

Professor Izhak Kehat received his MD and PhD from the Faculty of Medicine, Technion –Israel Institute of Technology. During his PhD he pioneered the derivation of cardiomyocytes from human embryonic stem cells. He did his postdoctoral research with Jeffery Molkenin in Cincinnati, USA. Dr. Kehat is an associate professor and the head of the Dept. of Physiology, biophysics, and system biology, at Faculty of Medicine, Technion – Israel Institute of Technology, and a senior cardiologist at the Rambam Medical center echocardiography unit. The Kehat lab discovered that each sarcomeric ‘engine’ is maintained by a nano-scale ‘factory’ in which mRNA is localized, sarcomeric proteins are locally produced, and excess proteins are discarded. The lab identified the mechanism underlying the turnover of sarcomeric proteins, and key regulators of the localization. The discoveries shed light on the maintenance of sarcomeres and opens up new therapeutic possibilities.