BioSpectrum the business of Bio & Health Sciences ASIA EDITION

NCKU, Novo Nordisk sign research and license agreements

May 16, 2012 | News | By BioSpectrum Bureau

NCKU, Novo Nordisk sign research and license agreements



Singapore: A southern Taiwan-based National Cheng Kung University (NCKU) research team led by Ming-Shi Chang, NCKU professor of the epartment of Biochemistry and Molecular Biology, have come up with a potential new anti-osteoporosis and anti-rheumatoid arthritis drug. NCKU, which discovered the anti-interleukin-20 (anti-IL-20) antibody, agreed to license selected intellectual property and transfer certain technology to Novo Nordisk A/S, for a total payment of $13.3 million in case of a successful completion of the project.

In addition, professor Chang and Novo Nordisk A/S have established a two year research collaboration to further strengthen and possible expand the usages of an IL-20 antibody.

Mr Hwung-Hweng Hwung, president, NCKU hailed the groundbreaking discovery of anti-interleukin-20 antibody, "The findings not only mark a milestone in global healthcare, but also raise the visibility of Taiwan's academic research."

This medical discovery was published in theÃ?Â *Journal of Experimental MedicineÃ?Â* (JEM) and has drawn huge attention in the academic world and the biotechnology industry as well. IL-20 has a key role in osteoclast differentiation, and blockading this cytokine could represent a novel therapeutic approach for osteoporosis, according to data from the NCKU medical team.

The chief editor ofÃ?Â *Nature Reviews*Ã?Â wrote a research highlight in the September issue ofÃ?Â *Nature Reviews Rheumatology*Ã?Â commenting on this finding, whileÃ?Â *Science-Business eXchange*Ã?Â (SciBX) published a cover story reporting on the discovery in the same month. The study not only signifies groundbreaking findings in the pathogenesis of osteoporosis, but could lead to the innovation of new drugs to treat osteoporosis and rheumatoid arthritis.

Professor Chang pointed out that the medical expense of anti-osteoporosis drugs for patients around the world is estimated to be as much as $8 billion per year, and that the amount spent on them by 2015 will be about $8.8 billion. Chang's team has discovered that IL-20 is an important factor in bone cell differentiation and that high serum IL-20 levels in osteoporosis patients cause bone destruction.