goodness** of science ... Even among scientists themselves there are signs of a metaphysical rebellion. Modern man is searching for a new worldview ... For several centuries Western civilization has operated under the assumption that man can understand the universe without understanding himself.*

JACOB NEEDLEMAN (A SENSE OF THE COSMOS, 2003)

Look at the step-by-step process by which we come to understand the world around and within us. Energy is a huge part of this. Our personal ability to understand and manipulate the energies of nature gives us direct experience of the most vital aspects of life. However, because of historical confusions and vested interests our culture and our education have obscured the nature of energy and thereby denied us the opportunity to explore what is arguably the most important part of our nature and of our health. The resulting confusion has spilled over into our healthcare system, which is in a crisis that threatens our prosperity and national security. To ignore energy is to deny the application to our health and welfare of one of the greatest areas of human inquiry – physics. This book has the goal of bringing the physical and biomedical sciences into cooperation as we look to the future of our healthcare system.

JAMES L. OSCHMAN (2014)

FOREWORD TO THE FIRST EDITION

For a number of years before I actually had the profound pleasure of meeting Dr Oschman, I kept hearing about him from energy therapists of many types. Here was a real scientist, a cellular biologist and physiologist with impeccable credentials, who dared to associate with Rolfers, acupuncturists and other bodyworkers in a bold search to establish the nature of the real science underlying energy medicine. Dr Oschman's quest was to explain and document what he had learned with clarity and scholarship in such a convincing way that old paradigm naysayers would be forced to listen and join the dialog. Now he has succeeded by providing us with a breakthrough text which maps out an elegant theory of the human body and how it is impacted upon by energy medicine. This is a theory fully compatible with classical physiological and electromagnetic principles, as well as electronics and modern physics, a theory which doesn't need to invoke 'subtle energies' or other mysterious forces which currently lack a scientific rationale.

For years I had lectured and written on the power of healing techniques considered at best unorthodox and at worst quackish, which I had experienced in my own body as powerful and having merit despite the strong resistance and irrational dismissal by most of conventional medicine and my own inability to explain them in the conventional biological paradigm. Feeling 'energy moving' is a common denominator in many of these techniques and I constantly experienced this from my first encounter with acupuncture over twenty-five years ago to my recent interaction with Dr Oschman at the AMTA (American Massage Therapy Association) meeting to design scientific experiments to demonstrate the efficacy and mechanism of action of massage therapy. There in South Carolina, when Dr Oschman proceeded to 'pull' some energy away from my 'stagnant' liver, I felt the appropriate movement before he had even described it. Thus in scientific parlance I was blind to the anticipated outcome, as when years earlier my young son, unaware of the reflexology chart, had accurately reeled off six or seven places in his body to where he had felt 'something move' from the six or seven points of his feet I had manipulated in accordance with that chart. These types of mini-experiment on myself and family over the years had convinced me that there is something so compelling that energy medicine should be taken seriously and studied, not squelched and ignored simply because the reigning paradigm – until now – had no theories to explain it.

How exciting then that Dr Oschman's research has provided a brilliant, concise simple explanation for the sense shared in many diverse energy therapies that claim that energy must move in the body. Today most bodyworkers and body psychotherapists take as a fact the twin neo-Freudian and neo-Reichian concepts that trauma is absorbed and stored in the body and can be unblocked by some corrective energy flow. I have understood for some time that therapeutic massage can be so much more than increasing the blood circulation in sore muscles; our concept of the psychosomatic network (Pert 1999) envisions memories stored in the body (the subconscious mind) in the form of alterations at receptor molecules which transduce chemical changes into ionic fluxes and thus the propagation of electromagnetic waves throughout the network which joins the nervous system, immune cells, gut, glands, skin, etc.

Dr Oschman carefully traces the history of ideas from several fields which support his vision of the body as a liquid crystal under tension capable of vibrating at a number of frequencies, some in the range of visible light. Based upon these revolutionary, but well-supported ideas, I am most excited about the new possibilities of bringing about a rigorous understanding of the nature of emotions on an energetic level. In emphasizing emotions as the mind-body bridge, I have been struck by the ability to span the physical realm of internal communication via ligands and receptors and the spiritual realm of external communication among people, animals and the rest of nature.

