

Report | VC ABLE E05/2024 16th BioPune Seminar Series Talk on Translation of Biomedical Microtechnologies from Lab to Clinic by Prof. Mark Prausnitz, Regents' Professor, Georgia Tech, USA | Wednesday | 11 Sept 2024

About Event

BioPune Seminar Series presents talks in the areas of Biotechnology, Biomedical Engineering, Bioinformatics, Biomass value addition and related areas which are of interest and relevance to the biosciences based technology and entrepreneurship community in Pune.

Abstract of Talk

Many tissue barriers that limit access to the body exist on the micron length scale. We are therefore developing microneedle technologies that selectively cross these barriers in a minimally invasive way to improve drug delivery and other medical applications. In this presentation, we will discuss the development of microneedle patches to simplify vaccination, as exemplified in clinical trials of influenza vaccination and measles/rubella vaccination; adaptation of microneedles to serve as electrodes for an ultra-low-cost method of electroporation using a piezoelectric device for DNA vaccine delivery; incorporation of microneedles into millimeter-scale particles called STAR particles that enable increased drug delivery to skin over large areas for dermatological applications; use of microneedles "in reverse" to collect interstitial fluid from the skin as a novel source of biomarkers; and development of hollow microneedles for targeted drug delivery to the eye that forms the basis for an FDA-approved product to treat ocular inflammation.

Fact file

- Venue : Lecture Theater, 900 NIP, Venture Center, Pune
- Event Date : 11 Sept 2024
- Time : 04.00 to 05.00 PM
- Attendees : (Hybrid) In-person & on Zoom; 50+ attendees

Photo Gallery

