Utilization of a student-created, simulation-based curriculum to enhance learning amongst preclinical medical students

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Collaborative Team Members

- Michael C. Larkins, Alexandra Doherty, Julia Horiates, Kamel Alachraf, Julian Gordon
  - Creation of events, planning, question creation, data collection, data analysis, and writing
- James C. Fletcher, Kori Brewer
  - Question creation, data analysis, editing of manuscript
- Interprofessional Clinical Simulation Program
  - Hosting and setup of events
- Department of Emergency Medicine
  - Providing physicians to teach events
- Physician Assistant Studies Program
  - Partnership for ITEAM event
- Student Government Association
  - Provided funding for ITEAM event

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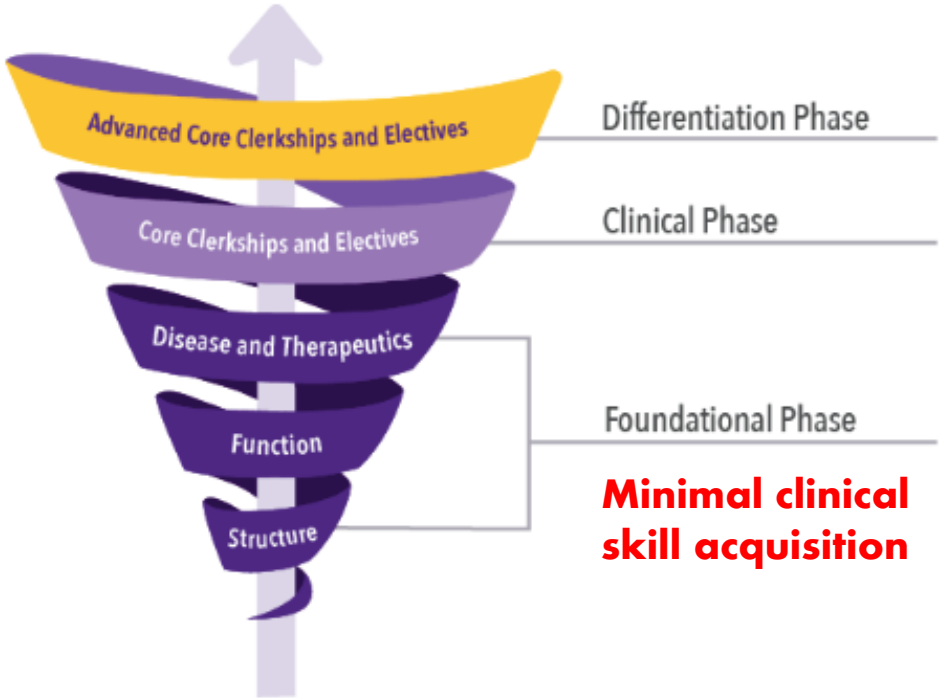
Rationale/ Need

Longitudinal Preceptorship:
Each student will be assigned a clinical home where they will precept with a physician. You will keep a patient log to record the conditions, complaints and learning objectives you find during these sessions.

CANCELED

Brody Spiral Curriculum Model



Minimal clinical skill acquisition

Class of 2020 and Beyond M4 Requirements

- 4 weeks – Acting Internship (AI) – BSOM or Away
- 4 weeks – Emergency Medicine – BSOM
- 4 weeks – Intensive Care Unit (ICU) – BSOM
- 4 weeks – Neurology & Physical Medicine & Rehabilitation – BSOM
- 4 weeks – Primary Care (PC) – Ambulatory at BSOM or Away
- 22 weeks – Electives – BSOM or Away
- 1 week – Transition to M4 – BSOM
- 3 weeks – Transition to Residency Bootcamp/Foundational Science Capstone – BSOM
- 8 weeks – Flex (personal study/residency interviews)
- 3 weeks – Vacation (Fall Break and Winter Break)

