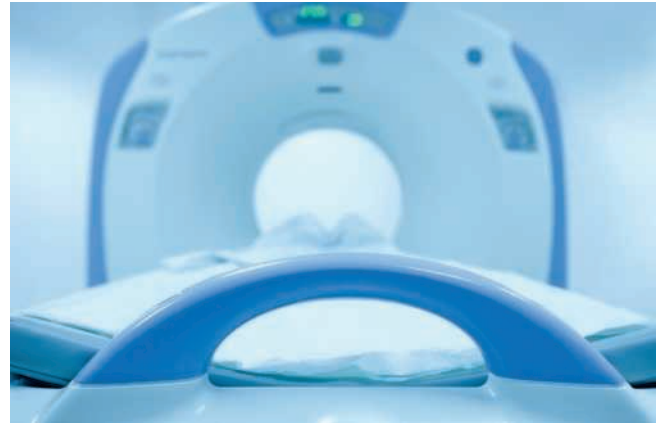


A brain research centre in Beijing

The State Key Laboratory of Cognitive Neuroscience and Learning at **BEIJING NORMAL UNIVERSITY** is dedicated to improving the intellectual development of the young and reducing cognitive decline in the elderly.



The State Key Laboratory of Cognitive Neuroscience and Learning at Beijing Normal University (BNU)

was established in 2005 for exploring learning and brain plasticity. With leading psychology programmes and research teams, it has China's first PhD programme in cognitive neuroscience and is a key innovation hub for brain and cognitive science. The laboratory, which studies cognitive function, aims to promote healthy psychological development of children and find solutions to cognitive disorders. Through research and education, it has substantially promoted China's development in brain science.

A focus on child cognitive and brain development

Childhood and adolescence are usually considered the golden age for learning and intellectual

development. Among China's 200 million-plus youth and children, many suffer from various developmental disorders, demanding timely diagnoses and appropriate interventions.

To enhance the intellectual development and education of Chinese children, researchers at the BNU state key laboratory are using cutting-edge science to look at how genetic and environmental factors influence brain and cognitive development in children.

With support from the Ministry of Science and Technology, the BNU state key laboratory has led 52 other Chinese universities and research institutes to complete China's first large-scale survey on the psychological development of children and adolescents. The survey studied cognitive capability, academic achievement, social adaptation and growth environment of

nearly 100,000 6-15-year-olds in 31 provinces across China. The data collected were fed into China's first large-scale national database on the psychological development of children and youth, providing important benchmarks for brain cognitive function testing and tools for future research.

Through basic and applied research on the evaluation of children's cognitive and learning capacities, as well as on the identification and intervention of learning disorders, researchers at the BNU state key laboratory have accumulated rich experience for research and practice. Their many publications in multi-modal brain imaging and brain development data analyses have made the laboratory internationally recognisable. A series of software packages and application platforms it developed, based on methodologies for studying

children's brain development, are widely used in China and overseas.

Research on cognitive and brain ageing

Another research focus of the laboratory is brain and cognitive ageing in the elderly. The laboratory started the Beijing Ageing Brain Rejuvenation Initiative (BABRI) in 2008, which evaluated the cognitive function of nearly 10,000 elderly people in Beijing, and provided free individualized advice about improving quality of life to 6,000. By building a database on the ageing of brain and cognitive functions, the initiative has assisted in mapping the trajectory and degeneration of cognitive function in elderly Beijing residents. The study has revealed how common conditions, like high blood pressure and diabetes, damage brain and cognitive capacities, providing important support for designing evaluation and interventions that prevent cognitive disorders developing in the elderly. ■



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