Profiles in Simulation: Bob Armstrong  
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From Military to Healthcare Simulation

Bob Armstrong has made his way to the Eastern Virginia Medical School, Sentara Center for Simulation and Immersive learning in Norfolk, VA, by way of Annapolis, MD, Kuwait, Somalia, Japan, South Korea, Indianapolis, In. and Twentynine Palms, CA.

And he has made his way to simulation in healthcare and a seat on the SSH Board of Directors by way of a background in simulated war gaming and computer sciences.

Armstrong graduated from the Naval Academy in Annapolis and served in the U.S. Marine Corps from 1985-2005. He earned a graduate degree in computer science and became involved in computer code and algorithms and systems analysis and predictive analysis.

This led to his managing one of the first simulation centers used by the Marine Corps, in Twentynine Palms, CA. (Yes, that's a city, and home to a large military base with more than 8,500 residents). Armstrong developed and ran the computer systems behind the base’s military war-gaming.

He would move on to become the senior Marine for Technology Division at the Marine Corps headquarters in Quantico, Va., a small unit that developed and managed all of the modeling and simulation-based training activities. When he retired in 2005, the portfolio he managed was made up projects totaling $375 million.

Eventually, Armstrong became Director of the Simulation Center at Eastern Virginia Medical School, the Sentara Center for Simulation and Immersive Learning, in Norfolk, VA, where he serves today.

Though he is now involved in simulation in healthcare, as opposed to military training, there are many common denominators.
“The application of simulation is exactly the same - you’re still using models and sims to represent some aspect of reality to train people that you can’t otherwise represent easily, efficiently and/or physically.”

“My job entails an understanding of how to best impart learning through the systematic application of technology, while understanding the limits of technology and best practices -- how to accomplish what you need with the resources that you have (people, equipment, attitudes, time, funding and space).”

And while the specifics of a healthcare simulation may be different than military training in terms of the context, content, and the number of learners, the computer programming behind each type of technical simulation is similar.

And here, Armstrong says, is where there is an opportunity for SSH and for IMSH to expand.

“Most people who are involved in simulation in healthcare don’t have the technological background to write code. It’s not their specialty. System developers know how to write code, but do not have the application domain knowledge; because of this, they often create systems that people don’t need or can’t use. System developers need to rub elbows with the user community. I think there’s an opportunity for SSH to create a forum for that type of cross pollination.”