

FOREWORD to IFPMSS

This is not the book that William James Brooks, DO, wanted to write. It is the book that he needed to write. It is the book that will introduce to a new generation of practitioners an exciting, clear, and conceptual approach to manual medicine that holds the potential to completely reimagine the care of patients, particularly those with chronic pain.

By nature, Dr Brooks (or, to me, Bill), is broodingly thoughtful, fiercely analytical, and relentlessly rigorous. He is the man who would spend a lifetime writing the *Oxford Dictionary of the English Language* rather than a simplified speller that most of us would use. He can be exasperatingly focused on proper definitions and usage of terms, on measurements, as well as on detailed descriptions, while some of us are just eager for the pearls that he offers in every lecture he gives, presentation he makes, and article that he writes. *Functional Pathology of the Musculoskeletal System: Volume 1*, therefore, is a compromise between what exists in Bill's mind and what Bill knows can be digested in an introductory volume. It is masterfully written and thoughtfully illustrated in a way that forges these dueling perspectives into a work of excellence and beauty.

I first met Bill when we were both on the faculty at the University of Arizona College of Medicine in Tucson 30 years ago. We shared ambitions to be outstanding in our professional work and to translate our best understanding of how things work to our colleagues for the benefit of our patients. Over the years, each of us achieved recognition for our clinical skills and judgment. Neither of us were laboratory researchers, but both of us were committed to the practice of medicine as an intellectual process that required clinical study, integrity in communication, and careful descriptions of both processes and outcomes. Ours was what might appear to be a strange relationship in that Bill, as an osteopathic physician, and me, as an allopathic physician, shared such a parallel vision that carried us both through a lifetime of clinical practice and academic pursuits. He was deeply interested in my career in neurology and pediatrics as I careened through several academic institutions, and I was

deeply interested in the gestation and application of Bill's thinking about manual medicine that would ultimately culminate in *Functional Pathology of the Musculoskeletal System*.

There seemed to me to be a "passing of the torch" taking place in Tucson when Bill and I were there. Before Robert Fulford, DO, the mystical philosopher-osteopath, ended his practice in Tucson, Bill had the opportunity to work with him. From my perspective as a young neurologist in the Department of Pediatrics, Dr Fulford was the legendary author of *Touch of Life*. Parents of my patients told me stories about his ability to bring about remarkable changes in the behavior and neurologic function of their children in his hands. He was the person parents would sometimes take their children to when my services fell short of their expectations. Dr Brooks served in a function much like that of a translator, helping me understand the basics of cranial osteopathy and appreciate the immense value of Dr Fulford's work, which was far, far afield from what I had learned in medical school at Johns Hopkins University. The important transition was from Dr Fulford's philosophical thinking about the basis and mechanics of life to Dr Brooks' natural scientific thinking about the basis and mechanics of movement. Both of them were in search of a unifying, scientific understanding of manual medicine and the way this understanding can be used to improve life. Both recognized the "art" in practicing osteopathy, but they sought to expand its acceptance, utility, and future by understanding its scientific foundation. That neither of them had any weakness in their practice as an art form has established for them the highest level of credibility in studying, critiquing, and improving the practice of manual medicine.

From my perspective as an allopathic physician, I have seen glaring holes in the scope and coverage of specialized medical care. There is a medical desert between orthopedics, rheumatology, neurology, and physical medicine and rehabilitation. Patients who are searching for relief from pain (without even addressing the next level of "restoration of function") can seldom find the help they need. This is in part due to the lack of foundation that we as healthcare professionals receive in assessing functional pathology. We are excellent at identifying structural pathology by examination or advanced imaging. We are excellent at localizing pain by examination with the patient sitting in front of us. However, we are deficient in our assessment of movement and our understanding of an integrated systematic approach, and we often cannot even separate the cause of pain from the site of pain. In our pursuit of

greater knowledge in subspecialty areas, we have lost our sense of how the body is designed, and we have lost our ability to think about the neuromusculoskeletal system as an *integrated* organ system. Dr Brooks' primer is a major step in reversing this trend.

