

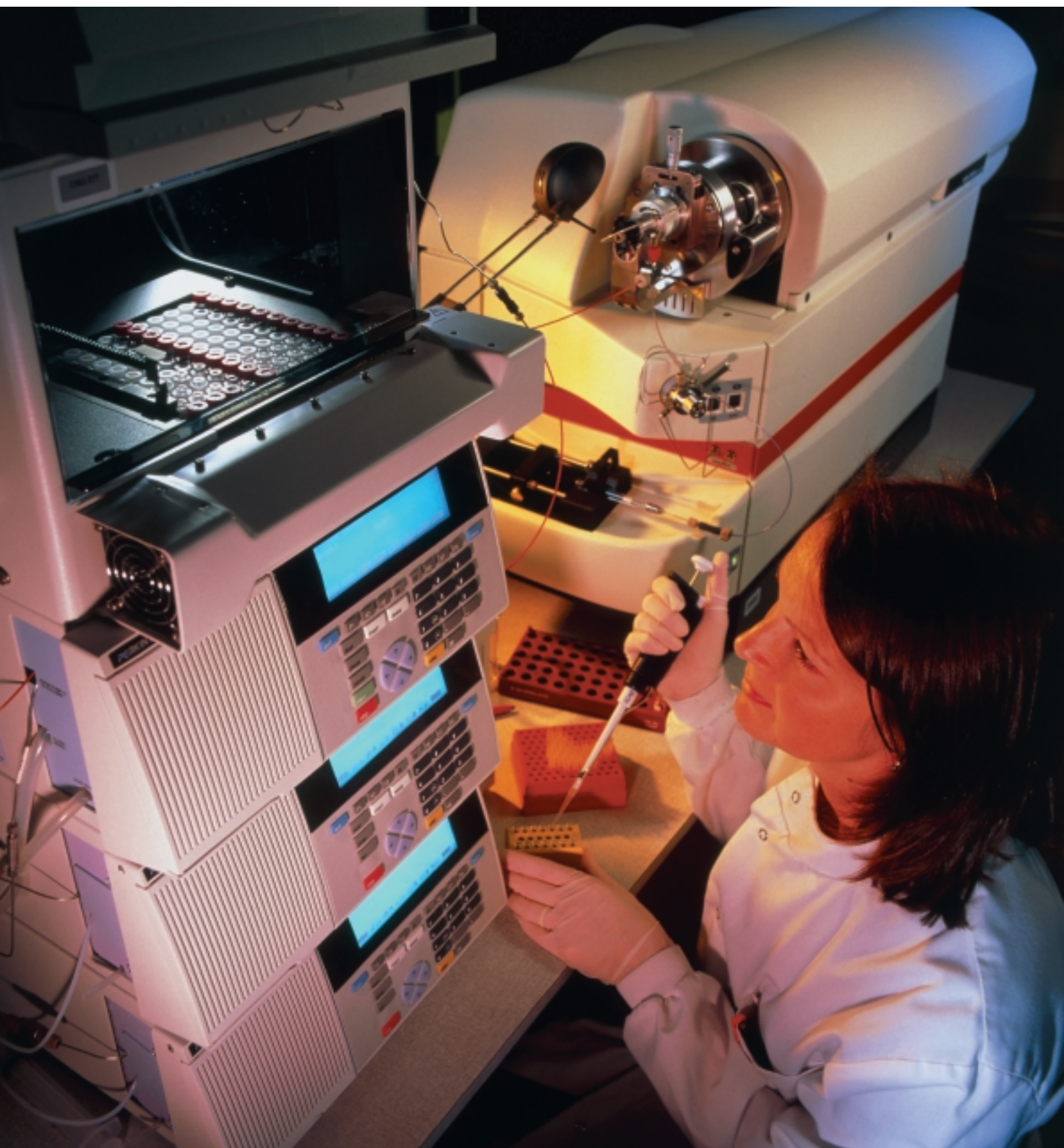


Cambridge Science Park
Founded by Trinity College
in 1970

Winter 2003

catalyst

CAMBRIDGE SCIENCE PARK NEWSLETTER



PARKLIFE

Director of Science Park welcomes New Zealand government minister

Dr Jeremy Fairbrother, Senior Bursar at Trinity College and Director of the Cambridge Science Park, met New Zealand's Minister for Research, Science and Technology, the Rt Hon. Pete Hodgson, who visited Cambridge Science Park on 21st March 2003 in order to find out how his government might learn from one of the largest science parks in Europe. As part of his visit, Mr Hodgson toured the

site and listened to a presentation from Dr Fairbrother. He also had the opportunity to ask questions about the important strategic relationships between Science Park companies, the University of Cambridge, Trinity College and central government. The visit forms part of a wider initiative by the New Zealand Government to further develop their economy into a successful knowledge-driven model.



The Rt Hon Pete Hodgson (left) and Dr Jeremy Fairbrother

Lord Sainsbury opens Astex Technology building

Lord Sainsbury, Minister for Science and Innovation, officially opened Astex Technology's new research and development facility at Cambridge Science Park on 11th July 2003.

The 36,000 sq ft facility, leased from Trinity College by this growing drug discovery company, includes purpose-built laboratories, offices and computational facilities, and provides a base where up to 150 research scientists can work, with the option of a further 30,000 sq ft available for future development.

