Approaches in the translational R&D of traditional Chinese medicine (TCM)

Experience-based TCM has played a key role in maintaining the health of people in China and several Asian regions, now becoming popular world-wide; its value remains largely not accepted in conventional medical circles. Questions for underdevelopment may include: Is there any initiative to link TCM and conventional medicine in the communities outside China? Is TCM difficult to be integrated into conventional healthcare? Is there research finding to support TCM integration in conventional healthcare? Is there lack of curriculum in the basic training catered for integrative healthcare? Advances in research of biomedical, chemical and computational technology will provide multidisciplinary approaches to investigate Evidence-Based aspects of TCM practice. Future translational R&D of TCM can focus on the following key areas: DNA/chemical fingerprinting techniques for GACP of Chinese materia medica (CMM) and proprietary Chinese medicines (PCM) for assurance of quality; Chemometrics and bioactivities integration to provide niche R&D for CMM/PCM; TCM pattern differentiation to stratify patients before RCT of PCM; TCM-QOL instrument for patient reported outcomes (PRO) linking with biomarkers/biomedical indices for Evidence-Based assessment in TCM practice and PCM development. A global shortage of qualified human resources who understand both TCM and orthodox medicine (OM) modern technologies are also key factors in delay of modern progress. A quantitative method is urgently needed to record PRO, health and disease status based on TCM principles. We need TCM-OM integrative approach to support research and training of future human resources for integrative medicine. The lecture will focus on some of these issues.

Biography
Kelvin Chan (DSc PhD FCP FRPS FRSM) is the Joint Chair of Traditional Chinese Medicine (TCM) at the University of Sydney and University of Western Sydney appointed to establish strategic research & development of the TCM in NSW and to understand the cultural role of the discipline in community healthcare. Trained in Industrial Pharmacy, then specialised in Clinical Pharmacology in the UK, he has taught pharmacology in orthodox medicine, pharmacy and biomedical science in TCM at universities in Hong Kong, UK and UAE. Research interests, working closely with counter parts in key labs in Hong Kong, Heilongjiang, and Macau in China and with colleagues in the EU/UK, include R & D of Chinese medicines; Methodology on quality control of Chinese materia medica (CMM); ‘Omics’ approaches in bioactivity screening; Integrative research in TCM with biomedical medicine applying patients’ reported outcomes and quality of life measure in clinical studies; Promoting education & training curriculum towards integrative medicine.

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