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## FOR IMMEDIATE RELEASE

### Los Angeles high school student publishes article in scientific journal on use of mixed reality gaming as physical therapy for spinal cord injury

Elena DeBre, a recent graduate of Marlborough School in Los Angeles, CA, recently published a scientific manuscript titled, “The Feasibility of Mixed Reality Gaming as a Tool for Physical Therapy Following a Spinal Cord Injury” in the *Journal of Emerging Investigators*.

DeBre’s article, published on April 4, 2018, explores the use of Skyfarer – a mixed reality video game – to improve the physical health of players with spinal cord injury (SCI) in a more immersive and social environment compared to traditional physical therapy. DeBre searched for individuals with and without SCI to participate in her study and conducted semi-structured interviews after game play to assess levels of exertion, immersion and whether or not the individuals would use the program in the future. DeBre found that 80% of players with SCI felt physically challenged by the game, and that 100% of players with SCI would use the game in the future. DeBre’s research aims to improve the physical therapy of those with SCI by making the rehabilitation experience more social and interactive when compared to traditional therapy. DeBre contends that innovations in therapy like this one lead to patients being more engaged and willing to move forward in their therapy. Additionally, DeBre notes that this innovation allows patients to play alongside friends or family, making therapy seem more like a game than treatment.

DeBre was supported in research by mentor Marientina Gotsis of the University of Southern California’s School of Cinematic Arts, who shares a special interest in interactive entertainment applications for health, happiness and rehabilitation. DeBre will attend Yale University in the Fall.

The *Journal of Emerging Investigators (JEI)* is a non-profit scientific journal operated by graduate students at Harvard University. JEI is dedicated to mentoring young scientists in middle and high school and publishing their research through the online journal. Articles submitted to JEI pass through a rigorous editorial and scientific review process by several PhD-level scientists before they are accepted and published.

Link to DeBre’s article: <https://emerginginvestigators.org/articles/the-feasibility-of-mixed-reality-gaming-as-a-tool-for-physical-therapy-following-a-spinal-cord-injury>

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