

PARK NEWS

Southampton Science Park Newsletter

■ **MP OPENS NEW MERCK LABORATORIES**

■ **AN INTERVIEW WITH TRACKBACK**

■ **INTRODUCING THE 2017 CATALYST COHORT**

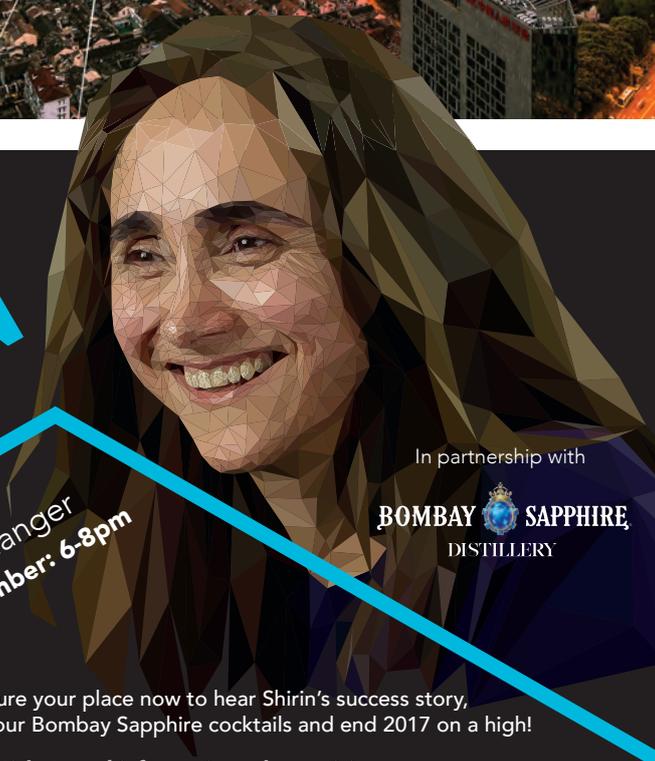
■ **NEW AI DIVISION AT CRITICAL SOFTWARE**



University of Southampton Science Park proudly presents 'Cocktails & Conversation'

An evening with
SHIRIN
DEGHAN

The \$85 million
Global Game Changer
Thursday 7 December: 6-8pm



In partnership with

BOMBAY  **SAPPHIRE**
DISTILLERY

Secure your place now to hear Shirin's success story, savour Bombay Sapphire cocktails and end 2017 on a high!

For tickets and information, please visit:
www.science-park.co.uk/events/evening-with-shirin

ALSO IN THIS ISSUE OF PARK NEWS

- The 2017 Test Valley business awards
- Mobile Onboard empowers bus passengers
- SEaB Energy generates spotlight on STEM
- DISCnet to boost data science employment
- nquiringminds leads Indo-UK project
- Wessex Academic Health Science Network launches medicines project
- Aareon acquisition creates new Southampton Science Park base

A note from the Operations Director

Faith in the future

This issue of Park News is positively brimming with evidence of success based on, not only good science and business acumen, but confidence.

We are witnessing future-focused investment at all stages of the business spectrum, from start-up to multinational – and it's all happening right here on the Science Park.

At one end of the scale, we welcome eight fantastic new businesses to the Science Park for this year's Catalyst programme. These businesses are all potential game-changers in their field: from healthcare to artificial intelligence, there's a hotbed of creativity, energy and determination already evident in the Catalyst Centre that I am sure will fast-track their potential. Could their ideas complement your own?

At the other end of the scale we have well-established sector leaders choosing to

expand their operations here in Southampton. Promega will be building its new UK HQ here; Merck has expanded into new laboratories; Aareon is consolidating its acquisition of 1st Touch with a new base; and CRITICAL Software is expanding operations with a new division.

In the wider context of a volatile global social, political and economic landscape, these stories are evidence of businesses not just carrying on, but adjusting, trusting and confidently facing the future.

Adam Smith famously once said: "All money is a matter of belief". Some three hundred years later a certain Steve Jobs echoed the sentiment. He said: "You can't connect the



Dr. Robin Chave, Operations Director, Southampton Science Park

dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect in your future. You have to trust in something – your gut, destiny, life, karma, whatever. This approach has never let me down and it has made all the difference in my life."

The concept is certainly not new – but it's truer than ever.



USSP supports Test Valley innovation

Congratulations to CoolLED Ltd, named winner of the Innovation & Technology Award at September's Test Valley Business Awards.

