





Program for Interprofessional Practice, Education and Research

## Pivoting to develop a virtual dissection anatomy course in response to COVID-19 Lessons learned and future opportunities

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14<sup>TH</sup> ANNUAL DAY IN FACULTY DEVELOPMENT: ACADEMIA DISRUPTED - MAY 25, 2021

### Interprofessional Education (IPE) & COVID -19



- 10-week IPE dissection course
- First year students from OT, PT, PA, MD, MF, SLP, RN
- Receive the only academic Mastery level IPE credit
- COVID in March of 2020
- Not possible to host inperson version in 2021
- Course has run for 13 years
- Concerned about transition to online

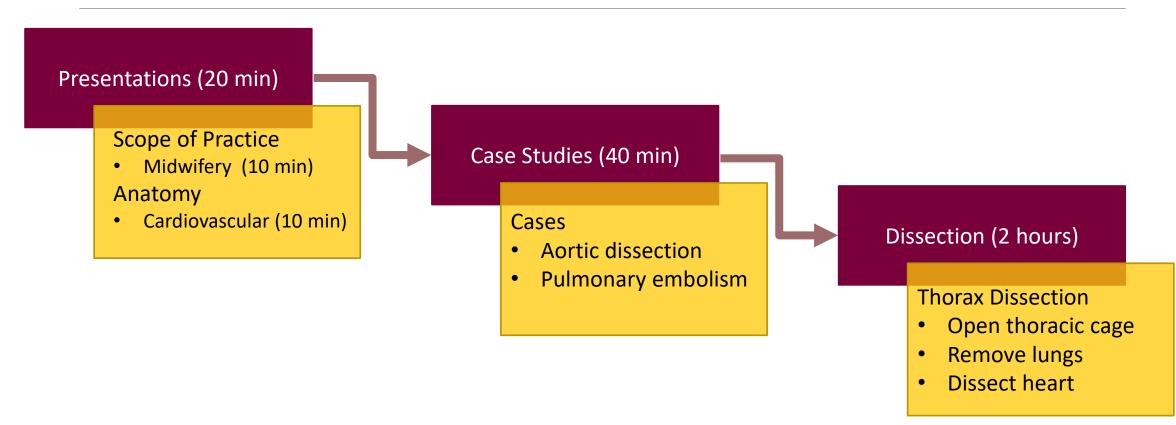
### Needed to redevelop the course to deliver a virtual IPE opportunity in 2021

## How the course used to run

- 10 weeks, 3hrs/week
- 3 elements: presentations, breakout group case studies and cadaveric dissection
- 4 interdisciplinary groups lead by "coordinators"
  - Coordinators are upper year students who have previously taken the course



## In-person Class Schedule



## How did the course change?

### <u>Format</u>

Microsoft Teams

 Private channels were used for breakout group discussions

- <u>S</u> <u>•</u>Condensed content
  - •4 weeks
  - •2hrs/week

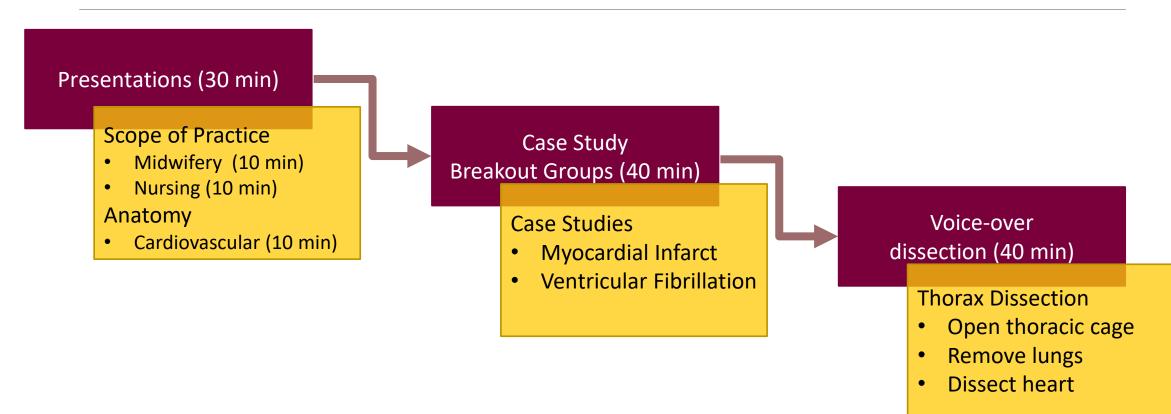


- •Full body dissection recorded in advance in 4K
- •Voiced over live by course instructors

