Title of Program: Simulation-Based Research

Dept/Center/Lab: Carolinas Simulation Center

Principal Mentor: Dimitrios Stefanidis, MD, PhD, FACS, FASMBS
Surgical and Research Director, Carolinas Simulation Center
Associate Professor of Surgery, Carolinas HealthCare System
Clinical Associate Professor of Surgery, University of North Carolina
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Other Faculty: Mark J. Bullard MD, FACEP
Medical Director, Carolinas Simulation Center
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Director, Carolinas Simulation Center
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Summary Description:

Carolinas Simulation Center is one of few dually accredited education institutes by the American College of Surgeons and the Society for Simulation in Healthcare in the United States. The center's mission is to improve patient safety by enhancing the education of healthcare providers. It contributes to the education of over 1000 healthcare workers each year. Under the leadership of Dr. Dimitrios Stefanidis, a world-renowned expert in surgical simulation, the Center engages in several simulation-based research projects and has an impressive publication record. Research activities involve optimizing training curricula in laparoscopic surgery, identifying the best performance metrics for simulator training, and demonstrating the value of simulation-based education for patient safety and process improvement. Dr Stefanidis and his team recently received a 3-year AHRQ grant for the development of a mental skills curriculum for surgeons.

Expectations and Role of Student:

The successful student should have passion for learning, inquisitiveness, and interest in teaching others and should be hard working and a good team player. A great deal of independence is given to the student so it is important to be self-driven and responsible; participation in weekly meetings with faculty mentors is also required. The student will be expected to learn how to conduct hypothesis-driven research on simulators, to become familiar with how simulators can be used for learning, what metrics are best for performance

assessment, how to create learning experiences using high fidelity patient simulators, and how to teach learners new skills. The student will have the opportunity to practice on simulators and improve his/her own skills. The student will present oral and written summaries of research and will be required to prepare and present an abstract and paper summarizing findings.