PRESS NEWS genapta

INVESTMENT IN NEW VENTURE IS GOOD NEWS FOR GENETICS RESEARCH

A Cambridge based company which is developing a device capable of radically improving genetic research has been boosted with an investment from the University Challenge Fund, established to promote business spin-outs from Cambridge University.

genapta has received first tranche funding to build a revolutionary new microarray tool for use by scientists analysing the genetic make-up of living beings, from plants to humans. This work demands that many tens of thousands of genome samples be processed on a single microscope slide, and genapta will make it possible to quantify samples more reliably and accurately, and at lower cost than at present. The invention is based on fibre optics technology which is ubiquitous in the world's telephone networks but rarely used in analytical equipment.

Formed as a result of an academic-industrial collaboration, the company was born out of a chance meeting between two of the founders: engineer Dr Julian White and biologist Dr Neil Hall, who met while dropping their children off at school.

'genapta brings together a unique blend of designers and end users, whose joint work will significantly improve the performance of the latest DNA microarray experiments,' says genapta CSO Dr David Richards. 'The microarray market is currently growing at 35% CAGR and despite its relative youth it is becoming the technique of choice in the genome sector.'

'Primarily it will help molecular biologists squeeze more high quality information from their experiments. Most of the cost of microarray techniques is in making the arrays, and current optical readers have problems, leading to most experiments being repeated three or four times. The genapta reader offers a radically different solution to the problem, increasing stability and reducing photo-bleaching, which should mean that most experiments will take less time and need fewer repeats.'

The involvement of the University Challenge Fund will make a critical difference to the success of the project.

'We are delighted with this investment which will strengthen our position both in terms of building our technology portfolio and protecting the intellectual property we have developed around the device,' added Dr Richards.

It is hoped that the first commercial system will be available by the end of 2003.

Ends

Press enquiries: Jenny Kartupelis/Jane Heeney, Elements PR, St John's Innovation Centre, Cowley Road, Cambridge CB4 0WS
01223 421605 Email info@elementspr.co.uk

Further information:
Dr. J.D. White, CEO 01954 200825 e-mail: press@genapta.com
Dr. D.R. Richards, CSO 020 7848 2753

NOTES FOR EDITORS - MICROARRAY TECHNOLOGY

All the information needed to make a human being can be stored on a single DVD disk. Over the last decade groups around the world have been working tirelessly to extract and order this data, in the process building a unique picture of the human species. The next step is to use the data for the diagnosis and, ultimately, treatment of most forms of inherited and infectious disease.

Unlike a DVD, this rich seam of information is locked up in molecular scale building blocks that need to be coaxed into giving up their structure. Until recently this was done in a step by step fashion. For a piece of DNA with many thousand of units this was a time consuming process (the human genome is composed of about 3 billion units).

To counter this extraordinary bottleneck, the microarray concept was born which allows many thousands of parallel experiments to be carried out on a one standard microscope slide. Each experiment takes place in spot a few tens of microns in diameter. To understand the outcome of the experiments the spots are read using laser beams which excite specific luminescent markers on the spots that tell the experimenter the outcome of each mini-experiment

The microarray reader is the self contained system which takes the slide, scans the laser light across the surface of the array, collecting and collating the results of the many thousands of parallel experiments.

This news release (and illustration) is issued in accordance with Clause 1.2j of the British Codes of Advertising and Sales Promotion and therefore cannot be subject to a transaction of any kind.