

Elaine Marieb Center for Nursing and Engineering Innovation 2023 Symposium: Round Tables

Sessions Offered A: 10:15-11:15 am B: 11:15-11:45 am C: 12:45-1:45 pm	Session Title	Description
A, B	Transportation's Effect on Black Maternal Health	Black women are disproportionately affected by maternal mortality compared to other women in the United States. This team utilizes ride alongs to and from doctor's appointments as well as interviews with Black pregnant women in Springfield, MA to better understand their transportation needs as well as how transportation affects their health outcomes.
A, B	Interventions for Improved Nurses' Health	Nurses (despite spending much of the day promoting the health of others) have a high prevalence of obesity, diabetes, and poor cardiovascular health. This team is examining factors that impact the health and well-being of nurses in order to develop an intervention that has a lasting, positive impact on nurses' health.
B, C	Video Tools Improve Living with Osteoarthritis for Asian Adults	Osteoarthritis is highly prevalent and current lifestyle modification and interventions fail to consistently meet the needs of Asian adults. This team has created a mini-tablet guided intervention with a video conferencing tool that targets Chinese older adults and has been effective in ensuring long-term adherence to lifestyle modification changes.
B, C	Early Detection with Home Healthcare Monitoring for Older Adults	The elder population in the US is growing, and with that growth comes an increase in the need for home healthcare services. This team developed a home healthcare platform that enables the large-scale monitoring of vital signals such as heart rate, respirations, and temperature and thus enables early detection of emergency situations in both private homes and independent assisted living communities.
A, B	Intravenous (IV) Smart Pump Error Reduction	Adverse events associated with the use of IV Smart Pumps are among the most frequent sources of error reported to the US Food and Drug Administration. This team's findings demonstrated that setup practices can cause flow rate inaccuracy and the team's work continues with the long-term goal being the reduction of IV Smart Pump errors.
B, C	IALS CORE Students - Smart Pumps and Robotics	Undergraduate interns from the Center's Core Summer Internships will discuss their work studying IV Smart Pumps, the use of Robotics in Nursing, and the Nurse-Engineer approach practiced in real time at Baystate Hospital of Springfield.
A, B	Real World Nurse-Engineer Research Projects at Baystate Medical Center	Collaborating to bring interdisciplinary healthcare innovation from UMass laboratories to patient care at Baystate Medical Center. Hear how frontline nurses can thrive as clinicians, researchers, and experts in the implementation of new innovations that improve patient care.
A, C	Robot Technology in Nursing	This project brings together students from Nursing and Engineering to explore the use of robotic technology in nursing. Initial surveys of nurses have demonstrated that although there are nurses who have various concerns about the use of robotics in healthcare, they are excited about the potential uses in hospital and other settings.
A, B	Individualized Blood Pressure Management in the Community for Black and Hispanic Americans	Black and Hispanic Americans have significantly lower rates of blood pressure control than White Americans. Working with the Baystate High Street Health Center in Springfield, MA this project introduces an innovative blood pressure management approach and addresses transportation as a factor in the prevalence of hypertension.
B, C	Chronic Pain Monitoring with Electro Dermal Activity (EDA) sensors	Chronic pain is one of the most expensive health problems in the US and a prevalent symptom of people with Alzheimer's disease and related dementias. This team developed wearable pain monitoring systems that are non-intrusive and convenient, with the aim being to prevent chronic pain in this population being overlooked. EDA is Electro Dermal Activity.
A, B, C	Elaine Marieb Center for Nursing and Engineering Innovation Table	Learn about the Center, its funding and how you can get involved as a student, faculty member, or community member. Also learn about the pilot grant application process and what types of projects we are seeking for future funding.
A, B, C	Networking	Connect with others in this open table for networking and conversation.