

NAMS Scientific Symposium on Regenerative Medicine
Speaker : Dr. Sujata Mohanty

BIOLOGICAL BASIS AND MOLECULAR MECHANISM OF REGENERATION

ABSTRACT

Stem cells are responsible for regenerating the lost and damaged cells and tissue. Because of this known fact, regenerative medicine has emerged as a promising field to explore. As a result of exhaustive series of research, in 2012, Shinya Yamanaka and John B Gurdon were awarded the Nobel Prize for their remarkable contribution in the field of Physiology or Medicine. Stem Cell Facility (SCF) at AIIMS was established in 2005 and was the first centre to start stem cell trial. Department of Biotechnology has granted Centre of Excellence in stem cell to SCF, AIIMS to carry out basic, pre- clinical and clinical research. The main purpose of exploring all these various aspects of research is to study the molecular biology involved in the process of stem cell differentiation, mode of action of stem cells and their pre-clinical and clinical implications in terms of homing of stem cells at the site of damage, differentiation into desired cells and interaction with the tissue in vivo and finally, in disease prognosis.