Total= 57 weeks

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Methods / Description

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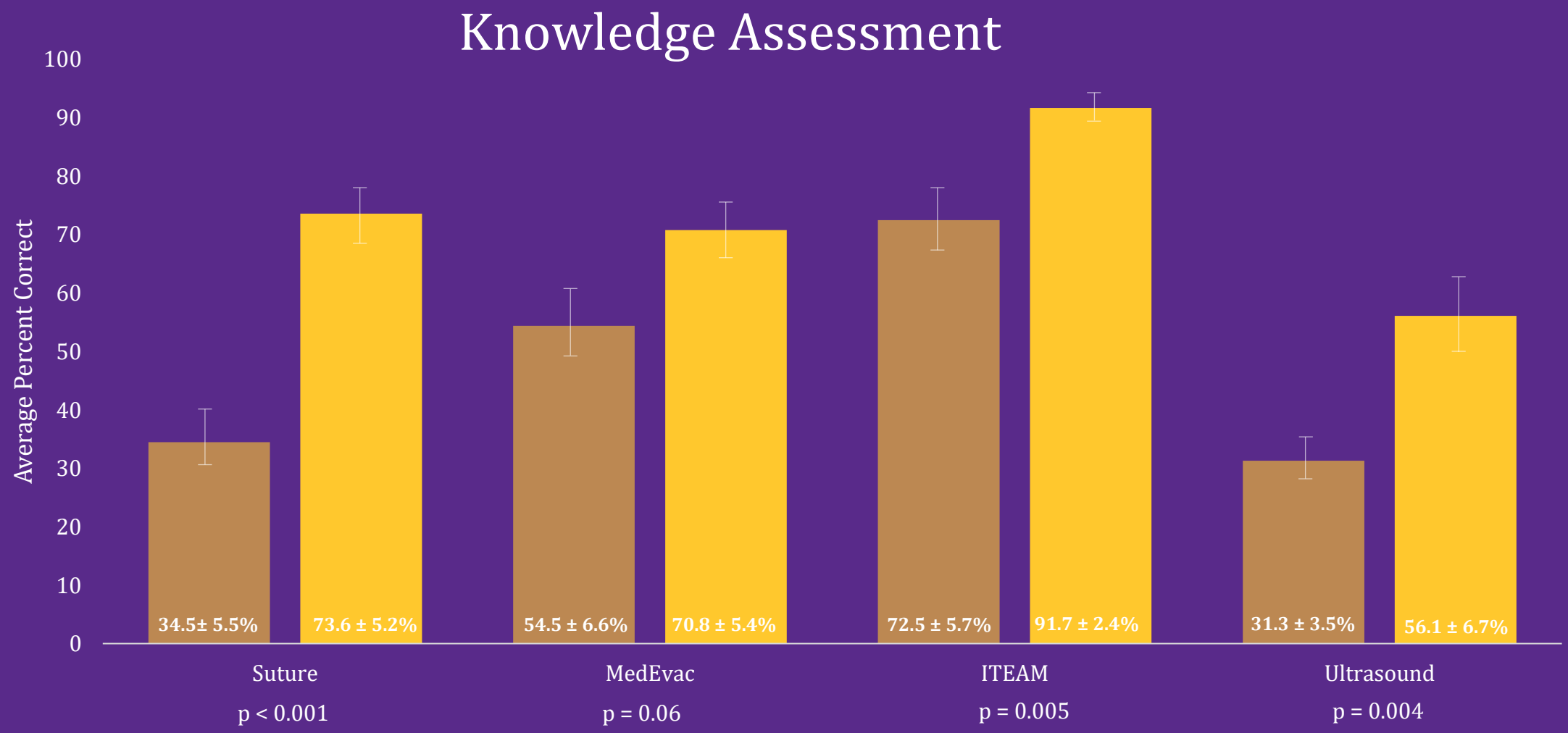
Results



