



LIFE SCIENCES

Technology

New Zealand nanotech instrumentation company attracts funding

Australo Ltd (Dunedin, New Zealand), a company developing high sensitivity analytical instruments, has raised NZ\$1 million (\$662,000 at NZ\$1.51 = \$1) from two New Zealand government institutions. This adds to NZ\$1.5 million raised previously from private investors and is to drive the commercialisation of Australo's particle sensing, measuring and control instruments using its proprietary Scanning Ion Occlusion Spectroscopy (SIOS) technology, which are currently in a beta testing phase.

SIOS, based on the Coulter principle for counting particles and gauging their

sizes, enables the electronic sensing and measuring of particles as small as single molecules. However, "no one has yet been able to develop an affordable and fast means of analysing single fluid-borne particles at sizes below 400nm," Martin Jones, Australo's CEO, told *Instrumenta*. The limiting factor is the accuracy, and the related price, needed for creating a nanopore with such dimensions.

"We worked from the basic idea that if you stretch a piece of rubber, like a balloon, put a hole in it and then relax the rubber, the hole gets smaller. We've now created a nanopore in polyurethane

using a tungsten tip that is only two or three atoms wide," explained Jones. The technology was developed by Australo itself, who currently hold one patent, but plans an expansion of the IP portfolio in the next two years.

Two instrument systems are available since November last year: the Axis(2), a \$8,000 bench-top system, equipped with Australo's resizable aperture sensor element (RASE); and the Pico(z), a system for research into aperture formation. The company sees its competition mainly in ELISA-based technology and Luminex' xMAP platform. ♦

In brief

- **Medco Health Solutions Inc** (Franklin Lakes, NJ), a company engaged in running prescription drug benefit programmes to drive down drug-related health costs, has entered into a collaboration with Mayo Collaborative Services Inc (Rochester, MN) to "jointly evaluate the medical, clinical and cost-savings potential of genetic testing, while improving patient safety and care". First test case will be the genetic determinants for the metabolism of warfarin, a widely used blood-thinning agent, in a group of 1,000 patients, while further projects into personalised medicine are planned.

Enzo gets green light for patent case against Applera

Applera Corp (Norwalk, CT) has been denied permission by the US Court of Appeals for the Federal Circuit for an immediate interlocutory appeal against a patent infringement case brought by **Enzo Biochem Inc** (New York, NY), a developer of non-radioactive labelling protocols for nucleic acids. As a result, Enzo will proceed with its lawsuit at the Connecticut Federal District Court covering US patents 5,328,924, 5,449,767, 5,476,928, 4,711,955, 5,082,830 and 4,994,373, all covering methods and materials for the detection of nucleic acid sequences, against Applera and **Tropix Inc** (Bedford, MA), a major supplier of

chemiluminescence technologies.

"This ruling paves the way for Enzo to establish infringement by the defendants' sequencing products and systems that include, among others, its TaqMan genotyping and gene expression assays, and the gene expression microarrays used with its Expression Array System," according to Dr Elazar Rabbani, Enzo's CEO. Earlier this year, Enzo settled with Sigma-Aldrich in a patent infringement case (see *Instrumenta* 23 (10) 4), one of many involving names such as Affymetrix, Roche Diagnostics, Amersham Biosciences (now GE Healthcare), Molecular Probes and PerkinElmer. ♦

BioLED medical platform ready for presentation

A biosensor spin-out from Imperial College, **Molecular Visions Ltd** (MVL; London, England) and **Acroingenomics Inc** (Geneva, Switzerland), a company specialising in investing and commercialising technology platforms for the life sciences, are close to presenting the result of their R&D collaboration, a Light Emitting Diode (LED) technology that could become the central concept in a point-of-care (POC) device for medical testing.

A demonstration version of the BioLED platform, combining MVL's expertise in LED and microfluidics, will go on show at the Imperial

College's BioIncubator building, where MVL is situated, during the first quarter of 2007. The two companies have signed a £3.5 million (\$6.6 million at £0.53 = \$1) development contract to jointly exploit and commercialise the technology.

MVL was founded in 2002 by three researchers based at Imperial College, Drs Donal Bradley, Andrew de Mello and John de Mello. Those three also received one of the first annual Research Excellence Awards, worth approximately £150,000, bestowed by the institution for their work in organic semiconductor research. ♦