## NURSING EDUCATION for the 21st Century



When Dr. Treva Job was a nursing student in 1994, she practised taking stitches out of pig's feet and giving injections to oranges and hotdogs.

Now, as manager of the simulation centre in Health, Wellness and Sciences at Georgian, she oversees the introduction of the very latest in leading-edge simulation equipment and technology in nursing laboratories and classrooms.

Last September, Georgian College welcomed the first students to Central Ontario's first stand-alone Honours Bachelor of Science – Nursing degree program at Georgian's Barrie and Owen Sound campuses.

Instead of practising on food, nursing students will learn using state-of-the-art manikins that resemble simulated patients – looking and acting remarkably like real patients.

"Digital technology has drastically changed the way nurses are educated," says Dr. Job. "There have been significant advancements in teaching simulators, artificial intelligence, virtual reality and the realism in how our students interact with this technology."

The manikins turn their heads, move their arms and even answer questions. A birthing mom delivers a baby, an infant breastfeeds, and a pediatric patient cries real tears. Students practise scenarios on adult manikins that simulate a cardiac arrest, a geriatric manikin with removable teeth, and a palliative manikin that slowly stops breathing.

Learning spaces are also equipped with various immersive technology that can simulate a variety of scenarios and environments such as caring for a trauma victim or visiting a patient in their home.

"Using all this technology in scenarios that replicate a life-

like clinical area and patient condition allows the learner to practise in a safe environment where it is okay to make mistakes," says Dr. Job. "Students build confidence and competence, it increases their knowledge and clinical judgement. In the end, it will help them become practice ready nurses."

Advances in nursing education aren't confined to the labs. "We've come a long way from blackboards and overhead projectors," says Dr. Sara Lankshear, Associate Dean of Health, Wellness and Sciences at Georgian. "When I was in school 40 years ago, you sat in class and listened. We know much more now about how to best support student learning by using a variety of teaching and learning strategies such as lectures, case studies and interactive exercises that help students to integrate and make sense of the theory."

While Georgian has educated nurses for almost 50 years, September 2022 marked the first time students can stay in their local communities to complete all four years of the Honours Bachelor of Science – Nursing degree.

And those future nurses will be in very high demand. Before the pandemic, health care providers in Bruce, Grey and Simcoe Counties estimated they would need to hire 4,300 nurses to accommodate growth and retirements. The number is only greater now.

The new degree at Georgian is a direct response to the serious nursing shortage in local communities and provides a unique opportunity to build a new nursing curriculum from the ground up.

"We know students who are educated here are much more likely to stay and make their careers here," says Dr. Lankshear. "And we've purposefully built the curriculum



High-fidelity simulation manikins in use at the Owen Sound Campus.

for our region. It is focused on local needs including Indigenous health, seniors care, mental health and recognition of the local Francophone community."

"We've taken a very specific community-based approach," she explains. "As one example, one course is dedicated to knowing and responding to your community. We sent the draft outline to our public health colleagues in Owen Sound and Barrie for their input. We fully recognize our students are their future employees and our goal is to make our students practice ready."

Dr. Job adds, "The community focus extends even to the equipment we've chosen to purchase. The hospital beds and crash carts students learn with in class are the same brand they'll use in the regional health centres in Barrie or Owen Sound."

Along with classroom theory and laboratory hands-on practice, the third element of the program is six clinical placements in a diverse range of community health-care providers.

"Hospitals are a key pillar of health care, but not the only one," says Dr. Lankshear. "Students need to experience

and appreciate all practice settings throughout the breadth of our health-care system. They'll learn in clinical placements in primary care and public health right through to long-term care homes and palliative care. And the wide range of placements will help them determine where they eventually want to focus their careers."

Students who are undertaking their nursing degree education at Georgian are preparing for a 21st century health-care system that continues to transform. And they'll deal with new challenges no one could have foreseen a few short years ago, including the fallout from a world-wide and continuing pandemic.

However, one fundamental element of their education remains the same, says Dr. Lankshear. "At its core, nursing is about serving. It is a service profession. That hasn't and won't change."



Scan this QR code to learn more about the Honours Bachelor of Science – Nursing degree at Georgian or visit <u>GCHeroes.ca</u>.