It will be most interesting to begin to gain more experimental proof of the external energetic patterns emitted from the hands of healers, the approach Dr Oschman was recommending in South Carolina. We can then start to attempt to measure and understand the energetic forces that act together on seemingly separate creatures which in reality must be continually subjected to unifying emotional(?) forces which drive them to interact more like molecules in solution.

It is not difficult now to imagine different emotional states, each with a predominant peptide ligand-induced 'tone' as an energetic pattern which propagates throughout the bodymind, a 'vibratory flow' which can restore communication among 'blocked', diseased or unintegrated body parts. I too have moved beyond the 'lock and key' model of receptor/ligand binding to the notion of vibrating receptors and ligands which attract at a distance as they resonate at the same frequency. Dr Oschman's new paradigm vision of the human body allows me at last to be able to begin to understand how different emotional states, by triggering the release of various peptide ligands, trigger sudden, even quantum, shifts in consciousness accompanied by concomitant shifts in behavior, memory and body posture. Perhaps we can now begin to imagine how physical 'adjustments' of spinal joints that house peptidergic nerve bundles, therapies that emphasize emotional expression and feeling within the body, and hands on healings where practitioners claim to be able to feel energetic differences and emit appropriate corrective energies share common energetic mechanisms.

The publication of *Energy Medicine – The Scientific Basis* by Jim Oschman is a milestone in the history of medicine which will open hearts and minds to new hypotheses and experimental approaches toward understanding important modes of healing previously thought to be too mysterious to be approached scientifically. Also, we may begin to have a new paradigm vision of the human body as a dynamic shape-shifting bundle of multiple personalities, not merely layered, but capable of sudden and dramatic transformations able to be stabilized in new healing states of mind and body. Bravo!

Candace B. Pert

Reference

Pert, C., 1999. *Molecules of Emotion: The Science Behind Mind-Body Medicine*. Simon & Schuster, New York.

PREFACE TO THE FIRST EDITION

This book is about a subject that scientists have always found extremely controversial and confusing. For centuries, concepts of 'life force' and 'healing energy' have been virtually off-limits for consideration by serious and respectable scientists. Therapeutic approaches employing healing energy have been regarded with a great deal of skepticism. The legacy of this history is that there are many who will not even open a book such as this.

Why, then, would a serious and thoughtful scientist dare to take on this subject? Those willing to read on will find that there are extraordinarily good reasons. Stated simply, times have changed dramatically. Both scientists and energy therapists around the world have made discoveries that have forever altered our picture of human energetics. Individually, most of these discoveries have not been perceived as major breakthroughs or milestones. But it now appears that the seemingly disparate experimental results and experiences and concepts are converging. A promising new branch of academic inquiry and clinical research is opening up. Approaches that have appeared in competition or conflict are actually supporting each other.

The book is the outcome of an invitation by Dr. Leon Chaitow and his editorial team at the *Journal of Bodywork and Movement Therapies*, published by Churchill Livingstone, an imprint of Harcourt Publishers. I was asked to clarify and come to terms with the word *energy* as it is utilized both in science, in the various branches of bodywork and movement therapies, and in healthcare generally (Magnetic Resonance Imaging scans for example). Was 'energy' a concept that could be explained in terms acceptable to a scientific and intellectually critical mind?

I had already researched this topic for about 15 years: The invitation from Dr. Chaitow gave me an opportunity to gather together many more pieces of a fascinating puzzle.

In the process of writing the journal articles, I noticed similarities between the discoveries of modern medical researchers and the daily observations of 'hands-on' energy therapists. In essence, these traditionally very different approaches to the body are beginning to validate one another.

To be specific, and to anticipate Chapters 6 and 15, oscillating magnetic fields are being researched at various medical centres for the treatment of bone, nerve, skin, capillary, and ligament damage. Virtually identical energy fields can also be detected around the hands of suitably trained therapists. There is an inescapable conclusion.

Medical research is demonstrating that devices producing pulsing magnetic fields of particular frequencies can stimulate the healing of a variety of tissues. Therapists from various schools of energy medicine can project from their hands fields with similar frequencies and intensities. Research documenting that these different approaches are efficacious is mutually validating. Medical research and hands-on therapies are confirming each other. The common denominator is the pulsating magnetic field, which is called a biomagnetic field when it emanates from the hands of a therapist.

