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Australia leads project on pain research

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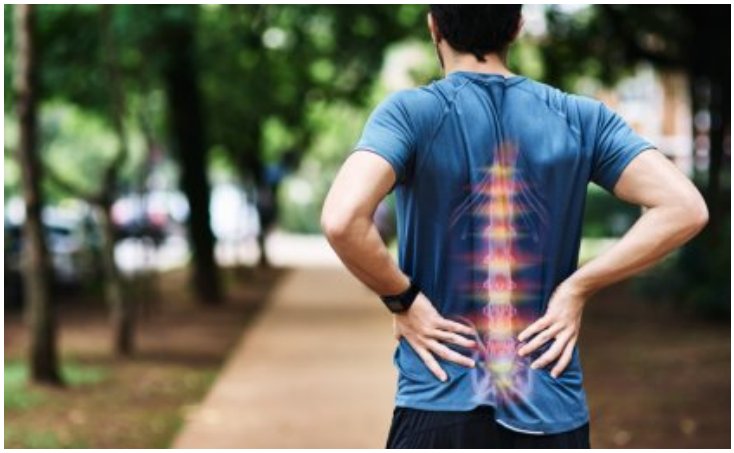

Why back pain persists in some cases but not others will be the focus of an international study, which has received more than $1.4 million in funding from the US Department of Defense. Led by The University of Queensland, the three year project will span Australia and the US and involve some of the world's most prominent pain researchers.

Dr David Klyne, Fulbright Fellow at the UQ School of Health and Rehabilitation Sciences, said the study aimed to reveal how pain evolved from a brief acute episode to an ongoing, chronic state.

"Over the last few years our research has helped establish that an overly sensitive central nervous system, driven by inflammation, may play an early key role in this acute to chronic transition," Dr Klyne said.

"This response is likely shaped by the type of tissue initially injured, such as muscle or nerve, and other factors like sleep and physical activity.

"Through a series of complex experiments we will explore the relationships between injury type, sleep and physical activity levels.

"Beyond advancing our understanding of the physiology of pain, the project is designed to identify new risk factors for developing chronic pain, particularly back pain, which can be targeted by interventions.

"Understanding how sleep and exercise might be used to target these and other risk factors can help prevent the transition from acute to chronic pain."

Low back pain is the leading cause of disability globally. It is the sixth most costly condition in the US, and it is the leading cause of medical discharge in the US military.

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Dr Klyne said the results of the study would have the potential to quickly translate from research into practice. “The clinical applicability of these results would be immediate, both in terms of new and refined non-pharmacological treatments for pain as well as influencing advice given by practitioners and strategies advised for self-management,” he said.

“The outcomes have potential to improve the lives of millions of people with substantial public health benefit.”