



Advertisement No. inStem/Temp/19/2022

Institute for Stem Cell Science and Regenerative Medicine (www.instem.res.in), an Autonomous Institution under the aegis of Department of Biotechnology, Government of India invites applications for the post of **Postdoctoral Fellow in the Tubulin Code, Cilia and Homeostasis lab at DBT-inStem**

The “*Tubulin code, Cilia and Homeostasis*” laboratory headed by Dr Sudarshan Gadadhar in the *Centre for Inflammation and Tissue Homeostasis at inStem, Bengaluru*, offers one postdoctoral fellow position for candidates with strong interest in protein biochemistry, cell biology, animal physiology and tissue homeostasis.

The major research focus of the lab is to understand how different posttranslational modifications (PTMs) of α - and β - tubulin dimers, building blocks of the cytoskeleton, impact the biology and function of the tiny hair-like organelles called cilia, present on most epithelial cells in mammals. The lab is interested in understanding how the primary cilia on different cells within the tissue crosstalk to be able to regulate tissue homeostasis, especially in repair post injury/infections. A major focus of the lab is to understand how the core structural backbone of cilia, the axonemal microtubules, and their posttranslational modifications are modulating ciliary trafficking, thus controlling primary cilia function, and play a role in regulating tissue homeostasis. The selected candidates will address key questions using an interdisciplinary approach that involves *in vitro*, *in cellulo* and *in vivo* analyses with techniques ranging from molecular aspects (biochemistry, molecular biology, *in vitro* reconstitution), through cell biology, advanced microscopy to the level of whole organism understanding.

Check our recent publications as well as visit www.sudarshanlab.com to have an idea of our scientific approaches and questions.

We are located at the **Institute of Stem Cell Science and Regenerative Medicine (DBT-inStem)**, Bengaluru, which is one of the premier research institutes of India. As an autonomous research institute of the Department of Biotechnology, research at inStem focusses on bridging clinical and laboratory research with experts in fields of stem cell biology, developmental biology, computational biology, structural biology, biophysics and so on. In addition, inStem has state-of-the-art core research facilities within a stimulating and collegial research environment.

Qualifications

We are looking for highly passionate and motivated candidates with a PhD in any branch of Life Sciences from a recognized university or institute.

Candidates with strong background and experience in cell biology, protein biochemistry, advanced imaging and molecular biology are encouraged to apply. Previous experience with animal handling, animal physiology and/or computational biology will also be an asset. Candidates must have a good scientific record with at least 1 first author paper published from their PhD work in an international peer-reviewed journal of repute.

The candidate is expected to design and manage the work independently, have good organizational skills, work in an interdisciplinary team, and handle multiple tasks. They will also be responsible for data documentation, validation and compilation, for preparation of manuscripts.

Post: Postdoctoral fellow – 1 position

We offer one full-time fixed term postdoctoral fellow position for initially 1 year and extendable based on review. The candidates will benefit from technical and conceptual training, mentorship, and career development and will have access to cutting-edge technologies and develop independent research

thinking. Applicants will be involved in planning and executing the experiments related to *in vivo* analyses of wound healing and tissue homeostasis, with understanding the molecular mechanisms of how tubulin posttranslational modifications regulating signalling through primary cilia and thus control organ functions, homeostasis and regeneration post injury / infection.

Pay Scale:

As per Govt. norms based on experience and qualification

Age limit: Below 35 years as on 01-09-2022

Mode of Applications: Only online applications will be accepted. Applications received through any other mode shall stand rejected automatically.

Application Fee: Nil

Application Details

Applicants should submit the following information as a single PDF file:

1. 2 page Curriculum vitae with current address, phone (mobile) number and e-mail address.
2. 1-page Motivation letter explaining past research experiences, career goals, and motivation to join our laboratory and research programs. Please include the advertisement number in the letter.
3. Contact information of at least two referees.

Any issues while applying online may be addressed to estt@instem.res.in. Incomplete applications will not be considered. Shortlisted applicants will be informed by E-mail and will be interviewed via in-person / electronic mode, depending on the location of the candidate. Appointment will be contingent on medical certification by the campus medical centre.

Incomplete applications shall be summarily rejected and no correspondence in this regard shall be entertained.

Application Deadlines

Last date for receipt of applications: 30th October, 2022 at 5 pm IST

Start date of the position: Immediate

Note: No selection will be made if suitable candidates are not identified.