CAI – The Immersion

Introduction to the Clinical Anatomy Immersion

24 July 2017

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from Vesalius, *De Humani Corporis Fabrica* (1543)

One College

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Three Campuses

Features of the Immersion

- "Immersion"—highly focused, few other activities
  - Four days per week (Mon-Tues-Thurs-Fri)
  - Three hours of lab per day, balance of time is largely for reading and other preparation
  - OMM is the other major player in the Immersion
- Frontloads musculoskeletal anatomy (back & limbs)
- Has a strong clinical emphasis

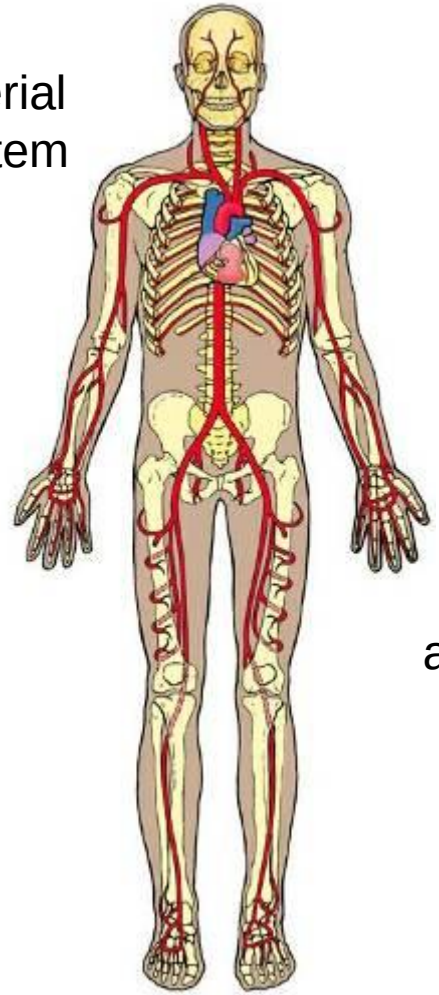
Justification for the Immersion

- Gross anatomy is the foundation and language of medicine—particularly Osteopathic Manipulative Medicine (OMM)
- Provide that foundation prior to beginning the rest of your training
- Quickly bring all students up to the same level
- Better prepare all our students for OMM training
- Provide a clinical focus & orientation at the outset
- Starting the process of clinical thinking & problem solving

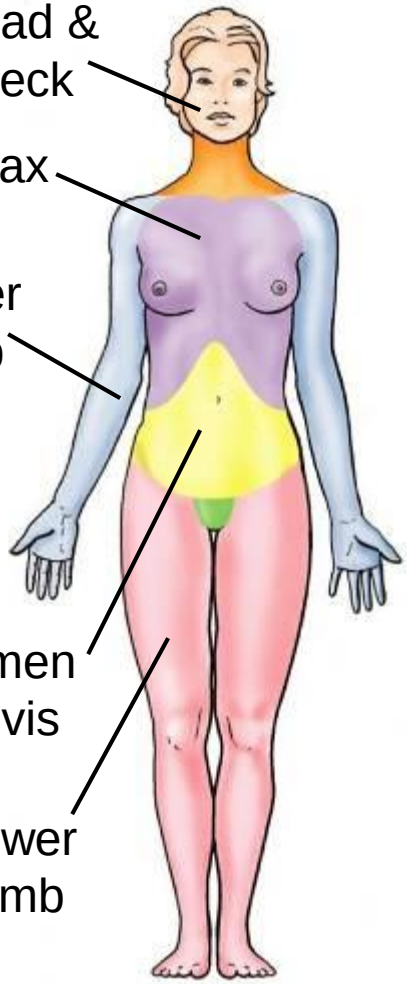
What Is Clinical Anatomy?

