

Bio

Seyed Ali Mousavi Shaegh received a B.S. and a M.S. in 2004 and 2007 from Yazd University, and Ferdowsi University of Mashhad, Iran, both in mechanical engineering. He received a Ph.D. in 2012 from Nanyang Technological University, Singapore, in mechanical engineering. He joined Harvard University, Brigham and Women's Hospital and Harvard-MIT Division of Health Sciences and Technology (HST), in 2014 as a postdoc fellow after a two-year research appointment at Singapore Institute of Manufacturing Technology (a research institute of Agency for Science, Technology and Research, A*STAR). Currently, he is an assistant professor of biomedical engineering at Mashhad University of Medical Sciences, in the School of Medicine (Clinical Research Unit and Orthopedic Research Center). Mousavi's research interests are mainly focused on microfluidic systems for diagnostics and drug testing, development of rapid prototyping methods for microfluidic chip fabrication, as well as design, fabrication, and testing of medical devices and implants.

Title Abstract

The presentations will provide an overview about the use of microfluidics for personalized medicine, particularly for cancer treatment. The presentation will begin with the definition of personalized medicine, known as a paradigm-shifting approach, for the treatment of various diseases including cancer. Then, the talk will be continued with the introduction of bio-microfluidics and lab-on-chip systems for the conduct of tasks required for diagnostics, drug testing and treatment follow up steps in cancer treatment.