allied academies Joint Event on
Global Congress on
BIOTECHNOLOGY
&
Annual Congress on
EMERGING MATERIALS AND NANOTECHNOLOGY
September 06-07, 2018 | Bangkok, Thailand
Kampon Sriwatanakul, Biomed Res 2018, Volume 29 | DOI: 10.4066/biomedicalresearch-C4-009

Kampon Sriwatanakul
Vitastem Co, Ltd, Thailand

Biography

Kampon Sriwatanakul is an internationally recognized pioneer of stem cell therapy, received MD degree and PhD degree from Mahidol University where he had an academic career for more than 35 years. He has also received training in Clinical Pharmacology from University of Leicester, UK and University of Rochester, USA. Apart from publishing more than 40 publications in international journals, he has spearheaded several important research and development activities related to stem cell technology in Thailand, including setting up of cord blood and tooth cell banking.

drsrikul@gmail.com

POTENTIAL OF PROBIOTICS AS A NEW BIOTHERAPEUTIC AGENT FOR BOOSTERING THE IMMUNE SYSTEM

Probiotics or heath-beneficial bacteria have recently been introduced as the new biotherapeutic agents for boostering immune system as well as treatments of several chronic diseases. Probiotics have also been demonstrated to exert positive effects on the composition of gut microflora and overall health. This presentation provides an overview research and development of probiotics, emphasizing non-dairy foods that contain probiotic bacteria. Production of the Lactobacillus genus is found mostly in dairy products with yogurts, kefir and cultured drinks. Our research group decided to use the plant sources which are more beneficial and have much less side effects than animal products. Cordyceps militaries, Houttynia cordata and other immune-boosting herbs were carefully selected as the raw materials for probiotic production. The finished product contained mixture of probiotics including *L Plantarium, L acidophilus, B subtilis* and *Saccharomyces cerevisiae.* It was well recognized that a healthy body is dependent on a strong immune system. Probiotics help maintain intestinal microbial balance and gut mucosa development. Our pilot studies indicated the potential applications of this plant-based probiotic mixture in the treatments of chronic allergies, frequent infections and autoimmune disorders. The immune status tests also showed marked increases in NK cell, CD4, CD8 cell counts as well as restoring immune balance. We believe that probiotics communicate with the host by proteomic recognition receptors, such as nucleotide binding oligomerization domain, which modulate key signalling pathways. Our future goal of research is to explore probiotic mode of action focusing on how gut microbiome influence the host immune system.

Note: