



**Indian Institute of Technology Hyderabad**  
**Kandi 502 284, Telangana, India**  
**Phone: (040) 2301 6033; Fax: (040) 2301 6003, 6032**

**Junior Research Fellow (JRF) in 3D printed pancreas or cartilage projects  
at Regenerative medicine & stem cell (RMS) Lab, Dept. of Biomedical  
Engineering, IIT Hyderabad**

3D bio-printing is a technique used to fabricate tissues in lab. We are currently using primary human stem cells to fabricate pancreatic organoids, cartilage tissue or cancer organoids for drug testing and therapeutic applications using bioengineering strategies. Details in webpage: <https://tinyurl.com/27738kn2>.

Applications are invited from talented, motivated candidates for the research projects in the Department of Biomedical Engineering of the Indian Institute of Technology Hyderabad (IITH) with collaboration with Materials Science and Metallurgical Engineering (MSME) dept. of IIT Hyderabad. As the projects are inter-disciplinary strong experience in one part of the project is encouraged to apply who can learn the other complementary skills with time.

1.	Name of the post	Junior Research Fellow (JRF) (can be converted to PhD as per performance)
2.	Number of Posts	One/ Two
3.	Name of TWO Research Projects	<b>1. Lipo-polymeric Nanodrug-delivery system in a defect specific 3D Printed Cartilage: An in vivo analysis in osteoarthritis Rat model</b> <b>2. Development of 3D-bioprinted artificial pancreas with nanosensors for real-time monitored insulin release: In vitro model replacing animal models for diabetic treatment</b>
4.	Name of the Sponsoring Agency	ICMR, Govt. of India & IITH.
4.	Duration of the Position	<b>One year extendible further as per grants.</b>
5.	Consolidated monthly stipend	<b>Rs. 31,000/- per month</b>

6.	Essential Qualifications	M. Tech (Biomedical Engineering, Materials Science, Biotechnology, Chemical engineering, Mechanical Engineering or equivalent Biosciences degrees) with 60% marks or equivalent CGPA; M. Sc. (Biotechnology, Life sciences or equivalent courses like M. Pharma.) with fellowships or 1 year of research experience.
8.	Preferred qualifications	<b>Knowledge of 3D printing or stem cell culture or diabetes-related works are encouraged to apply.</b> Students with their own fellowships <b>DBT/DST-INSPIRE/ICMR/CSIR/UGC</b> are encouraged to apply if interested in at least part of the project.
9.	Age	Not more than 30 years (Relaxable as per research experience and publication records)
10.	Application	Apply via google forms with uploading CV there: <a href="https://forms.gle/NXfQ1WmjCzBiqwpM6">https://forms.gle/NXfQ1WmjCzBiqwpM6</a> Fill the form before <b>November 11th, 2022</b> , with the form subject heading " <b>IITH-JRF</b> ".
11.	Any other queries	Contact the PI by email below with subject heading " <b>QUERY</b> ". Name: Dr. Subha Narayan Rath Address: Professor & Head, Department of Biomedical Engineering, Indian Institute of Technology Hyderabad, Kandi, TS-502284, India. E-mail: <a href="mailto:rmslab.iith@gmail.com">rmslab.iith@gmail.com</a>
12.	Shortlisted candidates	The short listed candidates for the interview based on merit will only be informed via email by <b>November 16<sup>th</sup>, 2022</b> .
13.	Interview date	By online mode on <b>November 19<sup>th</sup> or 20<sup>th</sup>, 2022</b> .