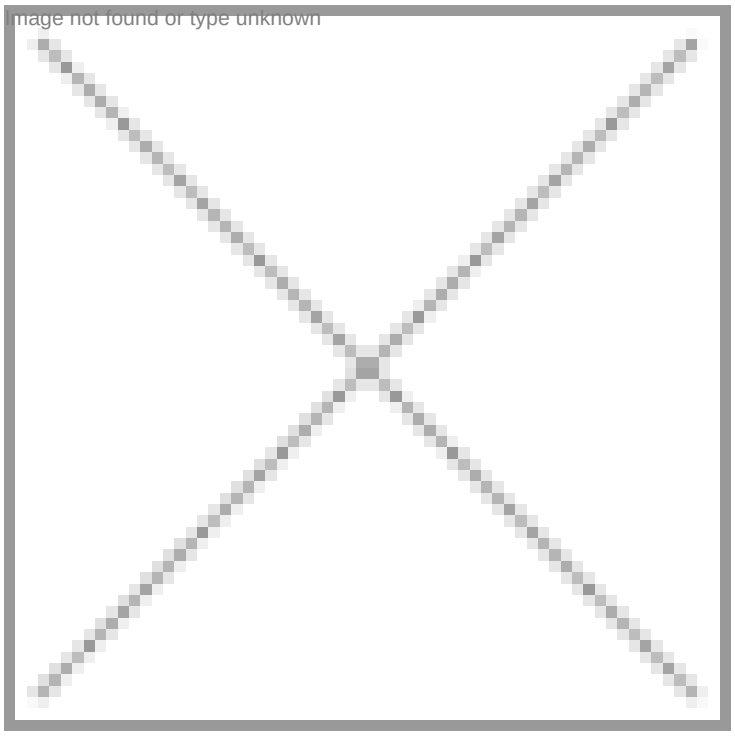
BioSpectrum the business of Bio & Health Sciences

