

# V. MUSCULAR SYSTEM / SKELETAL MUSCULATURE

## FUNCTIONAL OVERVIEW

- FLEXOR<sup>A</sup>**
- EXTENSOR<sup>B</sup>**
- ABDUCTOR<sup>C</sup>**
- ADDUCTOR<sup>D</sup>**
- ROTATOR<sup>E</sup>**
- SCAPULAR STABILIZER<sup>F</sup>**
- EVERTOR<sup>G</sup>**
- INVERTOR<sup>H</sup>**

CN: Use light colors throughout (especially for A and B). Deeper muscles are not included in the large illustrations. (1) Color all of the muscle groups in the anterior view before going on to the posterior view at right. Only the muscles on one side of the figure have been labeled. As you color the muscle, also color its opposite. (2) Color the small diagram below.

Upon coloring these functional groups, note the spatial relationship of adductors to abductors and evertors to invertors. Take particular note of the extensors and flexors. Recall that extension of weightbearing joints is an anti-gravity function, and extensor muscles of these joints tend to keep the standing body vertically straight. Note the line of gravity and its relationship to the vertebral, hip, knee, and ankle joints. The center of gravity of an average human being standing with perfect posture is just anterior to the motion segment of S1-S2. Flexion of the neck and torso moves the center of gravity forward, loading the posterior cervical, thoracic, and lumbar paraspinal (extensor) muscles. The actors moving the vertebral, hip, knee, and ankle joints make possible erect standing and walking/running posture.

