

Editorial

Potentials of Stem Cell Therapy-Curiosities Ignited

Dear Friends

The potentials of Stem cell therapy are being harnessed to the fullest by the Stem Cell Biologists all over the world who are working towards the unanimous goal of finding a cure to many untreatable diseases through cellular replacement or tissue engineering. Keeping this view in mind, both basic and translational research are being promoted by various institutions & hospitals throughout the world

Umbilical Cord blood, a rich source of Hematopoietic stem cells holds great potential for use in hematological malignancies and Umbilical Cord Blood Storage has spread its roots around the world. The post thaw viability of the Cryopreserved Umbilical cord blood stem cells is an issue of concern. In this regard Dr.Sachdeva in his article has explored the possibilities of using patient's own serum as cryoprotection for enhancing the cryopreservation viability of umbilical cord blood cells.

Amidst the several ongoing studies on the properties of telomerase Dr.Goes et al in their article of this issue have studied the influence of the telomerase in the osteogenic process and their studies support the hypothesis that the telomerase accelerates the osteogenic differentiation besides extending the lifespan of mesenchymal stem cells.

This issue also presents a comprehensive record of work being done in the Stem Cell research field presented by leading scientists, clinicians and researchers in the Annual Symposium & Plenary Session on Regenerative Medicine 2009. These include an array of topics like *In vitro* production of RBCs from ES, iPS generation and Stem Cell therapy in Japan by Dr.Yukio Nakamura, Stem Cell applications in Burn Injury by Dr.Yerneni, Stem cells in auditory hair cell repair by Dr.Hata, Hematopoietic Stem Cell Transplantation status in India by Shripad D. Banavali, Recent Innovations in ocular Surface reconstruction by Dr.H.N.Madhavan, *Ex vivo* expansion of Primate CD34+ Cells isolated from Bone Marrow and Human Bone Marrow Mononuclear Cells using a Novel Scaffold by Dr.Deedepiya Devaprasad and many other works presented.

This issue will ignite the dormant seed of Curiosity in the readers' mind to further explore the dimensional possibilities of Stem Cell applications in treating the diseases that are a challenge to the survival of a Healthy human race

Happy Reading!