Foreword

In medical education we spend a disproportionate amount of time teaching the biomedical model at the expense of other important areas – areas that contribute to both the art and science of medicine. There is no specialty in medicine that is untouched by the behavioral and social sciences, dimensions that regularly challenge our way of thinking about medicine and disease. While it is attractive, and in some ways comforting, to many students to be able to reduce disease to a series of biomedical events, this is not currently possible and it may never be possible. In fact, health care without the richness of the behavioral perspective is not medicine at all.

Once a cancer, a mental illness, or even diabetes has been diagnosed, the power of our treatments to alter the outcome is influenced by a mélange of behavioral and social factors. A disease, or more accurately an illness, in one culture, place, and time may be perceived as completely normal in a different setting. People suffer "illnesses" that are life events, while doctors diagnose and treat "diseases" that are pathological events. **Illnesses** are experiences filtered through a myriad of social, economic, cultural, and educational lenses that each impact normal function. **Diseases** are pathological abnormalities of the normal function and structure of organs and cells. Biomedical science places a large emphasis on disease, while medicine is the blending of treating both illness and disease – requiring mastery of both art and science.

The practice of medicine involves far more than an understanding of scientific information and facts. It is also about culture – not only the culture of our patients but the culture of our profession: "the culture of medicine." Medicine is certainly its own culture with a requisite body of knowledge shared by a large group, a common set of beliefs and values that are accepted with great thought and passed along from generation to generation: special symbols, rituals, meanings, hierarchies, roles, special possessions, unique aspects of language, and behaviors derived from social learning. The culture of modern medicine influences how we think about essential human experiences including race, gender identity, conception, human development, sickness and disease, social responsibility, aging, dying, and spirituality. At times our medical thinking does not mesh with that of our patients. Conditions like menopause, Asperger's syndrome, AIDS, and suicide can have profoundly different cultural meanings. Medicine is reductionistic. To many these diseases are understood as disorders of hormones, neurochemicals, and viral agents, while others understand them as disorders of spiritual influences, behaviors, and complex interplays between biology, environment, and culture.

While humans share many biological similarities, health care is an area in which understanding human differences is essential. We often do not understand why some groups have a disproportionate burden of illness, but it is likely that genetics, environment, and behavior interact to create this havoc. Add to this social stigma, physical disability, access to health care, and economic deprivation, and you can partially explain the large disparities in US health care. Only with an understanding of these social and behavioral issues can we provide appropriate medical care.

These are not easy times to practice medicine or to learn medicine. There are some who brag that America has the best health care system in the world. I think the data argue otherwise. A quick look at any newspaper reminds us that far too many of us have no access to health care, much of the health care we do provide is not evidence-based and of poor quality, the rate of medical errors is unacceptably high, and the chance of surviving, say, a cancer depends as much on your skin color and ethnicity as it does on your health insurance. Despite spending more per person on health care than any other nation on the planet we are ranked in the middle of all nations in terms of major indicators of health status (longevity, infant mortality, immunization rates, etc.). There are regions such as South Central Los Angeles, Oakland, Detroit, and the Bronx, where men have shorter life expectancies than those in Hanoi or Cape Town. A baby born in Sacramento is now less likely to survive than one born in Beijing or Havana. Access to our system of health care is not fair—in 2010 we still had 45 million uninsured and 23 million underinsured, and most of these people were working Americans. All this might be fine if Americans were satisfied with the quality and access to their health care, but we are not – at least not compared to people living in the United Kingdom, Japan, France, or Germany. So there is an urgent need for change that will address these aspects of heath and will alter both the practice of medicine and medical education itself.

Biomedicine, behavior, and social factors (social, cultural, political, and economic forces) are inextricably linked to health outcomes. *Behavior & Medicine* does a wonderful job of introducing the health sciences student to this complex interface. It is only through understanding these critical interplays that we can open our minds and design interventions for patients that are achievable and acceptable and truly act in our patients' best interest. According to Piaget we learn through two processes, namely, assimilation (importing new information into an existing belief system) and accommodation (changing our belief system based on new information). For many, this book offers the

chance to understand a more complete picture of the art and science of medicine and to develop a more inclusive belief system that will lead to a more meaningful practice of medicine and permit better patient care.

Students will likely be frustrated that in much of clinical care there is no easy answer. When a person presents with a complex illness linked to a dysfunctional family, deep-rooted cultural beliefs, destructive behaviors, and limited access to health care, there are often no MRI scans or lab tests that offer a quick diagnosis. Diagnosis requires a good fund of knowledge, careful listening (both for what is spoken and also for what is not spoken), and a health-care team that works well together. To properly care for patients there will need to be an understanding of culture, religion, economics, power, education, the human spirit, psychology, and biomedicine. *Behavior & Medicine* begins the process of helping us to understand these important linkages between behavior and disease.

Michael Wilkes, MD, PhD
Professor of Medicine
University of California, Davis
Sacramento, CA

Foreword

Behavior, a living organism's actions in response to stimuli, is the cause, the goal, and the reason for everything. Our DNA, RNA, proteins, cells, organs, systems, memories, and experiences, in the context of our surroundings, cause our actions that sustain and reproduce ourselves, help sustain our fellow humans and—if we humans behave especially well—other species. When our brains (the organs of our behaviors) die, we are said to die, even while our hearts beat and machines breathe for us.

Our behaviors determine whether we are good doctors. Our professional behaviors are responses to the behaviors of our patients, fellow professionals, and others with whom we work. Our behaviors extend and shorten our lives—sometimes dramatically. Our symptoms and often our signs of illness are expressed by behaviors. Our personalities and our individuality are reflected as behaviors. The objectives and competencies of our medical educations are themselves behaviors. In its 2004 report, *Improving Medical Education: Enhancing the Behavioral and Social Science Content of Medical School Curricula,* the Institute of Medicine (IOM) of the National Academy of Sciences states unequivocally that "approximately half of all causes of morbidity and mortality in the United States are linked to behavioral and social factors."

So behavior is pretty important. And everyone who practices medicine must know a ton about it; be competent in it; and even be "sort of" expert in it. Personally, behavior is the only thing that interests me, and every doctor, medical student, and smart person I have ever met is interested in it.

So it is always a joy when a splendid book on behavior is published, in this instance the fifth edition of Danny Wedding and Margi Stuber's *Behavior and Medicine*. The chapters in the book are a response to the IOM and the Accreditation Council of Graduate Medical Education (ACGME) recommendation that "medical students should be provided with an integrated curriculum in the behavioral and social sciences throughout the 4 years of medical school" and the recommendation that medical students demonstrate competency in the following domains:

- Mind-body interactions in health and disease
- Patient behavior
- Physician role and behavior
- Physician-patient interactions
- Social and cultural issues in health care, and
- Health policy and economics

The IOM and ACGME also recommends that the U.S. Medical Licensing Examination (USMLE) should include increased behavioral and social science content on its certifying examinations.

Like its predecessors, this edition is written crystal clearly, and is a very enjoyable, up-to-date "read" filled with wise and crucial information. Each of its chapters is theoretically sound, clinically precious, and unusually helpful in preparing for clinical practice and USMLE Step 1 and Step 2 examinations. As in the previous editions, the literary quotes and artwork give the book a unique texture. All the authors are experts and fine writers.

Frederick S. Sierles, MD
Professor and Director of Medical Student Education
in Psychiatry and Behavioral Sciences
and inaugural member, Master Teacher's Guild,
Rosalind Franklin University of Medicine and Science
North Chicago, IL