The Andover company was presented with its award by Peter Birkett on behalf of the Science Park which has been a gold sponsor of the event for some years. He said: "I believe that it is enormously beneficial for business leaders to take time out to reflect on their organisations' achievements and to celebrate the success of others across the region. We congratulate CoolLED and everyone who has contributed to their company being shortlisted or winning an award this year."

CoolLED designs and manufactures illumination systems for researchers and clinicians using the latest LED technology. The company has specialised in fluorescence microscopy since it introduced the first commercially available LED illumination system in 2004. LEDs are now the system of choice because they are more stable, longer lasting, and energy efficient than traditional mercury based illuminators as well as offering superior safety and environmental features.

cooled.com

DISCnet to boost data science employment

Southampton University has joined forces with some of the South's other leading universities to establish DISCnet (Data Intensive Science Centre in the South East Physics Network): a Centre for Doctoral Training of PhD students that have a professional interest in the new discipline of data science. It is one of eight being established across the country.

DISCnet will be a sustainable centre of innovative education, training and research in data intensive science for postgraduate students with a physics-related background. Data intensive science is rapidly growing what has already become a huge influence on the development of global society and economics.

Brian Luff, Chairman of CRITICAL Software, is chairing the DISCnet advisory board. He commented: "A key aspiration is to ensure that the PhDs emerging at the end of their four years in the programme are equipped to take their skills and expertise into the broadest possible range of industries. Their skills are extremely transferable and we want to provide them with alternatives to a career in their original academic disciplines."

One way that DISCnet will do this is through internship placements with data-intensive projects in the summer of 2018. If you are interested in participating, contact DISCnet's Placement Committee Chairman, Professor Bob Nichol via bob.nichol@port.ac.uk. Placements will be organised in a series of rounds, so check with DISCnet for closing dates.

MP opens new Merck Laboratories

Local MP Caroline Nokes visited the Science Park to officially open new laboratories for Merck recently. The company's expanding operations here are home to a 90-strong multinational team and are one of the company's most significant performance materials R&D sites globally.

A world-leading supplier of liquid crystals, Merck is instrumental in the rapidly developing field of organic and printed electronics. Every smartphone in the world contains materials supplied by Merck – from materials for LCD and OLED displays, to those used in the most cutting-edge memory chips. The Science Park site also leads on the development of next generation solar photovoltaic technology, or 'organic PV', which has enabled the development of lighter, more flexible and cheaper to produce solar panels.

Speaking at the laboratory launch, Caroline Nokes MP said: "I am delighted to open the new laboratories at Merck's Chilworth Innovation Hub at Southampton Science Park and see first-hand the research and development taking place in our community. This cutting-edge work really puts us on



the map – I'm immensely proud that this work is taking place within our local area."

Dr Owen Lozman, Merck's Global Platform R&D Director, commented: "This investment in performance materials is allowing the development and commercialisation of new display modes and printed electronics to enable the devices that fuel modern society. I am very excited about the future opportunities for our operations here as they continue to expand to support Merck's position as a leading science and technology company."

www.merckgroup.com/en



Mobile Onboard empowers passengers

Mobile Onboard has announced the launch of a new service designed to give power to passengers and take the guesswork out of using public buses. The smartphone app, smartLINK, is a real-time passenger communication system, providing up-to-the-minute information on bus locations, times, journey planning and service disruptions.

The system complements the company's full range of products and technologies designed for public transport operators and users. As such, it integrates seamlessly with its mobile ticketing solution so that customers can access the latest information and purchase tickets from a single app. It also works with Mobile Onboard's updated talking bus platform, Beam Next Stop, which provides personal destination stop alerts directly to passengers' mobile phones.

Public transport operators are set to benefit from this innovation too, by enhancing the customer experience from ticket purchase through to journey completion. Indeed, there is also the option to take the technology further by adopting Mobile Onboard's Beam smartLINK system: this presents real-time arrival and departure information on large screens - ideal for operators offering park and ride or commuter services from key locations.

mobileonboard.com

CRITICAL Software launches new division

CRITICAL Software has launched a new Artificial Intelligence (AI) and Machine Learning division to provide its clients with new data search and analysis expertise.

The new division will be led by Paulo Gomes, who has published over 100 scientific papers on AI, and has lectured academically and led multiple commercial industry projects in the area. He commented: "Our aim is to be a global leader in the development of AI technologies with the ability to solve the most pressing real-world businesses challenges."

The move will benefit clients in two key areas. Firstly, it will tackle the challenge of finding information more efficiently, using techniques such as natural language processing, data mining and semantic search. Several recent studies have shown that individuals spend around 25% of their time searching for information, which impacts business productivity and the effectiveness of important systems and processes.