Stem cell researchers gather in Bangalore

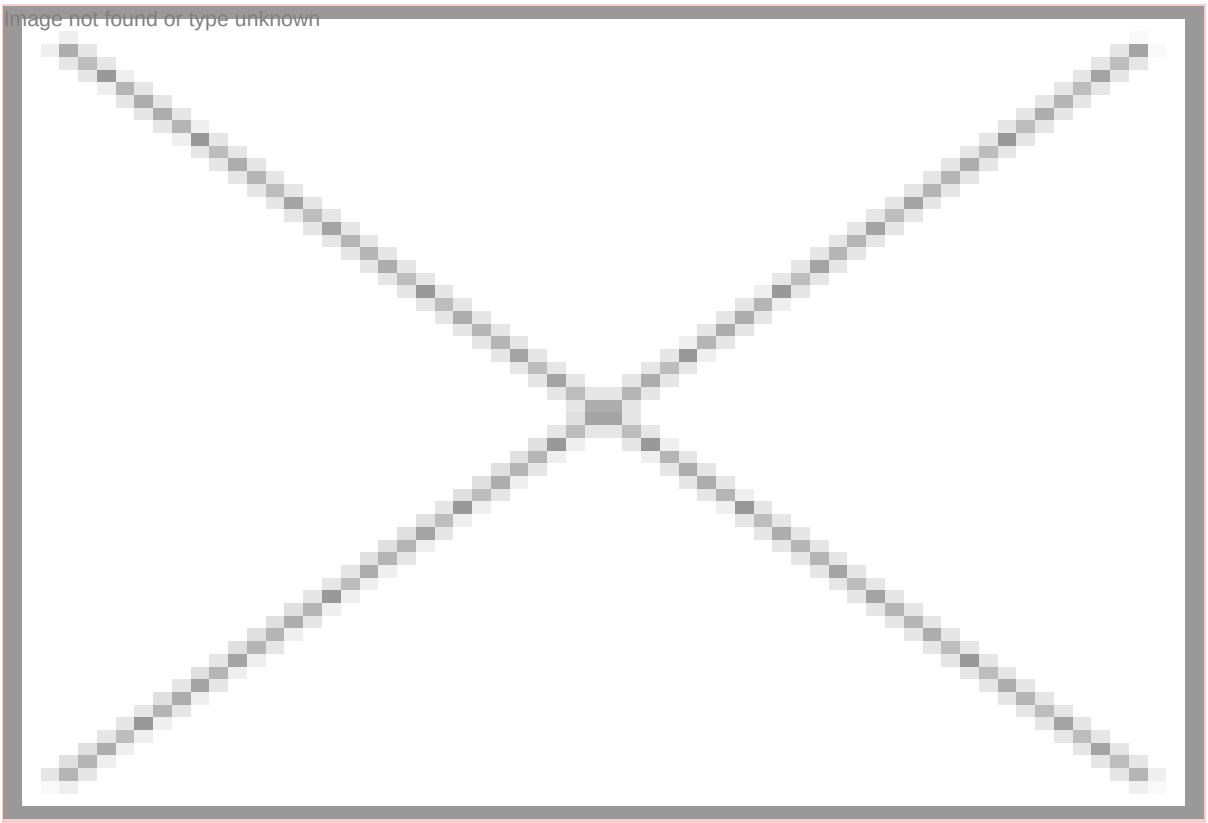
08 February 2007 | News



Stem cell researchers gather in Bangalore

City to get research center

Image not found or type unknown



Dr Ramdas Pai and Dr Ranjan Pai of the Manipal Group at the inauguration of the first international conference of the Stem Cell Research Forum of India (SCRFI) in Bangalore on January 29, 2007.

The first annual meeting of Stem Cell Research Forum of India (SCRFI) in Bangalore has been a huge success. The four-day meeting had the participation of over 350 delegates, including 40 international delegates deliberating over the advantages and the progress of stem cell therapies. About more than 50 scientists spoke at the forum on various aspects of stem cell research across the globe.

SCRFI through this event had attempted to show a glimpse on how India would achieve that $20 billion market contribution by 2010. The forum showcased India's potential to emerge as the largest bench-to-bedside player in stem cells research and therapy in the world. The forum impressed upon the Indian government to take essential steps in developing stem cell research and setting regulatory guidelines to meet international standards.

SCRFI is a society formed to bring biological and medical scientists with common interest in the field of stem cell research and work with the aim of promoting scientific research in stem cell biology. SCRFI has initiated this event to develop a multi-disciplinary network and help the delegates harmonize on their interests. SCRFI, a member of international consortium of Stem Cell Network (ICSCN), had organized the conference in association with Manipal Group and the Department of Biotechnology.

First stem cell research institute for Bangalore

Inaugurating the four-day meet, Dr MK Bhan, secretary, DBT, set the tone for the event and announced that Bangalore will soon have the country's first stem cell research institute. This will give a much-needed fillip to research in this area. "We have a broad strategy to recognize the biology of stem cells and create practical accessible therapies. The way we see it in India is that while promoting science and technology strongly, we want to follow world-class standards of ethics, regulation, and engage the civic society in terms getting their consensus," he said. "The stem cell arena has difficult social and ethical issues attached so we have arrived at a broad consensus on stem cell therapy guidelines. The first draft is on the DBT website and soon the final guidelines will be formulated".

Exhorting the researchers to innovate, he opined, "We need to develop depth in stem cell biology. And if we want to combine science research with innovation then our strategy is to create centers where there are interdisciplinary systems and link it up with the hospitals, medical schools and overseas training. We also need to create a science model that takes into account issues of accessibility." Optimistic about the future of research in this segment, he shared that the scientific mass is slowly gathering in stem cell research area. Talking about the DBT's initiatives he said that the department has supported a large

number of medical institutes to start stem cell groups and "hope in the next few months we will initiate steps to start a full-fledged stem cell research institute in Bangalore."