The reason that many people seek medical care is to alleviate pain—typically chronic pain. According to the Centers for Disease Control and Prevention, some 20% of U.S. adults had chronic pain in 2016. Sometimes the pain is difficult to localize, and other times the point of pain is obvious. In the former case, physicians may cast a wide net to gather information to guide treatment. In the latter case, attention is often too quickly focused on the site of pain as the site of dysfunction. In both cases, many physicians fail to fully understand the dynamics leading to the patient's pain and to the cascade of maladaptive mechanisms used by the patient to make peace with this chronic foe.

The approach taken by Dr Brooks in this book focuses on looking at the continuum between painful *dysfunction* of the musculoskeletal system and *inefficient* function of the system. This perspective enables a more effective strategy for understanding and alleviating pain, but also for restoring potential function that has been lost. For patients without pain, this perspective offers an effective strategy for maintaining optimal fluidity and power of movement, resulting in decreased injuries and avoidance of pain. The Functional Pathology of the Musculoskeletal System paradigm offers more. By teaching practitioners how to assess *proportionality* as well as *symmetry* of motor function, Dr Brooks demonstrates how to profile deficits in available motion. This allows physicians to take the next step and evaluate problems in available motion and their impact on balance and posture across a wide spectrum of phenotypes. The entire sequence of assessment and interventions in Dr Brooks' approach allows practitioners to build from the elements of the body to the integrated musculoskeletal system to optimal function, mobility, and power of the body. The implications of this approach are huge, particularly considering the ongoing opioid epidemic and renewed interest among patients for noninvasive and nonpharmacologic treatment options.

It has been a privilege for me to observe Bill's thinking over the years and to review chapters and revisions, and rewritten chapters and new revisions. Each has taught me valuable lessons. It was also a

privilege for me to attend a 3-day seminar on Comprehensive Biomechanical Diagnosis taught by Dr Brooks at Nova Southeastern University. It was a disappointing testament to how ill prepared I was as a neurologist to address many of the problems that patients brought to me for solution. However, it was an almost magical experience of seeing what options a careful biomechanical assessment can open for effective intervention. Over the years, I have come to respect Bill Brooks so tremendously that I arranged for him to come to the Medical University of South Carolina to serve as a visiting professor. Unfortunately, my colleagues in orthopedics largely dismissed his approach and knowledge, which is not altogether unexpected when an “outsider” challenges the status quo. Interestingly, Dr Brooks started his career at the University of Arizona working closely with orthopedic physicians and in fact *caring* for many of these colleagues. In Tucson, he was recognized as the “missing link” in the practice of orthopedics that seemed to offer little beyond splinting, casting, or surgery to its patients. He was the colleague who could effectively treat and relieve pain and could restore lost musculoskeletal function. Despite the lack of enthusiasm from the orthopedic physicians in Charleston, Dr Brooks was wholeheartedly welcomed by other audiences at the university, including rheumatologists, neurologists, and physical therapists, and discussed with our dean integrating his scientific paradigm into the medical school curriculum.

Dr Brooks set out to establish a scientific background for the practice of osteopathic manipulative medicine. It is important for the reader to understand that he did not simply sit down and write this book during a summer at the beach or during a sabbatical year that neither of us got. It is the culmination of his career and his efforts in evaluating and treating thousands of patients, in thoughtfully considering lessons learned from each patient, and in learning from each approach that he took to the patient. It is the application of lectures presented across the country. And I have no doubt that this book will leave all of us hungry for more expansive volumes to follow.

I am so pleased that Dr Brooks' *Functional Pathology of the Musculoskeletal System*, as a new foundation for manual medicine, is now available to an even wider audience. It is now time that I can replace many words of my explanation to the next generation of physicians by saying, “Read this book!

It will fill in such an important gap in your education, and you will never regret investing the time." I am really proud of my friend, Bill Brooks, as well.

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