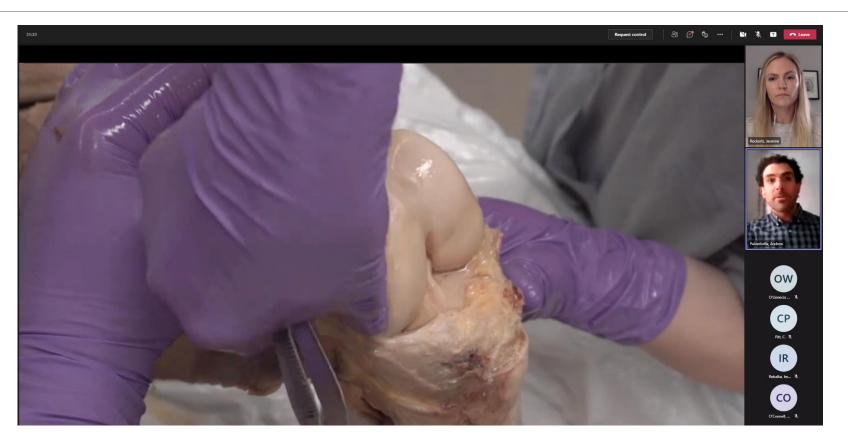




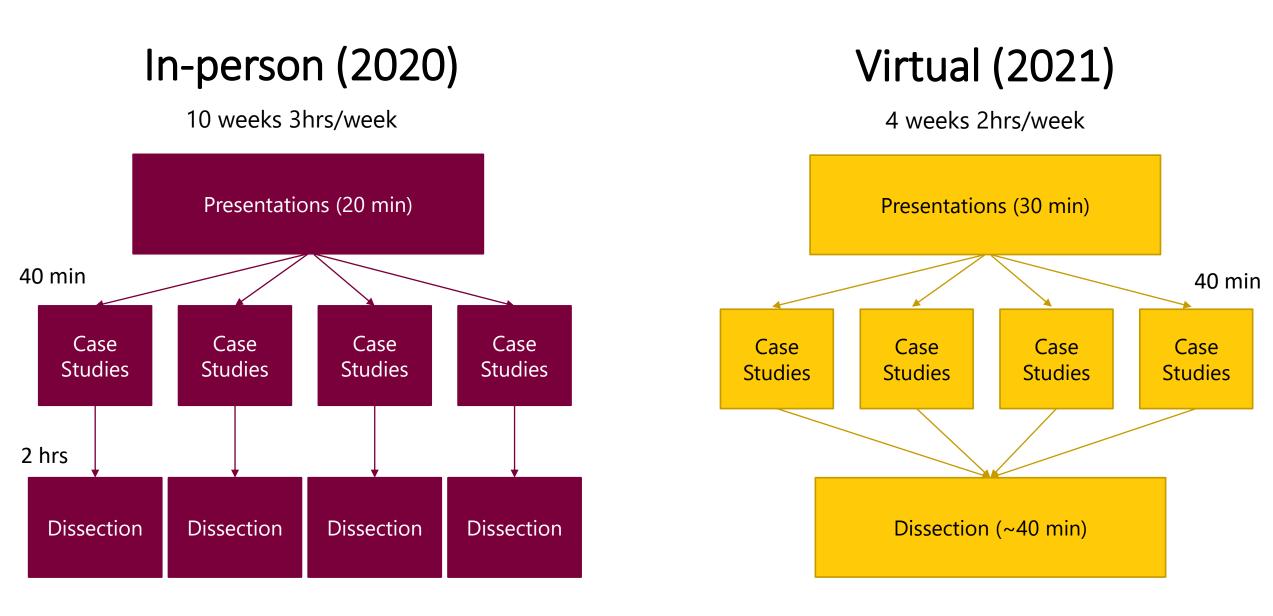
## Virtual Class Schedule



## **Virtual Class**



https://macdrive.mcmaster.ca/f/fd4dd4224c094f0d8e0a/



# What are the effects of a virtual dissection course on IPE outcomes?



#### <u>Participants</u> n=30; 22 [23-24] yrs; 6 ♂ 2021 cohort



#### <u>Readiness for Interprofessional Learning Scale</u> (RIPLS):

- 19 item scale

- Total score from 19 (low readiness) to 95 (high readiness)

- 4 subscales: Teamwork & Collaboration, Negative & Positive Professional Identity and Roles & Responsibilities

### Interdisciplinary Education Perception Scale (IEPS):

- 12 item scale
- Total score from 12 (low perception) to 72 (high perception).
- 3 subscales: Competency & Autonomy, Perceived Need for Cooperation and Perception of Actual Cooperation



