HONG KONG BAPTIST UNIVERSITY Talent 100 PhD Scholarship Scheme (2021-2022 Cohort) <u>List of Potential Principal Supervisors</u>

| No. | Name | Faculty/ School/ AVA | Department | Research Interests | Research Profile | Preferred Student's Background |
|----------------------------|---------------------|-------------------------|------------------|--|---|---|
| Computational Medicine Lab | | | | | | |
| 1 | Prof. Zhiling YU | Chinese Medicine | Chinese Medicine | Traditional Chinese medicinal herb-based anticancer drug discovery, focusing on repurposing tumor-oriented phytocompounds that have been marketed as drugs: Repurposing old drugs advantages compared to the development of new entities; Exploring the potential of their anticancer applications. Dr Xiuqiong FU (https://scm.hkbu.edu.hk/en/expertise/detail/expertise_118.html) will serve as the Co-I. | https://scm.hkbu.edu.hk/en/expertise/detail/expertise_11.html | Molecular Biology, Pharmacology, Biochemistry |
| 2 | Prof. Hongjie ZHANG | Chinese Medicine | Chinese Medicine | Prof. ZHANG is an expert in phytochemistry and drug discovery from natural resources; He has more than 30 years of research experience in identification, analysis, synthesis and biological evaluation of small molecules of natural products; His current research interest focus on drug discovery and development from natural resources, as well as the development of botanical dietary supplements from herbal medicines. Dr Wei Shen AIK (https://chem.hkbu.edu.hk/aik) will serve as the Co-I. | | Student with background of strong organic chemistry or molecular biology is preferred. |
| 3 | Dr Jialing ZHANG | Science | Chemistry | Dr ZHANG's laboratory focuses on molecular imaging using cutting-edge mass spectrometry methods and the integration of artificial intelligence, to serve the goal of enhancing precision of cancer research. Using the mass spectrometry as the molecular analysis platform, the laboratory will develop new mass spectrometric methods and construct novel instrumentations, through the integration of mass spectrometry imaging and machine learning/deep learning algorithms, to achieve the prediction of human diseases. Dr Xian YANG (https://www.comp.hkbu.edu.hk/v1/?page=profile&id=xianyang) will serve as the Co-I. Dr ZHANG and Dr YANG share research interests in developing data analysis/machine learning methods to construct predictive models from multi-omics datasets. Under the supervision of Dr ZHANG and Dr Yang, the student can obtain deep knowledge in both Chemistry and Computer Science, which will remarkably expand the possibility of their future career. | | Students in Computer Science/ Statistics/ Mathematics or related majors, with solid theoretical foundation, professional knowledge and good programming habits. |