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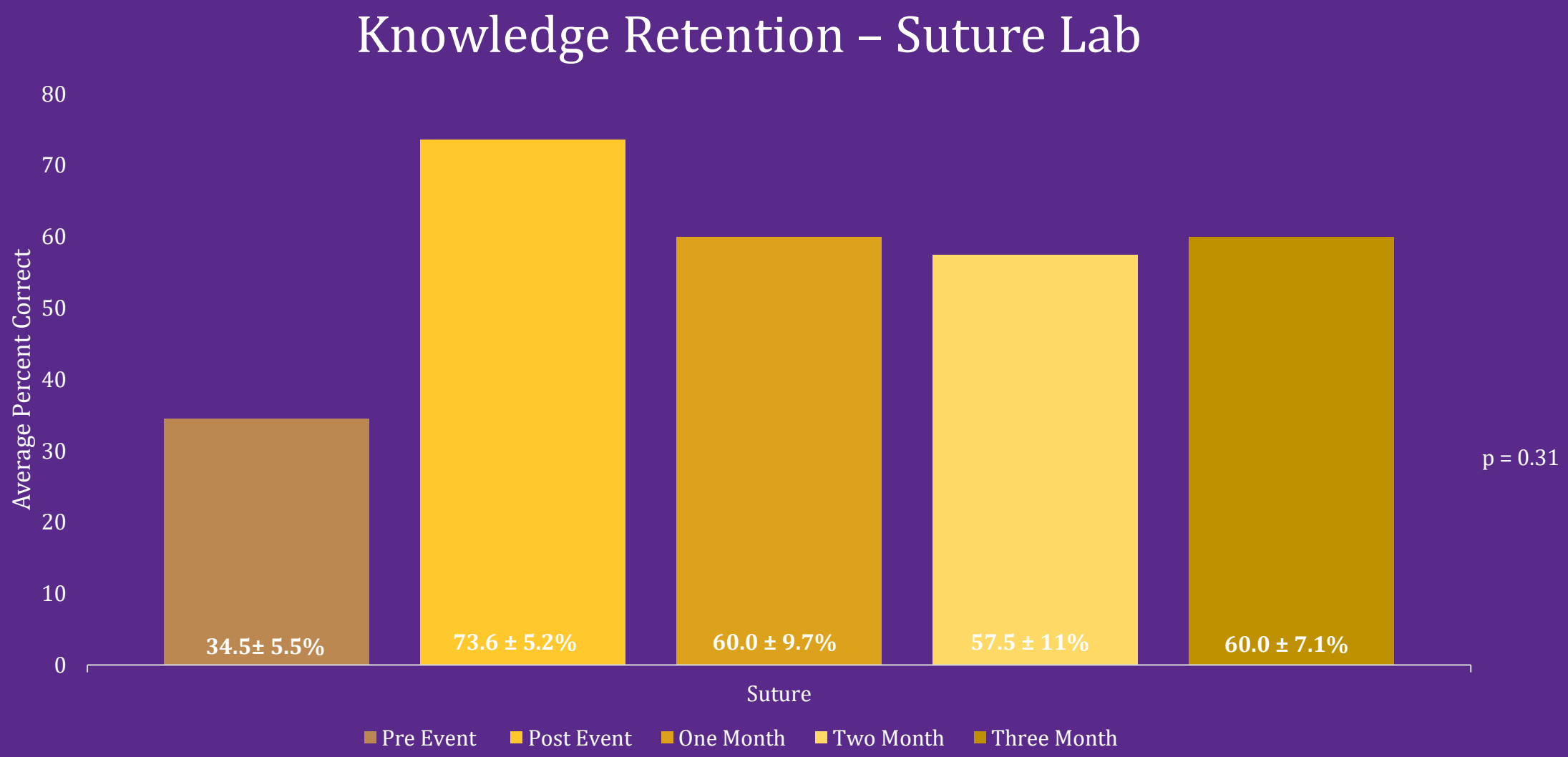
Results



