

# Medical Gaming and Simulation: How to Save a Life

By Mike Bryan July 17, 2009  
IT Hire Wire

Serious gamers with a passion for challenges and innovation might consider the career opportunities presented in the medical gaming and simulation field. A new report from the Games for Health Project shows worldwide sales for health-focused games such as Wii Fit, EA Sports Active and Konami's Dance Dance Revolution have totaled USD \$2 billion over an 18 month period. It is no surprise that this year's annual Games for Health Conference had an unprecedented turnout. The once negative stigma associated with videogames has come full circle to now be embraced as a significant value-add to the learning and health of our society.

Over the past several years, gamers have driven the demand for evermore sophisticated games and the rendering of very realistic graphics on the screen. Thus the success in medical gaming largely depends upon the ability to give artificial players increasing intelligence (artificial-intelligence [AI]). In order to do so, IT skills required include real-time programming and training courses in distributed system environments or generic simulation training. This growth of interest and opportunity has helped push the gaming technological advancement beyond traditional boundaries.

The Virtual Heroes game *America's Army* is a great example. In 2008 this video game, which requires users to go through extensive medical training to pilot a medic, led to a real-life rescue on the North Carolina Interstate. Through 3D simulations of heart surgery procedures students are able to understand and practice in a virtual world before tackling real-life situations. At this year's Games for Health Conference, Virtual Heroes discussed its upcoming *R-Mission 2* game (an upgrade from the 2006 *Re-Mission* which allows cancer patients to pilot a robot that attacks cancer cells and combats the side effects of treatments). *R-Mission 2* promises to conquer the sensory experience challenge by shifting the players to a first person perspective.

Previously, we have discussed how the salvation of the healthcare industry lies within technology, and thus the momentum in the medical gaming and simulation industry aligns with this outlook. IT professionals who have worked in the defense gaming and simulations industry will see more career growth in health care as health care spending is now roughly 4.3 times the amount spent on national defense.

To help keep up-to-date on this industry's pulse, I recommend you check out Taylor's blog called Virtual World Innovations. He is the founder of Second Life and documents new and emerging best practices of virtual works. Recently, he developed a virtual ward for a group of staff nurses at St. Mary's Hospital in West London. His virtual ward provided nurses the opportunity to practice and test reactions to unexpected and expected situations. So far, the trial is going well. Also, GameCareerGuide.com offers great resources for gamers at any point in their career with an abundant amount of information on upcoming trends, personal anecdotes and much more.