

Wen-Fei Chiou, Ph.D.
Deputy Director/Research Fellow
National Research Institute of Chinese Medicine
Ministry of Health and Welfare
Chinese Taipei
Email: wfchiou@nricm.edu.tw

## **EDUCATION**

Ph.D., Institute of Pharmacology, National Yang-Ming University, Taiwan (1992/9-1995/7) Master, Institute of Pharmacology, National Defense Medical Center, Taiwan (1988/9-1990/7)

## **SPECIALIZATION**

Inflammation and Bone homeostasis (Osteoporosis)

## RESEARCH DESCRIPTION

My research focus on developing the potential natural resources (TCM or herbal medicine) for the treatment of osteoporosis, a disease caused by dysregulation of bone homeostasis and induced a reduction in skeletal mass due to an imbalance between osteoclast-mediated bone resorption and osteoblast-mediated bone formation. Current drugs used to treat osteoporosis include bone resorption inhibitors, which prevent further bone lose and maintain bone mass by inhibiting the function and differentiation of osteoclasts. Besides, agents that regulate bone formation act by either increasing the proliferation or inducing differentiation of the osteoblasts can stimulate new bone formation. After screening more than 70 candidates, we found that *Vitis thunbergii.*, *Helminthostachys zeylanica* (L.), *Sambucus formosana* (SF), *Polygonum cuspidatum* and their active components displayed the potential to inhibit osteoclastogenesis and induced osteoblastogenesis, respectively.