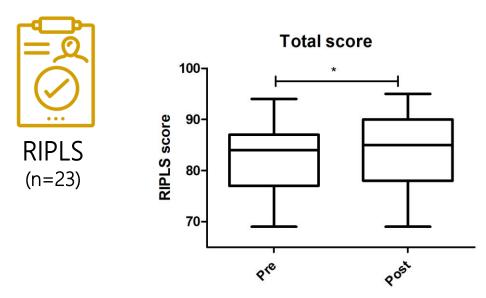
<u>Programs</u> 3 Physician assistant, 4 PT, 5 Nursing, 3 Midwifery, 4 OT, 8 Medicine, 3 SLP

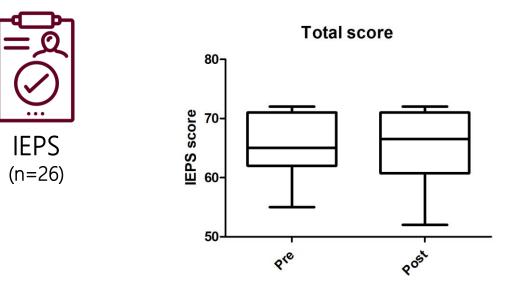




n=7

## What are the effects of a virtual dissection course on IPE outcomes?





Teamwork & Collaboration	41 [37 to 44] vs. 41 [37 to 44]
Negative Professional Identity	13 [12 to 14] vs. 13 [12 to 14]
Positive Professional Identity	18 [16 to 19] vs. 18 [16 to 19]
Roles & Responsibilities	11 [9 to 12] vs. 12 [11 to 13]

Competency & Autonomy	28 [2
Perceived Need for Cooperation	12 [1(
Perception of Actual Cooperation	28 [2

28 [26 to 30] vs. 28 [25 to 30] 12 [10 to 12] vs. 12 [11 to 12] 28 [23.8 to 29.3] vs. 28 [25.8 to 30]

# Does in-person and virtual dissection courses result in different IPE outcomes?



### 2020 cohort

n=32 24 [22 to 25] yrs 5 ♂

3 Physician assistant, 4 PT, 5 Nursing, 4 Midwifery, 4 OT, 10 Medicine, 2 SLP n=30 22 [23-24] yrs 6 ♂

2021 cohort

p<0.005

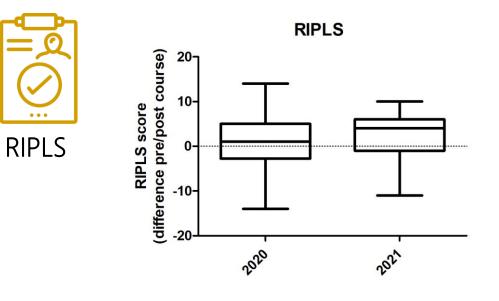
3 Physician assistant, 4 PT, 5 Nursing, 3 Midwifery, 4 OT, 8 Medicine, 3 SLP

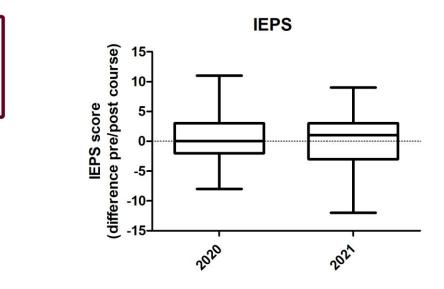


Nine had previous IPE experience Seven had previous IPE experience

# Does in-person and virtual dissection courses result in different IPE outcomes?

**IEPS** 





Teamwork & Collaboration	0 [-2 to 2] vs. 1 [-1 to 2]
Negative Professional Identity	0 [-1 to 1] vs. 0 [0 to 1]
Positive Professional Identity	0 [-1 to 1] vs. 0 [-1 to 1]
Roles & Responsibilities	1 [0-2] vs. 1 [0-2]

Competency & Autonomy Perceived Need for Cooperation Perception of Actual Cooperation

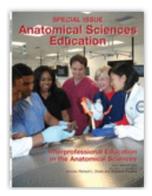
0 [-1 to 2.8] vs. 0 [-2.3 to 1] 0 [-1 to 0.8] vs. 0 [-0.3 to 1] 0 [-1 to 1.8] vs. 0.5 [-0.3 to 1.3]

## Take home message

- Course preparation was front loaded
- MS Teams was a feasible platform
- Received positive student feedback
- Virtual dissection seem to improve students' readiness for interprofessional learning
- In-person and virtual dissection courses seem to have similar outcomes regarding students readiness for and perception about interprofessional learning

### Future Directions: Flexibility of virtual format would allow for expansion

## References

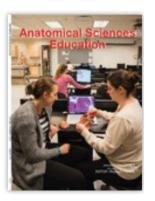


Dissecting Through Barriers: A Mixed-Methods Study on the Effect of Interprofessional Education in a Dissection Course With Healthcare Professional Students

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#### Dissecting through Barriers: A Follow-up Study on the Long-Term Effects of Interprofessional Education in a Dissection Course with Healthcare Professional Students

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## Thank you!











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