Field of medicine: Anatomy and clinical anatomy

Audience: Students of medicine and dental medicine

Purpose: To make a textbook rich in schemata and figures, with practical case depictions and skill-based learning outcomes that ties in with the golden standard of anatomy – the Sobotta atlas, expanded with the Sobotta app and a one-volume Sobotta Dissection Atlas.

Content: The textbook is divided into five chapters, followed by Further Reading (divided into a list of books – which reads as the hit list of anatomy reading in the last 10 years – and a list of research articles/essays) and a detailed Index. The chapters are as follows: “General Anatomy and Embryology,” “Musculoskeletal System,” “Internal Organs,” “Head and Neck,” and “Neuroanatomy.”

The first chapter, as one would expect in an anatomy textbook, sets the stage for introducing major concepts related to the human body – its architecture and organization, as well as its development, from fertilization to the formation of the limbs, pharyngeal arches, and face. This chapter gives just about enough details for busy students to get the concepts they need for understanding the rest of the textbook.

The second chapter’s title “Musculoskeletal System” is a little misleading as the chapter presents the entirety of the locomotor system, including the thoracic wall, the spine, and the entirety of both extremities, including their neurovascular structures (nerves, arteries, veins, lymphatics), as well as some topographically important regions.

The third chapter, “Internal Organs,” obviously, presents the viscera from the thoracic and abdominopelvic cavities. For every organ, a brief overview is given, followed by a description of its function and development (and structure if necessary), topography, and vascular/nervous supply/drainage.

The fourth chapter, “Head and Neck” (although it reads “Throat” instead of “Neck” in a couple of places), is particularly intended for students of dental medicine and first presents the skull and its development, continues with the description of the soft tissue covering, cranial nerves, and organs (the eye, ear, and nose), followed by the oral cavity, masticatory apparatus, and salivary glands. The following subchapter – “Neck,” gives an overview of the surface anatomy, regions, and musculoskeletal and fascial systems of the neck, followed by descriptions of the (para)thyroid glands, larynx, and pharynx.

The final chapter “Neuroanatomy,” the largest chapter of the textbook, is further divided into subchapters “General Neuroanatomy,” “Special Neuroanatomy,” and “Functional Systems.” The “General Neuroanatomy” subchapter gives an overview of the structure of the nervous system, meninges, and ventricular system. The “Special Neuroanatomy” subchapter describes the telencephalon, diencephalon, brainstem, cerebellum, cranial nerves (detailed AGAIN!),
and spinal cord. The final subchapter of the textbook, the "Functional Systems," gives an overview of the somatic and autonomic nervous systems, and the somatosensory, visual, auditory, vestibular, olfactory, gustatory, nociceptive, and limbic systems.

**Highlights:** The textbook limits itself to macroscopic anatomy and related development, which reduces the size and repetitiveness of the text compared with other specialized textbooks. It, also, intensely connects macroscopic content with functional and clinical aspects, enriching the studying experience and making it curiosity-driven.

**Limitations:** This is the first edition of the textbook translated into English, so it is plagued with some linguistic inconsistencies (eg, "Head and Throat" instead of "Head and Neck") and awkward translations (eg, "construction of the spleen"), which will, no doubt, be ironed out in the coming editions. The editors have, evidently, made a conscious decision not to include some concepts (eg, the nephron) and details (the topography of the tarsal canal – while still referring to the "tarsal canal syndrome") that are typically discussed in other anatomical textbooks. The lack of a detailed description of the nephron (which, arguably, is a histological level) or a detailed branching of the arteries within the kidney shows that the editors have followed their logic in choosing the discussed topics according to their overarching ideal – practicality and streamlining of the studying process of macroscopic anatomy.

**Related reading:** The textbook should be compared with two other German golden standard textbooks: Waldeyer – Anatomie des Menschen (De Gruyter, 1176 pages) and Duale Reihe Anatomie (Thieme, 1336 pages), which are a bit more detailed textbooks aimed at a slightly larger audience. Considering the flourishing of new programs provided in English in Europe, it is better to compare it with two classics – Gray’s Anatomy for Students (Elsevier, 1180 pages) and Moore’s Clinically Oriented Anatomy (LWW, 1168 pages).

**Commentary:** While, arguably, anatomy is not evolving as rapidly as some other medical fields, some (pre)conceptions concerning teaching and learning anatomy are changing. These changes are related to the students themselves, their skills, and their expectations. The students have become a much more (inter)active audience, looking for and expecting different experiences from what was traditionally taught. The students feel the need to grasp concepts rather than the names of structures, expect practical and quick implementation rather than laborious and time-consuming devotion to detail, and, by-and-large, have a skewed worldview (influenced by modern technologies) that pieces of information are just a few quick and easy finger taps away. The editors have done their best to reduce the typically overwhelming amounts of text found in other standard anatomical textbooks to a more manageable, interactive, app-oriented experience. However, as they themselves say “… there is one thing (the concept of this textbook) cannot do: it cannot do the learning for the students.” Time will tell if this textbook becomes the classic its namesake, the atlas, has become.