Of Astex Technology, Lord Sainsbury said: "Their achievements are exciting not only for our health but also for the wealth of our economy, both regionally and nationally. I wish them every success as they continue their important work on diseases such as cancer and Alzheimer's."

Timothy Haines, Chief Executive of Astex Technology, said: "We now have a much better environment in which to pursue our goal of developing small molecule therapeutics using our fragment-based discovery approach."



Timothy Haines (left) and Lord Sainsbury

Chief Scientist at Plastic Logic is knighted

Professor Richard Friend, founder and Chief Scientist at Plastic Logic, was awarded a knighthood in the Queen's Birthday Honours list announced in June 2003.

Professor Friend, who is Cavendish Professor of Physics at the University of Cambridge, co-founded Plastic Logic in December 2000 as a spin-out from his research work, looking to develop and exploit new technology and

processes that combine the power of electronics with the pervasiveness of printing. Based in purpose-built facilities at Cambridge Science Park, the company now has over 40 employees.

Saying that he was surprised but "delighted with the award", Professor Friend commented: "This is a good recognition for physics, a field in which the UK has a very high standing"



The newly knighted Sir Richard Friend



Leading by example

Drug discovery with Paradigm Therapeutics

The international programme to map the human genome has brought huge advances in the drug discovery process, but it still remains a high-risk business to be involved in – especially for start-ups. Paradigm Therapeutics, a new arrival at Cambridge Science Park in 2003, is a young and fast-growing company making a real impact in this highly competitive field – Catalyst talked to Dr Mark Carlton, Director of Operations, to find out why.

Innovative therapeutics

"We're looking at the output of the human genome programme so as to find the most novel opportunities there are for developing new targets into drug discovery," says

Dr Carlton. "We believe that's the area of greatest measurable impact in the medium-term future for the development of truly innovative therapeutics."

Blockbuster potential

At present, the vast majority of drugs on the market are directed to far less than 500 known drug targets, in spite of the fact that it is predicted that there are approximately 4,000 genes within the human genome that encode tractable drug targets. "Any one of these has the potential to be the starting point for the development of a blockbuster drug," explains Dr Carlton.

"What makes us different is that we are focusing on the most novel and innovative drug targets and validating them as our first stage of enquiry"

Dr Mark Carlton, Paradigm Therapeutics

An integrated platform

Their approach is based on a platform which successfully integrates a complex and disparate set of skills, including bioinformatics, molecular biology, model genetics and phenotype analysis. But while an integrated approach is common to many drug discovery companies, Dr Carlton is keen to point out the reasons why Paradigm, less than five years after being spun out from the University of Cambridge, has already identified more than 800 potential drug targets, of which over 200 are currently undergoing biological validation.

"What makes us different is that we are focusing on the most novel and innovative drug targets and validating them as our first stage of enquiry. This is a process that takes a long time in many situations, but our whole approach is to get out of the computer and into the biological validation system *in vivo* as

soon as possible. That gives us a foundation upon which we can add the best available chemistries to the best available drug targets."

Long-term perspective

The successful completion of a £12m second-round of funding in December 2002 has allowed Paradigm to grow the company in terms of both talent and infrastructure, and saw the business relocate to Cambridge Science Park in April 2003.

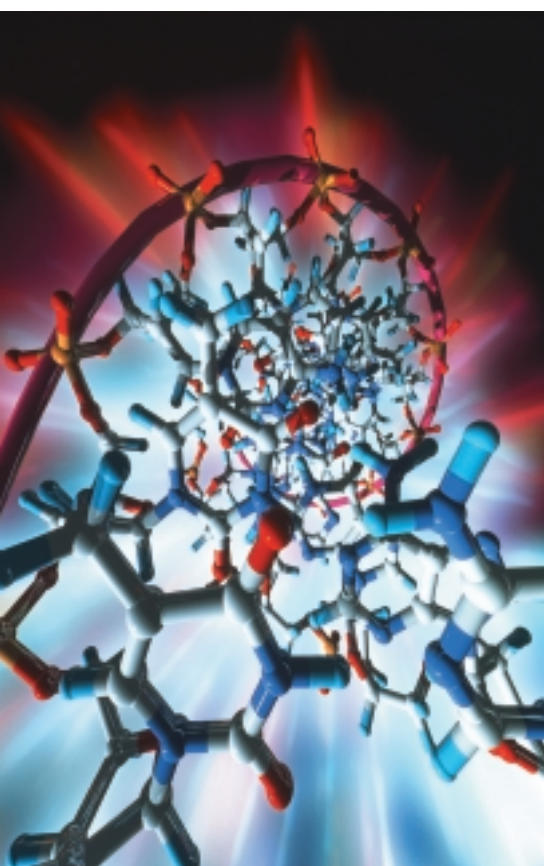
Looking forward, Dr Carlton is keen to stress that such large-scale investment is based on the expectation of a solid long-term return rather than any thought of fast bucks. "The drug discovery process is a long cycle," he says. "As the draft of the human genome was only sequenced in the year 2000, you're not really going to see the direct benefit of that with drugs on shelves until 2010 at the earliest, and I think that's the timeframe everyone has to keep in mind."