The second key area is intelligent data and information analysis. With ever-increasing amounts of data, the ability to quickly and objectively analyse and make use of information is becoming business-critical. CRITICAL's solution will provide clients with accurate and predictive insights to help them make better, faster decisions.

criticalsoftware.com



nquiringminds leads Indo-UK project

nquiringminds is deploying its Internet of Things (IoT) technologies to help Indian farmers cut down on post-harvest spoilage and maintain the quality of their stored and dried grains.

In an Indo-UK humanitarian Newton Funded project, entitled GrainCare, the Science Park-based IoT company is working to develop low cost humidity sensors and mobile apps for monitoring and preventing problems with

grain storage across the Indian sub-continent. Through the project, Indian farmers will change their processes and management of grain and get mobile alerts regarding moisture or temperature rises during drying and storage. They will also be provided with solutions to the various problems detected to enable them to act immediately to prevent losses in both quality and quantity.

nquiringminds.com

Wessex Academic Health Science Network launches medicines project

An innovative approach to help patients adapt to new, existing and changed medicine regimes is being trialled by Science Park-based Wessex Academic Health Science Network. The project, entitled Transfer of Care Around Medicines, will involve over 80 community pharmacists who will initially work with referrals from University Hospital Southampton.

When moving between care providers or returning home from hospital, patients often experience errors or unintentional changes to their medication and this presents a significant safety risk. In fact, research has shown that 20% of patients experience unwanted medicine-related events within three weeks of returning home from a hospital stay.

However, there is now evidence which clearly indicates that referring patients to a community pharmacist for a medicines review makes a significant difference to people taking their medicines correctly, thus preventing them from becoming unwell and being re-admitted to hospital.

Pharmacists are well placed to support patients with changes to their medication, understanding side effects and other concerns, and can resolve most issues easily. They will liaise with hospital pharmacists and GPs to help people manage their medicines confidently at home and understand how they work together for the best possible health outcomes. There are further plans for this scheme to be rolled out across Hampshire, Dorset and The Isle of Wight in the next 12 months.

wessexahsn.org.uk

CATALYST ROUND-UP

In September we welcomed eight new early-stage businesses onto the Science Park's Catalyst programme.



CATALYST



Phil Sharpe, one of the programme leaders said: "News of the Catalyst programme spread far and wide this year, resulting in an incredibly exciting cohort of businesses across a range of sectors and all at different stages of development. I personally can't wait to get stuck in and see how far we can take their ideas!"

Over this issue and next, we will profile our 2017 Catalyst Centre tenants, with greater detail available now at catalyst-centre.co.uk.

■ **Care Quest** hopes to tackle the nationwide issue of making it faster and easier to obtain appropriate and available healthcare. Some 1.75 million hospital bed days were lost in 2016 due to delays in sourcing care packages and, for members of the public, it is often a daunting and stressful exercise to find the right provider for their needs.

Founders Natalie Dobson, Joanne Barry and Philippe Preget have created Care Quest, an online portal bringing all healthcare partners together to support patients' care choices encompassing nursing homes, residential homes and community care provision. These providers, the NHS and members of the public are all set to benefit from this revolutionary approach.

■ **Soton Audio Labs** is a spin-out arising from research conducted into audio reproduction at the University of Southampton. Founders Marcos Simón and Filippo Fazi set out to design a replacement for conventional

surround sound systems; a way to provide the same listening experience but without the need for positioning loudspeakers around the listener or wearing headphones. The result is technology which accurately reproduces 3D soundfields in the form of a loudspeaker array.

Although initial concepts had affluent, early adopting consumers in mind, the resulting technology has opened up the prospect of taking it beyond the consumer market into a whole new set of applications across commercial business-to-business markets which might include the automotive and leisure sectors.

■ **Pulsar R&D** is the brainchild of Dr Anne Roques who will be using her extensive experience in research and development in the orthopaedic industry and undertaking contract development work for orthopaedic medical devices. She was one of 15 winners of a prestigious infocus Women in Innovation Award in 2016.

Each year in the UK, over 10 million people consult their GP for musculoskeletal problems, resulting in an estimated annual cost to the UK economy of £5.7 billion. Dr Roques is working with clinicians, patients and academic partners to bring down these staggering statistics through the development of low cost methods for assessing the way people move, with the aim of avoiding musculoskeletal problems for them in later life.

■ **Filament** is an artificial intelligence (AI) and machine learning consultancy, working to help companies understand and 'bottle' their expertise, unique data sources and intellectual property into reusable machine learning models. Its team of ex-IBM Watson AI specialists and digital agency practitioners will offer consultation, education and implementation services for clients, as well as a tooling platform to help clients build their own machine learning assets.

