## SYMPOSIUM ON STEM CELL APPLICATION – (Promises and Potentials, Clinical and Experimental Aspects)

Org. by: Department of Pediatric Surgery, Medical Oncology and Stem Cell facility, AIIMS

August 17, 2008, Venue: Board Room – AIIMS, New Delhi.

Dear colleagues and friends,

The Department of Pediatric Surgery will be holding **Workshop cum Symposium on "Advances in Stem Cell Applications – Promises & Potentials"** at AIIMS from August 16-17, 2008 in honour of Prof P Upadhyaya, who was the founder Professor and Head of Pediatric surgery at AIIMS, on his 80<sup>th</sup> Birthday with the participation of the National and international experts.

The aim is to invite the scientists and the clinicians from India and overseas to exchange knowledge on their ongoing research work and benefit from the deliberations. National and international experts (from USA, Canada, Ireland, Hong Kong, Abu Dhabi, Pakistan), and the Policy Makers from the Ministry of Science and Technology, DBT, CSIR, ICMR would present their research work.

2. It is also planned to release the Reference Book in "Pediatric Surgery – Diagnosis and Management", edited by Dr D.K.Gupta and published by Jaypee Bros, New Delhi. The book has about 1800 page, with 134 contributors from the world, 1200 color figures, in two volumes.

The Presidents of the World Federation, Pacific Federation, Asian Association, the SAARC Association and the Indian Association of Pediatric Surgeons, have kindly accepted the invitation and would be the Guests of honor. The Aims and objectives of the symposium are to invite the clinicians and the experts, deliberate on their various ongoing research projects and learn further for future research as relevant to our needs.

There is NO registration fee for the participation in the symposium; however, an advance confirmation is requested.

Thanking you.

**Devendra K Gupta** Org. Chairman,

9810065280

**Shilpa Sharma** Org. Secretary,

9810863996

**Sujata Mohanty** Org. Secretary, 9868398194

August, 2008

# \_Symposium on Stem Cell Application (Promises and Potentials, Clinical and Experimental Aspects)

(In Honor of Prof P Upadhyaya, Former Professor and Head, on his 80<sup>th</sup> Birthday)

Release of the BOOK – Pediatric Surgery – Diagnosis and Management

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### **Scientific Program**

	Registration : Inauguration of symposium and Release of Book in Pediatric Surgery -	8.0 am - 9.0 am 9.0 AM – 9.30 am
1.	Introduction - Stem Cell Application in regenerative Medicine	D.K.Gupta, AIIMS
2.	Key Note Address: Academic Paediatric Surgery – A Personal Perspective	Prem Puri – President, World Federation of Association of Pediatric surgeons
	Chairpersons: Prem Puri, Paul Tam, DK Gupta, Anirudh Shah	
3.	Stem cells – Promises and Potential -	Sujata Mohanty, AIIMS
4.	Thrust to Stem cell research – A National scenario	Alka Sharma, DBT, Govt of India
5.	Guidelines for stem cell research, including Stem cell Banking	V Muthuswamy, ICMR,
6.	Ethical issues related to Stem Cell Research	T Ganesan, Kochi
	Chairpersons: S Chooramani Gopal, Talal Almalki, MV Padma	
7.	Embryonic Stem Cell differentiation into Neurones	Dr Shyamala Mani, NBRC
8.	Targeting tumor stem cells in their hypoxic niche	Bikul Das, Toronto
9.	Stem cells and regenerative Medicine	Paul Tam, Hongkong
10.	Cancer Stem cells	T S Ganesan, Kochi
	Lunch (1-2 pm)	
	Chairpersons: NK Ganguly, T Ganesan, V Bhatnagar, Sujata Mohanty	
11.	Embryonic stem cell to cancer stem cell: molecular signaling of stemness	Bikul Das, Toronto
12.	Stem cells in Hepatic fibrosis – Pilot study in biliary atresia	D K Gupta
13.	Personalized Medicine.	Paul Tam, Hongkong
14.	Stem cells in stroke	MV. Padma , AIIMS
		WV. I ddina , Milwo
	Chairpersons: Lalit Kumar, Shyamala Mani, , M Bajpai, Radhika Tandon,	WV. Fdania , Arrivio
15.	Chairpersons: Lalit Kumar, Shyamala Mani, , M Bajpai, Radhika Tandon, Clinical application of stem cells in spina Bifida	Shilpa Sharma, AIIMS
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#### SYMPOSIUM ON STEM CELL APPLICATION -

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August 17, 2008, Board Room - AIIMS, New Delhi.

