

STRUCTURE OF THE HUMAN BODY

2009

Introduction to the Laboratory

The study of gross human anatomy is the foundation for much, if not all, of the medical studies to follow. The science and practice of medicine rely on understanding the individual as an integrated whole.

Gross anatomy is the study of structures, their relationships, and their functions. A useful knowledge of the structure of the body cannot be obtained from lectures, books, or electronic resources alone. The student must obtain first-hand information from seeing and handling actual structures of the body and appreciating their interrelations and the three-dimensionality of human anatomy. This is done by dissection, the art of removing surface tissues exposing underlying structures, separating them from one another, and identifying them. Dissection requires careful and accurate work and personal discipline. A dissector and atlas(es) must be used constantly as learning resources but do not substitute for the actual specimen. Careful dissection enables a synthesis of the identification of structures with an understanding of disease processes and therapeutic interventions in the practice of medicine.

Although all bodies have the same gross architectural plan, no two bodies are identical. Minor variations, as well as greater anomalies, should always be anticipated. The student should concentrate on normal anatomy in this course but will encounter alterations caused by diseases, abnormal development, or surgical interventions.

The information acquired during gross human anatomy is cumulative. Complete information about a particular structure may not always be gleaned from the first encounter with textual information or during dissection. During regional dissection students will encounter structures that arise from and terminate near unexposed areas; future dissections will reveal a complete structure or pattern. Thus the student will be challenged to continuously create a three dimensional mental picture of the region and its component structures and their interrelationships. The student should learn what information about a structure is pertinent to the regional dissection at the particular time, add to this information as the dissection proceeds, and integrate and synthesize the new information with the old.