The entrepreneurial spirit

Furthermore, he is firmly pragmatic about the difference between commercial and purely academic research. "In terms of getting funding for what we do, you have to understand that you are asking people to part with substantial slices of money into a risky venture, and they expect high rewards for taking this risk – the way venture capitalists think is very different to the way an academic may think," he says.

"That's why we've tried to build and maintain a sense of entrepreneurship in our company, alongside the pragmatism of our research programmes. It's very much a forward-thinking environment – people are encouraged to think independently," concludes Dr Carlton. And if success is measured by coming a long way in a short time, it's an effort that so far seems to have paid off very handsomely indeed.

www.paradigm-therapeutics.co.uk



Prime movers

Unlocking the information age

Despite an international reputation as specialists in encryption technology, it doesn't take an expert to decode the signals of success coming from Cryptomathic. Catalyst went to meet founder Peter Landrock at their office on Cambridge Science Park to find out about a small company making a big impression on the global scene.

Pioneering spirit

As one of less than 40 "Technology Pioneers" nominated in February 2003 by the World Economic Forum – an influential think-tank whose members include representatives from virtually every major international corporation – it's clear that Cryptomathic is an organisation making a name for itself with some of the biggest players in global business.

So it's an exciting time for Peter Landrock, who founded the company in his native Denmark as a spin-off from his research work at the University of Aarhus, and has seen it grow into an organisation with 80 employees, subsidiaries in Copenhagen, Turin, Munich and Paris, and R&D centres at Cambridge Science Park and Leuven, Belgium.

Landrock explains the reason for having so many different sites for what is still a relatively small company: "When you are in security, it's very difficult to sell across borders unless you're really one of the major global organisations like IBM or something," he says. "Companies feel most comfortable with people they can talk to in their native language and can visit with relative ease. That's why it's been so useful to get an office here at Cambridge Science Park – it's an indication of the right pedigree to our clients."

The Cambridge connection

Despite having only moved onto the Park in November 2002, Landrock has a long and affectionate relationship with the city he has since adopted as his home. "In 1992 I was elected President of the International Association for Cryptologic Research," he says, "and that got me some publicity. Then in 1996 Professor Roger Needham – the former head of the Microsoft Research Laboratory in Cambridge – and Dr Ross Anderson at the University of Cambridge Computer Laboratory asked me to join them in heading a research project at the Newton Institute.

"Being here at Cambridge Science Park is an indication of the right pedigree to our clients"

Financial backing

"That brought me to Cambridge initially, and I made some excellent connections. I was subsequently asked to serve on the technical advisory board of the Microsoft Research Laboratory – it was about this time that I decided I wanted to establish a division of Cryptomathic here, but as a small company we simply couldn't afford it."

Nevertheless, his plans were soon to be put into action after securing the financial backing of two major investors who each took a 25% stake in the company – Danish shipping giant Maersk and Europe's largest manufacturer of semiconductors, Infineon Technologies. This allowed him to move to Cambridge in 2001 and set up the UK division.

Digital integrity

As a global leader in e-security solutions, Cryptomathic certainly seems to represent a sound investment proposition. Landrock explains the basis of the demand that drives his company's products: "We used to live in a society where the integrity of a document – a contract, a cheque, a voting slip or whatever – was dependent on a particular piece of paper and perhaps a signature to go along with it," he says.

"Now we communicate digitally over the Internet, we have to make sure we can provide integrity for transactions or documents or suchlike which is not based on physical attributes – such as the individual form or the signature – but on what we call a digital signature attached to our message."

Transforming language

To describe what makes Cryptomathic's encryption system failsafe he uses the analogy of trying to communicate in a language which you don't know. "Imagine you don't speak a word of German but you want to write a letter in this language. However, you don't have the English-to-German dictionary – you only have the German-to-English. It's not going to help you much, because whatever word you want to look up, the only way you're going to find it is by an exhaustive search – reading the dictionary from start to finish.

"When we send encrypted messages, we are doing the same thing as inventing languages – except that in our case we are using a mathematical function to transform bit combination into bit combination. In each case there's an inverse function – in the case of our analogy, going from German back into English – but even though one is the inverse of the other, they are completely different.

Product of primes

"By that I mean that you can't reconstruct one from the other; just as you couldn't write a letter in German with only the German-to-English dictionary, except through an exhaustive search. And in terms of digital encryption, an exhaustive search would mean you have to go through as many combinations as there are atoms in the world – the world's fastest computers or the best mathematicians wouldn't be able to help you!"

At its heart, it's a technology based on a simple mathematical principle. "It's all about prime numbers," says Landrock. "It's very easy to verify if a number is a prime number; and it's also very straightforward to multiply two prime numbers together – that in simplified terms is what we're doing when we encrypt our messages."

