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何鴻燊博士醫療拓展基金會
Dr. Stanley Ho Medical Development Foundation

澳門大學—何鴻燊博士醫療拓展基金會

University of Macau – Dr. Stanley Ho Medical Development Foundation

“揚帆追夢、創啟未來” 2022年度獲資助研究項目

“SET SAIL FOR NEW HORIZONS, CREATE THE FUTURE” FUNDED PROJECT FOR 2022

設計促進創傷癒合的糖類分子 Designing Sweet Cures for Sour Wounds



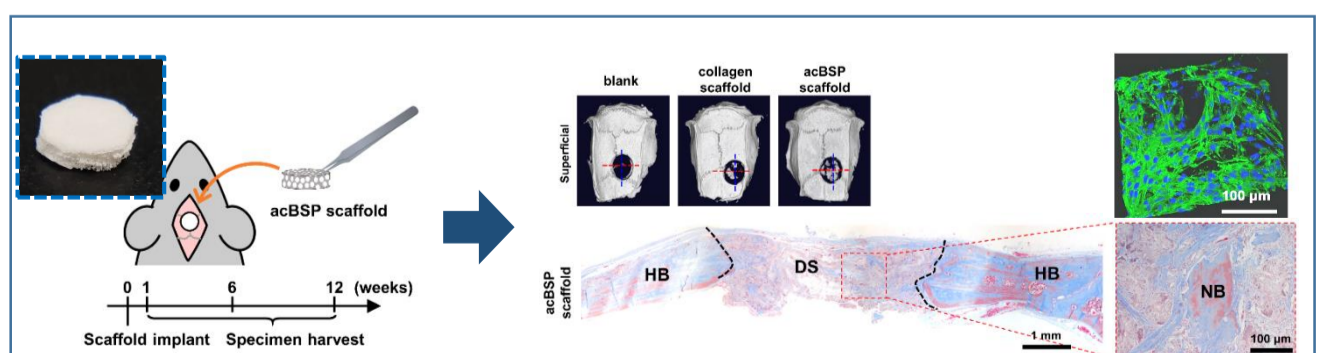
王春明教授
Prof. Chunming WANG

王春明，澳門大學中華醫藥研究院、健康科學學院藥物科學系教授；主持國家自然科學基金委優秀青年科學基金、國家中醫藥管理局青年岐黃學者、澳門重點研發項目；當選英國皇家生物學會、皇家化學會會士；領導澳大研究服務及知識轉移辦公室。

Chunming WANG is a Professor at the Institute of Chinese Medical Sciences and Department of Pharmaceutical Sciences, Faculty of Health Sciences, University of Macau (UM) and an awardee of the NSFC Excellent Young Scientist Fund and Fellow of the Royal Society of Chemistry (FRSC), UK. He also leads the UM's Research Services & Knowledge Transfer Office.

細胞生活在組織基質中，宛如種子與土壤。十年來，我們開發糖類分子作為生物材料，塑造更好的“土壤”幫助“種子”生長。它們通過激活創傷局部的免疫細胞來加速創傷癒合、促進組織修復。我們在包括骨缺損、下肢缺血、糖尿病皮膚創面等動物模型中測試，並在 *Nature Communications*, *Science Advances*, *EMBO Molecular Medicine*, *Gut* 及 *Advanced Materials* 等知名期刊報導這些研究，其中一項發明亦將完成臨床前測試，期望未來可以轉化應用、造福病患。

Cells and tissue microenvironment are like seeds and soil. For ten years, our research has focused on devising glycan molecules to create better soil to promote seeds' growth. By activating immune cells around injured tissue, these glycans help to accelerate wound healing and drive tissue repair. We test our concepts in various animal models, ranging from bone defects to limb ischemia to diabetic skin ulcers. We report our research in, e.g. *Nature Communications*, *Science Advances*, *EMBO Molecular Medicine*, *Gut* and *Advanced Materials*, etc., with one invention now completing pre-clinical trials towards clinical translation for regenerative medicine.



植入葡甘聚糖支架促進小鼠顱骨缺損修復再生
Glucomannan scaffolds promote cranial bone repair