In addition, Dr. Chaitow asked me to describe how the evolving concepts might impact specific clinical practices. The inclusion of clinical aspects added a valuable focus to the articles. An appreciation of current energy medicine research enables students and practitioners of all therapeutic disciplines to find a common ground for discussion. Complementary therapies complement each other. Phenomena that previously seemed disconnected could supplement one another, leading to a better understanding of the living body than would be achieved by any single approach. I thank Dr. Chaitow for having the foresight to set this rewarding process in motion.

This book gives me the opportunity to include details that could not be fitted into the journal articles because of space constraints. It also enables me to bring the story up to date with discoveries that have been made since the articles were written. In this book, I have expanded on

important topics that were only mentioned in the journal articles, such as emerging information on the physics underlying energy and the roles of energy in consciousness. Finally, it is possible to include a wealth of technical information and quotations that was not appropriate for the journal. This material will be of particular interest to the professional scientist wishing to critique the ideas presented here. Some of this information is technical, and non-technical readers can skip it if they wish.

Only passing reference is made to the ways that various energy techniques are practiced and to the extensive and growing research that supports their claims of clinical efficacy. The reader interested in these topics can consult the appropriate schools that teach clinical techniques and the relevant clinical literature. My inquiry is an attempt to use the latest scientific research to answer the question 'If it works, then how does it work?' An understanding of mechanisms is crucial, because successful clinical trials have much more impact if there is a logical explanation of how a method works. Moreover, therapists benefit enormously from knowledge of mechanisms, because it helps them explain and even enhance their work.

I have received treatments from practitioners of many of the techniques described, and I am convinced that these experiences have helped me become more aware of myself and of my personal energy system. However, I am not an advocate of any one method over another. I have lectured at various schools of bodywork and movement therapy around the world but am not on the faculty of any of them. The aim here is not to promote any particular method but to help understand the mechanisms involved and connect the phenomena with medical science. We have much to learn from each other if we can learn to use a common language.

I thank all of the clinicians who have challenged me to explain their insights and observations. Peter Melchior started me on this journey, by telling me details of important scientific research – such as that of Dr. Harold Saxton Burr – that I had never encountered during my academic education. Dr. Chaitow and the staff of Churchill Livingstone did an excellent job of producing the series for the *Journal of Bodywork and Movement Therapies*, and Graeme Chambers efficiently and professionally rendered the artwork. I particularly thank the production editors, Lynn Percy and Ewan Halley, and the copyeditor, Sally Livitt, for their careful work in preparing the manuscripts for publication in the journal, and Stephanie Pickering for her thorough editing of the book manuscript. I am indebted to the many scientists and therapists who have alerted me to important discoveries so that I can include them in this book. And I am especially appreciative of the role of my dear wife, Nora, who knows more about energy than I ever will. She discussed every aspect of this work with me and gave me the freedom and encouragement to wander deeply into the minutest nooks and crannies of living structure and energy.

James L. Oschman
Dover, New Hampshire, 2000

PREFACE TO THE SECOND EDITION

In science, the acceptance of new ideas follows a predictable, four-stage sequence. In Stage 1, skeptics confidently proclaim that the idea is impossible because it violates the Laws of Science. This stage can last for years or for centuries, depending on how much the idea challenges conventional wisdom. In Stage 2, skeptics reluctantly concede that the idea is possible but that it is not very interesting and the claimed effects are extremely weak. Stage 3 begins when the mainstream realizes not only that the idea is important but that its effects are much stronger and more pervasive than previously imagined. Stage 4 is achieved when the same critics who previously disavowed any interest in the idea begin to proclaim that they thought of it first. Eventually, no one remembers that the idea was once considered a dangerous heresy.

RADIN (1997)

Our medicine is always a work in progress. There are many unanswered questions. This book is written from a firm belief that the study of energetics is our best hope for solving the mysteries of life and healing. Looking at medicine through the lens of energetics is like opening the front door in springtime and allowing the fresh air and the scent of spring flowers to come in. For energy medicine has gone through a cold winter of confusion and misunderstanding, and that season is now behind us.

