I. **Announcements** Topic outline due **next Thursday.** Future Anatomy Lab visits?

II. **Anatomy Lab Exploration Review**
   A. **Brachioradialis**, nickname, grip during curl?
   B. **Patella**, nickname, tibia, nickname, …?
   C. **Rectus abdominis & obliques**, exercises
   D. **Gluteal & posterior thigh muscles**, exercises
   E. **Triceps brachii**, exercises, supersetting
   F. **Trapezius & posterior deltoid**, exercises

III. **Getting to Know You + Discussion**
    Any questions for me are open game!
Can you identify the *brachioradialis* muscle? What is its *nickname*? Which *grip during a biceps curl* stresses this muscle?

Hitchhiker muscle!

Neutral or hammer grip!!
Is the *patella* visible? What is its *nickname*? Can you find the *tibia*? What is its *nickname*? Where does the *patellar tendon* insert onto the tibia? Is it *patellar tendon* or a *ligament*? Explain briefly.

Kneecap!

Shin bone!

Chondromalacia patella
Can you find the **biceps brachii long and short heads**? What two actions does the biceps brachii do? Where is the **brachialis** compared to the biceps? What **grip** isolates the **brachialis**?

Pronated/Reverse Grip stresses **Brachialis**!

https://www.youtube.com/watch?v=5QxggbUvkbg

Supinated/Palms up Grip stresses **Biceps Brachii**?
Identify the *rectus abdominis*, *external oblique* and *internal oblique* muscles if dissected. What exercise/s stress/es the *rectus abdominis*? What movements emphasize *oblique muscles*?
R Abdomen

- Tendinous inscription
- Rectus abdominis
- Tenth rib
- Transversus abdominis
- External oblique
- Internal oblique
- Semilunar line
- Anterior superior iliac spine
- Ilioinguinal nerve
- Cremaster muscle
- Pyramidalis
- Spermatic cord
- Conjoined tendon
- Aponeurosis of internal oblique
- Aponeurosis of external oblique
- Superficial inguinal ring
External oblique

R Lower Abdomen

Internal oblique

Rectus abdominis
Trunk flexion activates rectus abdominis muscles
**Iliopsoas** with **Knees Straight** vs. **Bent**?

- **Knees Straight**: Taut & tugs on lower back!
- **Knees Bent**: Collapsed & relieves stress!

**Hip Flexors?** *Iliopsoas, rectus femoris, sartorius*

**Feet Anchored vs. Unanchored?** *Unanchored*
Lower back stress by flexing hips & bending knees
Contract abdominals, bend knees, widen stance to reduce back stress!
Identify the *gluteal* and *posterior thigh* / *hamstring* muscles. Is the dissection completed enough to differentiate *gluteus maximus, medius* and *minimus* muscles? Can you identify the *biceps femoris, semitendinosus* and *semimembranosus* muscles? What *exercise/s* work/s *gluteal and hamstring* muscles, simultaneously?
Deeper Gluteal Muscles Look Like Pizza Slices!!
Superficial to Deep: *Maximus, Medius, Minimus!*

http://www.anatomyexpert.com/structure_detail/5715/
Image Source: http://saveyourself.ca/articles/spot-06-gluteus-medius.php
Hamstring Group

1. Biceps femoris (long)
2. Biceps femoris (short)
3. Semimembranosus
4. Semitendinosus

L thigh posterior

Quadratus femoris
Gluteus maximus
Sciatic nerve

Adductor magnus
Gracilis

Tensor fasciae latae

Vastus lateralis

Biceps—long head
Biceps—short head

Semimembranosus
Semitendinosus

Tibial nerve
Gastrocnemius
Vastus lateralis

Adductor magnus

Gluteus maximus

Biceps femoris

Hamstrings

Semitendinosus

Semimembranosus

L thigh posterior
What exercise/s work/s gluteal and hamstring muscles, simultaneously?

Squat  
Lunge
Identify the *triceps brachii*. List all *three heads* below. What exercise/action works the *posterior arm*?
Push - Pull

Triceps Brachii
- Long Head
- Lateral Head
- Medial Head

Biceps Brachii
- Lateral intermuscular septum

Brachialis

Brachioradialis
- Tendon of triceps
- Lateral epicondyle of humerus
- Anconeus
- Extensor carpi radialis longus
Within Same Workout – Superset to Save Time!

NB: Antagonistic relaxes while agonistic works.
Can you identify the trapezius and posterior deltoid muscles? What are these muscles shaped like, respectively? What exercises help isolate these two muscles?
Trapezius = Shaped like a Trapezoid
L arm lateral

Pectoralis major

Deltoid

Triceps brachii

Biceps brachii

Brachialis
Posterior Deltoid Raises
Time-out for discussion!