

Breaking The Wall of Silent Disease Diagnosis - Kandeel Shafique

Kandeel Shafique is one of the fifteen MSCA fellows who will participate in the Falling Walls Lab competition.

Kandeel is a doctoral fellow at Universitat Rovira i Virgili (Spain) in the department of Electronic, Electrical, and Automatic Engineering. As part of the research group "Nano-inspired nanotechnologies", she couples biology with electrical engineering. Her work focuses on developing rapid and cost-effective **diagnostic tools to fight infectious diseases**. She is exploiting morphological features, topographical cues, and surface chemistry of nanomaterials for **biosensing applications**.

Currently, she is working simultaneously on two projects. The first is to use multilayer porous **nanostuctures** for the early-stage detection of Bovine Mastitis - an infection of the udder that affect dairy cows - in the project "Biosens4PrecisionMastitis". The second is to develop a biofilm chip device for biofilm detection.

With a real interest in innovation and entrepreneurship, Kandeel is eager to design **bio-inspired sustainable solutions** to improve the global **healthcare** system.