'Unstructured data' like emails, webpages and documents comprise nearly 90% of all digital information globally. While this unique data can be hugely valuable and differentiating, most businesses lack the technical skills or innovation structures to monetise it. Founders Doug Ayres and Phil Westcott, with CTO James Ravenscroft and Technical Client Services Lead Andy Feltham, hope to change this with their innovative concept.

DO YOU HAVE A GREAT BUSINESS IDEA?

INNOVATE | INCUBATE | ACCELERATE

Great business ideas can strike at any time! If you have an innovative science or technology-led idea and the drive to build a business, apply now for the Catalyst 2018-19 programme at catalyst-centre.co.uk.



New Promega premises

Southampton Science Park is pleased to announce that it has signed a major long-lease land contract with Promega UK Ltd. The deal will see the company, a global leader in life sciences, construct a bespoke new UK headquarters on Plot 2 Benham Campus. The 18,000 sq. ft. premises will provide an exceptional working environment and enhanced space for laboratory work and training.

The Science Park's Peter Birkett commented: "There have been very few land deals of this magnitude and significance in the South Coast region in the last decade and everyone associated with the Science Park is delighted with this news. We have supported Promega's considerable success in the UK for 28 years and this new development will enable us to continue to do so."



Promega creates innovative solutions and technical support to life scientists in academic, industrial and government settings. Its portfolio of more than 3,500 products aims to help scientists worldwide to advance their knowledge in genomics, proteomics, cellular analysis, drug discovery and human identification.

Although Promega has sited its UK head office at the Science Park since 1989, rapid growth over the last five years has led the company to increase its team of scientists and administrative staff to support its expanding operations and medium-term growth.

Managing Director of Promega UK, Derek McCall, said: "Our vision is to create a working environment, from both an appearance and sustainability viewpoint, which our employees are proud to work within. More than this, our new laboratory and training facility will enable us to host customer visits and to reach out to the wider community in terms of local colleges and schools, to provide training on applications and technologies in biological research. We hope to enthuse the next generation of life scientists!"

promega.com



SEaB Energy generates spotlight on STEM

Sandra Sassow, one of the Science Park's most decorated CEOs, collected the 'Spotlight on STEM' award at the Women in Business Awards in September.

Hosted by The Business Magazine and sponsored, amongst others, by Barclays and KPMG, the award recognised Sandra's achievements in the field of science, technology, engineering and mathematics (STEM) and the application of these skills, through her leadership at SEaB Energy, by championing technology that addresses climate change.

Ms Sassow commented: "Although the gender gap in the field of STEM is slowly closing, it has become a personal goal of mine to grow female participation in science and technology. These awards, therefore, are an important stage to showcase role models that will, hopefully,

encourage the next generation of women to enter into these sectors".

She was also recently shortlisted for 'Entrepreneur of the Year' at the Investor Allstars Awards, which is often referred to as the 'Oscars' of the European entrepreneurial and investor community.

The SEaB Energy team has spent much of the summer travelling with a schedule that has included: the 'Change Now' International Summit in Paris, the 'World Smart Energy Week' in Japan, and RWM, Europe's largest Waste, Energy, Recycling and Water event. It has also been involved in 'Unreasonable Goals', a venture led by the US Department of State that brings together some of the world's largest institutions and the most impactful entrepreneurs.

seabenergy.com

Aareon acquisition creates new Southampton Science Park base

Southampton Science Park is set to welcome Aareon UK to its new office suite, 5 Benham Campus soon.



The move cements Aareon UK's operational merger with Science Park success story 1st Touch, established leader in the supply of mobile workforce software solutions for the UK's social housing, property services and local government sectors. The merging of company operations at their new 5 Benham Campus base will enable the companies to complete their integration following Aareon Group's acquisition of 1st Touch in 2012.

Nigel Rees, Joint Managing Director, Aareon UK, commented: "This move is an important milestone in our company's development. We have had a partnership

with Southampton Science Park since 2008 during which time we have grown as an organisation. We see the 5 Benham Campus move as an opportunity to take our business to the next level, not only by creating a great working environment for our staff, but giving us space to welcome our customers and partners, enabling us to work with them in a more effective and agile way."

Opened by the Rt. Hon Sir Vince Cable MP, 5 Benham Campus is the latest addition to the Science Park's successful portfolio of accommodation for science and technology businesses. It is also home to Grant Thornton and Tekever Group.

aareon.com

The Interview

James Davenport is Head of Technology at TrackBack. The company's first employee as a start-up, James has helped shape the globally successful, multiple award winning organisation that it is today. Here, he reflects on his journey and considers the future.



