ONE OF THE OFT-HEARD ADAGES IN MEDICAL education is that professional values are “caught and not taught,” which implies that learners integrate important values in a way that resists formal pedagogical efforts. The editors of Teaching Medical Professionalism, however, believe that such values, attitudes, and behaviors can indeed be taught in a formal and innovative way. They have assembled an impressive array of scholars of professionalism, and two of the editors, Richard Cruess and Sylvia Cruess, have earned a reputation as leaders of the professionalism movement in medical education.

In the first chapter of the book, entitled “The Cognitive Base of Professionalism,” the Cruesses carefully articulate an open and transparent definition of professionalism. They state that the members of the medical profession do not define professionalism; instead, society does, “by delegating powers and responsibilities to the profession.” The relationship between society and the medical profession is the basis of the social contract that the Cruesses argue is a reciprocal relationship. The formal parts of this contract are exemplified in the regulation of medicine through a variety of means (including licensure and educational standards), as well as in historical documents (such as codes of ethics and the international charter on professionalism) that outline the ethical obligations of physicians. The Cruesses make an important contribution to the literature on professionalism with this chapter, which is the foundation for everything that follows in the book.

The chapters in the second section of the book offer more theory, but it is educational theory as opposed to theory about professionalism. The chapter written by Yvonne Steinert is an excellent overview of a variety of theoretical approaches. She focuses specifically on situated learning, an approach that “brings together the cognitive base and experiential learning that is needed to facilitate the acquisition of professionalism.” Although reflection has received the lion’s share of attention in this area, Steinert also discusses the importance of cognitive apprenticeship, collaborative learning, practice, and articulation. She also discusses the specific needs and attributes of adult learners and how crucial it is to ensure that any instructional design that is geared toward professionalism is based on an understanding of the needs of adult learners. Moreover, the importance of narrative, which can be taught through stories, film, and art — a concept that is well established in the literature of bioethics and medical humanities — is highlighted as a dynamic way for learners to acquire competence in professionalism.

In a standout chapter, David Leach discusses the importance of resident formation. Eschewing words such as “training” (a term that is, unfortunately, commonly used) to describe the educational process of physicians, Leach instead focuses on formation as a more appropriate way to describe the process that residents go through. Again, reflection is discussed as an essential activity in resident formation, as is emphasis on group dynamics, social justice, and conscientious stewardship of resources.

A challenge to medical educators and learners is the disconnect that many students perceive between the high-minded rhetoric of lectures and classroom discussions about professionalism in their preclinical years, and the actual behaviors they witness during their clinical rotations. In their chapter on how to support the teaching and learning of professionalism, Thomas Inui and his coauthors build on Leach’s themes, arguing that such a discrepancy can be addressed not just by formal knowledge of professionalism (or “roles and responsibilities”) but also through community reflection. As important as individual reflection is, community reflection allows for a richer formation process. Also like Leach, Inui and his coauthors focus on formation as the backbone of professionalism competency.

The chapters in the last part of the book offer practical advice and suggestions on how best to integrate professionalism efforts from educators who are involved in different kinds of settings: a traditional curriculum (University of Washington School of Medicine), a problem-based learning curriculum (University of Liverpool), and residency education (McGill University). Lessons to take from these chapters include the importance of institutional support as well as the importance of ensuring that congruence exists throughout the curriculum. The final chapter of the book, written by Dave Davis, is a discussion of continuing professional development — the final frontier of
professionalism education. It is all well and good that medical schools and residency programs integrate professionalism as a core competency, but it is at least as important to ensure that professionalism is a relevant competency for physicians in practice. As Davis stresses, it is essential for educators to understand who their students are, what they need, and what their experiences are.

A strong theme that emerges in the book is the notion that professionalism — and the teaching of professionalism — is a team sport. The traditional myth of the insular relationship between physician and patient has given way to a much more complex array of relationships among patients, nurses, allied health professionals, laboratory technicians, and others. To focus only on the professionalism of physicians is not enough. Every member of a patient’s health care team must be committed to professionalism. The next challenge of the professionalism movement is to expand this dialogue beyond physicians to encompass everyone who works in health care.

During the past few decades, the bioethics movement has changed the way we view and practice clinical medicine and the way we conduct research. With the emergence of works such as *Teaching Medical Professionalism*, the professionalism movement will change the attitudes, beliefs, and behaviors not only of medical students, residents, and physicians, but also of everyone else involved in the enterprise of health care.

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**MYASTHENIA GRAVIS AND RELATED DISORDERS**


IN THESE EXCITING TIMES OF NANOTECHNOLOGY, the neuromuscular junction is an interesting example of a remarkably robust and efficient small machine. One normal nerve impulse opens about 200 presynaptic vesicles, flooding the synapse with 10,000 acetylcholine molecules. The acetylcholine receptors, each 20 nm in size, are positioned shoulder to shoulder at a density of 20,000 receptors per square micrometer at the postsynaptic membrane. They are waiting to bind their ligands and then to quickly react by opening and initiating a contraction of the muscle fiber. Amazingly, the whole process can repeat easily at a rate of 20 times per second. During contraction, muscle fibers typically differ in length — between 80% and 125% of the resting length — and one might fear that the fragile nerve endings would be torn away from their end plates. On the contrary, the whole process of neuromuscular transmission remains functional and stable under these conditions because of the extreme stiffness of the delicate synapses.

These are just a few of the details that can be found in the initial chapters of the second edition of *Myasthenia Gravis and Related Disorders*. They illustrate the detailed knowledge we now have about the structure and function of the neuromuscular synapse, the target of the autoimmune response in myasthenia gravis and in related disorders. Several chapters give the reader concise descriptions of the physiology of the neuromuscular junction, the structure of the acetylcholine receptor, and the electrodiagnosis of disorders of the neuromuscular junction. This is useful information for understanding the function of the synapse and the mechanisms by which disease can compromise its activity. Perhaps some readers would have appreciated an additional chapter on the basic elements of the electrophysiology of the neuromuscular junction, but the main focus of the book is on the clinical aspects of the autoimmune diseases that disturb the synaptic function.

One of the first chapters is an extensive description of the pathogenesis of the disease, including work that has been done on experimental autoimmune myasthenia gravis. The immune system can efficiently and selectively disturb signal transmission despite all the safety precautions that are present at the synapse. Several ion channels and other proteins are targets of specific antibodies. These autoantibodies, their pathologic effects, and their use in diagnostic tests are discussed in a separate chapter. Tests for muscle-specific kinase (MuSK) antibodies, which were discovered fairly recently, are also described, and some details on this new form of myasthenia can be found in the chapter on epidemiology and genetics. MuSK myasthenia gravis differs from the classic form of myasthenia gravis in its age distribution, its clinical features, its HLA association,