

Sample chapter introductions written for first-edition medical textbook

Respiratory chapter

No longer shall I paint interiors with men reading and women knitting. I will paint living people who breathe and feel and suffer and love.

—Edvard Munch

From Byron to Billy Ray Cyrus, the fluttering, palpitating, achy-breaky heart has come to symbolize love.

Likewise, breathing has become synonymous with expressiveness, with freedom—with life itself.

Perhaps because we can hear, feel, and even see our respiration, the practical necessity of breathing is often elevated to a poetic ideal. In the following chapter, however, we'll confine our discussion to the former, leaving the latter to the realm of music, art, and literature.

Shock chapter

Celebrated nineteenth century trauma surgeon Samuel Gross described shock as “a manifestation of the rude unhinging of the machinery of life.” R. Adams Cowley, the U.S. Army physician who promulgated the concept of the “golden hour,” called shock “a momentary pause in the act of dying.” As the organizer of the first statewide EMS system in Maryland and the founder of one of the first shock trauma centers in the nation, however, Dr. Cowley wasn't content to accept death as the inevitable consequence of shock. He and others, including William Harvey, Walter Cannon, George James Guthrie, William Bayliss, and George Crile, helped pioneer many of the treatments we'll discuss in the following sections. First, though, we must define shock, albeit in less poetic words than those of Drs. Gross and Cowley.

Endocrine chapter

"The good lord only gave [us] so many hormones," observed former astronaut and U.S. senator John Glenn, tongue in cheek. "If others want to waste theirs growing hair, that's up to them."

Patients and future providers alike learned in their mandatory sixth-grade health and hygiene classes that the pituitary gland is responsible for all that manly chest hair. And any woman will tell you that hormones are to blame for everything from PMS to the baby blues to hot flashes and night sweats. But the fact is, hormones released by endocrine system glands affect more than just our reproductive systems. They stimulate growth and development throughout the body, regulate the flow of water in and out of cells, help muscles contract, control blood pressure and appetite, modulate the sleep cycle, and much more. The body carries out these metabolic processes with remarkable efficiency, yet occasionally something goes awry. The acid-base balance tips too far in one direction. Body cells become resistant to insulin. Or perhaps too much sodium or potassium builds up in the blood. That's when the provider is asked to step in.

In this chapter, we'll take a look at endocrine and metabolic emergencies whose successful management depends on timely intervention, confidence, and sharp clinical acumen and skills.