The Department of Pediatric Surgery at the All India Institute of Medical sciences would be holding the **Symposium on Stem Cell Application-Promises and Potentials** with the participation of national and International experts in the field to learn from each other on the ongoing research. Stem cell application is a new field with lots of promises to offer.

Stem cell research is a new field with unlimited scope. Stem cells hold the key to replacing cells lost in many diseases that are caused by loss of functioning cells. The unique capability of this cell to form various tissues under definite signals received from the body, makes this cell an object of extensive research. Stem Cells are unspecialized cells, can divide and renew themselves for long periods of time and become specific specialized cell types of the body. Today, scientists are intensively studying the fundamental properties of stem cells, that is determining precisely how stem cells remain unspecialized and self renewing for many years; and identifying the signals that cause stem cells to become specialized cells. Stem cell research has been found beneficial in diseases like Alzheimer's, Parkinson's, Myocardial infarction, Stroke, Spinal cord injuries, Chronic liver cirrhosis, Sickle cell anemia, Leukemia, Non-Hodgkin's lymphoma and some other cancers, Auto-immune diseases, Multiple sclerosis, Diabetes, Chronic heart disease, End-stage kidney disease, Liver failure, Cancer, Baldness, Infertility, Deafness and Diabetes.

Recently there has been lot of interest in the stem cell research finding a solution to the cure of many diseases, including the cancers, spinal injuries, limb ischaemia, myocardial infarction, and parkinsonism and many more. The field requires dedicated team of basic researchers and clinicians to fully understand the cell physiology, modulators, their potentials and scope of applications more so in the diseases where presently there is no cure. The Department of Pediatric Surgery has been conducting experimental work on stem cell on the Rat model of Biliary atresia. The Department has also conducted the pilot study using autologus stem cells in babies with spina bifida and biliary atresia. There have been very few platforms or the meetings where the researchers in the field of stem cell could meet, present their ongoing work and interact with others freely on the subject.

#### Aims and Objectives of the symposium:

- 1. To provide basic technological information on the isolation, purification, categorization, transportation and delivery of stem cells in animals and human beings, for clinical and animal applications.
- 2. To exchange scientific knowledge with the experts working in different fields of stem cell research and clinical application in India and overseas.
- 3. To invite the clinicians and the experts from India utilize the available current information on ongoing stem cell research elsewhere in the world for designing clinical and experimental research projects in India.
- 4. To discuss the possible role of stem cells, their routes, schedule of therapy and possible side effects in the long term, in various types of congenital malformations especially in the field of pediatric cancers, congenital malformations (spina bifida, biliary atresia, renal dysplasia and Hirschsprung's disease).
- 5. To make use of the expertise and understand how to "Expand Stem Cells" using special modulators so as to use the limited number of cells repeatedly.

#### **Benefits from holding the:**

- 1. To provide a platform to the scientists, clinicians, postgraduates and fellows to learn from the ongoing projects in the field of stem cell research at the National & International level.
- 2. To expose and sensitize the new generation of the scientists, clinicians, the fellows, from India to think laterally and learn about the newer vistas in the field of stem cell research and its clinical application in large number of diseases specially those where there is presently almost no cure.
- 3. It is proposed to have the workshop with the participation of invited guests and delegates who are working in different labs in various fields, including clinical and experimental fields.

There would be technological support, guest lectures, Panel discussions and close interaction with the audience. Various centers in India already carrying out the stem cell research in the country, would be invited and involved in the Workshop cum CME Program. There would also be visits of the experts to the lab at AIIMS for on the spot discussions with the research staff. Invitations would also be sent to the major centers to depute their faculty or the scientists to attend the workshop and benefit from the proceedings. The participation would be complimentary to all. The proceedings would be compiled and circulated to the delegates.

[Devendra K Gupta] Professor and Head,