

Pharmaceutical science meets indigenous knowledge

Western science and traditional indigenous medicine may not have always been the most comfortable of bedfellows, but a collaborative research project involving UniSA and the Kaanju people of far north Queensland is breaking that mould, and with it, new ground in pharmaceutical science.

Researchers from UniSA's School of Pharmacy and Medical Sciences are working with the Chuulangun Aboriginal Corporation in the first in-depth scientific evaluation of the pharmacology of plant medicines from the Kaanju Homelands of Cape York.

The Australian Research Council-funded project has the dual aim of preserving traditional knowledge and helping establish new economic enterprises to benefit the Kaanju people, through the development of medicinal products derived from plants found in the biologically diverse Wenlock and Pascoe Rivers region.

Award-winning pharmaceutical scientist Dr Susan Semple is one of the key researchers involved in the project, which she says is helping to establish a fairer and more effective model for Indigenous-scientific collaboration.

"In the past some drug companies have gone out and collected what they could without being informed by traditional knowledge," Semple says. "This project differs in that it is driven by the community, they are involved directly in the research, and any intellectual property rights and benefits derived from the project will be shared."

Natural products have long been a source of study for pharmaceutical science, with drugs such as Morphine (derived from the opium poppy), Taxol (an anti-cancer drug derived from the pacific yew tree) and Artemisinin (an anti-malarial based on a Chinese herb) some notable examples of commercially-successful medicines based on plants.

Semple says that while public interest in the area is high, Australian native plants are still an under-researched area.

"Some plants have been identified as possessing particular antibacterial, antiviral or anti-inflammatory qualities, but in most cases we're yet to pinpoint exactly what it is about these plants that makes them act

the way they do. At the moment a lot of the momentum in the area is coming from academic institutions such as UniSA, smaller research bodies and Indigenous communities. The ideal outcome of this project would be to find a plant medicine that could be used either as a whole product or as a purified compound in a commercially-viable medicine."

More information about new and existing program in Pharmacy and Medical Sciences is available at www.unisa.edu.au/pmbs

— Charlotte Chalken

Pharmaceutical science researcher Dr Susan Semple and UniSA Honours student Brad Simpson are looking at the pharmaceutical properties of native Australian plants as part of a project with the Kaanju people of far north Queensland

