

Indo-German Forum on Regenerative Medicine – Journey and first meeting in India 30/01/2010 – 07/02/2010

A science delegation of the Regenerative Medicine Initiative Germany has broadened the way for collaboration with selected partners from the Indian subcontinent. In the first week of February, a group of 15 scientists visited a range of scientific institutions, clinics and companies in the cities of Bangalore and Hyderabad. Promising contacts have been established and there is great interest from both sides to establish collaborative projects, to foster exchange of young researchers and to explore technology transfer between the two countries.

The German group represented leading scientific organizations, centers and networks in the field, from the cities of Berlin, Bonn, Cologne, Dresden, Erlangen, Hannover, Leipzig, Rostock and Tübingen. Renowned Indian organizations were visited such as the National Center for Biological Sciences in Bangalore where the new national Indian Stem Cell Institute is being set up. Furthermore, in Bangalore the Manipal Institute for Regenerative Medicine, the Manipal Hospital and its spin-off stem cell company Stempeutics were visited. One more highlight of the journey was the visit of the L.V. Prasad Eye Institute in Hyderabad – one of a kind worldwide – where stem-cell based treatment of eye diseases is already in practice with more than 700 patients.

Both, possible synergies and large differences between the German and the Indian practice of basic and clinical research were encountered. Basic mechanisms for stem cell treatment of Vitiligo (lack of skin pigmentation), an indication with substantial impact in India, are under investigation at the Indian Institute of Science in Bangalore and perhaps, a fruitful collaboration can be established with a German company specialized in skin disorders. At the Owaisi Hospital in Hyderabad large numbers of patients are being treated with fetal liver stem cells, since these patients do not qualify for organ transplants. With the Department of Biochemistry from the University of Hyderabad the setup of a multi-center research and training programme, including summer and winter schools in the two countries was discussed.

At the conference “BioAsia 2010” in the city of Hyderabad, the booth of the RMIG was extremely well visited, especially by large numbers of students interested in educational opportunities in Germany. A key note lecture by Professor Gustav Steinhoff from the German Reference and Translation Center for Cardiac Stem Cell Therapy (RTC) in Rostock was well-received and referred to in the national newspaper “The Hindu” with the headline “Cardiac stem cell therapy holds promise - Findings of trials presented at BioAsia 2010”.

A special session of the BioAsia 2010 was dedicated to the first meeting of the Indo-German Forum on Regenerative Medicine with a workshop entitled “From Proof of Concept to Cell-based Medicinal Products”. Here, about 30 participants discussed necessary preconditions for the conduct of bilateral clinical multicenter studies with a focus on regulatory affairs in both countries. During the discussion, recommendations were made to identify clinical projects in which partners from both India and Germany might team up and establish first examples of how to resolve hurdles in bilateral clinical translation. The lessons learned of those pilot cases might then be transferred to further projects and disseminated by a central communication platform of the Indo-German Forum – for instance in the form of an online registry or by follow-up workshops. Further recommendations were made to develop a bilateral exchange and training program for young researchers as well as to define bilateral

basic research projects to understand the underlying mechanisms of regeneration – even beyond the realm of stem cell research.

“This journey was a great opportunity to meet with potential partners from a country with exciting perspectives in the field of regenerative medicine. We hope to be able to follow up on some of the many project ideas as German science needs to internationalize” says Prof. Skutella, Director of the Centre for Regenerative Therapies in Tübingen.

The journey to India was arranged by the Regenerative Medicine Initiative Germany, official partner project within the campaign “Germany - Land of Ideas” of the German Ministry of Research and Education, and an activity of the Indo-German Forum on Regenerative Medicine.

List of visited institutions in India:

Centre for Cellular and Molecular Biology – CCMB, Hyderabad
Deccan College/Centre for Stem Cell Science – CSCS, Hyderabad
Indian Council of Medical Research, Delhi
Indian Institute of Science, Bangalore
Institute for Stem Cell Biology and Regenerative Medicine (inStem), Bangalore
L.V. Prasad Eye Institute, Hyderabad
Manipal Institute of Regenerative Medicine, Bangalore
National Centre for Biological Sciences – NCBS , Bangalore
National Institute of Medical Statistics, Delhi
Owaisi Hospital & Research Centre, Hyderabad
Stempeutics, Bangalore
University of Hyderabad - Biochemistry Department
University of Hyderabad - Lab Drug Development
University of Hyderabad - School of Lifesciences
Vimta Labs, Hyderabad

List of German delegation participants:

Title	Name	Surname	Institution
Prof. Dr.	Wilhelm	Aicher	Center for Regenerative Biology and Medicine - ZRM, Tuebingen
Dipl.-Ing.	Joeri	Borstlap	Berlin-Brandenburg Center for Regenerative Therapies - BCRT, Berlin Regenerative Medicine Initiative Germany - RMIG, Berlin
Dr.	Denis	Corbeil	Technische Universität Dresden
Dr.	Egebert	Flory	Paul-Ehrlich-Institut, Langen
Prof. Dr.	Jürgen	Hescheler	University of Cologne
	Luis	Hügel	Regenerative Medicine Initiative Germany - RMIG, Berlin
MA, MSc	Tanja	Klett	Regenerative Medicine Initiative Germany - RMIG, Berlin
	Ralf	Naumann	Translational Centre for Regenerative Medicine - TRM, Leipzig Regenerative Medicine Initiative Germany - RMIG, Berlin
Dr.	Michael	Ott	Helmholtz Research Institute for Infection Research, Hannover Hannover Medical School
Dr.	Barbara	Pfüller	Berlin-Brandenburg Center for Regenerative Therapies - BCRT, Berlin
PD Dr.	Lothar	Just	Center for Regenerative Biology and Medicine - ZRM, Tuebingen
Prof. Dr.	Thomas	Skutella	Center for Regenerative Biology and Medicine - ZRM, Tuebingen
Prof. Dr.	Gustav	Steinhoff	Reference- and Translation Center for Cardiac Stem Cell Therapy - RTC, Rostock
Dr.	Gudrun	Tiedemann	Reference- and Translation Center for Cardiac Stem Cell Therapy - RTC, Rostock
Prof. Dr.	Edda	Tobiasch	Bonn-Rhine-Sieg University of Applied Sciences, Rheinbach
Prof. Dr.	Jürgen	Winkler	ForNeuroCell University of Erlangen-Nuernberg