

THRUST AREA OF RESEARCH AT KITS: HEALTH CARE

The KITS has identified health care as one of its four thrust areas of societal importance and is focusing on academic, research, consultancy and extension activities in the area of health care. Apart from 20 patents filed and published and a few already granted in the health care sector, Karunya developed a dozen and half products in the context of Covid Pandemic and two of them have already been commercialized .

The undergraduate and graduate programmes in Biotechnology and Biomedical Engineering and Instrumentation Engineering have emphasis on health care. There are more than 60 scholars doing their Ph.D in health care and some of them are working in the areas of medical imaging and application of electronics and mechanical engineering principles in clinical engineering. In collaboration with Boston Children's Hospital and Medical School of Harvard University, several hackathons were conducted and short-term grants provided to the students to develop medical devices.

A few well-equipped laboratories dealing with health care are available in the Department of Biotechnology and Biomedical Engineering of KITS apart from the facilities available at the medical imaging, nanotechnology, microbiology, molecular biology and biochemistry laboratories. A nursing college has been recently initiated under the School of Health Sciences.

Research is being carried out in collaboration with SEESHA - Karunya Community Hospital to develop instruments relevant to clinical studies. There is also an animal house attached to the Department of Biotechnology. Emerging out of research, about 400 papers have been published in Scopus indexed journals and around 20 patents filed and published in the area of health care. The faculty and students are given short-term grant to develop products, processes, designs and programmes. An Institute Ethics committee has been constituted considering the stipulations of ICMR to enhance the quality and standard of research in the health care sector.

The KITS has signed MoUs with Technion, Ben-Gurion University, Bar-Ilan University, Hebrew University and Agricultural Research Organization of Israel to work together in the four thrust areas of Karunya. Karunya has started a School of Health Sciences and the programmes such as, Geriatric Care, Genetics and Microbiology, Medical Ethics, OT Management and Clinical Psychology have been initiated. A house for the aged and rehabilitation centre are already available in the campus, where students involve in the healing mission of Karunya. The patents filed in the area of health care are being commercialized for the benefit of people.