Systemic Anatomy

arterial system

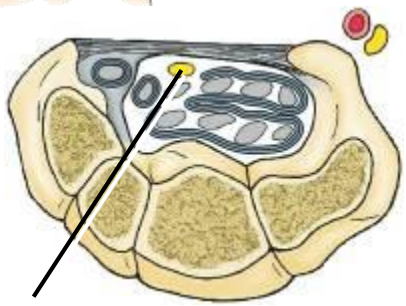


Regional Anatomy

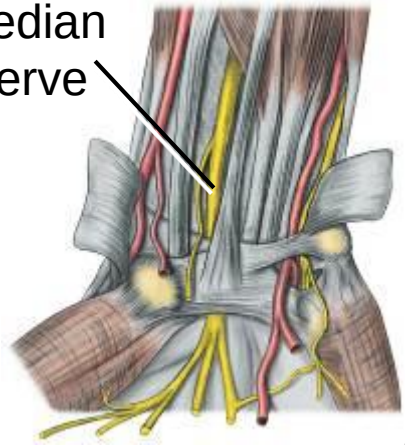


Clinical Anatomy

Carpal tunnel syndrome
- paresthesia
- thenar wasting
- hand weakness



median nerve



(from M&D COA6 2010)

Why Emphasize Clinical Anatomy?

- Medical school is for training physicians, not anatomists

- Promotes critical thinking and clinical problem-solving using anatomical knowledge

- Enhances ability to learn and retain anatomy
  - Retention is better if learning is done in the context in which it will be ultimately used
  - “Seeing the forest [clinical application] for the trees [anatomical structures]”

- “Reciprocal illumination”
  - Need anatomy to understand clinical practice
  - Need clinical correlations to understand anatomy

Why Emphasize Clinical Anatomy?

A.T. Still's Four Tenets of Osteopathic Medicine

1. The body is a unit; the person is a unit of mind and body
2. The body is capable of self-regulation, self-healing, and health maintenance
3. Structure and function are reciprocally interrelated
4. Rational treatment is based on the above three principles

→ **Anatomical structure is at the core**

Anatomy of the Immersion: staff

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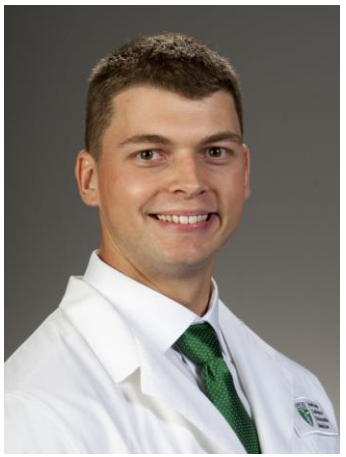

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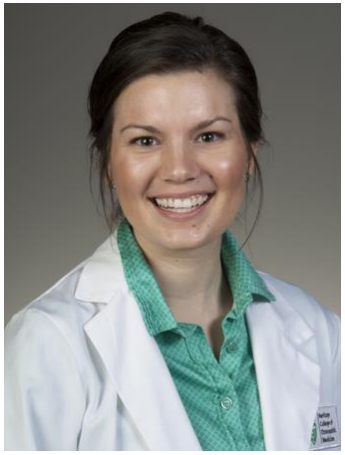
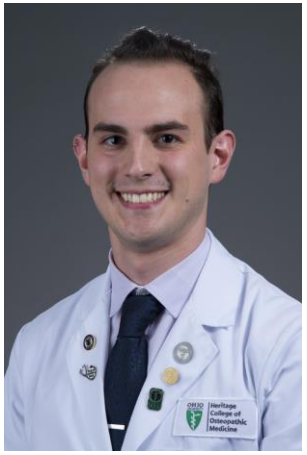


Allyson Halderman MSIV
OMM/DFM Associate



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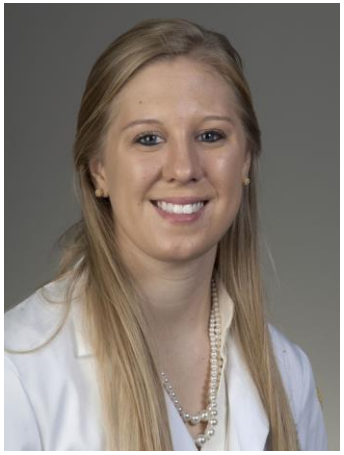
Instructor