"What really motivates me is to build a company that's known worldwide for its excellent research capability, and also for turning its research into something useful"

Practical applications

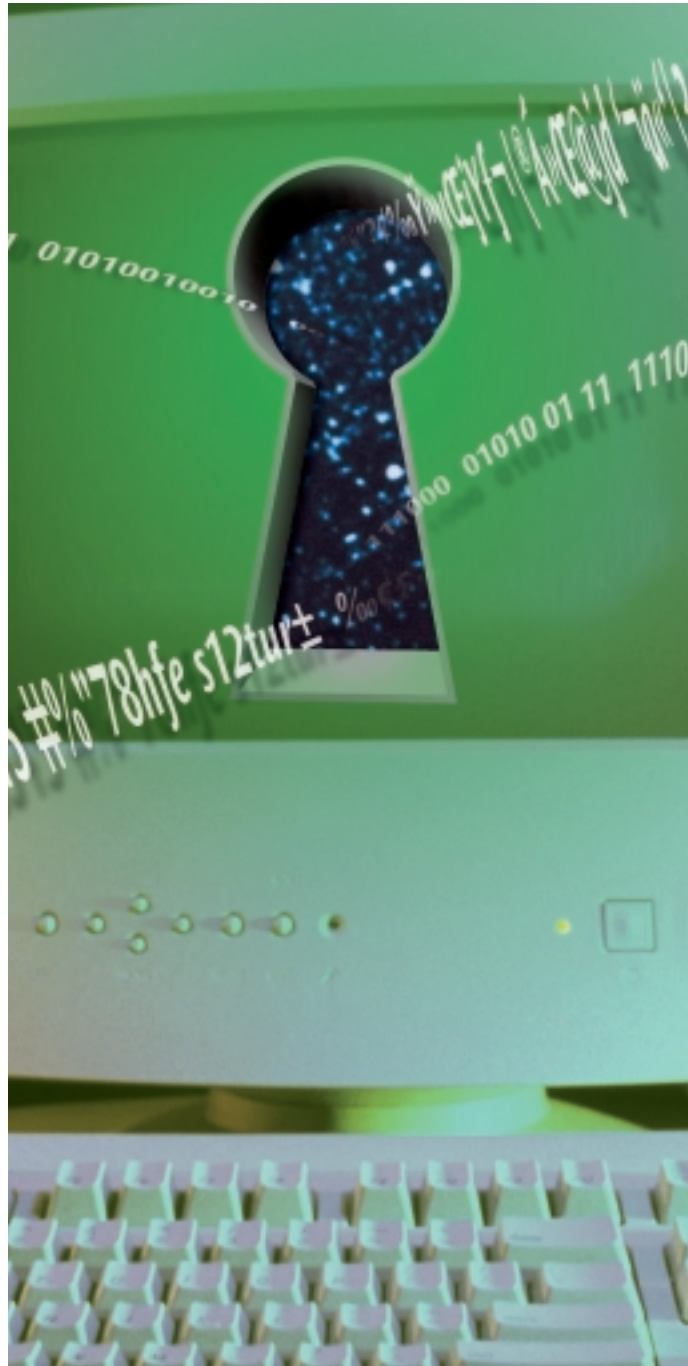
"However, it's very, very difficult given the product of two prime numbers to find the original primes – and therefore to get back to the original message. There are no simple mathematical solutions for that, we just have to use exhaustive search. And if you're using prime numbers that are 100 or 200 digits long, it's a very secure way of making sure no unauthorised person can decode your message."

The applications in the digital age, as one might expect, are practically endless. Landrock points to the chips on our credit cards, the Internet security systems used by our banks, or the online voting systems being introduced throughout Europe as just a few

examples of how Cryptomathic's solutions are currently being implemented. Nevertheless, in a competitive marketplace, there is no time for standing still.

"At the moment we're very interested in encryption applications for mobile communications," he says. "Being able to

with a digital cheque attached. You can then send it to your bank by phone and the money is automatically credited to your account – or you'll be able to go to an ATM and communicate with it by means of infrared signals and get the cash out. This kind of technology we've already developed – it's just a question of finding a buyer."



attach secure digital signatures to messages from your mobile phone has a huge range of potential uses.

"One of our new products allows people to send electronic cheques to each other. If I owe you £50, I'll be able to send you an SMS

The quantum factor

One of the latest areas of research for this highly innovative company is in the application of some of the principles of quantum physics to enable satellites to communicate more securely.

"The idea is based on the Heisenberg principle of uncertainty," says Landrock. "We're looking at giving electrons or photons a particular spin and encrypting the message according to this spin. What's unique about this method is that it actually allows you to tell if someone is eavesdropping – you can't listen in to the message without altering the code."

Inspiring innovation

It's yet more evidence of a commitment to innovation and an emphasis on practical application which has seen Cryptomathic increase its revenue by 86% in the last year. But having held out from going public at the height of the dotcom boom, Landrock is clearly not interested in simply cashing in on its success.

"I've always had at least one leg in research," he says, "and that's what really fascinates me. It doesn't interest me to become very rich very fast. What really motivates me is to build a company that's known worldwide for its excellent research capability, and also for turning its research into something useful."

It's an attitude that seems to speak volumes, whatever language you're using.

www.cryptomathic.com



Synergy in action

Inpharmatica broadens its platform in drug discovery

When London-based drug discovery company Inpharmatica acquired the Cambridge division of ArQule (UK) Ltd in June 2003, it brought together a combination of complementary talents which seems destined to forge a bright future. Catalyst talked to Dr Mike Tarbit, Senior Vice President of Preclinical R&D, about the changes to date and his vision of the road ahead.

A new beginning

It's certainly been an eventful few years for the occupants of 127 Cambridge Science Park. Originally the UK subsidiary of Californian start-up Camitro, the company then became ArQule (UK) Ltd in January 2001, after it was taken over by the Boston-based chemistry services business.

