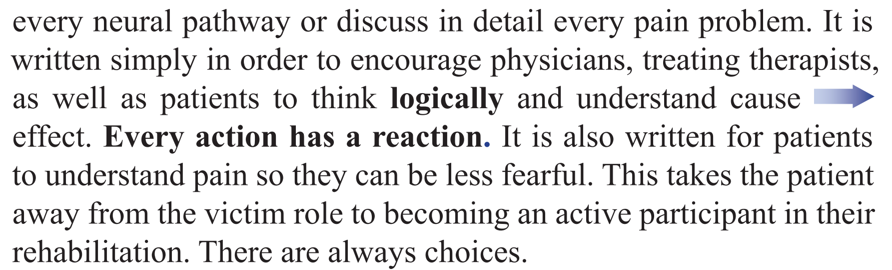
Introduction

"Creating a new theory is not like destroying an old barn and erecting a skyscraper in its place. It is like climbing a mountain, gaining new and wider views, discovering unexpected connections between our starting point and its rich environment. But the point from which we started out still exists and can be seen, although it appears smaller and forms a tiny part of our broad view gained by the mastery of the obstacles on our adventurous way up."

–Albert Einstein

More and more people are seeking "alternative" approaches to management of pain and injury with a growing interest in pilates, yoga, therapeutic massage, movement therapy, acupuncture, and chiropractic care. These disciplines are important, and each has something to contribute towards wellness. However, the shift towards alternative choices reflects disappointment in the outcomes of physicians and other traditional health care practitioners. As medicine has become technologically complex, with sophisticated diagnostic testing such as the MRI scanner, and improved surgical instrumentation, less emphasis is placed on patient contact through interactive history and physical examination. Often, if diagnostic testing reveals no abnormality, the physician mistakenly may discount the patient's complaints and cannot find a cause or offer any solution for a patient's pain. Frequently, the implication is the pain "is all in their head." Furthermore, the discovery of a "positive" finding by sophisticated testing, may lead to treatment unrelated to the true cause of the pain. The result is a systematic diminishing of medical art by substituting yet an imperfect science.

This book is a simple book. It is not designed to identify and label

every neural pathway or discuss in detail every pain problem. It is written simply in order to encourage physicians, treating therapists, as well as patients to think **logically** and understand cause  effect. **Every action has a reaction.** It is also written for patients to understand pain so they can be less fearful. This takes the patient away from the victim role to becoming an active participant in their rehabilitation. There are always choices.

The members of our healthcare team; physicians, physical therapists, nurses, technicians, and administrative staff feel an obligation to apply the traditional art of medicine while utilizing the extensive resources of modern science. Our approach to rehabilitation integrates knowledge of injury anatomy, injury physiology, structural and functional changes, and their effects on pain. The team's approach also stresses patient education regarding the connection of their pain to abnormal structure and function.

Sophisticated radiological imaging and advanced surgical technology expanded the surgical treatment of pain. However, most pain problems are non-surgical. The pharmaceutical industry has spent billions of dollars on medications to decrease pain. The more sophisticated the options for treatment the less focus there has been on the impact of history and physical examination in diagnosing and eliminating the pain.

In this book we will outline some common biomechanical causes of pain and the subsequent use of **interventional medicine "integrated" with manual physical therapy**. This integrated approach focuses on mobilization of the spine in coordination with treatment of peripheral dysfunctions. It is common for chronic pain to involve both spinal and peripheral dysfunctions. For example, many patients have a congenital hypermobility leading to extensive myofascial pain syndromes and fixation of the spine. A substantial population of complex chronic pain patients has a true short leg which can be measured by leg length x-ray. This can cause knee pain, sacroiliac joint pain, low back pain and/or headache. Many patients have had a significant trauma such as a motor vehicle accident in their lifetime. This may cause spasticity of muscles and torsion in the spine because the body has the ability to adapt or compensate for effects from an injury. Often the pain may mature as a result of the body's adaptations over many years. Treatment requires a compassionate and involved relationship with the patient to draw critical subjective information needed to design a treatment plan. Each patient needs to be treated individually based on the physical examination and the results of diagnostic tests such as weightbearing spine films. During treatment the body changes from week to week

and constant reevaluation is necessary.

Publishing data and designing meaningful clinical studies can be difficult. Everyone knows building a house requires nails, but that nails alone do not make the house. Measuring the outcomes from one modality of treatment alone is a tempting formula, but not the correct one to evaluate a successful treatment plan for the patients with pain. For example, an epidural steroid injection can help in the treatment of lumbar pain and be part of treatment but physical therapy and trigger point injections may also be needed to eliminate pain. Studies involving the evaluation of multiple treatment modalities are difficult to design because people are individual and complicated and isolating one part of a treatment for a study may not be at all conclusive of the treatment necessary. Statistical analysis of variables is not sophisticated enough to analyze an injection coupled with other modalities of treatment. After 25 years of experience we know what will and will not work making it impossible to withhold certain treatment options to complete a study. However, patients who opt to do only physical therapy or only injections, the result is never the same as the integrated approach. This treatment program has evolved and draws from greater understanding of the anatomy of the nervous system, neuroscience, pharmacology, physical therapy and rehabilitation and chiropractic medicine. Treatment plans are designed to push people past their pain as efficiently as possible. Over the years financial pressure from insurance companies has fueled efficiency and affected outcomes as most patients will not have insurance coverage for more than 20 physical therapy visits a year. This makes treatment time precious for both the patient and the team.

Finally, a word of thanks needs to be given to our patients for their time, energy, and faith they share with us towards making themselves better. Much of what we have learned we have learned from listening to patients and constantly seeking solutions to pain problems. Frequently, we are the 9th physician the patient has consulted for the same problem. It is their wish that more practitioners understand and learn to diagnose pain and make appropriate referrals for effective treatment. This book is dedicated to all the patients who have trusted us enough to share their stories and make the effort to change their bodies and minds towards wellness. It is also dedicated to those patients we could not help heal, to let them know we are always trying to learn, teach, and apply new approaches. Medicine is and should always be constantly changing.

Rachel and Barry Feinberg