



# University of New England College of Osteopathic Medicine

Learning by Living &  
Virtual Reality  
Research Projects

**Immersion  
Research:  
Advancing Medical  
Education**

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# UNE COM Learning By Living Nursing Home Immersion Project

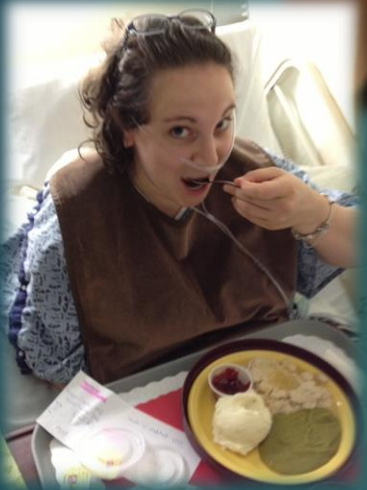


**Implemented:** 2006 – Ethnographic/Autobiographic Research

**Goal:** To immerse students into a nursing home to live the life of elder resident for 2 weeks – 24/7 – with a diagnosis and standard procedures of care (toileting, bathing, pureed foods, wheelchair reliance)

**Outcome:** Life altering experience for 100% of the students- improved empathy, mindfulness in voice cadence, touch, communication with older adults.

Students connect heart to heart with their fellow residents!





# L/L Story

*It was a frightening moment to be sitting in the [wheel] chair for the first time. Several things hit me all at once.*

*The first is that I suddenly have to look up at everyone in order to make eye contact, and they have to look down at me...I was conscious of the feeling that staff were “talking over my head” literally. I was physically lower down, and staff would do this thing where they would say something to the person pushing me around, which meant that they were speaking in a direction that was both above and behind me.*

*It made me feel vulnerable to have someone consistently direct their attention to a source that was both above and behind me.*

*And I realized... I am totally dependent on their care. (Male Medical Student)*



# UNE COM 48 Hour Hospice Home Immersion



**Implemented:** 2014– Ethnographic/Autobiographic Research

**Goal:** To immerse medical students into an 18 bed acute care hospice home for 48 hours to work with Interprofessional hospice trained staff to provide patient care, family support and post mortem care

**Outcome:** Life altering experience for students that reframes death from being something fearful to understanding death as a process of life



*“Yesterday I missed the very first opportunity to participate in post-mortem care because I was helping take care of Harold with the hospice aide, I was so incredibly frustrated [to miss this opportunity], but then this morning, Harold died and I got to help with his post-mortem care.*

*I feel so grateful for having the time that I had with Harold prior to his death, he was the first new admission that I saw on Friday, and I cared for him on Saturday, not knowing he would die on Sunday.*

*It was through Harold that I got to witness the gift that is hospice. I got to witness a man come into Gosnell agitated and uncomfortable, have the opportunity to die with dignity and comfort. My experience with Harold taught me the value of appreciating the present, instead of focusing and worrying about what I might be missing.”*

*(Female Medical Student)*



*Aside from giving me the experiences of a lifetime, that I cannot gain from sitting in a classroom for 8 hours, my experience at Gosnell House provided me with valuable information on the dying process to assist me in thinking about my own end-of-life checklist (Female PA Student).*



*Presence is exceedingly important; it's a powerful tool, and a most excellent gauge of a good practitioner. Having the opportunity to have that unblinded or undistracted presence in a patient's room was and is...priceless (Male PA Student).*

## Clinical Pearls

*Exposure to something as overwhelming as death allowed us to become more comfortable in this process, further benefiting our future patients (Female Medical Student).*



# Virtual Reality Medical Education

Embodied Labs, Inc.



**Implemented:** 2017

**Goal:** Through Virtual Reality (VR) technology that offers 3 Labs (1) macular degeneration and hearing loss; (2) levels of dementia; and (3) end of life, students embody the person in each of these labs to experience first hand each of these conditions

**Outcome:** 95% increase in empathy pre/post after completing the VR labs







## FIRST EMBODIED VR EXPERIENCE

### The Alfred Lab

- Live-action 7 minute 360° film
- Computer-generated interactive objects
- 3D binaural sound

### Who is Alfred?

- A 74 year old African-American patient
- Advanced macular degeneration
- High frequency hearing loss



\*Patent pending



*This was definitely a unique experience - I had no idea that sensory deficits of this proportion were actually fairly common in the aging population, and it has really opened my eyes to what elder individuals may be going through.*

*This experience was truly eye-opening and I thoroughly enjoyed it*

*We're all, for the most part, healthy and capable 20 somethings with no sense of what it means to have macular degeneration or any other type of serious degenerative illness. I don't think this experience necessarily gives us the perfect foundation but what could? It's a great first step!*

*I loved this experience because I think it's an incredible step forward to incorporating technology into our curriculum and creating a fundamental understanding of some of the symptoms our patients may be experiencing.*

- ▶ Learning was broad and significant...
- ▶ 92% reported increased empathy
- ▶ 88% reported increased learning about macular degeneration
- ▶ 89% reported increased learning about hearing loss.