The study of energy medicine will give you a clearer picture of the world around and within you. Some of the science presented here may seem a bit daunting, but there is no reason for anyone to shy away from it. The information can make a huge difference for your personal health and happiness and your comprehension of nature and healthcare should you need it. The author should be able to explain the subject with clarity so that anyone can understand it and with accuracy that most scientists will verify. I say 'most scientists' because there is no subject that all scientists agree upon. In some cases these disagreements are extremely interesting, and I will strive to present both sides of critical or controversial issues. In some places you will find new insights that have arisen during the process of preparation of the book and working through the evidence. You will also discover that energy is a multi-disciplinary subject that touches upon every aspect of what it is to be alive and on every aspect of health and medicine. Prepare yourself for an interesting and enjoyable journey!

One of the most exciting recent discoveries is the mechanism by which living systems are so incredibly sensitive to energy fields in their environment. These energy fields can be produced by therapeutic medical devices, the hands of therapists, or by technologies such as radio, TV, radar, cell phones, Wi-Fi, and countless other technologies. There is no longer a question about whether the wireless devices we have incorporated in our lives can affect our health. We now have reached the stage where we know why these technologies create problems for many people and how to deal with the issue (see Chapters 3, 16 and 17).

Research and clinical experiences from around the world have enabled energy medicine to take its place among the dominant academic disciplines, on a par with physics, philosophy, astronomy, pharmacology, orthopedics, and so on. As an academic discipline, energy medicine is a mature and multi-disciplinary endeavour and is firmly supported by, and supports, the other well-established disciplines.

We now know that many of the most common health disorders and diseases are partly or entirely energetic in nature and are therefore difficult to prevent or treat when energy is left out of the equations of life and healing. This fact is documented by one of the most significant advances

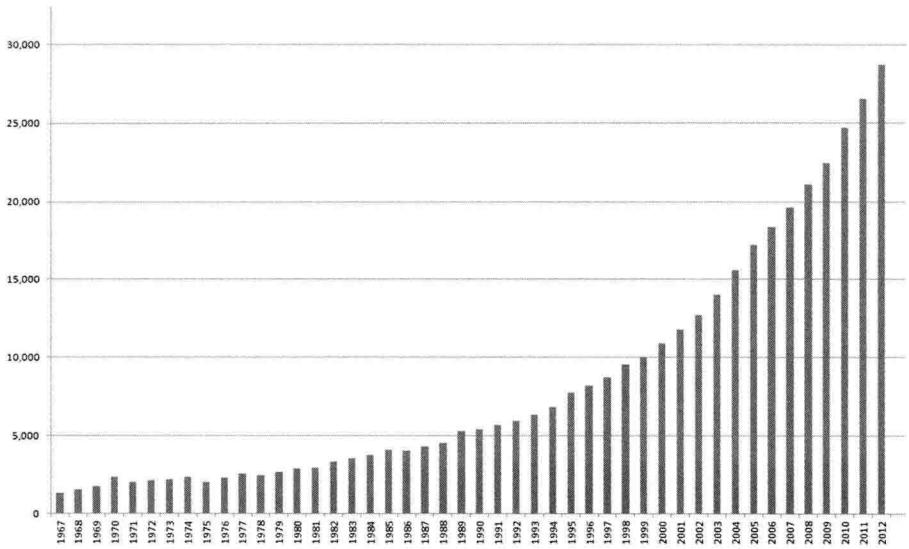


Figure P-1 Peer-reviewed studies of inflammation, 1967–2014, data from the National Library of Medicine database, Pub Med (as of December 25, 2014).

in biomedicine that took place during the years since the publication of the first edition of this book. Specifically, the study of inflammation has become one of the most active areas of biomedical research, with nearly 450,000 peer-reviewed studies completed during the period 1967–2014 (see Figure P-1). Each of these studies represents an enormous investment in time and money and expertise to achieve acceptance in a peer-reviewed journal. This growing body of research can be summarized with the statement that many and perhaps all of the chronic diseases and disorders that plague modern society, and that are the most costly in terms of money and human suffering, have a common cause, and that cause is best described in terms of energetics. While there are literally hundreds of thousands of well-controlled studies correlating virtually every chronic disease with inflammation, much less is known about the reasons for these correlations. The author has been personally involved in research that is revealing the reasons for these correlations and the roles of energy medicine in preventing and treating inflammatory conditions. This will be described in chapter 17, which details what we have learned about the energetic aspects of inflammation and how many of the hands-on, energetic, and movement therapies are able to produce dramatic effects with gentle, natural and completely non-invasive approaches. One of these approaches is extremely simple and can be done by anyone. This is connecting the body with the earth.