Nevertheless, despite the uncertainties of working in a volatile industry sector, the recent change seems to herald the start of a new phase of stability and structured growth for this highly innovative team. Dr Mike Tarbit, formerly Managing Director of ArQule (UK) Ltd, and now Senior Vice President of Preclinical R&D at Inpharmatica, is enthusiastic about the opportunities this latest development brings.

Comprehensive platform

"Inpharmatica already had a very strong bioinformatics platform from which to predict protein structures as potential drug targets," he says. "What they saw in us were the

computational and laboratory technologies which allow us collectively to determine which of these targets are worth pursuing, and with what molecules – the alignment of *in vitro* and *in silico* processes provides a truly comprehensive platform for drug discovery.”

It's a set-up in which Inpharmatica retains its bioinformatics and biology labs at its London sites in Charlotte Street and Camden, but can now call on the expertise in medicinal chemistry and computational expertise focused on lead optimisation at Cambridge Science Park. In particular, the new site provides the capability to offer both in-house ADME (absorption, distribution, metabolism and excretion) lead optimisation expertise and a top-class revenue-earning service to external clients.

“The alignment of *in vitro* and *in silico* processes provides a truly comprehensive platform for drug discovery”

Significant growth

Dr Tarbit draws particular attention to the innovative work on the company's proprietary portfolio of nuclear receptors taking place in Cambridge. “When we find a compound that triggers a particular nuclear receptor; that means we've found a potential way of getting into the nucleus of a cell and controlling the transcription of its DNA. In drug discovery terms, that means there's a very high likelihood of that compound having a therapeutic use. Given our technology, those compounds will start out with a lot of the right properties to make good medicines.”

The valuable leads the Inpharmatica team has discovered in this area form part of the ongoing dialogue with large pharmaceutical companies to secure collaborations and fund growth. “We want to grow the site significantly and we're actively seeking collaborations right now,” says Dr Tarbit. “I'm hoping that once we've completed our recruitment of chemists, we'll form a team of about 25 here at the Cambridge Science Park within the next year.”

Potential pitfalls

However, with his 30 years' combined experience at pharmaceutical giants Pfizer and GlaxoWellcome, Dr Tarbit is well aware of the potential pitfalls on the path towards sustained growth. “We have a very strong

technology platform here,” he says, “but of course there are always other companies not so far behind you, who may be able to provide the same services in the not-too-distant future.

“That brings its own pressure on finances and resources – we need to be able to develop our technology platform to keep ahead of the game and generate revenue through our service offering to external clients, but also we need to drive our own drug discovery programme forward. Finding the right balance is crucial for a company like ours.”

It's the calibre of the Inpharmatica management team that gives Dr Tarbit every confidence that the company will strike the right balance, as he surveys an economic climate significantly different from that when the original Camitro was first formed.

Changing landscape

“You saw the birth of a lot of start-ups five years ago,” he says, “and a lot of them had some great intellectual property, some great ideas. Further down the road, we've seen that a lot of these companies have struggled because of a lack of real industrial and commercial experience.

“The landscape has changed now, and I think ultimately it's for the better,” he continues. “Redundancies from some of the big pharma mergers have meant that smaller companies can recruit some very experienced pharmaceutical executives and scientists, and this is making a real difference to how some of these businesses are being run.

“Certainly the depth and breadth of industry experience we have gathered together here at Inpharmatica is hugely impressive by anyone's standards, and points towards a very successful future. It is still a tough environment at present, and some consolidation is also occurring in the biotech sector as investors seek to cut costs. However, the companies such as ours with solid foundations and good management will still do well.”

“The depth and breadth of industry experience at Inpharmatica is hugely impressive”

A new identity

A significant part of the well-being felt by Dr Tarbit and his team is due in no small part to their presence on the Cambridge Science Park. “People enjoy coming to work in this environment,” he says, “being part of the local scientific community and having access to the excellent facilities available.”

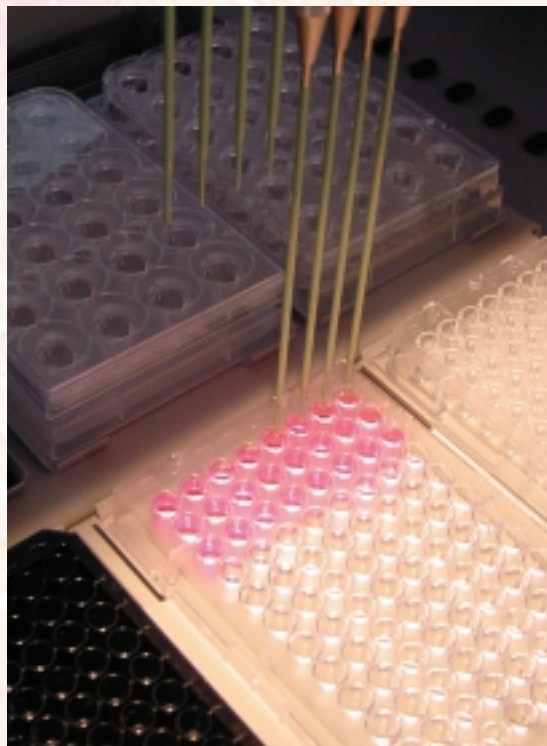
He's also quick to point out the unique atmosphere of working on the site, particularly during a time of upheavals and changes. “While some of the companies here might be perceived as competitors in several respects, there's a real sense of mutual support between all of us,” he says.

