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| **Joint** | **Sagittal Plane (ML axis)** | | **Frontal Plane (AP axis)** | | **Transverse Plane (long axis)** | |
| **Spine** | Lumbar Flexion   * psoas major * rectus abdominis * external oblique * internal oblique * transversus abdominis | Lumbar Extension   * latissimus dorsi * erector spinae * transversospinalis * interspinales * quadratus lumborum * multifidus | Lumbar Lateral Flexion (L)   * erector spinae * rectus abd left side (weak) * left ext/int oblique * left quadratus lumborum | Lumbar Lateral Flexion (R)   * rectus abd right side (weak) * right ext/int oblique | Ipsilateral Lumbar Rotation   * internal oblique (R to R, L to L) | Contralateral Lumbar Rotation   * ext oblique (R to L, L to R) * quadratus lumborum |
| **Ankle** | Dorsiflexion   * **tibialis anterior** * peroneus tertius * ext hallucis longus * ext digitorium longus | Plantar Flexion (ext)   * **gastrocnemius** * **soleus** * flx hallucis longus * flx digitorum longus * peroneus longus * peroneus brevis * tibialis posterior * plantaris | Inversion (Add)   * **tibialis anterior** * tibialis posterior * soleus * gastrocnemius * extensor hallucis longus * flexor digitorum longus * flexor hallucis longus | Eversion (Abd)   * **peroneus longus** * **peroneus brevis** * peroneus tertius * extensor digitorum longus |  |  |
| **Knee** | Flexion   * **biceps femoris** * **semitendinosus** * **semimembranosus** * gastrocnemius * gracilis * sartorius * popliteus * tensor fascia latae (past 15° flexion) | Extension   * **rectus femoris** * **vastus medialis** * **vastus intermedius** * **vastus lateralis** * tensor fascia latae (0-15° flexion) |  |  | Internal Rotation   * **gracilis** * **sartorius** * semimem * semitend * popliteus | External Rotation   * biceps femoris (as knee reaches full ext) |

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| **Joint** | **Sagittal Plane (ML axis)** | | **Frontal Plane (AP axis)** | | **Transverse Plane (long axis)** | |
| **Hip** | Flexion   * **rectus femoris** * **iliacus** * **psoas major** * sartorius * tensor fascia latae * adductor longus * pectineus * gracilis | Extension   * **semimembranosus** * **semitendinosus** * **biceps femoris** * **gluteus maximus** * adductor magnus | Adduction   * **adductor longus** * **adductor brevis** * **adductor magnus** * gracilis * gluteus maximus (inf) * pectineus | Abduction   * **tensor fasciae latae** * **gluteus medius** * **gluteus minimus** sartorius * gluteus maximus (sup) * rectus femoris (weak) | Internal Rotation   * **gracilis** * **gluteus medius (ant)** * **gluteus minimus** * adductor magnus * pectineus * semimembranosus * semitendinous * tensor fascia latae | External Rotation   * **piriformis** * **gemellus superior** * **gemellus inferior** * **obturator externus** * **obturator internus** * **quadratus femoris** * sartorius * gluteus maximus * gluteus medius (post) * biceps femoris * adductor brevis * adductor magnus |
| **Pelvis** | Anterior Tilt   * **iliacus/psoas major** * **rectus femoris** * tensor fascia latae * gracilis * sartorius * gluteus minimus * adductor longus/brevis * adductor magnus (ant) * pectineus * erector spinae | Posterior Tilt   * **semimembranosus** * **semtendinosus** * **biceps femoris** * **gluteus maximus** * adductor magnus (post) * rectus abdominus | Ipsilateral Tilt   * tensor fascia latae * sartorius * gluteus maximus (sup) * gluteus medius * gluteus minimus | Contralateral Tilt   * gracilis * gluteus maximus (inf) * adductors * pectineus | Ipsilateral Rotation   * gracilis * gluteus minimus * gluteus medius (ant) * pectineus | Contralateral Rotation   * sartorius * gluteus maximus * gluteus medius (post) |
| **Elbow** | Flexion   * **biceps brachii** * **brachialis** * **brachioradialis** * supinator * pronator teres | Extension   * triceps brachii (all heads) * anconeus |  |  | Supination (RU)   * biceps brachii * brachioradialis * supinator | Pronation (RU)   * **pronator teres** * **pronator quadratus** * brachioradialis |

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| **Shoulder (GH)** | Flexion   * **pectoralis major (clavicular fibers)** * **anterior deltoid** * coracobrachialis | Extension   * **latissimus dorsi** * **posterior deltoid** * **teres major** * **pectoralis major (sternal fibers)** * subscapularis | Adduction   * **pectoralis major (sternal fibers)** * **latissimus dorsi** * **teres major** * coracobrachialis * teres minor * subscapularis * infraspinatus (lower fibers) | Abduction   * **pectoralis major (clavicular fibers – > 90)** * **deltoid** * **supraspinatus** * infraspinatus (upper fibers) | Internal Rotation   * **pectoralis major** * **subscapularis** * **latissimus dorsi** * **teres major** * anterior deltoid   Horizontal Adduction   * pectoralis major * coracobrachialis * anterior deltoid | External Rotation   * **infraspinatus** * **teres minor** * posterior deltoid   Horizontal Abduction   * **deltoid (mid, post)** * **infraspinatus** * **teres minor** * latissimus dorsi |
| **Shoulder Girdle (Scapula)** | Protraction (abd)   * serratus anterior * pec minor | Retraction (add)   * **rhomboids** * **trapezius (mid, lower)** * levatator scapulae | Elevation   * rhomboids * trapezius * levatator scapulae * serratus ant | Depression   * trapezius (lower) * pec minor | Upward Rotation   * trapezius (mid, low) * serratus ant | Downward Rotation   * **rhomboids** * **pec minor** * levatator scapulae * trapezius (upper) |