

# NATIONAL CENTRE FOR BIOLOGICAL SCIENCES

Tata Institute of Fundamental Research  
UAS-GKVK Campus, Post Box No. 6501, Bangalore 560 065  
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## VISITING POST-DOCTORAL FELLOWSHIPS

The National Centre for Biological Sciences (NCBS) has been established by the Tata Institute of Fundamental Research. It is located on the campus of University of Agricultural Sciences (GKVK), Bangalore.

A small number of post-doctoral fellowships tenable at NCBS are available each year. Applications from those with a Ph.D. degree or equivalent (**in any branch of natural science/engineering**) and demonstrated research capabilities will be entertained throughout the year and will be considered in February and August. Applicants should summarize recent research experience and include names and addresses of three persons who can be contacted for a critical evaluation of the applicant's research.

The mandate of NCBS is basic research in the frontier areas of biology. **In addition, a collaborative Physics in Biology Program (with TIFR-Mumbai campus and Raman Research Institute) has been initiated to bridge the language and tools of physics, chemistry, engineering and biology.** Current research interests of the faculty are in the following:

### A. Biochemistry, Biophysics and Bioinformatics

1. Mechanisms of protein folding and unfolding (Jayant Udgaonkar)
2. Exploring the architecture and function of transmembrane ion channels (M. K. Mathew)
3. Computational approaches to protein science (R. Sowdhamini)
4. Single-molecule physics of biological systems (G. Shivashankar)

### B. Cellular Organization and Signalling

1. Mechanisms of Notch-mediated epithelial oncogenesis (Sudhir Krishna)
2. Mechanisms of endocytosis in metazoan cells (Satyajit Mayor)
3. T Lymphocyte death and homeostasis in the periphery (Aparva Sarin)

### C. Genetics and Development

1. Nerve and muscle development in *Drosophila* (K. VijayRaghavan)
2. The biology of InsP3 signalling in *Drosophila* (Gaiti Hasan)
3. The development of functional neural networks in *Drosophila* (Veronica Rodrigues)

### D. Neurobiology

1. Genetic analysis of chemosensory perception (O. Siddiqi)
2. Gene regulation in the mammalian nervous system (M. M. Panicker)
3. Computational neuroscience (U. S. Bhalla)
4. Neurobiology of learning and memory (S. Chattarji)

The NCBS web page at <http://www.ncbs.res.in> has brief accounts of the research projects being undertaken by these groups and **about the Physics in Biology Program.**

Applications may be sent to the Head (Academic Activities) at the above address.

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