High morale

“That can range from advice about a particular problem or situation, introductions to someone who may be able to help you, borrowing equipment and of course just moral support – knowing that people want you to do well. That can make all the difference, and I think it's something special that you find here.”

It appears that there's real cause for optimism at Inpharmatica, and in particular the growing team based at Cambridge Science Park. “We've always had a very high morale, even throughout the uncertainties of the changeover process,” says Dr Tarbit. “I think it's even higher now. There's a tremendous spirit here – it's taken us a long way so far, and I'm sure there's still a long way to go.”

www.inpharmatica.co.uk



8 Biotech connections

Networking opportunities at Cambridge Science Park



Summer 2003 saw the launch of 4Bio, a new networking event at the Cambridge Science Park, which will help to create shared opportunities for the wide variety of biotechnology companies based on this world-renowned site.

Network creation

The 4Bio network provides a distinctively local forum for biotechnology companies based at the Cambridge Science Park. Initiated by three individuals – Charles Bailey of Mundi Pharma, Karen Thomas of Amedis Pharmaceuticals and Nigel Low of Ionix Pharmaceuticals – the network aims to build on the close relationships already existing between neighbouring firms.

"We were all aware of the success and usefulness of ERBI (the Eastern Region Biotechnology Initiative), and 4Bio is certainly not trying to act as a rival to that," says Dr Thomas, "but we were interested in creating something much more local.

Successful start

"4Bio is really focused on networking and creating connections between different companies here on the site, helping to develop opportunities in terms of business development and financial leverage – it's not really aiming to be a scientific forum."

With the first event on 2nd July attracting around 15 members from a variety of larger and smaller businesses, 4Bio certainly got off to a positive start. "Trinity College and Qton together provided space and some refreshments," Dr Thomas explains. "We started by just chatting over nibbles, then we had some short presentations, and later gathered together again to talk afterwards, getting people's feedback"

Informal atmosphere

An informal atmosphere helped to increase the opportunities for sharing a variety of ideas. In particular, an equipment-sharing register for some of the very expensive items that biotechnology businesses have to use proved a very popular proposal at the first meeting.

"A few other things came up," says Dr Thomas. "For example we talked about how for small companies it can be very expensive to get access to all the relevant scientific journals – you often have to make a decision as to which few you can afford. So we discussed the possibility of having a central scientific library on the Cambridge Science Park – then everybody contributes something towards that central facility, and as a result we all get a much broader access to these sorts of journals."

"4Bio is focused on networking and creating connections between different companies"

A natural evolution

Looking to hold meetings regularly every six to eight weeks, Dr Thomas stresses that the event is still in its early stages. "I think the first six months are about getting the word out there that we're doing this, and letting the network evolve naturally according to what people want to get out of it. Companies will be able to make their own presentations or devise activities according to their own requirements – it's really up to the members to make 4Bio into what they want it to be."

For the second event in September, Ray Hill, Senior Director for Licensing for Merck Sharp and Dome, visited to talk about the sort of things his company looks for when it licenses compounds and technology. "I think it was really informative for the companies around here who are working in this area," adds Dr Thomas.

"It's really up to the members to make 4Bio into what they want it to be"

Biotech showcase

"In time, we'd like to bring in presenters from other big pharmaceutical companies, and also from companies who are service providers to the biotech and pharmaceutical industry – that gives them an opportunity to showcase what they're selling and meet with people here, but it also gives opportunities for us to see what's out there."

With an enthusiastic response from those involved so far, 4Bio seems set to become a popular and valuable addition to the Cambridge Science Park fixture list for some time to come.

For further information on 4Bio and forthcoming events, please contact Karen Thomas, Nigel Low or Charles Bailey at the following email addresses:

karen.thomas@amedis-pharma.com

nlow@ionixpharma.com

charles.bailey@mundipharma.co.uk



If you think the idea of running a marathon sounds like hard work to say the least, imagine more than doubling the distance, setting it in hilly terrain, and turning on the heat of the African sun – then you'll have some idea of what Dr Karen Thomas (above left), Head of Business Development at Amedis Pharmaceuticals, achieved when she completed the Comrades Marathon on 16th June 2003.



The Comrades Challenge

Cambridge Science Park runner goes the extra mile

The ultra marathon

Her colleagues have long been used to Karen's somewhat extreme tendencies as far as running goes – she had after all completed six "normal" marathons previous to this one. But the 56-mile race staged between Durban and Pietermaritzburg in South Africa is famous throughout the distance-running world as perhaps the most long-standing and popular "ultra marathon" and eventually the lure of the challenge proved too much.

Karen explains her very personal motivation to take part in the event – and to commit herself to the 40-mile training runs needed to prepare for such an undertaking. "I heard about it years ago, but I didn't really think about doing it until this year," she says. "There's a little bit of history involved because my brother lived in South Africa and he was killed out there in a car accident in 1997. My father hadn't been back since before my brother died. This year he asked me to go with him, and it just so happened that it coincided with Comrades.

"My brother was a bit of a runner. He did the Sun City Marathon and had said that one of these days he was going to do Comrades – you can't call yourself a runner in South Africa and not do Comrades. So I was partly doing it for him, partly for myself – it was a bit of a pilgrimage."

