DEDICATION

To my family and friends for their support and understanding.

To my parents for their inspiration, love, and encouragement.

I have always been cognizant and thankful for the opportunity to contribute to the specialties of orthopaedics and radiology. The respect shown by my colleagues and students has and continues to be a humbling and motivating force in my life.

The veracity of truth is a trenchant ally against the consensus who follow convention as if dogma.

The model checklist:
• Honesty, humility in thought and action
• Excel for others through example
• Never compromise on the truth for without honesty we cannot build knowledge.
• Change of heart and mind through teaching others is the most powerful and natural healing force of the human spirit.
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Stoller’s Orthopaedics and Sports Medicine: The Shoulder represents an ambitious and comprehensive undertaking for both myself and Wolters Kluwer. In order to organize this wealth of information and images in an accessible manner, a unique new format has been developed. A bulleted text that is concise provides for direct and rapid comprehension of orthopaedic advancements.

**Special features include:**
- Comprehensive collections of color illustrations and arthroscopic cases of orthopaedic pathoanatomy
- Key concepts section introductions to emphasize and reinforce critical information
- Detailed figure legends rich in content provide descriptive information and introduce novel concepts.
- 3T and high resolution MR images to demonstrate critical structures in functional shoulder anatomy and pathology.
- Evolved checklist approach as the keystone for accurate and reproducible image interpretation
- Updated concepts in the shoulder including:
  - The rotator cable
  - The superior glenohumeral ligament complex, IGLLC and BLC
  - Proper cuff tensioning in rotator cuff repair
  - PASTA lesions in the context of rotator cable anatomy
  - Cadaver dissections highlighting anterior band and capsular variations

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Undertaking the writing of this text has provided a unique opportunity to contribute to the emerging field of orthopaedic magnetic resonance imaging. Orthopaedic MRI has earned respect as a distinct subspecialty and is now a primary modality in the diagnosis of internal derangement of the joints. I would like to acknowledge the contributions of the following individuals:

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**Technical Reference List**


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Glenohumeral Ligaments Unifying Perspective

- While the IGLLC has received much of the focus in understanding the relationship between the anterior band and the anterior labrum, a more global overview of the glenohumeral capsule requires appreciating the role and link that exists between the superior and inferior capsuloligamentous structures.\(^{182}\)

Superior Capsuloligamentous Complex

- Superior glenohumeral ligament
- Coracohumeral ligament
- Posterosuperior glenohumeral ligament
- Coracoglenoid ligament
- Transverse band (previous terminology) or rotator cable as an extension of the coracohumeral ligament

Inferior Glenohumeral Ligament Complex

- Anterior band
- Posterior band
- Axillary pouch
- Fasciculus obliquus

Link Between Superior and Inferior Complexes

- Circular system
  - The glenoid labrum on the medial side
- Semicircular system on the humeral side
  - Rotator cuff tendons
  - Fasciculus obliquus
  - Transverse band or rotator cable
- Two diagonal cross-links
  - Fasciculus obliquus
  - Middle glenohumeral ligament
FIGURE 4.42  A gross shoulder specimen illustrates the structure of the inferior glenohumeral ligament (IGL) complex. With abduction of the humerus, the IGL structures are more prominent and taut in position. Coronal oblique MR images routinely show the lax axillary pouch of the IGL when the humerus is in the adducted position. Curved arrow, axillary pouch; AB, anterior band; AL, anterior labrum; HH, humeral head; PB, posterior band; PL, posterior labrum.

FIGURE 4.43  Middle glenohumeral ligament (yellow) depicted anteriorly superior to the anterior band (red) of the inferior glenohumeral ligament as it extends superiorly toward the biceps (blue) labral complex. Superior glenohumeral ligament in green anterior to LHBT. The anterior band attaches high replacing the anterior labrum above the equator. In contrast Figure 4.42 the anterior band is continuous with the anterior labrum at the equator. (Modified from DePalma AF. Surgery of the Shoulder. 3rd ed. Philadelphia, PA: JB Lippincott; 1983.)
FIGURE 4.57 The SGHL forms a semicircular anterior support for the lateral aspect of the intraarticular long head of the biceps tendon (LHBT) in the rotator interval. The rotator interval represents the space between the anterior border of the supraspinatus tendon and the superior border of the subscapularis tendon. The subscapularis tendon inserts onto the lesser tuberosity anterior to the SGHL. There is a transition zone, however located laterally at the proximal bicipital groove where posterior fibers of the subscapularis tendon, anterior fibers of the SGHL and some fibers of the ventral CH ligament interdigitate at their insertion. Sagittal FS PD FSE image.