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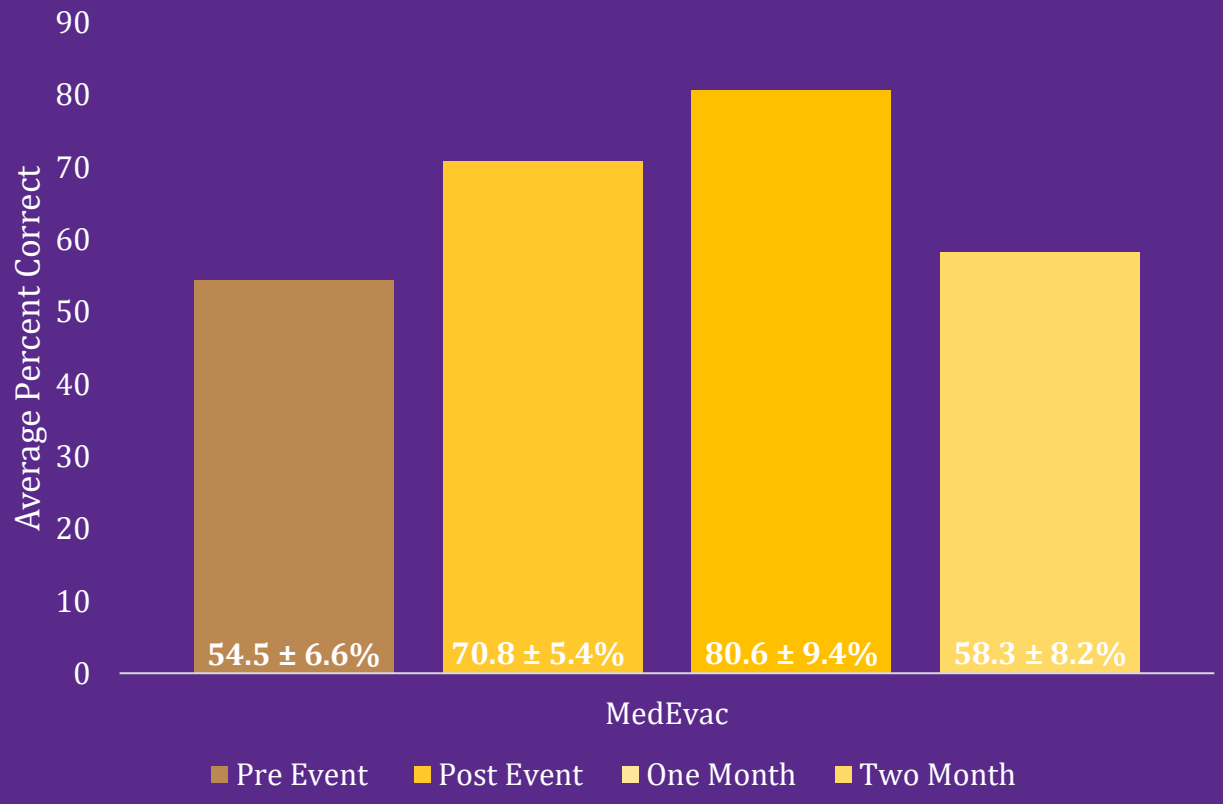
Results

