Cuban Neuroscience center incorporates advanced technologies

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The new headquarters of the Centre of neuroscience of Cuba (CNEURO), located in the Havana municipality of Playa, will enable to enhance the investigative institution capacities, the availability of advanced technologies that guarantee to undertake a wider range of studies with the utmost rigor and reliability in the results.

Thus, for example, the institution now has for the first time of a magnetic resonance of high-resolution (3 Tesla, the of highest field installed in the country), recently donated by the University of Maastricht, the Netherlands, and equipment designed specifically for scanning so vital organ.

Dr. Pedro Valdés Sosa, deputy general director of CNEURO, said that this device provides anatomical and functional images faster and more detailed brain, which will deepen the understanding of the mechanisms related to its operation, more accurately to assess the damage caused by various diseases of the nervous system, and be able to detect early evidence suggesting the possibility of some of them.

It will also be available for those cases requiring a very accurate diagnosis by the complexity of the clinical manifestations, and in clinical trials of new drugs that have an effect on the brain.

Planned to begin providing services before the end of 2014, the team will be joined research work referred to within the Cuban project of brain mapping, organized by the institution itself, and among whose most significant contributions have been characterized for a range of ages

from 15 to 60 years, the cortical thickness and brain connections of the typical Cuban appears.

Such data are extremely useful in monitoring patients with epilepsy, violent behaviors, language, schizophrenia and other neuropsychiatric disorders.

A technological innovation from the Center is the installation of a modern three-dimensional printer intended for the manufacture of dentures, which will make it possible to develop them with the highest quality and aesthetics, in addition to reporting a remarkable increase in productivity.

As concerns the doctor Pedro Valdés, also in the Center were created new facilities aimed at increasing Medicid medical equipment, Neuronica and Audix productions, and to foster the development of neurotechnology, emerging branch of a promising industry to achieve next-generation products for the diagnosis and treatment of brain diseases and improve mental performance.

The interest of the international scientific community towards the progress of Cuba in this field was the presence at the opening ceremony of the new headquarters of CNEURO's renowned world figures, including Jacques Beursgens, Deputy Director of the Faculty of psychology of the University of Maastricht; Barry Horwitz, Chief of the section of brain imaging and modeling of the National Institute of deafness and communication disorders, from United States; Steven Hillard, Professor of Neuroscience at the University of California; Helen Neville, Professor in the Department of psychology at the Institute of Neurosciences of the University of Oregon, and Edson Amaro, President of the Latin American chapter of the Organization of brain mapping.