

Lippincott Williams & Wilkins

atlas of  
**ANATOMY**





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**ANATOMY**

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**Dedicated to the memory of  
Russell T. Woodburne, PhD  
whose descriptions of anatomy are as valid and accurate today  
as they were when first written over 50 years ago.**



The opportunity to create a new anatomical atlas could not be described as even a once-in-a-lifetime opportunity. Original atlases simply are not produced often enough to make that statement accurate. As anatomical educators of medical students with nearly 60 years of classroom experience between us, we are familiar with all of the anatomical atlases that are currently on the market, and it is a very esteemed group. Our experience with these existing atlases has helped us formulate strong ideas of how to present anatomical images more concisely and in a more logical sequence. The intent of this new atlas is to make images easier and faster for the student to use. Speed and ease of use have become critical needs in the era of compressed anatomical curricula.

The development of this atlas required the combined efforts of a large group of people and the good fortune to have all of these resources available simultaneously. First, we had the complete support of Lippincott Williams & Wilkins (LWW). This support came in many forms, from editorial and production assistance and project funding to art direction and expert market analysis as well as many words of encouragement.

Second, we had the exceptional talents of the creative team at the Anatomical Chart Company (ACC). ACC produces the thousands of anatomical and diagnostic charts that are displayed in clinics and doctors' offices all over the world. The ACC creative team recruited a small army of the best medical illustrators in the country, kept this army organized, and guided them throughout the project. The ACC design team created a truly inspired design and oversaw the construction of pages. Working with the LWW production team, ACC also guided this complex atlas through the production phase.

Third, the authors have been friends and colleagues for many years. The result of our combined efforts to develop educational material has always been greater than the sum of our individual efforts. To this project we have brought the ability and desire to work as a team.

Using these resources to the maximum extent, we have developed an atlas that stands out among contemporary atlases in several areas.

### **Teaching Perspective**

The *LWW Atlas of Anatomy* is organized regionally. However, the atlas is not simply a series of flat anatomical drawings with every structure labeled. Every aspect of the atlas, from the selection and organization of the plates, to the coloring, style, and labeling of the individual images is grounded in a teaching perspective. The organization follows a teacher's logic, in that it begins with surface anatomy and superficial features, then proceeds into deeper structures with plate groupings that support regional dissection sequences. The labels are carefully selected and placed to tell a story and direct the attention of the viewer to important relationships.

### **A New Art Style**

A new art style was created for the *LWW Atlas of Anatomy*. The illustrations use a vibrant palette, new surface textures, effective use of shading to add depth, and a clean, uncluttered labeling approach. The main illustrations are designed to depict the most common anatomical features (i.e., "average" anatomy) that a student is likely to encounter in dissections or clinical practice. Common important anatomical variations are also depicted in supporting illustrations.

### **Careful Selection of Images**

There are fewer illustrations in the *LWW Atlas of Anatomy* than in other atlases. In today's shrinking anatomy curriculum, more is not necessarily better. We carefully considered the number of illustrations necessary to get the job done, with no superfluous figures or concepts. Illustrations are placed in logical dissection order, followed by summary illustrations (systemically organized illustrations of vessels and nerves) that help the student assemble the parts into a whole.

### **Consistent Perspective**

To aid the novice, the images in the *LWW Atlas of Anatomy* use consistent viewpoints: Directly anterior, directly posterior, directly lateral, or directly medial. The specimen is always placed in the anatomical position. Oblique views and quartering views are not used. Positioning of the limbs or the head in other than the anatomical position has been strictly avoided.

### **Effective Use of Color**

Images in the *LWW Atlas of Anatomy* use color to draw the viewer's attention to the important part of the figure. Many figures have highly detailed peripheral anatomy rendered in gray to provide context for the illustration without distracting the viewer from the central theme. Summary illustrations use this color technique to particular advantage to show systemic anatomy of body regions.

### **Ghosted Structures**

Many illustrations in the *LWW Atlas of Anatomy* employ a ghosting technique to allow the viewer to look into the illustration in greater depth. In some illustrations, the viewer looks through ghosted structures to see important anatomical relationships. In other illustrations, a solid object is rendered as a ghost where it passes behind another solid object. By use of these ghosting techniques, we are able to illustrate the relationships of deep structures to more superficial structures and allow students to see connections and associations that previously they had to imagine.

### **Limited Labeling**

We have intentionally limited the number of labels per illustration in the *LWW Atlas of Anatomy*. We deliberately selected only those structures most likely to be taught in modern curricula and to provide labels for those structures. We did not label everything in each illustration. Many additional structures could have been labeled, but at a loss of the didactic impact of the image.

### **Effective Label Placement**

We have juxtaposed labels to increase the pedagogical impact of the illustration. These label placements encourage the student to notice important relationships. We also have used lists of labels to reinforce the relationship of parts of structures to the whole. The arrangement of labels, combined with the use of color, leaves little doubt as to the intent of the illustration.

### **No Captions**

The *LWW Atlas of Anatomy* has no captions or text to explain the figures. Market analysis indicates that students and faculty are sharply divided on whether or not this type of material is useful. It is our feeling that an atlas is a supplement to a textbook. We feel that students consult an atlas for visual identification, not description, and that lengthy discussion of the illustrations is not necessary if the illustrations are designed and organized properly and used in the context of text materials.

### **Complete Product Package**

We are also offering with the text a set of supporting products designed to help students learn anatomy. All of the images are available electronically in an interactive atlas that can be accessed on thePoint (Lippincott Williams & Wilkins's website). The interactive atlas has several useful features, including a search function and zoom and compare features. Students can also test their knowledge of anatomy with a unique drag-and-drop labeling exercise available for each image. Instructors also receive an image bank that provides each image in a file suitable for multimedia presentations and an extensive repository of anatomy-oriented test questions

The *LWW Atlas of Anatomy* has taken many years to complete, and its creation took full advantage of electronic communication and imaging. It has not been an easy feat, as the artists, editors, authors, and publisher are spread all over the country. Approximately 7500 versions of the illustrations were reviewed and critiqued during the course of the project. We all suffered moments of fatigue but the result is well worth the time invested. The experience has been both exhausting and exhilarating.

We hope that you enjoy the outcome.

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