

Brain Research: Indo-U.S. Cooperation

Brain research in India has strong U.S. connections and evidence of that is the National Brain Research Centre in Manesar, Haryana, the only center in India totally dedicated to brain research. Most faculty members have been to American universities as students, researchers, or professors or have worked on projects funded by U.S. agencies. The center also works with the National Institute of Mental Health in the United States.

An Indo-U.S. workshop on Developmental Neuroscience and Imaging, organized in New Delhi in late February, is another example of this cooperation. The workshop was sponsored by the Indo-U.S. Science and Technology Forum and brought together scientists and faculty members from leading American universities and Indian institutes.

"The goal of the workshop was to provide a platform for updating, discussing and establishing research collaborations to advance the application of brain imaging technology and understand the developmental brain processes in humans," says Dr. Nandini Chatterjee Singh, Indian coordinator of

the workshop and an assistant professor at the National Brain Research Centre. She had worked at the University of California, Berkeley, and at Ohio University before returning to India in the fall of 2002. Issues related to development of the brain from the fetus stage to adulthood were discussed during the workshop. "The complementary brain research capabilities of the Indian and U.S. researchers were evident during the three-day program and a number of collaborations have been proposed. Indians have the computational and neuro-anatomical expertise, whereas U.S. researchers have strong imaging capabilities," says Dr. Singh.

Dr. P. K. Roy, an additional professor at the National Brain Research Centre, has worked with the University of Connecticut, University of California, Berkeley, and the Medical College of Wisconsin as a research scientist and guest professor. He discussed how MRI (magnetic resonance

imaging) can offer a glimpse into degeneration and repair of the nervous system. Dr. Hubert Priesl of the University of Arkansas for Medical Sciences explained the role of fMRI (functional magnetic resonance imaging) in investigating information processing in the

Above: The National Brain Research Centre in Manesar.

human brain, while Dr. Scott Holland, associate professor at the University of Cincinnati, discussed using fMRI to study language development in children.

The National Brain Research Centre, which was inaugurated in December 2003, obtained its first fMRI facility in September 2006. The technology is to be used to learn how the brain reacts when humans make certain cognitive choices, says Dr. Roy. —G.A.

