



Indian Institute of Technology Hyderabad
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Post-doctoral Research Fellowship (PDF) position at Regenerative medicine & stem cell (RMS) Lab, Dept. of Biomedical Engineering, IIT Hyderabad.

Title: Personalized precision oncology: 3D-printed microfluidic cancer-on-chip device for clinical validation of prior drug sensitivity using Carcinoma breast cancer stem cell organoids

Cancer-on-a-chip is implemented to make patient-derived cancer organoids for drug testing and finding patient pathology in this and correlate them to clinical findings. We have patented a device from IITH to make patient derived organoids, which can be found in our publications. Primary cancer stem cells need to be isolated from primary patient cancer tissues, followed by their characterization. Later, they are tested in our cancer-on-a-chip device after fabricating the device and correlate them to actual patient clinical situation. We are currently using this patented device to test cancer stem cells and drug sensitivity. In addition, our other bioengineering strategies can be found in our webpage and publications. Details in webpage: <https://tinyurl.com/22224q5y>

Applications are invited from interested and motivated candidates for the research projects in the Department of Biomedical Engineering of the Indian Institute of Technology Hyderabad (IITH) with collaboration with a hospital at Hyderabad. As the project is inter-disciplinary, strong experience in any one or more part of the project like Cancer stem cell isolation, cancer organoids, 3D printed microfluidic device fabrication, is solicited. Applicants are encouraged to apply who have good track record of high-end publications showing the project management skills.

1.	Name of the post	Post-doctoral Research Fellow (PDF)
2.	Number of Posts	One
3.	Project Title	Personalized precision oncology: 3D-printed microfluidic cancer-on-chip device for clinical validation of prior drug sensitivity using Carcinoma breast cancer stem cell organoids

4.	Funding Agency	ICMR
4.	Duration of the Position	One year extendible further as per grants.
5.	Consolidated monthly stipend	Rs. 71,000/- per month consolidated as per sanction (HRA included here)
6.	Essential Qualifications	PhD in (Biomedical Engineering, Life sciences, Materials Science, Biotechnology, Chemical engineering, Mechanical Engineering or equivalent Biosciences degrees) with 60% marks or equivalent CGPA.
8.	Preferred qualifications	Knowledge of 3D printed microfluidic or cancer stem cell biology are required to be shortlisted. Person with experience in cell culture, organ-on-a-chip and organoid related works will be given preference. Publication in high IF journals will have added advantage.
9.	Age	Not more than 36 years
10.	Application	Apply via google forms with uploading CV here: https://forms.gle/zZzLSMnmt1q6cPweA Fill the form before May 3rd, 2024.
11.	Any other queries	Contact the PI by email below with subject heading “ QUERY ”. Name: Dr. Subha Narayan Rath Address: Professor Department of Biomedical Engineering, Indian Institute of Technology Hyderabad TS-502284, India. E-mail: rmslab.iith@gmail.com
12.	Shortlisted candidates	ONLY , the short listed candidates for the interview based on merit will only be informed via email by May 7th, 2024.
13.	Interview date	By online mode on May 9th or 10th, 2024.