

Dr Sarmistha Mahanty



Host Institution: Indian Institute of Science

Department : Molecular Biology and Cell Biology

Host lab: Dr. G. Subba Rao's lab

Ph.D. Year: 2013

Ph.D training : JNU

I am working in the area of Cell Biology, the field of fascination for me. Colourful immunofluorescence images of confocal/super-resolution microscopy keep me energized and give the satisfaction of visualizing scientific interpretations.

My research aims to understand how the intracellular organelle turnover maintains cellular homeostasis to achieve tissue integrity. Currently, I am studying skin homeostasis in respect to a special class of organelle called skin lamellar bodies that are produced by differentiated keratinocytes. The production of and excretion by the mature lamellar bodies maintains skin barrier function. A top-down approach is employed to connect the production, intracellular movement/localization and function of the lamellar bodies with overall skin health and prevalent skin diseases in India.