During the same period that research on inflammation took off, beginning in 1967, there has been an increase in the frequency of use of the term ‘energy medicine’ in books published in the English language (Figure P-2). Skepticism or not, energy medicine is here to stay and is a key part of the medicine of the future. The learning curve is steep because of important and fascinating new knowledge being gained by the combination of basic science and hands-on therapies. Yes, the author believes that the insights of therapists who touch patients every day represent important *data* about how the human body functions in health and disease.

Experience has shown that a logical explanation helps patients understand, accept, and take advantage of treatments that have previously seemed mysterious. Some patients simply cannot respond to a treatment that is beyond their conceptual framework. This is a fascinating energetic phenomenon in itself that has implications for our growing interest in the effects of concepts and consciousness and intention on the healing response.

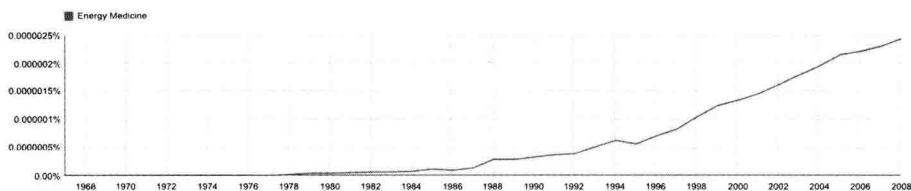


Figure P-2 Increasing use of the term “energy medicine” in books published in the English Language between 1967 and 2012.

Being conversant in the language of science helps alternative practitioners, medical doctors, and patients communicate with each other. Physicians are increasingly being asked by patients for an educated opinion about various CAM therapies. The science of energetics provides a common language with the potential to demystify and unite virtually all of the diverse branches of medicine.

Articulating this common language is my passion, and my goal is to present the technical information as clearly as possible without losing scientific accuracy. It can be challenging for readers who lack a science background to wend their way through the concepts described here. In spite of this, many physicians and other health care workers have shown me tattered copies of the first edition, with lots of highlighting, underlining, notes sticking out, worn out covers. Many have told me, ‘I struggled with unfamiliar concepts, but it was worth it, for I really needed this information and now I use it every day’. And, ‘I had to read it three times, but it is sinking in, and it is really important to me’. I truly admire these individuals for recognizing the value of ideas that are at first unfamiliar, but whose mastery is crucial to the evolution of their life and profession. And I, too, often have to read scientific articles several times before they make sense.

Readers will notice that I have kept equations to a minimum. There are parts of science that are regarded as explainable only through careful study of the mathematics. On the other hand, one of my mentors, the great Danish physiologist, Hans Ussing (1911–2000), himself a master of the application of mathematics to physiology, told me that anyone who develops an equation to explain his or her results should also be able to explain his or her discoveries in plain language. I have therefore sought out such explanations to make things easier for all of us.

There is nothing more satisfying for an author or a teacher than watching the significance of a new idea or a clearer picture of human structure and function being grasped by either a novice or a skilled practitioner. Often these concepts enable people to push beyond what they have thought is possible and to demonstrate their discoveries to their colleagues. Often insights about human energy systems enable them to find ways of doing the work they have learned and practiced with more effectiveness and less effort. In the last decade many advances have taken place as a result of practitioners’ growing appreciation of the science of energy.

Several key points summarize the scientific advances that have taken place since the first edition of this book. First, no new science challenges the main conclusions reached in the first edition. In fact, new discoveries are showing that living systems are even more sensitive to the energies in their environment than we had previously suspected. This is important because serious health conditions can be produced by minute fields in the environment – fields that are so tiny that it is a real stretch for many to believe that they are possible. Second, the study of the relationships between living systems and both the Earth’s surface and sunlight have led to new appreciations of the profound health significance of those energetic relationships. Finally, study of the effects of energetic contact with the surface of the Earth has added a new dimension to our understanding of how the immune system functions in health and disease.