Knowledge Retention – MedEvac



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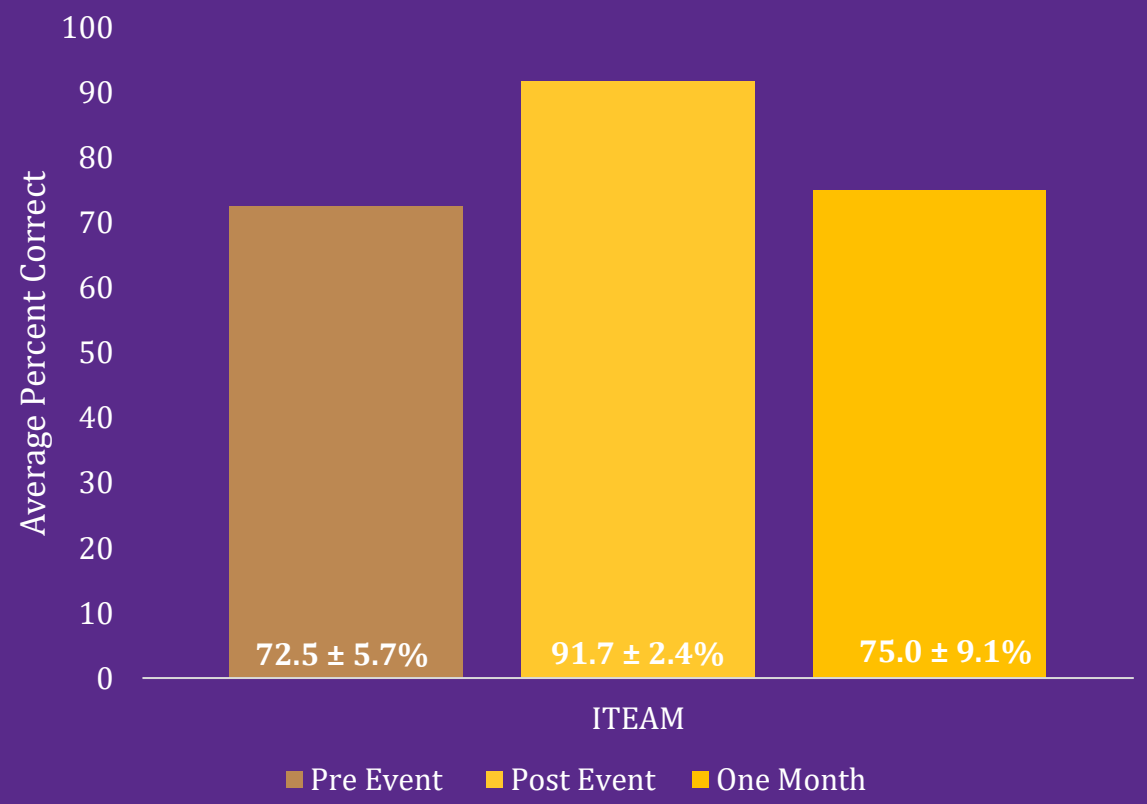
Knowledge Retention – ITEAM



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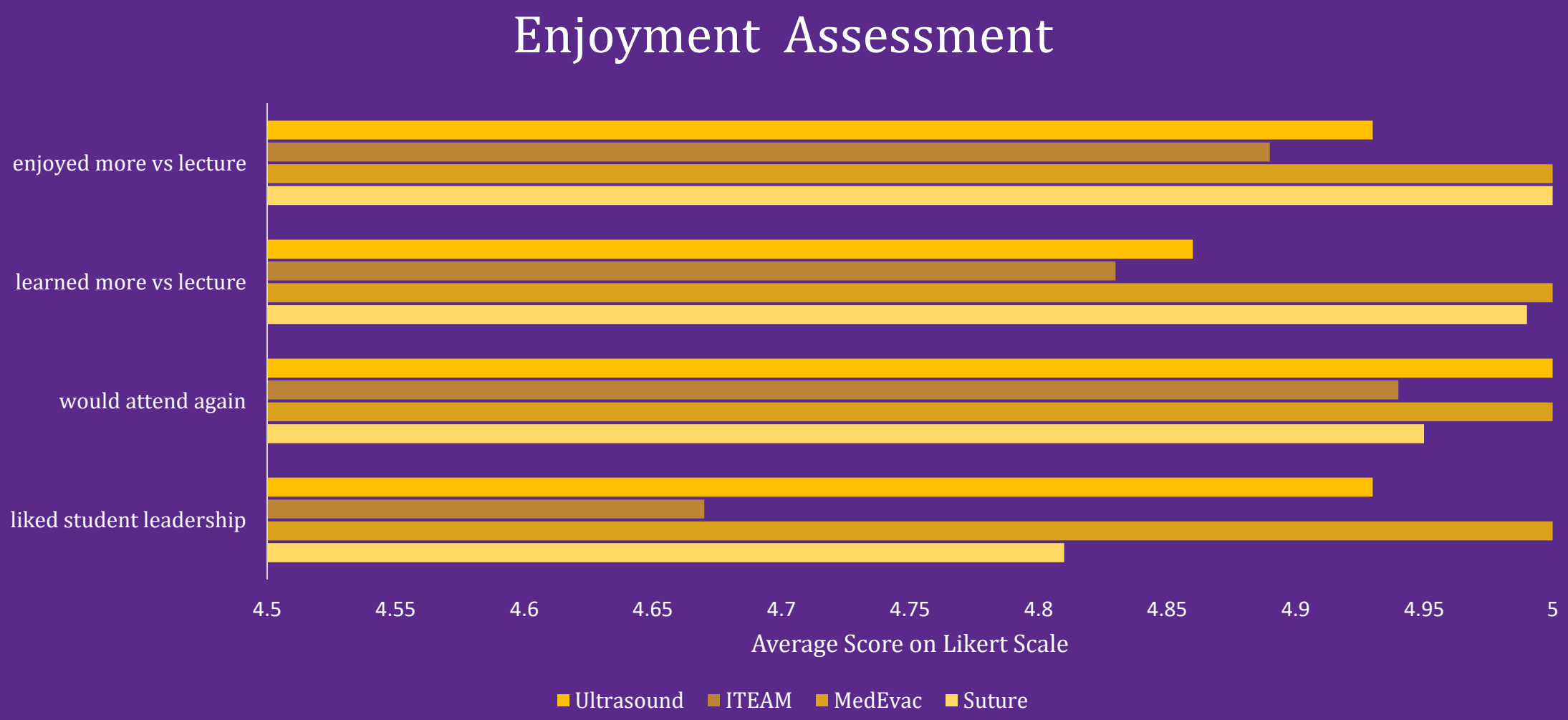
Results



