

## Dr Vivek Tanavde



**Vivek Tanavde** obtained his Ph.D from the Cancer Research Institute, Mumbai (1999) in Applied Biology. His Ph.D. thesis was on the characterization and expansion of hematopoietic stem cells from umbilical cord blood. From 1999 to 2002, he was a post doctoral fellow in the laboratory of Dr. Curt Civin at the Sidney Kimmel Cancer Centre, Johns Hopkins University working on expansion of hematopoietic stem cells from umbilical cord blood and mobilized peripheral blood. He also developed methods for the efficient transduction of these cells using lentiviral vectors. He returned to India in 2002 and was heading the Hematopoietic Stem Cell Lab at Reliance Life Sciences, Mumbai. At Reliance, he developed protocols for the use of mesenchymal stromal cells (MSC) in the treatment of acute myocardial infarction. He also set up the clinical flow cytometry lab providing services in the areas of CD4/CD8 enumeration & single platform CD34 enumeration.

In 2006, he joined the Bioinformatics Institute, Singapore as a Research Scientist in the Genome & Gene Expression Data Analysis Division, where he is currently a Principal Investigator. Most of his work has focused on developing protocols for expansion and targeted differentiation of MSC. His current research focuses on understanding the role of miRNAs in MSC differentiation. This is done by systematic profiling of miRNA & mRNA expression in MSC differentiating under different conditions. His laboratory has also developed various bioinformatics tools for connecting gene expression to cellular function. These tools have been used successfully in predicting cellular responses of embryonic stem cells to agents exhibiting developmental neurotoxicity. He has 16 peer reviewed publications and 4 book chapters in the area of stem cells.

He is a serious amateur photographer with an interest in landscape & wildlife photography. His work has appeared in Bombay Times as well as our Institute brochures for the past few years. He is also involved in an entrepreneurship development experiment by the SP Jain Management Institute through the Bhavans Research Center. This is an industry focused research center & he is involved as a founder member of the Advisory Committee for this center. He has been teaching at Indo-US Flow Cytometry Workshops since 2005 & also serve on the Education Committee of the International Society for Advancement of Cytometry (ISAC). Through the Society he has been teaching Flow Cytometry Workshops in Malaysia, Singapore & China.