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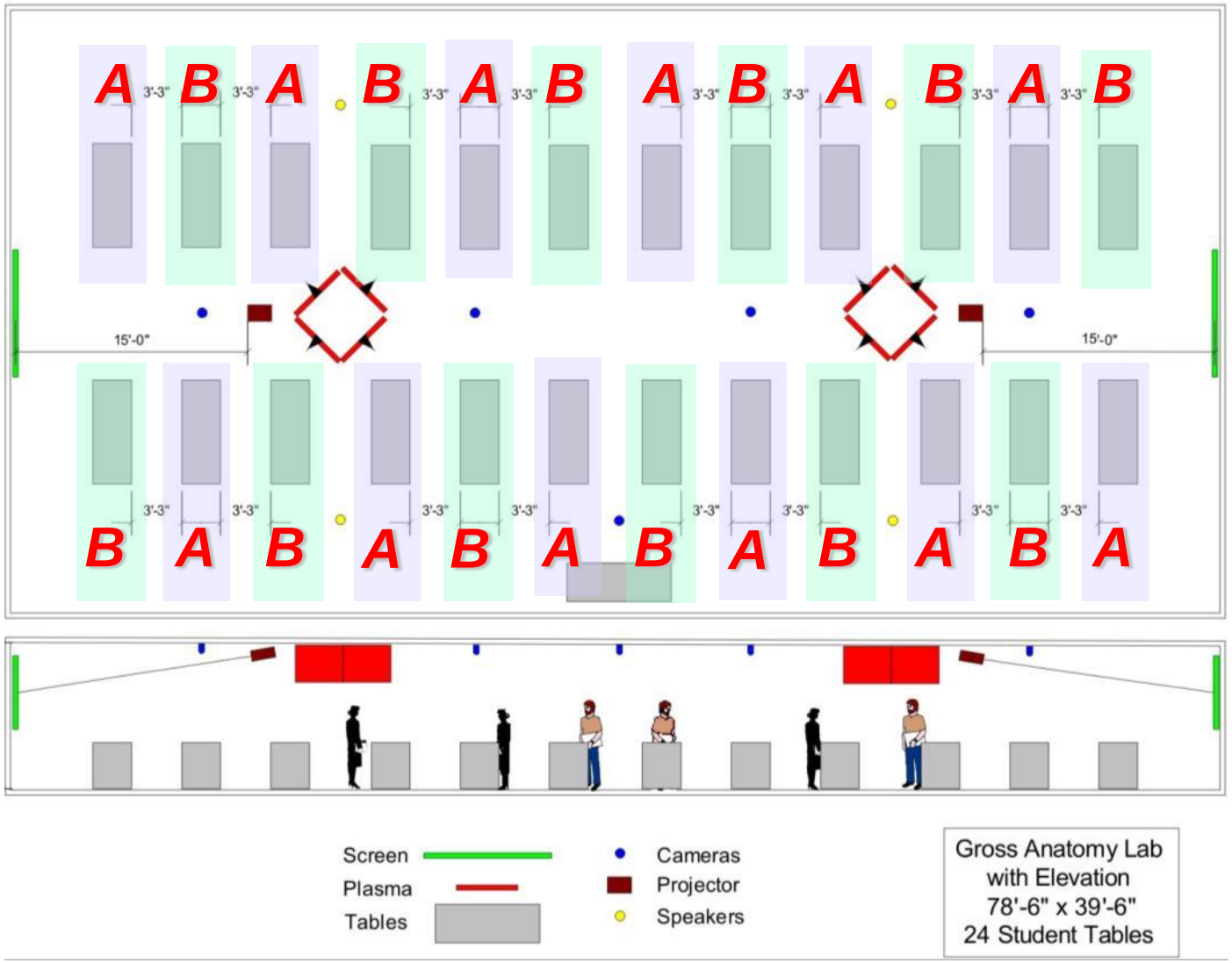
Anatomy of the Immersion: The Lab



- 4 or 5 students/table
- Athens: Sections A & B, alternate AM/PM slot weekly
- Teams do their own dissections. Division of labor: cutters, readers, …
- Dissect **BOTH** sides of the donor
- Come to lab at off times to finish up
- ***Attendance in lab is mandatory***

Anatomy of the Immersion: The Lab

Mandatory Attendance

Why?

