



inStem-NCBS Single-molecule Imaging Laboratory

Postdoctoral Positions

inStem (<http://instem.res.in>), a new Institute for Stem Cell Biology and Regenerative Medicine collaborates and is located at the National Centre for Biological Sciences (NCBS, www.ncbs.res.in) of the Tata Institute of Fundamental Research in Bangalore India. In collaboration with the Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University, Japan (<http://www.icems.kyoto-u.ac.jp/e/>), inStem has set up a laboratory for imaging and examining the localization and dynamics of identified single-molecules of proteins in the cell-membrane and relating this to molecular and cellular function. This **Single-molecule Imaging Laboratory** is led by **Kenichi Suzuki** who has laboratories in both inStem and iCeMS. The members of the Suzuki lab are expected to collaborate extensively with Prof. Aki Kusumi of the iCeMS at Kyoto University, and will have ample opportunities to visit his lab in Kyoto for initial training in single-molecule imaging and later to learn new techniques developed there and to collaborate with him. Prof. Kusumi is a visiting professor at inStem and NCBS, and is expected to visit regularly. Within NCBS-inStem, extensive collaborations with others are being developed. InStem-NCBS and iCeMS have a partnership program, in which each institute has its satellite laboratory in the other institute.

Two postdoctoral positions are available in the Suzuki **Single-molecule Imaging Laboratory**. The lab is particularly interested in the fundamental molecular mechanisms for signal transduction in the plasma membrane and the plasma membrane domain organization in nano-meso scales: These play key roles in regulating signal transduction. The critical feature of the Suzuki lab lies in its approaches: it advances and utilizes single-molecule imaging techniques (high-speed, simultaneous-multicolor, single-molecule FRET) to observe the behaviours of individual molecules in the plasma membrane of live cells, in addition to more conventional biochemical and molecular biological approaches.

We are seeking for two postdoctoral fellows who are interested in a highly interdisciplinary environment: one with strong background in biophysics and/or advanced fluorescence microscopy, and the other in cellular and developmental biology. Interested applicants should submit detailed curriculum vitae and the names of two references to :

Ken Suzuki, Ph.D.

inStem, NCBS (Email: ksuzuki@frontier.kyoto-u.ac.jp)