

By using this site you agree we can set and use cookies, please read our [Cookie Policy](#)

[I Agree](#) [More Info](#)



Introducing CRISPR gene-editing tools
 Click here to visit our website and learn more
horizon
 precision genome editing



BUSINESSWEEKLY
 Annual Subscription to Business Weekly
 From only £75.00

Thursday, Nov 20th Last update 01:29:43 PM GMT Headlines: [Owistone unveils new manufacturing facility](#)



BUSINESSWEEKLY
 THE VOICE OF EUROPE'S INNOVATION CAPITAL - THE EAST OF ENGLAND

HOME NEWS TECH TRAIL TRADE FLOOR EXPORT TO THE KILLER50 PUBLICATIONS BLOG BUSINESS AWARDS EVENTS STORE LOGIN

Business Awards 2014
 Inside track on the UK's premier B2B competition

The Killer 50
 We showcase the 50 hottest, disruptive technology companies

The Cancer Cluster
 An oncology A-Z of Cambridge cancer companies

YOU ARE HERE: BIOMEDTECH > TECH SPY INSIDE THE BODY WILL DIAGNOSE CANCER FASTER




Celebrating 50 BILLION ARM-powered chips

Share this post



Tuesday, 04 November 2014 01:16 TONY QUESTED

TECH SPY INSIDE THE BODY WILL DIAGNOSE CANCER FASTER

A fibre optic probe inserted inside the body to capture the molecular fingerprint of tissue is being commercially developed by Cambridge Consultants and client – Singapore startup Endofotonics – to help doctors make real-time diagnoses of stomach and bowel cancer.



The novel endoscope technology is being marketed as a world first. Instead of taking tissue samples and waiting for lab tests, physicians get an instant diagnosis and make timely medical decisions during routine endoscopic examinations – speeding up the treatment of diseases where early detection and treatment holds the key to long-term survival.

A laboratory prototype has proved successful in initial trials involving more than 800 patients. Using its extensive track record of medical technology and surgical device development, Cambridge Consultants is now working with the startup to rapidly build a manufacturable commercial product, complete with the necessary regulatory documentation.

The device comprises a spectrophotometer system, a proprietary fibre-optic probe and a customised software algorithm. It is based on Raman spectroscopy – a vibrational technique that enables molecular information to be captured when tissue molecules are agitated by a laser beam.

A fibre-optic probe delivers a laser beam and captures the molecular fingerprint of any tissue it comes into contact with – and the information is analysed in real time. Cancerous tissue has a different molecular fingerprint from healthy tissue – so a diagnosis is provided almost instantly.

Until now, surgeons have had to take a sample of abnormal tissue and then wait for it to be analysed in the lab – a process that is dependent on the expertise of the laboratory technician and compounded by the challenge of spotting subtle pre-cancerous changes.

The new technology not only gives instant results during the endoscopic examination but also makes it possible to test a much wider area of the gastrointestinal tract.

Endofotonics has successfully built two laboratory prototypes and used them on more than 800 patients across a wide variety of cancer types. "We are extremely excited at the prospect of bringing molecular diagnosis into the body," said Florence Leong, co-founder and CEO of Endofotonics.

"The ability to shift disease diagnosis from subjective operator-dependent visual recognition to objective real-time molecular diagnosis will cause a paradigm shift in how diagnosis is made – with the potential to significantly reduce cancer deaths and the burden of the disease.

"We are therefore looking to Cambridge Consultants to fast track the resolution of the engineering challenges of the IMDX system so that the regulatory testing and submission process can be completed by 2017."

Dr Miles Upton, Asia general manager at Cambridge Consultants, added: "Cambridge Consultants has a long history of helping innovative start-ups turn groundbreaking concepts into manufactured products fast. Combined with our experience of medical technology development in regulated markets, it means we have all the skills in-house to ensure Endofotonics secures vital competitive edge – whether that's in Asia and Europe initially or eventually also in the US market."

The technology exclusively licensed by Endofotonics was developed at the National University of Singapore (NUS). Irene Cheong, director of the NUS Industry Liaison Office – part of NUS Enterprise, the enterprise arm of the university – said: "NUS Enterprise is delighted that a technology that began its life in an NUS research lab is moving closer to market.

"The success achieved by Endofotonics is the latest example of how NUS Enterprise supports the commercialisation of such research."

Endofotonics is also supported via the Technology Enterprise Commercialisation Scheme (TECS) from



FLAIRJET A COMPREHENSIVE OFFERING OF BUSINESS AVIATION SERVICES

Sir Chris Evans Interview



NEW PEUGEOT 508
 Available on contact hire
 from only £265^{+VAT} per month*
Marshall Find Out More
*Non maintained based on 6+35 payment schedule. Business users only.



The biggest ideas are always the simplest.
kiss the art of simplicity

SPRING Singapore – the pro-enterprise development government agency. "We remain steadfast towards supporting innovative start-ups developing novel technologies," said Johnny Teo, deputy director of innovative start-ups management at SPRING Singapore. "Endofotonics' world-first technology is a good representation of what's possible in Singapore, and its partnership with Cambridge Consultants will be a good boost to its commercialisation efforts to bring a potentially revolutionary system to market."

