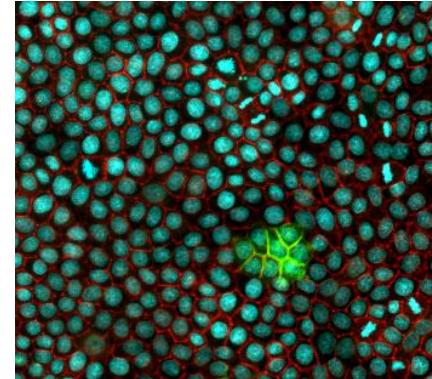


A postdoctoral position available in Cell and Molecular Biology at TIFR Hyderabad in a research project funded by the Wellcome Trust/DBT India Alliance Intermediate Fellowship Grant

**Title:** Building Connections during Competition: Role of Proteins Associated with Cell-Cell Junctions and Epithelial Polarity in Cell Competition

**Objective:** Cell competition is a collective phenomenon, in which a relatively 'unfit' cell population in the epithelium is eliminated by the surrounding 'superior' cells. It provides a basic epithelial defense mechanism against cancer. This project will attempt to understand how different components of cell-cell junctions as well as proteins associated with the apicobasal polarity of epithelial cells influence the intercellular force transduction and thereby, the modes of cell-cell interactions during cell competition. The experiments will mainly involve animal cell culture, gene-silencing, molecular cloning, immunocytochemistry, and high-resolution microscopy. Furthermore, the work will be complemented and integrated with several cellular force-measuring techniques such as traction force microscopy and optical force microscopy. To know more about our research interests, please visit <https://www.tifrh.res.in/~tamal/>.



**Duration:** Initially one year and extendable up to 3 years upon evaluation

**Salary:** As per TIFR norms

**Qualifications:** The applicant should already hold a PhD degree (preferred) or have submitted his/her thesis.

**Expertise:** A strong training in molecular cloning, animal cell culture, and confocal microscopy is must. The candidate should have extensive working knowledge of gene knockdown by shRNA or siRNA-based methods. Candidates having working experience with CRISPR-based gene knockdown method would be given preference, if other conditions are satisfied.

Interested applicants should email to Dr. Tamal Das (email: [tdas@tifrh.res.in](mailto:tdas@tifrh.res.in)) enclosing:

1. a curriculum vitae
2. a one-page cover letter describing their past research works and accomplishments, general research interests, and career goals)
3. names and contact information of at least three references

**Submission Deadline for Full Application:** 31<sup>st</sup> March, 2018

**Selection Process:** A short skype or walk-in meeting will be held before 2<sup>nd</sup> April, 2018. Short-listed candidate(s) will be called for a presentation-cum-interview before an institute-level committee shortly after that. Final decision will be made on the basis of the performance at this presentation-cum-interview.

**Preferred Joining Date:** 1<sup>st</sup> May, 2018

**Contact Person:**

Tamal Das, PhD (Email: [tdas@tifrh.res.in](mailto:tdas@tifrh.res.in))

Reader-F, Wellcome Trust/ DBT Intermediate Fellow

TIFR Centre for Interdisciplinary Sciences (TCIS)  
Tata Institute of Fundamental Research Hyderabad