

Shauna Mullally is passionate about the role the clinical engineering profession plays in improving patients' and communities' experiences and outcomes, particularly in health systems in low-resource settings where it is most needed.

Shauna studied in her hometown of Ottawa, Canada, receiving a Bachelor of Engineering (B. Eng.) in Systems and Computer Engineering and a Master of Applied Science in Electrical Engineering in 2004 and 2008 from Carleton University. Her master's studies were a mix of biomedical engineering and international development policy coursework. Her thesis, entitled "Clinical Engineering Effectiveness in Developing World Hospitals", was at the time the largest study globally of clinical engineering services and effectiveness metrics in low-resource setting health systems. She received both degrees with high distinction rankings and her thesis work was nominated for the University Senate Medal for Outstanding Academic Achievement.

After graduation Shauna moved to the Gambia, West Africa, where she had done field research for her graduate thesis, to work for the UK's Medical Research Council (MRC) becoming Head of Biomedical Engineering. In this role, she led the team of biomedical engineering technologists who provided equipment maintenance and management services to the clinics and laboratories at the MRC's five field stations in the Gambia and Guinea-Bissau. These services included full factory service level equipment maintenance, capital planning and procurement, service contract negotiation and management and research and training.

Under Shauna's leadership the Biomedical Engineering program established a quality system to meet the requirements of the UK Medicines and Health Regulatory Agency (MHRA)'s 'Managing Medical Devices' guidance document, which played an integral role in the MRC the Gambia receiving Good Clinical Lab Practice (GCLP) accreditation in 2011. The program also began training technicians and technologists from neighbouring countries on equipment maintenance. In addition to a regular internship program for students at the local technical training college, Shauna also hosted international research students to work on oxygen delivery projects at various clinics in the country.

In 2011, Shauna moved to Zambia to work with the Tropical Health and Education Trust (THET) to perform a country-wide needs assessment of clinical engineering personnel and resources. This led to the development of a new training program for biomedical engineering technologists (BMETs), which was the first of its kind in Zambia and the surrounding region. Shauna managed the curriculum development and initial program design and engaged public, private and non-profit partners to get the program up and running. The course, based at Northern Technical College (NORTEC) in Ndola, has graduated over 150 qualified BMETs since 2013.

Between late 2011 and late 2013, Shauna was based primarily in London, UK and Lusaka, Zambia working as a consultant on various projects for THET and a post-implementation review of a large emergency obstetric care equipment project across Zambia for the UK Department for International Development (DfID) and the Zambian Ministry of Health (MoH). In the UK, Shauna developed a new THET grants stream to support the work of National Health Service (NHS) clinical engineering teams and their counterparts in Ghana, Uganda, South Sudan, Ethiopia and Zambia. Shauna also authored a good practice resource for NHS Trusts and UK charities working overseas called "Making It Work: a toolkit for medical equipment donations in low-resource settings", which was launched at the second WHO Global Forum on Medical Devices in Geneva, Switzerland in 2013.

Shauna then relocated to Copenhagen, Denmark to work for UNICEF at its global supply headquarters as a Technical Specialist for Medical Devices. In this role she led technical procurement work for maternal and newborn care medical equipment and medical emergency kits sent around the world. She worked on the joint WHO-UNICEF Interagency List of Medical Devices for Essential Interventions for Reproductive, Maternal, Newborn and Child Health, led UNICEF's work on newborn resuscitation devices for the UN Commission on Life Saving Commodities, led UNICEF's work on assistive health technologies for children with disabilities and was heavily engaged in personal protective equipment (PPE) specifications, sourcing and supply planning work during the 2014 Ebola response. This included a field deployment to Guinea.

After a planned 9-month career break, Shauna returned to Zambia in 2016 to perform a review of medical equipment planning, procurement and management practices for THET and the MoH in Copperbelt Province and drafted recommendations for the MoH to implement quality improvement initiatives for clinical engineering services at the facility, provincial and national levels.

Shauna is currently based in the Canadian sub-arctic working for the Department of Health & Social Services as Manager of Health Technology Planning. In this role, she oversees medical equipment planning and procurement for the Northwest Territories' 34 communities' health facilities and health and long-term care services. This includes planning, procurement and technology implementation for new facilities, the management of an annual multi-million dollar planned equipment replacement program and special projects relating to technology adoption, technology assessment and capital planning and asset management. The largest project her team of clinical engineers and technologists has worked on to date was the planning, procurement, installation and commissioning of all medical equipment and related systems for the building of a new 100-bed territorial hospital in Yellowknife that opened its doors in 2019.

Shauna has worked and collaborated with the WHO's Medical Devices Unit on various projects over the past decade, including as a technical officer in 2011 on the global education survey and human resources book, as a reviewer of submissions for several innovative technology compendia over the years and in mid-2020 as a consultant on the COVID equipment training videos project. She is a collaborator with the IFMBE's Clinical Engineering Division, a past IET Appropriate Healthcare Technologies for Low-Resource Settings organizing committee member and a past Canadian Medical and Biological Engineering Society (CMBES) equipment donations project member.

Shauna has been a lifelong volunteer. She is a past university chapter co-president for Engineers Without Borders Canada, the founder of the Go Eng Girl! program at Carleton University to promote engineering to girls and spearheaded the building of a birthing house in a small village in the Gambia between 2009 and 2011 that her family in Canada fundraised for. The Penyem Birthing House recently celebrated its tenth anniversary and has become a full medical clinic in the village with a visiting nurse and doctor, with over 200 babies having been born in the it since it opened its doors. She is the recipient of the Carleton University Board of Governors Award for Outstanding Community Achievement in 2007 and the Ottawa Catholic School Board Distinguished Alumni Award in 2011. In 2008, she was named one of Canada's Top 80 Women to Watch by Chatelaine Magazine.

Shauna is happiest when she is learning, working with people to make systems better for the communities they serve, traveling and exploring, meeting new people and hearing their stories, and when she and her partner are at her family's place by the ocean in Prince Edward Island, Canada.