- Material is central to your training
- Responsibility to your dissecting team
- Honoring the gift of a donated body

Stay for the whole lab

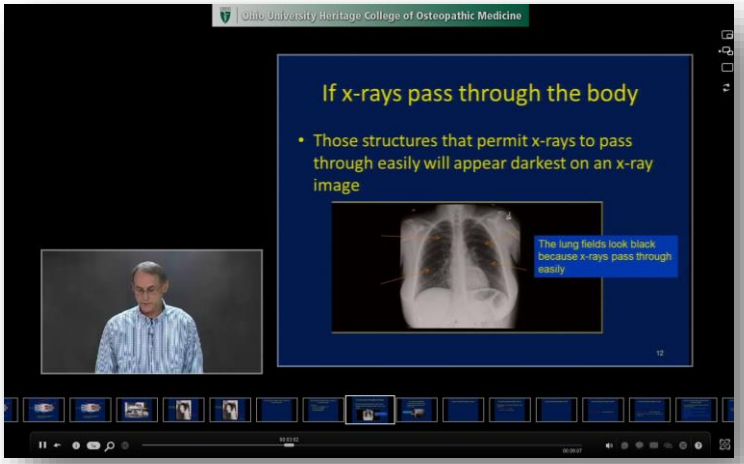
- Work on dissection
- If dissection is completed, work with other resources (e.g., other donors, bones, imaging, etc.)

Anatomy of the Immersion: Imaging

Dr. Jeffery S. Benseler, DO

- online video modules
- online self-study PowerPoints
- Face-to-face session Aug 15th

Medical Imaging Basics in Mediasite



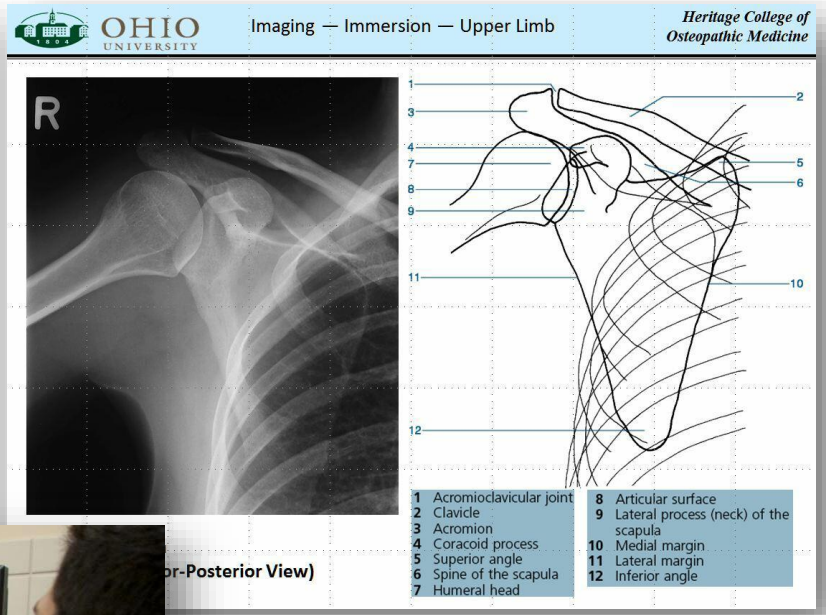
Medical Imaging Basics

- four asynchronous learning modules in Mediasite
- linked on Blackboard under “Imaging Resources”
- provide foundations of different imaging modalities
- won’t be assessed on the details but view well before Aug 15th session

Online Self-study PowerPoints

- linked on Blackboard under “Imaging Resources”
- required content on which you will be assessed according to these dates
  - Lumbar Spine Imaging: Exam 1 – Monday, July 31st
  - Cervical Spine Imaging: Exam 1 – Monday, July 31st
  - Upper Extremity Imaging: Exam 2 – Monday, August 14th
  - Lower Extremity Imaging: Exam 3 – Friday, August 25th

