Research Assessment Exercise 2020 Impact Overview Statement

University: Hong Kong Baptist University Unit of Assessment (UoA): 6 Chinese Medicine Total number of eligible staff of the university in the UoA: 22

(1) Context

a. Achieving High Impact on Health Policy, Professional Behavioral Changes and Wellbeing of Chinese Medicine Clinical Practice

Our school has 17 clinical centres in Chinese Medicine (CM) and these centres attracted more than 1,500,000 patients in the last 15 years. Our clinical services and research always aim to provide a full range of Chinese medicine healthcare services to cater to the public's needs. Through more than 20 clinical studies in the last six years, we have provided evidence-based Chinese Medicine practice guidelines to build Hong Kong's first Chinese medicine hospital. Through continuous efforts, the government stated its "plan for a Chinese medicine hospital at Tseung Kwan O" in the Chief Executive's 2017 Policy Address. In the 2018 Policy Address, the government further emphasized to establish the Chinese Medicine Hospital Project Office and the Chinese Medicine Unit to push the Chinese Medicine Hospital start-up. In view of an ageing population affected by chronic diseases, our School has received a fund of almost HK\$95.18 million from The Hong Kong Jockey Club Charities Trust to launch the "Jockey Club 'Embrace Health' Chinese Medicine Programme". The Centre is the first health service organization in Hong Kong with the core concept of "prevention before disease onset" with four health management platforms. It also meets the need of the government to promote the development of primary care. The team led by Prof. Lyu Aiping and Prof. Bian Zhaoxiang have made great progress in CM Clinical Practice Guidelines (CPGs) in Hong Kong and Mainland China. They established the first CM evidence-based CPGs in Hong Kong and developed the process of guidelines in CM in 2015. A national survey of 4,503 Chinese Medicine doctors in 28 provinces of China showed that most doctors regarded CPGs-recommended therapies as safe (92%), economic (84%), and effective (76%). Approximately four-fifths of the Chinese Medicine doctors selected 'acceptable' (60.84%) and 'acceptable after revision' (19.23%) regarding their understanding and application of the CPGs.

b. Realizing standardization and globalization of Chinese Medicines

Since 2002, our School has worked as one of the research institutions for the Hong Kong Chinese Materia Medica Standard (HKCMMS). With the development of modern analytical techniques, it is now possible to isolate, identify and control the complex compounds in herbal remedies. In addition, the safety of herbal medicines can be ensured by assessing for components such as heavy metals, ash content and microbial contaminants. These research results of Traditional Chinese Medicine (TCM) quality control can provide guidance for the government on regulatory and quality assurance standards to tackle the misuse of poor quality, adulterated or counterfeit products. These findings have laid the foundations for quality control by the HKCMMS. Prof. Chen Hubiao is the founder and director of the *Medicinal Plant Images Database*, *Chinese Medicinal Material Images Database and Phytochemical Images Database*. Featuring a combination of photos and text, the *Medicinal Plant Images Database* systematically categorizes and presents knowledge on over 1000 medicinal plants from Western and Chinese origins. Different platforms were established for information sharing and communication, such as sharing information about plant or herb image, chemical profiles and research data, or obtaining

reliable objective information resources for researchers, public and industries. Prof. Zhao Zhongzhen and Prof. Chen Hubiao are the editors of a series of publications including *Encyclopedia of Medicinal Plants*, *Easily Confused Chinese Medicines in Hong Kong*, *Chinese Medicinal Identification*, and *Illustrated Microscopic Identification of Chinese Medicines*, in different languages, which serve as worldwide reference books of TCM.

(2) Approach to impact

a. Affecting the government's health policy to establish the Chinese Medicine Hospital, and the Government Chinese Medicines Testing Institute

b. High impact on the community healthcare strategy of the Government by building up the Hong Kong Baptist University-Jockey Club Chinese Medicine Disease Prevention and Health Management Centre, and establishing online databases to provide new digital multi-language reference resources

c. Implementing evidence-based Chinese Medicine clinical guidelines to standardize professional practice, and establishing the TCM online databases for researchers, industries and the public to alter the user behavior from print reference to digital one

(3) Strategy and plans

a. Dedicating continuously to establish the first Chinese Medicine Teaching Hospital and prompting the government's decision to build up the Chinese Medicine Hospital

b. Meeting the need of the government to promote the development of primary care with the core concept of "prevention before disease onset" with four health management platforms in Chinese Medicine

c. Establishing research institutions for Hong Kong Chinese Materia Medica Standard

d. Featuring a combination of photos and text, the *Medicinal Plant Images Database* systematically categorizes and presents knowledge on over 1000 medicinal plants of Western and Chinese origins

(4) Relationship to case studies

Our School has always been dedicating to nurture high quality Chinese Medicine professionals, conduct innovative Chinese Medicine research, provide first-class healthcare services and encourage the standardization and robust development of Chinese Medicine.

The two cases we submitted include Chinese Medicines and Chinese Medicine clinical practice, which are two fundamental aspects to engage in the testing and authentication of Chinese Medicines and to develop Chinese Medicine therapeutics to foster health, in view of advancing Chinese Medicine from all perspectives.