Readers will undoubtedly notice and wonder about the repeated references and quotations from Albert Szent-Györgyi. I make no apology for this. Albert Szent-Györgyi has been acknowledged by many as one of the most brilliant scientists of the twentieth century. Moreover, he

was passionate about the importance of energy in relationship to health and disease. And he was continually baffled that nobody understood the important direction he was trying to point out. He could see clearly that our myopia about energy was a major contributor to our myopia about cancer and other major chronic diseases. Curing cancer was his foremost passion because he had lost two beloved members of his family to the disease. He was bewildered that he was repeatedly denied funding for his cancer research. I had the extreme good fortune to know this remarkable man, to work in the laboratory across the hall from his Institute of Muscle Research at the Marine Biological Laboratory in Woods Hole, Massachusetts. Szent-Györgyi's institute eventually became the centre of a worldwide network of scientists under the auspices of the National Foundation for Cancer Research. Consequently, I met and became friends with many distinguished scientists from around the world who came to visit Szent-Györgyi and work in his laboratory. For the study of energy medicine, the writings of Albert Szent-Györgyi and his colleagues are among the clearest and most important available. Other scientists who have contributed at his level can be counted on the fingers on one hand, and their work will also be presented here. Some of their names: Harold Saxton Burr, Robert O. Becker, W. Ross Adey, Fritz Albert Popp, Marco Bischoff, Emilio Del Giudice, Cyril Smith, and Mae-Wan Ho. While a journalist and not a scientist, Lynne McTaggart has made an enormous contribution by describing key advances in energetics in ways that anyone can understand. Her two books, *The Field* (2008) and *The Bond* (2011) document some of the remarkable new discoveries that are being applied to modern medicine.

After many years of study of the writings of Albert Szent-Györgyi and his colleagues, it is now clear to me that they were engaged in the search for a fundamental system that is of vital importance for health and healing. Lack of recognition of the importance of this pioneering work, and consequent lack of funding for research, prevented the completion of these efforts. It is exciting to report that modern discoveries in the fields of cell biology and biophysics enable us to understand where these investigations were headed.

During the writing of the first edition, a number of therapists published fascinating descriptions of the ways their work was being incorporated into hospitals and clinics. Among these are the fascinating books of Julie Motz (1998) and her physician colleague, Mehmet Oz (1998). Others have written compelling books about their personal experiences with energy healing (e.g. Brennan, 1987; Collinge, 1998; Egidio, 1997). More recently, a number of books have documented how energy medicine is entering mainstream medicine both through departments of physical therapy (Charman, 2000) and rehabilitation medicine (Davis, 2009). Donna Eden and her colleague David Feinstein have made practical applications of energy medicine widely available through their lectures and workshops around the country and around the world. Their trainings are enabling many to have rewarding careers in energy medicine. They have now published a series of books, beginning with Eden and Feinstein (1999). A growing number of books have energy medicine in their titles, attesting to the increasing significance of energetics for a wide variety of clinicians. Energy medicine techniques have been catalogued in an *Encyclopedia of Energy Medicine* (Thomas, 2010). I mention these sources because I believe the experiences they describe, extraordinary as they may sometimes seem, lay a strong foundation for the medicine of the future.

One of the most exciting areas of energy medicine is the field known as energy psychology. Those who suffer from emotional trauma and abuse can be just as debilitated as those who have a chronic disease or physical injury. Indeed, it now appears that many if not most chronic illness can be traced to a traumatic or emotional event in a patient's life. To free a person from the consequences of long-standing emotional pain and agony can be immensely rewarding for all concerned. Energy psychology has become one of the fastest growing and most exciting branches of complementary medicine Chapter 12 discusses energetic aspects of the subconscious mind and intuition.

In conclusion, there was a time when many were reluctant to use the terms *Energy Medicine* and *Energy Psychology*, and their skepticism was justified because of the lack of appreciation of the roles of energetics in regulating vital physiological processes, including healing. Another issue was

the widespread misuse of scientific language when talking about energetics. Growing familiarity with the language and concepts of energy medicine as well as of modern physics has forever changed this perspective and has taken the theory and practice of biomedicine to a new level.