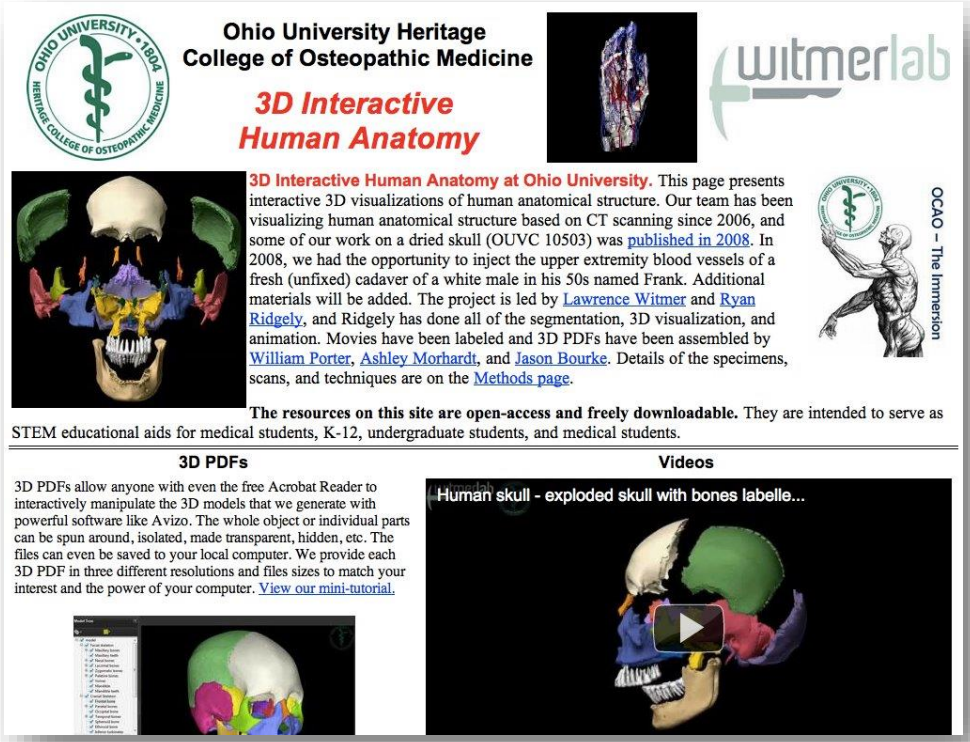
Anatomy of the Immersion: Imaging Stations



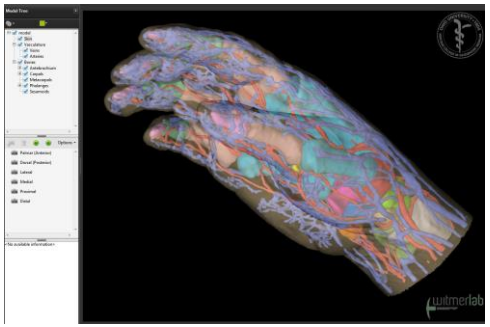
- Plain, CT, MRI
- Importance of sectional anatomy for imaging
- Very detailed but provide key correlations
- Use Dr. Benseler's PPTs as guide for exam prep
- PDFs on Blackboard but not for distribution

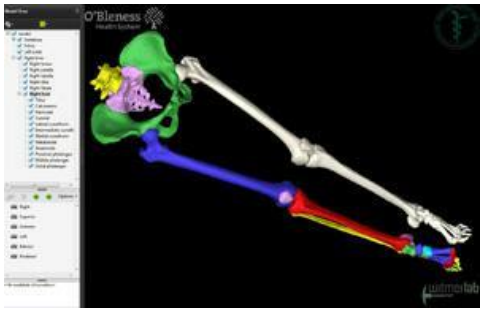
Anatomy of the Immersion: Online

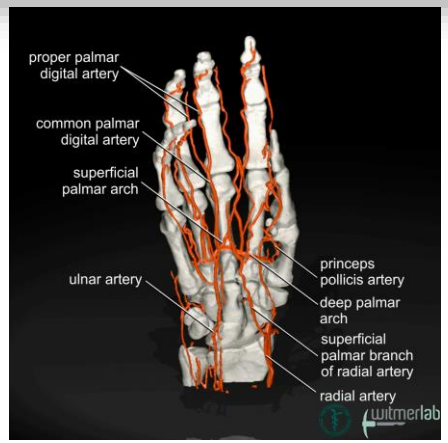
http://www.ohio.edu/people/witmerl/3D_human.htm



