# भारतीय प्रौद्योगिकी संस्थान हैदराबाद Indian Institute of Technology Hyderabad

### **Indian Institute of Technology Hyderabad**

Kandi – 502 285, Sanga Reddy, Telangana, INDIA Phone: (040) 2301 6033; Fax: (040) 2301 6003 /32

# "Novel Biomaterials and Stem Cells Based Skin Tissue Regeneration" (JRF) @ Department of Biomedical Engineering, IIT Hyderabad

Recalcitrant acute (**burn wound**) and chronic wounds (**diabetic foot etc**) are a growing public health concern. With the expanding elderly population and increasing incidence of diabetes, localised management of these wounds is becoming a multi-billion-dollar enterprise. Current treatment options and management of large asymmetric burn wounds and chronic wounds have limited success, require longer inpatient care, and are often expensive and beyond the means of the majority of the population in India.

Our laboratory (eNARM Lab, PI: Jyotsnendu Giri) at IIT Hyderabad (in collaboration with the hospital), led by highly energetic interdisciplinary people, is working at the interface between materials and biology to develop next-generation approaches for skin tissue engineering targeting acute burn and chronic wound healing. We seek talented, motivated and passionate individuals to join our efforts for cutting-edge research on "Skin tissue engineering and wound healing". The candidate will get a highly interdisciplinary work environment to perform cutting-edge research. The candidate will work closely with collaborators from the hospital in Hyderabad.

Essential Qualification: M Tech, M.S, M.Sc.Pharmacy/ Material Science/Biomedical Egg/Nanotechnology/Biochemistry with first division or equivalent mark from reputed institutes with relevant experience (2-3 years). A science degree holder should qualify for the NET or equivalent examination GATE.

#### **Work Experience:**

- Experience on Biomaterials processing or scaffold fabrication, particularly polymers for tissue engineering applications
- Polymer synthesis and modification (optional), Polymer blending, Biomaterials fabrication
- Basic Knowledge on Physical, Organic Chemistry and solvent chemistry, worked with Biopolymers, Basic organic synthesis,
- Experience related to wound healing project preferable (though optional)
- Eager to learn new interdisciplinary research and technique related to the research.
- Experience on small animal handling (in vivo study), basic laboratory techniques related to molecular biology, tissue engineering
- Experience on in vivo study using small animals, cells and tissue culture
- Further Technical Information: Candidate may contact the Principal Investigator. Dr. Jyotsnendu Giri, Email: enarm@bme.iith.ac.in

<u>Duration of project:</u> Two to Five years (Based on the funding). The appointment will be on temporary basis for a period of six months. Based on performance in the initial period, the appointment could be extended till the end of project. <u>Candidate may have strong interest</u> to pursue PhD. Depending on the performance; candidate will be offered to continue this work for PhD.

**Emoluments:** Standard JRF salary, i.e., INR 37000/month, No HRA as the candidate need to stay in the IITH Hostel.

<u>How to Apply:</u> Eligible candidates should apply with their CV via email to enarm@bme.iith.ac.in on or **before 9<sup>th</sup> Nov, 2025**, with the subject marked as "JRF in Skin



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Tissue Regneration". <u>The candidate should provide a short justification note to support his/her candidature for this project.</u> Candidates who are short-listed for the interview based on merit and experience will be informed via email.

<u>Preference</u> will be given to candidates with relevant experience in the work mentioned above, as well as CSIR/UGC/NET holders with a strong interest in this research field, who will also be given priority.