James L. Oschman

Dover, New Hampshire, 2014

References

- Brennan, B.A., 1987. *Hands of Light. A Guide to Healing Through the Human Energy Field*. Bantam Books, Toronto.
- Charman, R.A. (Ed.), 2000. *Complementary Therapies for Physical Therapists*. Butterworth-Heinemann, Oxford.
- Collinge, W., 1998. *Subtle Energy. Where Ancient Wisdom and Modern Science Meet*. Warner Books, New York.
- Davis, C.M., 2009. *Complementary Therapies in Rehabilitation. Evidence for Efficacy in Therapy, Prevention, and Wellness*. 3rd Edition. Slack Incorporated, Thorofare, NJ.
- Eden, D., Feinstein, D., 1999. *Energy Medicine*. Tarcher, New York, NY.
- Egidio, G., 1997. *Whose Hands Are These? A Gifted Healer's Miraculous True Story*. Warner Books, New York.
- McTaggart, L., 2008. *The Field: The Quest for the Secret Force of the Universe*. Harper Perennial, New York.
- McTaggart, L., 2011. *The Bond: How to Fix Your Falling-Down World*. Atria, New York.
- Motz, J., 1998. *Hands of Life: From the Operating Room to Your Home, an Energy Healer Reveals the Secrets of Using Your Body's Own Energy Medicine for Healing, Recovery, and Transformation*. Bantam Books, New York.
- Oz, M., 1998. *Healing from the Heart: a Leading Heart Surgeon Explores the Power of Complementary Medicine*. Dutton, New York.
- Radin, D.I., 1997. *The Conscious Universe*. Harper Edge, San Francisco.
- Thomas, L., 2010. *The Encyclopedia of Energy Medicine*. Fairview Press, Minneapolis, MN.

ACKNOWLEDGEMENTS

My involvement in energy medicine began when Rolfer Peter Melchior described the work of Harold Saxton Burr from Yale University School of Medicine, who had spent decades researching the energy fields of living things. Burr's discoveries were fascinating, but I was left with two burning questions: why did I never learn about this remarkable work during my lengthy academic education? And what do modern medical researchers think of his excellent work, published in some 93 articles between 1932 and 1956? Eventually it became clear that the energy therapies had been left behind during the period of explosive growth in pharmaceutical medicine and the race to find 'a pill for every disease'. And the answer to the second question is that medical researchers simply do not think about energy. One reason: medical education gives little attention to physics and biophysics, subjects that are at the foundation of energy medicine and that are beginning to contribute to mainstream medicine.

Thus began my detailed investigation of biological energy from every possible perspective. As described in the Preface to the First Edition, Leon Chaitow and his editorial team at the *Journal of Bodywork and Movement Therapies* accelerated the process by commissioning a series of articles aimed at clarifying the term 'energy' as it is used both in science and in the various branches of medicine. Eventually Churchill Livingstone published the first edition of this book, leading to invitations to present to students at many schools of complementary and alternative and integrative medicine. Meeting the teachers and innovators in therapies from A to Z (Acupuncture to Zero Balancing) enabled me to connect my academic background in physics, biophysics and biology with remarkable discoveries that were being made every day by therapists devoted to healing with diverse forms of energy. To acknowledge each of these individuals would fill many more pages. I shall simply give a big 'thank you' to all who have given me an incredibly enriching education about aspects of medicine that cannot be found in any medical texts.

The journey was nourished and sustained by my close colleague, Nora Oschman, who discussed every idea from her perspective as a naturalist – a sensitive observer of living nature. You will find her insights 'between the lines' of every page of this book and in our many other articles on new ways of looking at energy and consciousness.

The chapter on Acupuncture contains some previously unpublished work of Joie Pierce Jones (1941–2013), who was professor of radiological sciences at the University of California at Irvine. I will always be grateful to Joie for fascinating conversations – his work was simply extraordinary. He pioneered a variety of new and innovative developments in ultrasonic imaging, tissue characterization, acoustical microscopy and non-contact ultrasonic imaging, and applied them to the study of Acupuncture and Pranic Healing. I am also thankful that Joie's wife, Becky Jones, encouraged the publication of his remarkable gifts to the Acupuncture profession, documented in Chapter 14.

Atty. Judy Kosovich, from Washington DC was inspired to write valuable appendices on the legal and ethical aspects of energy medicine. The result is a unique access to resources needed by those who develop therapeutic devices based on energy. Midge Murphy, JD, Ph.D. also prepared a valuable resource entitled *Legal Issues in the Practice of Energy Therapies: Empower Your Practice & Reduce Your Potential Liability with Essential Risk Management Strategies*. We did not have space to re-publish her important material here, but it is available on her web site: <http://www.midgemurphy.com/>. Every practitioner needs to know how to construct their practice in a way that minimizes the risks inherent in offering innovative energy-oriented methods to the public. While energy medicine and energy psychology are gaining recognition and visibility, they are still