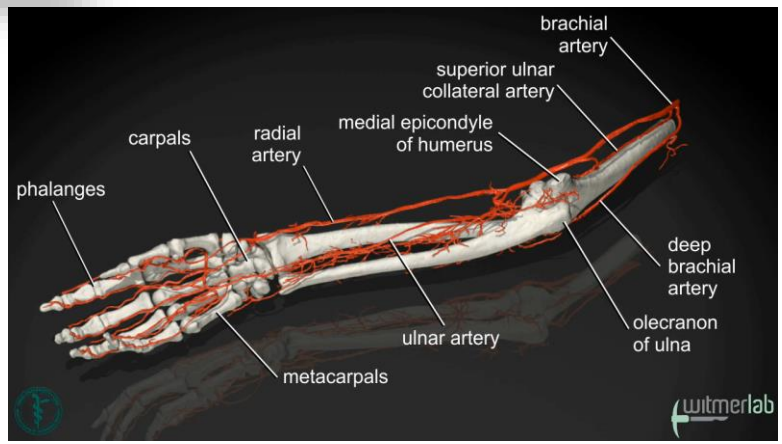
3D PDFs



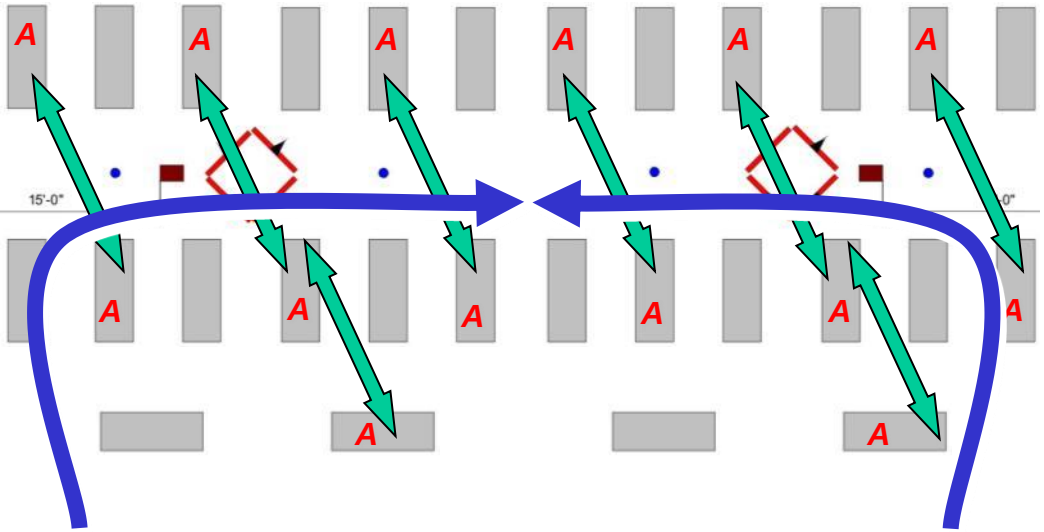




movies



Anatomy of the Immersion: Clinical Themes & Question of the Day



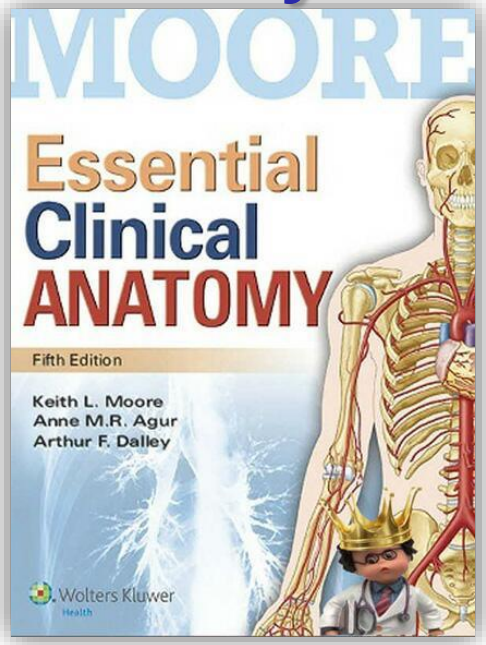
Clinical Themes

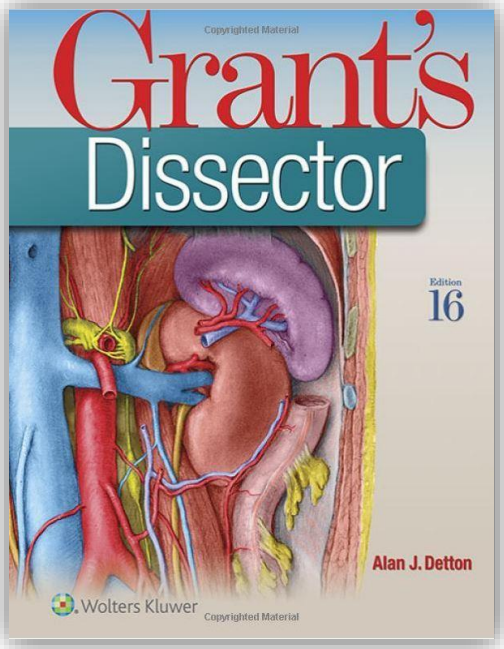
- Posted at the beginning of lab
- Provide clinical correlations
- For your reference; instructors may or may not discuss
- Available online prior to lab

