



# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY POWAI, MUMBAI 400076.

**Advertisement No.: IRCC/EXT328/2024**

## **Job Title**

BIODESIGN FELLOW

## **Job Reference Number**

50643712

## **Application End Date**

07.11.2024

## **Type of Employment**

Proj. Staff Contract

## **No. of Position(s)**

10

## **IITB Project Recruitment:**

Project title: Medical Engineering Design and Innovation Centre (MEDIC)

About the project: MEDIC – An innovation center for HealthCare Research. MEDIC is a multi-disciplinary center supported by Department of Biotechnology, Ministry of Science and Technology, Government of India. It is located in the Rahul Bajaj Technology and Innovation Center at the Indian Institute of Technology Bombay, Mumbai, India. The center is affiliated with the innovative and entrepreneurial ecosystem at IIT Bombay.

## **Essential Qualifications & Experience:**

Science: Engineering (M.Tech.) / M.Pharma in Life Sciences and related fields.

OR

Medicine: MBBS/BVSc/MD

OR

Design: M.Des.

OR

Business: MBA with Life Sciences or Engineering

Minimum Two years of prior work experience related to medical discipline of our mentioned thrust areas on website.

Desirable Qualifications: -

- 1). Willingness to incorporate a Start Up
- 2). Able to work with interdisciplinary fields.
- 3). Problem Identification and solving capabilities.
- 4). Leadership Qualities

## **Job Profile:**

The selected Fellows will spend one year in the MEDIC program, moving between IIT Bombay and GMC & JJ Hospital, as well as visits to industry, NGOs, and other organizations. The program will comprise four stages of three months each. The first quarter will include a boot camp workshop at IIT Bombay and clinical immersion in a partner hospital. The second quarter will be for concept and prototype development at IIT Bombay. The third quarter is for mechanical/electrical/biological testing in labs and feedback from clinicians. The last quarter is for clinical studies in hospitals and business plan preparation at IIT Bombay.

**Define stage:** Fellows will attend a bootcamp workshop on medical device innovation conducted by IIT Bombay and GMC & JJ Hospital. Then the Fellows will undergo clinical immersion in hospital(s) to identify their critical medical needs. They will shadow selected doctors to observe diagnosis and treatment procedures.

**Develop stage:** Fellows will undergo an advanced training program in healthcare innovation and entrepreneurship including coursework, lab exercises, and mentoring sessions.

**Deliver stage:** Fellows will visit partner hospitals for clinical feedback on the prototypes, refine the design, and fabricate functional prototypes. This will be followed by device testing for mechanical/electrical safety and biocompatibility, in partner institutes and industry. The Fellows will prepare proposals for human clinical trials and submit them to regulatory bodies for approval.

**Deploy stage:** Pilot clinical studies will be initiated in partner hospitals. The Fellows will prepare product dossiers containing design and testing details, file the final specifications of patents and other IPR (copyrights, design registrations, trademarks), evolve business plans to incubate start-up companies, and prepare funding proposals.

***Pay Details:***

Consolidated salary Rs.60000/- p.m.

***General information:***

The position is temporary for a period of 1 year and tenable only for the duration of the project. The appointment is for time bound project and the candidate is required to work mainly for the successful completion of the project. The selection committee may offer lower or higher designation and lower or higher salary depending upon the experience and performance of the candidate in the interview.

Candidates called for interview will be required to attend at his/ her own expenses.

For any queries/clarification please contact: [recruit@ircc.iitb.ac.in](mailto:recruit@ircc.iitb.ac.in)