

## SCHOLARSHIP ANNOUNCEMENT

We are seeking to recruit enthusiastic, highly motivated and creative researchers to work at ANKARA YILDIRIM BEYAZIT UNIVERSITY (AYBU), starting from September 2018.

**Funding Agency/**



**Programme**

**Project Title** A fully integrated rapid on-chip antibiotic susceptibility test - a case study for *Mycobacterium tuberculosis* (MycoCHIP)

**Project Aims and Objectives** The overall aim of this project is a positive contribution to the fight against antimicrobial resistance in Turkey. Practically, the main objective of the project is to develop a rapid, simple, cost effective and comprehensive antibiotic susceptibility/resistance test using a microelectrode array integrated microfluidic device. Detection is based on electrochemical measurements. Project collaborators are from University of Strathclyde (British PI), Acibadem University and Eskisehir Osmangazi University.

**Task**

- Design, fabricate and optimize the microfluidic device in accordance with the characteristics of the microelectrode arrays, integrate the electrode sensors with a microfluidic chip leading to a comprehensive susceptibility test on a chip.
- Using the integrated chip, determine the susceptibility level of *TB* isolates towards specific antibiotics, assess the system's performance compared to established methods and develop an early version of a prototype.
- Analyse the results and prepare for dissemination.

**Training** Although experienced researchers would be highly preferred, necessary training for microfluidic chip design, fabrication, and testing as well as electrochemical measurements will be given.

**Funding available for**

Researcher	Estimated Salary (TL)	Note/Requirements
PhD Student (1)	2.000,00-2.500,00	. Candidates with an MSc degree in Engineering, Chemistry, Physics are qualified to apply. Experience and bioengineering background would be a plus. . Interest in the field of micro/nanofabrication, on-chip biosensors and microfluidic devices.
MSc Student (1)	1.500,00-2.200,00	. Candidates with a BSc degree in Engineering, Chemistry, Physics are qualified to apply. . Interest in the field of micro/nanofabrication, on-chip biosensors and microfluidic devices.
BSc students are also encouraged to apply to get involved in the project.		

**Application Deadline** 22 June 2018

**How to apply** E-mail your professional CV (including min. 2 references) with cover letter to [fdogan@ybu.edu.tr](mailto:fdogan@ybu.edu.tr).

. Note that the interviews will be scheduled from 25<sup>th</sup>-29<sup>th</sup> June 2018. The candidates will be given a particular research article to present in the interview.