



## Introduction

- The general anatomy (GA) laboratory experience is a multifaceted student experience that introduces the basics of human anatomy, encourages team-based learning, and instills ethical responsibility to the students' "first-patient"<sup>1</sup>.
- While part of the curriculum, the dissection experience is a crucial opportunity to develop professional competencies in the field of medicine<sup>2</sup>
- This process was recently modified at WSUSOM to emphasize patient safety by including mock time-outs prior to each dissection that emulate the actual time-out process completed before every surgical procedure.
- While supplementary education materials provide some clinical connection, we believe that there is room to improve the clinical relevance of the anatomy laboratory encounters, especially through a surgical context.

## Methods

- A group of 4 medical students who completed the GA course at WSUSOM and a full-time faculty member are collaborating to create 30 surgical scenarios (one for each GA laboratory encounter) to be used in the 2023-2024 first year GA course.
- The surgical scenarios were created using commonly used and peer-reviewed educational materials and were reviewed for accuracy.
- Students are expected to discuss the surgical case between their team, perform a mock surgical time-out that references the case, and then review the case with the team that is accepting hand-off after the lab

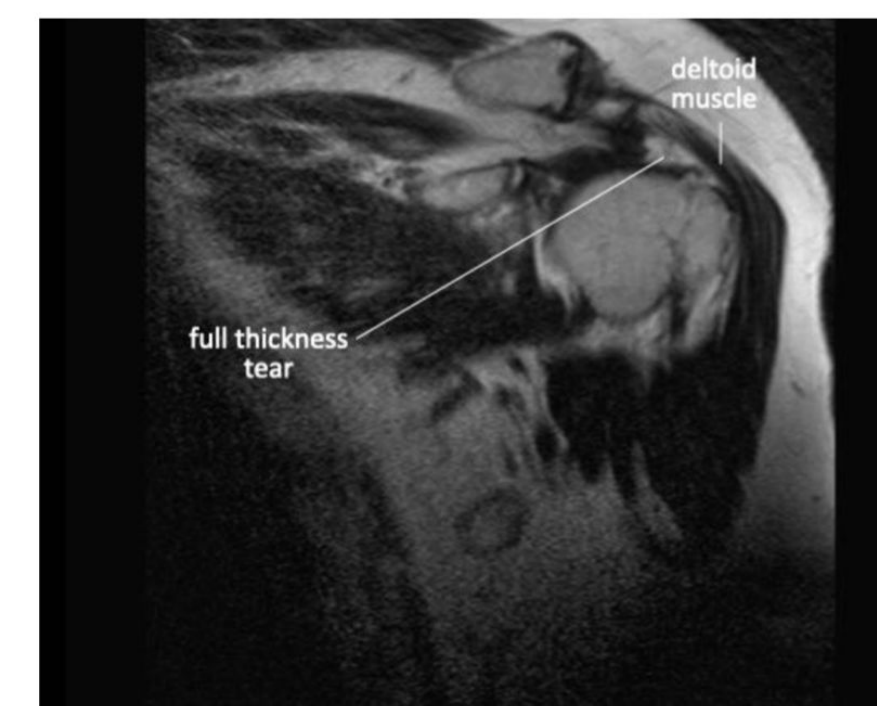
## Methods

- First year students completed pre- and post-surveys that ask students to identify the length of hand-off, respond to likert scale questions about perceived self-confidence in answer anatomy practical questions, and open-ended questions assessing the accuracy of surgical scenario interpretation and quality of hand-offs between the dissecting teams.

## Results

### Surgical Scenario Lab 03: Back, Vertebral Column, Posterior Scapula

Amanda is a 60-year-old female patient presenting with chronic pain in her left shoulder. She has had trouble elevating her shoulder, abducting her arm, and rotating at her shoulder joint. She hurt her shoulder in a car accident 2 years ago but did not receive any medical attention for it. The pain has slowly gotten worse since the accident. After physical examination and reviewing her MRI, the patient was diagnosed with a full thickness tear of her supraspinatus muscle along with some tearing of the infraspinatus as well. She also is suspected to have some acromial spurring. Today's procedure consists of left shoulder arthroscopic rotator cuff repair and acromioplasty.



Please review these questions with your group:

What is the action and innervation of the supraspinatus muscle?

**Abduction of the arm. Innervated by the suprascapular nerve**

The deltoid muscle can be commonly confused with rotator cuff muscles due to their proximity. What are the origins of the three heads of the deltoid muscle?

**Anterior: Clavicle. Middle: Acromion of the scapula. Posterior: Spine of the scapula**

Video of an arthroscopic rotator cuff repair:  
<https://youtu.be/zfrMhSebW2g>

Figure 1: Example of a surgical scenario that is displayed in the general anatomy laboratory (without answers)<sup>3</sup>. The answers to the discussion questions are provided to the students after the dissection session

- Currently, the team has completed 16 surgical scenarios with associated imaging and videos out of the 30 planned.

## Analysis Plan

- Analyze data regarding completion, length of hand-off, accuracy of time-out responses, and likert scale questions judging perceived self-confidence in completing anatomy practical questions to the related dissection region
- Review qualitative student responses to identify areas of improvement in surgical case quality and work-flow in the time-out/hand-off process

## Conclusion

- We hope that our data displays a positive student response to the introduction of the surgical scenarios to anatomy dissections.
- The combined practice of reviewing surgical scenarios, completing a time out prior to cutting, and effectively handing off information to the other dissecting team emphasizes patient safety early on in the medical school education and improves the overall educational experience of anatomy dissections
- In the future, we plan on expanding the surgical cases to include operative reports/surgical dictation to further add to the clinical relevance of anatomy laboratory dissections

## References

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