Cambridge Consultants and Endofotonics will be exhibiting at Medica 2014, November 12-15, at the Düsseldorf Trade Fair Centre in Germany. Cambridge Consultants will be in Hall 1-E08. Endofotonics will be in the Singapore Pavilion at Hall 16-G54/F54.

• Picture courtesy – National University of Singapore

Related Articles

- Endomagnetics raises £2m for US trial and cancer marker launch
- Science centre boosts top management to steer expansion
- Software gurus form Undo think tank
- Record revenues and more to come, says Sepura
- Microchip admits defeat in fight for CSR
- Horizon clinches \$750k deal with Top 10 pharma giant
- Barista for beer puts the inn into innovation
- Shanghai plans healthcare future with help from Cambridge medics
- Owlstone unveils new manufacturing facility
- Apple acquisition to smooth Cambridge passage
- Scientists seek funds to grow lung tissue in the lab



Endomagnetics raises £2m for US trial and cancer marker launch

19 November 2014, 10:20
HI-TECH NEWS
 Endomagnetics, the Cambridge UK cancer healthcare company, has raised an extra £2m to support a pivotal US clinical
[READ MORE](#)

Horizon clinches 0k deal with Top 10 pharma giant

17 November 2014, 08:49
 Cambridge UK medical technology business Horizon Discovery Group has landed another major deal with a top 10
[READ MORE](#)

Shanghai plans healthcare future with help from Cambridge

13 November 2014, 09:28
 A delegation of senior directors from state-owned Shanghai Hospital Development Centre (SHDC) have been in
[READ MORE](#)

GENERAL NEWS

easyJet flies higher as revenues and profits soar
 19 November 2014, 09:59

easyJet chief executive, Carolyn McCall says that the Luton-based airline
[READ MORE](#)

New teaching facility at Cranfield

19 November 2014, 09:46
 Cranfield University has a new research and teaching facility - a Boeing
[READ MORE](#)

Ferret genome clue to flu and cystic fibrosis

19 November 2014, 09:24
 A ground-breaking study involving The Genome Analysis Centre (TGAC) in
[READ MORE](#)

Suite deals make the grade in Ely

19 November 2014, 09:14
 The historic centre of Ely has been the setting for a number of recent
[READ MORE](#)

STARTUPS NEWS

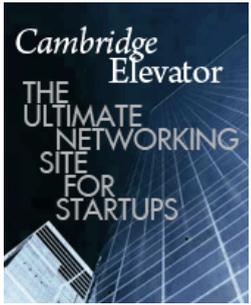
 Cambridge software to manage vast genomics data
 11.11.14

 Cambridge and London in tech battle of Britain
 30.09.14

 Cambridge dominates startup challenge
 10.09.14

 Software startups at fever pitch
 19.08.14

 Social enterprise Kick-start programme ramps up
 18.08.14



LATEST NEWS

 Endomagnetics raises £2m for US trial and cancer marker launch
 19.11.14

 Dialight expands in Mexico and Malaysia
 19.11.14

 easyJet flies higher as revenues and profits soar
 19.11.14

 New teaching facility at Cranfield
 19.11.14

 Ferret genome clue to flu and cystic fibrosis
 19.11.14

 Suite deals make the grade in Ely
 19.11.14

 Science centre

LATEST BLOGS

Culling the last of the tech dinosaurs

13 November 2014, 09:13 Tony Quested

It's hard to think of a thriving Science & Technology hotspot like
[READ MORE](#)

Let us take you on a growth-boosting journey around the

05 November 2014, 10:00 By Interim Director of UKTI (East), Thinley Topden

Last week, we heard that the UK GDP had grown by another 0.7 per cent in
[READ MORE](#)

Wyke Farms claims first social media trademark



boosts top management to steer expansion 18.11.14

03 November 2014, 15.55 by Kitty Rosser of Birketts Solicitors

Wyke Farms is certainly not the first business to use social media as part
[READ MORE](#)

ACADEMY NEWS at Cambridge

19 November 2014, 09:10

MANUFACTURING NEWS
Cranfield University has a new research and teaching facility - a Boeing B737-400
[READ MORE](#)

Ferret genome clue to flu and cystic fibrosis

19 November 2014, 09.24

A ground-breaking study involving The Genome Analysis Centre (TGAC) in Norwich is likely to be a major first step
[READ MORE](#)

IfM students to benefit from 3D printing lab

11 November 2014, 22.07

The Department of Engineering's Institute for Manufacturing (IfM) at the University of Cambridge has unveiled a 3D
[READ MORE](#)

X-MAN™
Isogenic Cell Lines
Genetically defined | Quality Controlled | Confidence Inspiring
horizon
precision genome editing

USER MENU

[Site Login](#)

[View Your Profile](#)

[Edit Your Profile](#)

[Logout](#)

BUSINESS WEEKLY

[Company Details](#)

[Privacy Policy](#)

[Terms & Conditions](#)

[Accessibility Statement](#)

SOCIAL NETWORKS

[Twitter](#)

[Linked In](#)

[YouTube](#)

[Google+](#)

Copyright ©2011 Business Weekly. All Rights Reserved. Business Weekly is a trademark of Q Communications Ltd.
Registered address: St John's Innovation Centre, Cowley Road, Cambridge, CB4 0WS.
V.A.T. Registration No.: 599 472 472. Company Registration No.: 02862181.

[RESET USER SETTING](#) [TOP](#)