



Permission to Take Part in a Human Research Study

Institutional Review Board
Approval Date: July 6, 2025
Expiration Date: July 5, 2026
APPROVED



**Weill Cornell
Medicine-Qatar**

1. Title of research

Development and Assessment of a 360° Video-Based Virtual Reality Application to Enhance Medical Students' Preparation for Initial Cadaver Dissection.

2. Investigator

Principal Investigator:

Name: Mange Manyama
Institution: Weill Cornell Medicine-Qatar
Telephone: +974 4492 8303
Email: mfm2003@qatar-med.cornell.edu

Co-investigators:

Name: Deema Al-Sheikhly
Institution: Weill Cornell Medicine-Qatar
Telephone: +974-4492-8385
Email: dea2006@qatar-med.cornell.edu

Name: Mohamed Ali Hammami
Institution: Weill Cornell Medicine-Qatar
Telephone: +974-4492-8028
Email: mmh4007@qatar-med.cornell.edu

Student Co-investigator:

Name: Khadija Ahmed Elmagarmid
Institution: Weill Cornell Medicine-Qatar
Telephone: +974- 5591 9256
Email: kae2012@qatar-med.cornell.edu

3. Why am I being invited to take part in this research?

You are being contacted to participate in this research study because you are a first-year medical student at WCM-Q. This study investigates the effectiveness of a 360° video-based virtual reality application in reducing anxiety among first-year medical students before their initial cadaver dissection experience.

4. What should I know about this research?

The main goals of this study are:

- To develop a 360° video-based virtual reality application aimed at reducing anxiety levels among students before their first cadaver dissection experience.
- To compare the anxiety levels of students prepared for their first cadaver dissection using a 360° video-based virtual reality experience with those prepared through traditional anatomy lab methods.
- To assess the impact of a 360° video-based virtual reality experience, designed to prepare students for their first dissection class, on their anxiety levels during actual cadaver dissections.

If you need more information, the study co-investigators can provide more details. You are free to ask questions at any time.

- Whether or not you take part is up to you.
- You can choose not to take part.
- You can agree to take part and later change your mind.
- Whatever decision you make, there will be no penalty to you, and no loss of benefits to which you were otherwise entitled.
- You can ask all the questions you want before you decide.
- To avoid any perceived coercion, the Principal Investigator (Dr. Mange Manyama), who also serves as the anatomy professor, will not participate in the recruitment of participants or oversee the 360° video-based VR session. He will only access coded data without identifiers and therefore will not



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know who is participating in the study.

5. Who can answer my questions about this research?

If you have questions, concerns, or complaints, or think this research has hurt you, talk to the research team at:

Principal Investigator:

Name: Mange Manyama
Institution: Weill Cornell Medicine-Qatar
Telephone: +974 4492 8303
Email: mfm2003@qatar-med.cornell.edu

Co-investigators:

Name: Deema Al-Sheikhly
Institution: Weill Cornell Medicine-Qatar
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Email: mmh4007@qatar-med.cornell.edu

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Name: Khadija Ahmed Elmagarmid
Institution: Weill Cornell Medicine-Qatar
Telephone: +974- 5591 9256
Email: kae2012@qatar-med.cornell.edu

This research is being overseen by the Weill Cornell Medicine in Qatar (WCM-Q) Institutional Review Board ("IRB")

You may talk to the WCM-Q IRB (at +974 4492 8960 or irb@qatar-med.cornell.edu) if:

1. Your questions, concerns, or complaints are not being answered by the research team.
2. You cannot reach the research team.
3. You want to talk to someone besides the research team.
4. You have questions about your rights as a research subject.
5. You want to get information or provide input about research.

6. Why is this research being done?

This study aims to evaluate a 360° video-based virtual reality application in enhancing medical students' emotional preparedness for their first cadaver dissection experience. We hypothesize that this intervention will reduce anxiety levels and improve overall preparedness among medical students compared to traditional preparation methods. By enhancing emotional preparedness, this study has the potential to positively impact students' overall well-being and professional development in medical education.

7. How long will I be in this research?

Your participation in this study involves completing a series of surveys. If you are assigned to the intervention group, you will also experience a 360° video-based virtual reality session. Each of the online surveys will take no more than 10 minutes of your time. Participants assigned to the intervention group will also spend about 10 minutes to experience the 360° video-based virtual reality application.

8. How many people will be studied?

We expect about 47 people will take part in this research.