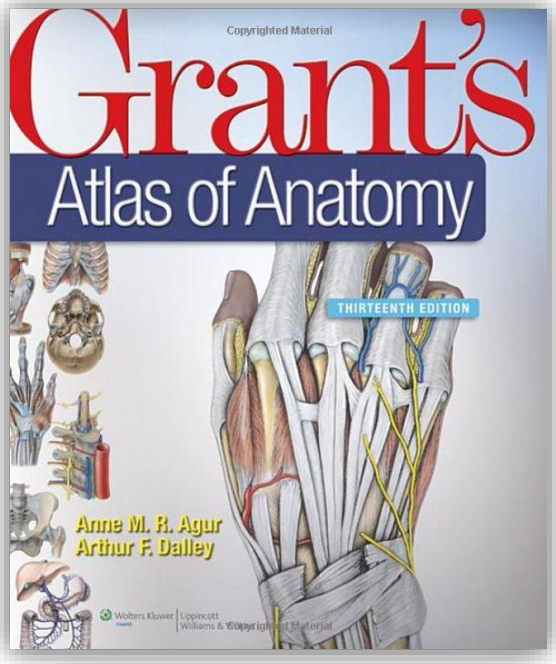
Question of the Day (QOD)

- Short clinical vignette
- Table team explores the QOD
- Faculty & Fellow/Associates will discuss QOD with trios or pairs of tables

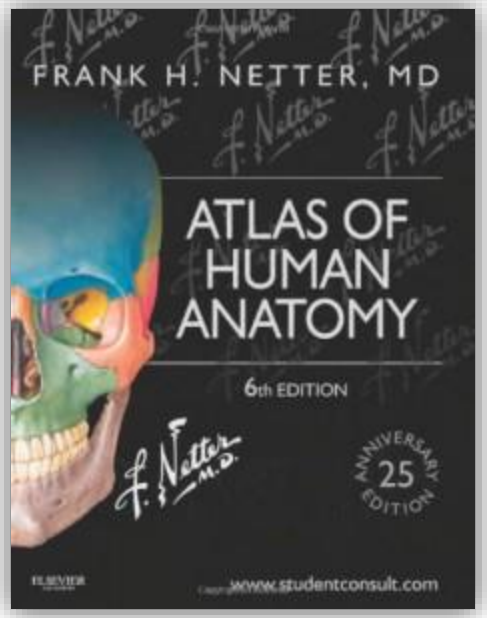
Anatomy of the Immersion: Books







- Relevant pages to read are on the schedule.
- Moore's Clinical "Blue Boxes" are key (but you won't understand them without reading what's between!)
- **Dissector & Atlas must be at each table!**
- Read dissector prior to coming to lab
- iPad and Kindle version of books are fine
- Anatomy.tv by Primal Pictures (click image below)



Anatomy of the Immersion: Assessment

1. Four self-assessment quizzes online on Blackboard

2. Three sets of written (ExamSoft e-tests) and practical exams
   1. Monday, July 31st – Back
   2. Monday, August 14th – Upper Extremity
   3. Friday, August 25th – Lower Extremity

3. Year-2 med student assistants will be setting up mock practicals

Donors & Body Donation

- Role of the donor: 3D anatomy, variation, “diagnosis” of pathology, etc.
- Significance of the donor
  - A profound experience
  - Directly see & handle structures you’ll later have to imagine
  - Opportunity and privilege to work on an actual human
  - Potentially uncomfortable feelings
    - Death: Illness, end-of-life, dying, corporeal remains
    - A very different kind of intimacy
    - Overcoming societal taboos
    - Sadness: clear evidence of their humanity
- Body donation
  - Conscious, often family decision to donate
  - The ultimate gift
  - Honoring that gift
    - Respect, professionalism
    - *USE the gift*: prepare for lab, don’t miss lab, study & learn from all the donors
- Great book! — *Body of Work*, by C. Montross, MD