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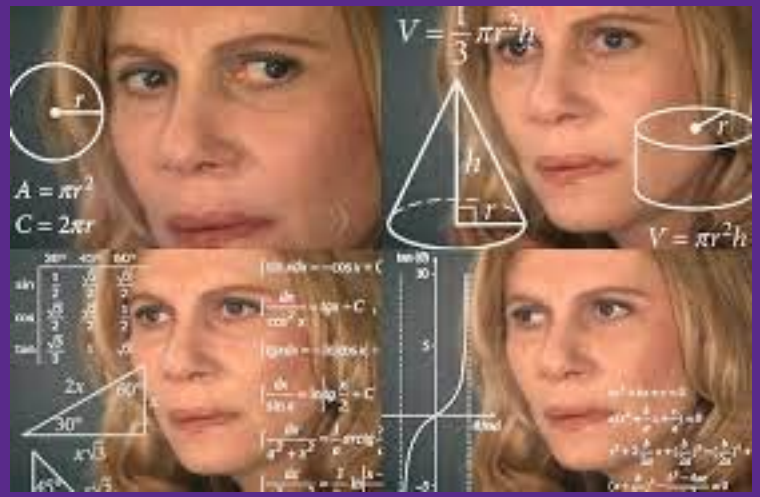
Challenges Encountered

- Limited number of students allowed
- Scheduling
- High level of difficulty in assessment