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<p>9. What happens if I agree to be in this research?</p>	<ul style="list-style-type: none"> If you agree to participate in this study, you will be randomly assigned by the investigators to either the intervention group or the control group. All participants will be asked to complete a baseline survey once they have provided their consent to take part in the study. Participants assigned to the intervention group will take part in a 360° video-based virtual reality session held in Lecture Hall 2 on the second and third days of orientation week. Ms. Deema Al-Sheikhly, Mr. Mohamed Ali Hammami and Ms. Khadija Ahmed Elmagarmid will be present in the Lecture hall 2 to facilitate and provide guidance on the VR experience. The VR headset provided to you by the Medical Education Division on the first and second days of orientation week will be used to experience the 360° video-based virtual reality. Participants in the control group will follow the current standard procedure (which involves no intervention). Participants in the intervention group, will also be asked to complete another survey. immediately after they finish the 360° video-based VR viewing session. Following the first dissection class, all participants will be asked to complete another survey. Finally, a follow-up survey will be sent to participants in the intervention group one week into the dissection sessions. You will be asked to generate a unique code to be used in all surveys, as this is a longitudinal study. You will not be asked to share the code with anyone at any stage. This is to protect your anonymity. As the survey is anonymous, there will be no link between your anonymous survey answers and your identifying information (e.g., email address etc.). All data will be collected directly from participants; no student records will be accessed
<p>10. What other choices do I have besides taking part in this research?</p>	<p>You can choose not to participate in this study and there is no penalty to you for not participating.</p>
<p>11. What happens if I agree to be in this research, but I change my mind later?</p>	<p>You are free to withdraw from the study by not submitting the survey or by stopping your participation in the 360° video-based VR session. Since the survey results are anonymous, once you submit a survey, your data cannot be identified or removed from the study.</p>
<p>12. Is there any way being in this research could be bad for me?</p>	<p>There are no anticipated risks, discomfort, or injuries from completing the surveys. However, participants in the intervention group may experience:</p> <ol style="list-style-type: none"> Virtual Reality Discomfort: Some participants may experience virtual reality sickness, including symptoms such as nausea, eye strain, and disorientation. These symptoms are temporary and reversible. The 360° video-based VR session will be promptly discontinued if participants report any discomfort. Emotional Response: The 360° video-based VR session may trigger emotional reactions in participants. If a participant experiences discomfort, their 360° video-based VR encounter will be stopped immediately. <p>The co-investigators will be present during all participants' experiences with the 360° video-based VR sessions.</p> <p>To avoid minimize potential perception of coercion, Dr. Mange Manyama (Principal Investigator, Assistant Professor anatomy and Course Director for Essential Principles of Medicine B) will be excluded from participant recruitment activities, information sessions, and supervision of the 360° VR sessions. These activities will be overseen by co-investigators (Deema Al-Sheikhly), Mohamed Ali Hammami, and Khadija Ahmed Elmagarmid) who have no teaching or assessment roles involving first-year medical students.</p>
<p>13. Will being in this research help me?</p>	<p>We cannot guarantee any direct benefits to you or others from participating in this research. However, potential benefits include reduced anxiety for participants who watch the 360° video-based virtual reality encounter. Additionally, your participation will help explore whether utilizing a 360° video-based virtual reality application can reduce pre-dissection anxiety, potentially improving emotional readiness and shaping future medical education practices.</p>
<p>14. What happens to the information collected for this research?</p>	<p>The survey data will be stored in a secure password protected file in OneDrive. Scholarly works resulting from this project will utilize aggregated data, so complete anonymity of participants will be</p>



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assured. To the extent allowed by law, your personal information will be limited to people who must review it. We cannot promise complete secrecy. The IRB and representatives, Weill Cornell Medical College in Qatar, the Ministry of Public Health in Qatar, and the Office of Human Research Protections in the United States will have access to your records. All research records will be retained for minimum of 3 years post study closure, or longer if required by other applicable regulations or institutional policy.

15. What if I am injured because of taking part in this research?

This is a minimal risk study and injuries are not expected. If you are injured as a direct result of research procedures, contact the co-investigators and appropriate care will be made available at HMC. If you seek care outside of HMC, such care will be at your expense. Compensation is not available in case of injury.

16. What will I be paid for taking part in this research?

We will compensate you for your time with a 180 QAR gift voucher at the end of the second week of dissection sessions.

17. What else do I need to know about this research?

None



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Signature Block for Adult Subject Able to Consent	
Subject	
My signature documents my permission to take part in this research	
Printed/Written name	
Signature	Date
Person Obtaining Consent	
My signature documents that I personally obtained consent	
Printed/ Written name	
Signature	Date
Witness (use when subject is illiterate)	
My signature documents that the information in the consent document and any other written information was accurately explained to, and apparently understood by, the subject, and that consent was freely given by the subject.	
Printed/ Written name	
Signature	Date