"It's just the most incredible race I've ever done – a bit of a pilgrimage"

Taking the challenge

Thirty-five people took part in the first race in 1921, after a former soldier in the South African infantry hit upon the idea of holding an endurance event to commemorate his fallen comrades from the Great War. This year more than 13,000 runners lined up at the start, all of them seeking to beat the 12-hour cut-off point after which participants are deemed to have "failed" the Comrades Challenge.

An event quite unlike any other, it has an atmosphere and tradition all of its own that Karen finds exciting. "It's just the most incredible race I've ever done because it's such an institution in South Africa. It's always on a national holiday, and everybody but everybody watches it.

"They all get up at 5.30am to watch the start of it on TV, while along the route everybody is out in their front gardens having barbecues and cheering you on. There's a real camaraderie among the runners – you will see people carrying others across the line to make sure that their comrades get through."

Changing direction

As well as completing the course in 10 hours and 26 minutes ("feeling I could do more", she says without irony), Karen managed to raise £1,100 in sponsorship for COCO (Comrades of Children Overseas), a UK-based charity which supports children's projects overseas. But not content with the success of her efforts so far, she is determined to take part in the race in 2004, when it will head in the other direction from Durban to Pietermaritzburg – the so-called "up run".

This time round she is even more ambitious, looking to secure corporate sponsorship to raise funds for the same charitable cause. And of course it means another long and sometimes lonely training period starting in early 2004, but let no one think she won't achieve it – after all, she's been there, done that, and got the blisters to prove it.

Anyone interested in sponsoring Karen to take part in the Comrades Marathon 2004, raising money for children's charity COCO, please write to her at:

karen.thomas@amedis-pharma.com

New arrivals



Paradigm Therapeutics

Drug-discovery company Paradigm Therapeutics moved into a 12,000 sq ft new R&D facility on Cambridge Science Park in April 2003.

The company, which focuses on the use of *in vivo* functional genomics to predict the clinical utility of novel drug targets from the human genome, completed the move following a successful £12m second-round of fund-raising in December 2002.

Dr Mark Carlton, Director of Operations for Paradigm, said: "We are delighted to have moved onto Cambridge Science Park. Paradigm already has an exciting pipeline of novel targets, and the company will now be able to extend its target validation and development programme considerably."

www.paradigm-therapeutics.co.uk



Pharmorphix

Pharmorphix was established in July 2003 to provide pharmaceutical science R&D services to the pharmaceutical and biotech industries.

Pharmorphix's services include salt selection, polymorph screening and physical property characterisation. Pharmorphix's industry-leading approach to this essential, but often neglected, aspect of drug development will generate high-quality defensible data for its customers and ensure there are no downstream delays associated with the chosen drug solid form.

www.pharmorphix.com

Entrepreneurs Club starts in Cambridge

A club for emerging and established entrepreneurs is holding its first Cambridge-based meeting on Wednesday 19th November at 6.00pm at the Q:ton centre at Cambridge Science Park.

The club, which has already been successfully established in London by Kleinwort Benson Private Bank, helps like-minded people to share ideas, find new business contacts and discover opportunities through interaction and networking at its regular meetings.

The first meeting will focus on the topic of "The Business Exit – personal and financial issues". Representatives from Deloitte & Touche will offer insight into personal tax issues and grooming for sale, while Kleinworts will cover strategy aspects. Quarterly meetings in 2004 will cover a variety of themes including raising finance, building successful management teams and effective branding.

Derek Wright, Club Director, said: "This is a great opportunity to bring some of the fantastic business minds in and around Cambridge together and to benefit from each other's experiences and insight."

For further information, please contact:

Derek Wright
Tel: 020 7475 5476
Email: derek.wright@kbp.co.uk

Web: www.the-entrepreneurs-club.com

PARKLIFE

connections

The Science Park HR Group, a support network for HR managers/representatives, provides a forum for sharing of common issues/problems, discussion of best practice, updates on legislation, and the opportunity to offer support to each other in what can often be a solitary role. We meet every other month over lunch.

Contact: [Wendy Hepburn](#)

Email: whepburn@xaar.co.uk

A Facilities Managers' Forum is proposed for the Science Park as an opportunity for networking and sharing experiences, a consultation and pressure group, and an educational forum.

The Forum plans to meet four times a year.

Contact: [Martin Scutt](#) or [Tim Burrows](#)

Email: martin.scutt@camcon.co.uk

tim_burrows@xanova.co.uk

Biology in Business (BiB) is a Park- and University-wide organisation focusing on career development and the exploitation of novel technologies applicable to the life sciences. BiB organises formal and informal events, including the region's only careers fair for life scientists (CoILS).

Contact: [Charlie Bailey](#)

Email: cbailey@cantab.net

The European Chapter of the Lab Robotics

Interest Group is a forum for the exchange of ideas on robotics and programmable automation in the field of high throughput screening, assay development, proteomics, genomics and general lab automation. Regular meetings bring together scientists, engineers, users and vendors of equipment and instruments.

Website: www.lab-robotics.org

The Eastern Region Biotechnology Initiative (ERBI)

offers members substantial discounts on supplies through its Purchasing Consortium. Membership also gives access to ERBI's special interest groups that include human resources, finance and business development.