Talking about the need for creating people for science, he commented, "We have failed in creating the human resource and are way down in numbers in biology scientists. This is a big challenge. We have not seen institutional leadership in creating excellent human resources. The institutes need a new kind of drive and excitement, restructuring and a mix of science and innovation and the scientific community itself needs to reach out more. It is only against such a background that the stem cell research can thrive."

Stressing on the importance of international collaborations, he said that international partners should be valued more in India now and that the science managers have to think of new ways to bring more energized collaboration in India.

The active support of the premier government science agency will definitely help the stem cell family to soon grow in strategy, vision and size.

White Paper on stem cell technology for India

The International forum was a great platform for the Indian stem cell researchers to connect with other researchers across the world. Dr Ramananda S Nadig, CEO of Bangalore-based Stempeutics, stated, "This forum is an eye opener for the use of stem cells in all kinds of therapy. Through this event scientists in India can converge with their counterparts from other countries and get a bird's eye view of the various stem cells technologies and applications. Scientists in India get an opportunity to clarify their doubts and also discuss the regulatory compliances involved in stem cell research." Dr Nadig also stated that through this conference stem cell leaders in India would be able to impress upon Dr Bhan to formulate a 'White Paper' on stem cell technology for India.

"Medicine today is moving rapidly toward the development of more effective cures for a host of diseases. In the past, doctors could usually only treat the symptoms of illness â€“ treatments rarely addressed the causes of disease. Today, many of the cures being developed by scientists are based on advanced techniques that are able to target the causes of disease rather than simply treating the symptoms. This field of medicine is known as stem cells and regenerative medicine," stated Dr Satish Totey, director of Manipal Institute of Regenerative Medicine and Secretary of SCRFI on the application of stem cells.

The international forum provided a platform for the leaders in stem cell, biotechnology and pharma industrialists to share their views on stem cell research and offered numerous opportunities to forge professional alliances. The participants deliberated over the future of stem cells in transplantation and tissue generation in vitro. They also discussed the application of stem cells to restore function in various diseases including spinal cord injury, myocardial infarction, leg ischemia, diabetes mellitus, Parkinson's disease etc. in animal models and humans.

India to hold $540m in global stem cell market by 2010

The fourth day of the annual meeting of Stem Cell Research Forum of India (SCRFI) set a platform for global participants to gain an insight into the progress of stem cell research.

The presentations and posters made by leading scientists and entrepreneurs gave an insight into its immense application in incurable diseases and its scope in the growing regenerative medicine market. Participating scientists and students had a peek into the works of pioneers, which would be published in popular journals only a year later.

At the event, one of the key delegates, Linda F Powers, managing director of Toucan Capital, a leading US investor in stem cells and regenerative medicine, explained what attracts investors and venture capitalists to invest in stem cell research and its products. She stated that investors are bullish on stem cell products that have application in treatment of diseases that cannot be cured by non-cell products. Ideally, investors are interested in stem cells products that have application in curing diseases that have plenty of unmet need, i.e. in spinal cord injury, diabetes, Parkinson's disease, cardiovascular diseases, cornea regeneration and off-late AIDS cure. In addition, stem cell products that are less cumbersome at the point of care, easy handling and those that are feasible for storage attract immediate investment.

Dr Donald W Fink, biologist and regulatory review scientist at the US FDA, suggested that it would be ideal to have one single international body to overlook all regulatory aspects of drug approvals. This single body could have one common procedure to meet regulatory requirements and drug approval standards. His suggestion should certainly reduce many procedures for introducing products in different countries.

Dr Satish Totey explained the scenario of stem cell market in India. He indicated that the global market for stem cell therapies is expected to be $20 billion by 2010. India is expected to contribute about $540 million with an annual growth rate of 15

percent. There are about 180 stem cell companies in the world. Majority of these companies are based out of the US, Europe, Israel, Thailand, Canada and Australia.