

PRESIDENT LEE LEADS DELEGATION TO RUSSIAN ACADEMY OF SCIENCES BRANCH IN VLADIVOSTOK

President Si-chen Lee led an NTU delegation to the Far Eastern Branch of the Russian Academy of Sciences (FEB RAS) in Vladivostok, November 21-24, 2011. The delegation included Dean of Research and Development Ji-wang Chern, Prof. Shih-ming Lin, Center for Optoelectronic Biomedicine, Prof. Chieh-hsiung Kuan, Graduate Institute of Electrical Engineering, and Dr. Chun-fu Lai, College of Medicine.

President Lee initiated the trip on the recommendation of Dr. Min-liang Kuo, associate dean of research and development of the Institute of Toxicology, College of Medicine, as well as director general of the Division of Life Science, NSC. Dr. Kuo, who visited the FEB RAS in 2010, was deeply impressed by FEB RAS's use of magnetoencephalography and the acupuncture energy channels of Chinese medicine to diagnose diseases, and suggested that NTU pursue academic cooperation with FEB RAS.

President Lee and his delegation were received by FEB RAS Vice Presidents Yuri N. Kulchin and Vladimir Chumakov, International Office Director Vladimir V. Borodin and Innovation and International Relations Office Director Alexander I. Cherednichenko, and were briefed on the FEB RAS's research mission, which includes the development of marine sciences in the Russian Far East as well as the fields of life science, biochemistry, medical physics, nanotechnology, mechanics and automation, and humanities and social sciences.

The NTU delegation was interested in the FEB RAS biotechnology center's extraction of materials from marine organisms for researching and creating active pharmaceuticals to fight cancer, protect the liver, regulate the immune system and work as antioxidants. NTU sees potential for research cooperation between the FEB RAS and NTU researchers in medicine, pharmacology, biotechnology and marine biology.



The Medical Complex of the Far Eastern Branch of the Russian Academy of Sciences

President Lee's delegation also visited the FEB RAS Medical Complex, where it held discussions with Chief Physician Sergey Kryzhanovskiy, Director Alexander Rybchenko of the Ecological Neurocybernetic Laboratory, Arctic Research Center, and Laboratory Director Larisa Bogdanovich. The Russian scientists reported on the Ecological Neurocybernetic Laboratory's medical physics research achievements and applications. The lab's magnetoencephalography equipment is of the type once used for medical projects under the Russian space program, able to detect latent diseases and provide treatment. The lab uses this equipment for the early detection of disease and evaluation of overall health condition, and has utilized it in the clinical treatment of ocular diseases.

The NTU team recognized similarities between some of the lab's research work and the Chinese medical theory of acupuncture energy channels, and sees potential for cooperation between the two institutions which might lead to breakthrough developments. The NTU officials, who were each tested with the FEB RAS equipment, expressed interest in bringing such instruments to Taiwan and cooperating in research on clinical applications.

(Left) President Lee's delegation is briefed on innovative pharmaceuticals at an FEB RAS technology exhibition hall; (center) The NTU delegation poses for a photo with members of the FEB RAS; (right) An FEB RAS researcher presents research results.