Contact: [Jeanette Walker](#)

Email: jeanettewalker@erbi.co.uk

Enterprise Link, a Business Link service for Cambridgeshire, is a membership network providing advice and support for early-stage, entrepreneurial/aspirational businesses.

It holds a variety of networking events and seminars at the St. John's Innovation Centre in Cambridge, and also sends out regular bulletins to members with information, advice and opportunities, and also can arrange access to sector specialists.

www.enterprise-link.co.uk

Catalyst is a forum for companies on the Cambridge Science Park. The next issue will be published in Spring 2004. If you have any comments or suggestions for stories to be included in the next issue, please get in touch with the Editor, Dr Sarah Tasker.

Management Team:

David Lupson

email: dlupson@bidwells.co.uk

Tel: +44 (0) 1223 559548

Dr Sarah J Tasker

email: stasker@bidwells.co.uk

Tel +44 (0) 1223 559186

Fax: +44 (0) 1223 840294



www.cambridgesciencepark.co.uk

The Cambridge Science Park is managed by Bidwells on behalf of Trinity College



Viewpoint

The continued growth of the Cambridge region, which has the largest cluster of hi-tech and knowledge-based businesses in Europe, is of great importance for the Government.

Cluster development

The region combines leading-edge university research with an entrepreneurial culture and top-class business capability. Between 1995 and 1998, Cambridgeshire's GDP grew by 46%, compared to 30% for the UK as a whole.

This shows clearly why cluster development is one of the key components of the Government's strategy for driving forward regional economic growth. By providing continued support for internationally important clusters such as Cambridge, we ensure that not only can the region build on its success, but also economic growth will flow out from the area.

"British science is among the best and most cost-effective in the world"

I had the opportunity to see this in action when I was invited to open Cambridge Display Technology's (CDT) new Technology Development Centre in April last year. CDT is leading the world in the commercial development of light-emitting polymers, a technology which is set to significantly change products such as mobile phones, computers and consumer electronics. By choosing to locate its new centre in Godmanchester, a short drive away from Cambridge on the A14, CDT is bringing the benefits of the Cambridge cluster to a new part of the region.

Building the hi-tech economy

Lord Sainsbury, Minister for Science and Innovation, looks forward

Foundations for the future

It is vital that UK science remains at the cutting edge. The research carried out in our laboratories today is the foundation for the new products, medicines and technologies of tomorrow. British science is among the best and most cost-effective in the world. To ensure this continues, the Government has substantially increased its total spending on science. By 2005/06, the science budget will reach just short of £3bn – more than double the figure in 1997/98. We have also recently announced another £1bn for the UK's science research infrastructure, the largest-ever Government investment.

Cambridge University has benefited greatly from this and previous investments. It was allocated over £100m of this £1bn investment – known as the Science Research Investment Fund (SRIF). The previous SRIF investment in 2001 is currently paying for, amongst other projects, a new criminology centre (£10.3m), the Cambridge Cranfield High Performance Computing Facility (£5.2m) and the Interdisciplinary Research Centre for Nano-Fabrication (£7.1m).

Long-term investment

Scientists and business need to work together to drive innovation and ensure scientific breakthroughs are turned into commercial success. For this reason the Government has invested £120m in recent years to encourage knowledge transfer between universities and business. This included:

- £15m for the Science Enterprise Challenge Fund, which encourages entrepreneurial education for science and engineering students – £3m of which was given to Cambridge University in a partnership bid with the Babraham Institute; and
- £15m for the University Challenge Fund, which provides access to seed funds in order to assist the successful transformation of good research into good business – £2.9m of which was given to create the Cambridge Entrepreneurship Centre.

Access to finance

Once an innovative and potentially high-growth business has been set up, access to finance can be a particular issue. Without appropriate finance its growth can be seriously impeded.

For over 20 years the Government has offered loan guarantees to businesses who have viable business propositions but are unable to access loans due to lack of track record or collateral. Since 1981, we have guaranteed over 79,000 loans worth over £3bn.

The UK High Technology Fund is a "fund of funds", investing in existing funds which specialise in investment into early-growth high-technology companies. So far it has raised £126m, including £20m from Government. It has attracted investors who have previously not invested in technology businesses. A number of Cambridge-based businesses have already benefited from investment by some underlying funds.

"The UK's future success and prosperity depends on building a knowledge economy based on cutting-edge science and technology"

Our Regional Venture Capital Funds are, from April 2003, in place in each of the nine English Regions, providing small-scale equity (less than £500,000) to smaller businesses. These funds operate on a fully commercial basis and again aim to draw more investors into smaller investments.

Early Growth Funds

The Smart programme provides grants to small businesses to research and develop technologically innovative products and processes or to buy in external consultancy to improve their use of technology. 800 awards were made last year. We are also in the process of establishing a programme of Early Growth Funds that will provide capital to those businesses in the early stages of growth. This can include start-ups, as well as established businesses. An Early Growth Fund that will cover the Cambridge area will be launched shortly.

Much of our work to foster a hi-tech economy is in evidence in Cambridge. Our strategy includes investing in: research infrastructure; knowledge transfer; hi-tech clusters; and securing financial support for businesses. The UK's future success and prosperity depends on building a knowledge economy based on cutting-edge science and technology. We are committed to making Britain the best place in the world to start and grow a business, for all groups within our society.