For anyone who hasn't come across TrackBack before, what problem does the company try to solve? TrackBack technology reveals if and when automotive dealers follow up sales leads generated by manufacturers. We do this by telephone and now by email too, with the recent introduction of TrackBack Email. It's niche, measurable, insightful and labour saving for dealer personnel.

We believe that all potential customers deserve a fast, high quality follow-up to their enquiry but, surprisingly, this isn't always the case. In Italy, for example, research showed that just 30-40% of leads were being followed up and often this took several days. With the deployment of TrackBack, it's now over 90%, with the majority of prospects being contacted within one hour.

Why is this important? It's important because the car industry's advertising spend is second only to cosmetics and toiletries. Universally, manufacturers make a huge investment in lead generation but rely on the dealer network to convert this investment into income. Unfortunately this is where the problems begin: staff working in car dealerships may view some leads as poor quality and simply not bother, or the opportunity may be lost as the follow-up isn't quick enough. The conversion to appointment rate from a lead that has been followed up within one hour is around 50% but it drops to approximately 25% if contact takes two days or more.

The automotive sector is a real indicator of global economic performance: how is it fairing at the moment? There are always peaks and troughs but it's fair to say that current conditions are challenging. That's why high quality customer engagement and resource efficiency are extremely important right now.

Many manufacturers are developing and rolling out programmes to improve the car purchasing

experience, taking learnings from conventional retail space and looking to those that break the rules, like Apple stores. This is leading to removing the traditional desks, computers and salesmen that pounce on you, and replacing these with informal lounge areas and iPads to generate car configurations, quotes and finance options on the spot. It's exciting to see this revolution taking shape with TrackBack playing a part.

Tell us about your role specifically? I have been working alongside Founder Jerry Horwood since inception and was involved in creating the first prototype. Now, as Head of Technology, I am focused on operational leadership, governance, learning how to make best use of emerging technologies and staff development.

A key challenge for me is keeping on top of new global communication channels, specifically social media. An example of this is the Chinese equivalent of WhatsApp called WeChat. The Chinese are already utilising this to book appointments and so we need to be able to capitalise on these emerging channels to stay consumer-relevant.

TrackBack was recently awarded two Queens Awards for Enterprise: how important are accolades like this? We were presented with the International Trade Award, recognising our impressive rate of international growth with export revenue quadrupling over three years, and also the Innovation Award, recognising the uniqueness of our product and the impact it is having for both businesses and customers.

These awards are incredibly important internally because they're not just a reflection of the company but the people within it. Often it's hard to put a value on IT products or services because they are intangible, only existing in an abstract way when you 'switch on'. These accolades somehow make our work tangible and give our entire team a great

deal of pride and satisfaction in the fruits of their labour.

Externally, the recognition has prompted a few interesting conversations too, particularly in India where the Queen is held in high regard. This is extremely positive in the Brexit landscape.

How has the Science Park supported company growth? The Science Park's flexible approach has been hugely beneficial to us as we have upgraded our offices four times now. Another major benefit of being here is the environment itself – it's a truly nice place to work.

We have an open plan office but my second office is Lattes! Although our core market is a little far removed from others on the Park, I enjoy meeting other people working here. It's really good to be able to talk to others in a non-competing technology space. Contrasting your experience with other companies adds context and this can make all the difference.

Looking back, what have you learnt from your journey that you'd like to share with those about to start out on theirs? The major lesson I've learnt is that technology entrepreneurs tend to prioritise the nuts and bolts of their technology instead of people. I believe that when you grow beyond three staff, whoever it is that's leading the journey should spend a minimum of 50% of their time on their people through mentoring, training and leadership. This responsibility cannot be placed with others or there's high potential for unseen problems to develop.

My other advice – despite not being a mountaineer! – is: don't look down! Stay focused, stay positive and keep looking up!

And what does the future hold?

New markets. We've recently got Ford, Mazda and Volvo onboard and there will be further expansion across Europe. Then it's America! It's a prime market but difficult to break into given the current political climate and its very different sales culture. It's also a bit 'chicken and egg': we need a local presence to demonstrate commitment and be taken seriously but at the same time, we need to get some major business secured to create the right conditions for a US office base. But I'm looking up, and it won't be long!

trackback.net



For further information, please contact:
 Southampton Science Park, 2 Venture Road,
 Chilworth, Southampton, Hampshire SO16 7NP
 Email: enquiries@science-park.co.uk
 Tel: 023 8076 7420

If you have any relevant news or stories you would like to see included in the next issue of Park News, contact The Escape on **01256 334567** or email parknews@the-escape.co.uk