SYST 9200 – CARDIOPULMONARY

	Monday	Tuesday	Wednesday	Thursday	Friday
	09-13-21	09-14-21	09-15-21	09-16-21	09-17-21
8:00	**8:00-8:50** **TC** **QUIZ 4**	8:00-9:50 2W Rooms PHARM/CLINAPP 18 Cardiology PI Cases 4	8:00-8:50 2S04 PATH 38 Pulmonary Overview/ Congenital Diseases/ ARDS	8:00-8:50 2S04 CLINAPP 27 Pulmonary Airway Phys Review/Imaging	8:00-8:50 2S04 PHARM 19 Pulmonary Asthma
8:30					
9:00	9:00-9:50 2S04 PHARM 16 Cardiology Anti-Hyperlipidemic Agents		9:00-9:50 2S04 PATH 39 Pulmonary Obstructive Disease	9:00-9:50 2S04 CLINAPP 28 Obstructive Lung Disease	9:00-9:50 2S04 PATH 42 Pulmonary Vascular, Upper Respiratory, Pleural
9:30					
10:00	10:00-10:50 2S04 PHARM 17 Cardiology Cardiopulmonary Ups and Downs	10:00-10:50 2S04 PATH 37 Cardiology Blood Vessel Disease (BVD): Congenital & Tumors	10:00-11:30 Ethics 15 2S04, 2L55, 2N55, 2N57, 2E69, 2S11, 2S13	10:00-10:50 PATH 40 Pulmonary Restrictive Disease	10:00-10:50 2S04 PATH 43 Pulmonary Neoplasia: Non-Small Cell Carcinomas
10:30					
11:00	11:00-11:50 2S04 Psych 16	11:00-11:50 2S04 Psych 17		11:00-11:50 2S04 PATH 41 Pulmonary Pneumoconiosis / Environmental	11:00-11:50 2S04 Intro to Health Systems Science Curriculum (mandatory in-person or view recording)
11:30	Obsessive Compulsive & Related Disorders	Trauma- and Stressor-Related Disorders	11:40-12:30 2S04 Psych 18 Dissociative Disorders		
12:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
12:30					
1:00	1:00-4:00 Autopsy 5 Group E	**IS**			**IS**
1:30		1:30-4:30 FoD2 13 Clinical Conference and PDR	1:30-3:20 2S04 CLINAPP 26 Cardiology PI Cases 5 Sloan	1:30-4:30 FoD2 14 PBL 5 Case 4B/5A Small Groups	
2:00		2:00-4:00 Distinction Track Meeting 1			2:00-2:50 Webex M2 Town Hall
2:30					
3:00					**IS**
3:30			3:30 - 5:00 Autopsy Slide Review 4 Group D	**IS**	
4:00	**IS**				
4:30					

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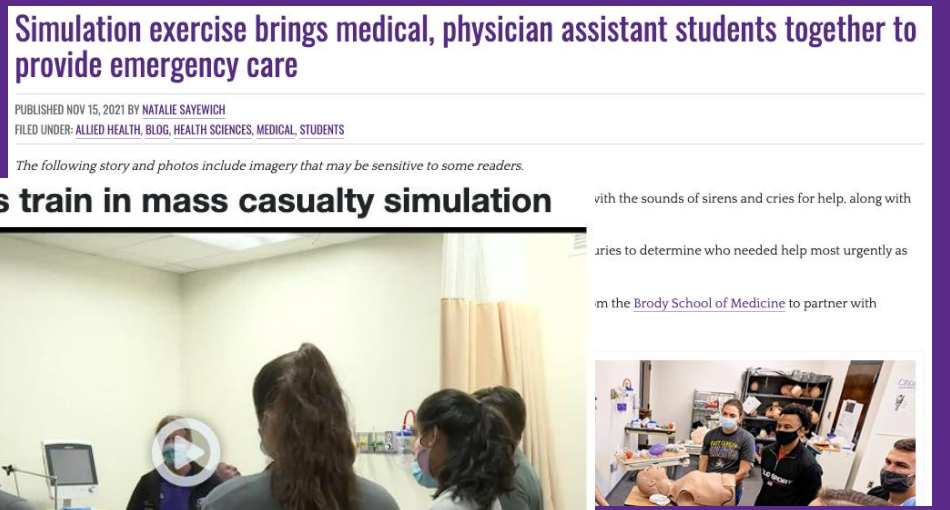
Lessons Learned

- Simulation based learning is EFFECTIVE
  - COVID-19
  - Collaboration
  - Introduction to EM for students and general public
- Simulation based learning is ENJOYABLE
- Simulation based learned takes EFFORT
  - From faculty, support staff
  - From students



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Next Steps

Future Studies

Do preclinical students retain clinical skills and/or knowledge learned in SBL into clinical years?

What is the impact of incorporating more SBL on medical school faculty?

Does increased SBL impact student performance in preclinical years?