New medical device to make the mines safer

Dehydration can be a serious health issue for Australia’s mining industry, but a new product to be developed with input from Flinders University’s Medical Device Partnering Program (MDPP) is set to more effectively help mine managers implement their health and safety policies.

Hydralert – a concept developed by occupational hygienist Ryan Wynch – is a compact device placed in urinals to analyse a person’s hydration level in real time and provide immediate feedback.

Hydration data can then be subsequently downloaded by occupational hygienists to target hydration promotion and trend data amongst workgroups.

The concept is one of two projects to receive expert design and development assistance from the MDPP, as part of the South Australian Government’s Medical Technologies Program (MTP).

The prototype developed by the MDPP will later be integrated into clinical trials by Occulert Pty Ltd.

Manufacturing and Innovation Minister Susan Close said the Medical Technologies Program provides support for the early stage development of commercially viable medical and assistive devices such as Hydralert.

“Heat stress can be a serious safety issue because it impairs concentration, decreases productivity and causes illness,” Dr Close said.

“If successful, Hydralert will provide an innovative alternative to current time-consuming approaches, allowing employees to self-test day or night, without the need for a health professional”.

The second company to receive MTP funding is AMNY Medical Pty Ltd, which will use the support of the MDPP to develop a central component of a novel airway surgery system.

AMNY Medical is an emerging medical device company focused on delivering innovative solutions to day to day clinical problems with products at varying stages of development.

Developed by AMNY Medical CEO and anaesthetist Dr Aidin Mohajeri, the concept will dramatically improve surgical access while both eliminating the need for complex anaesthesia techniques and reducing morbidity associated with neck extension during airway surgery.

The MDPP will design and prototype the device in line with the needs of surgical procedures through a 250-hour Project.