## *Biomedical Informatics Grand Rounds* Wednesday, May 11th, 2022 3:00 pm – 4:00 pm



## Examples of Collaborations: Clinical and Computer Sciences: The Scholarship of Integration

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## **Remote Access**

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**Bio:** Dr. Mark C Henry is the Professor and Chairman of the Department of Emergency Medicine, and Affiliated Faculty of the Department of Biomedical Informatics at Stony Brook University. He received his MD from Albert Einstein College of Medicine, Bronx, NY. During his career he has been privileged to be part of the movement that established Emergency Medical Service Systems in New York City and in New York State. The ultimate goal is delivery of acute medical care in time to make a difference. He has participated in the development of hospital standards of care, prehospital protocols for triage, treatment and transfer of emergency patients, and in designation and quality review of specialty centers for emergent patients. Dr. Henry was the PI for the New York State Trauma Quality Assurance Demonstration Project for Suffolk County which led to formal designation and maintenance of the trauma system with Stony Brook as the regional trauma center. He was site PI for the Public Access Demonstration Study which showed a two-fold increase in survival from out of hospital cardiac arrest by placement of automated electric defibrillators in the community. He was co-PI of a study funded by the New York Heart Association which led to CPR training in the schools through a hospital-school partnership throughout New York City. He was the Medical Director for the New York State Emergency Medical Service Program from 1989 to 1912 and founding chair of the New York State Emergency Medical Advisory Committee (1995-2012) which addressed state standards for emergency care including treatment and preferential transport to designated trauma centers, stroke centers, and heart centers and other specialty services. With his colleagues in Computer Science and IT and CDI, they developed a comorbidity program which efficiently (in less than a second) pushes key clinical information from the electronic medical record to the physician for validation and improved documentation. In addition, they have worked on an artificial intelligence program to identify adverse drug interactions as the cause of a patient's illness or reason for visit. They are using AI and machine learning to have real time projections of a patient's acuity/stability and need for future upgrades in care and need for interventions.

**Abstract:** Multiple specialties working together make advances in clinical and scientific knowledge. A partnership between a clinical specialty and computer science has been in progress for over ten years. The advances made are highlighted with an emphasis on essential interactions among the specialties involved. Examples on the scholarship of integration will be used as foils.

Educational Objects: Upon completion, participants should be able to:

- Describe the Scholarship of Integration.
- Why are collaborations powerful in advancing knowledge and problem solving?
- What factors need to be considered in real time clinical solutions using electronic health records?

**Disclosure Statement**: The speaker Dr. Mark C Henry has a relevant financial relationship with an ineligible company whose primary business is producing, marketing, selling, re-selling, or distributing health care products used by or on patients, as indicated below. The other speakers (if any), the planners and the reviewer have no relevant financial relationships to disclose.

Dr. Mark C Henry

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