

EXIST

Exeter Initiative for Science & Technology

insight

A focus on science,
technology, & innovation
for the business community

JUNE 19 **ISSUE 10**

CHAMPIONING LGBTQ+ PEOPLE IN STEMM:

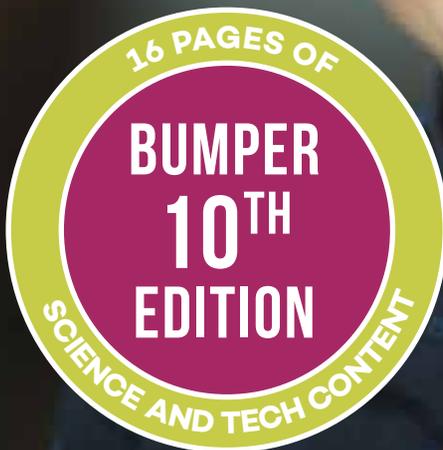
DR CLAIRE DAVIES, PRISM

FORMING THE BLUEPRINT FOR 21ST CENTURY HEALTHCARE:

*TRACEY COTTAM, ROYAL
DEVON & EXETER NHS
FOUNDATION TRUST*

INSPIRING THE NEXT GENERATION:

*STEPHEN MARIADAS,
EXETER COLLEGE*



Exeter Chamber
of Commerce & Industry

VENTUREFEST
SOUTH WEST

INCLUDING AN EXCLUSIVE GUIDE
TO THE REGION'S INDUSTRY,
INVESTMENT AND INNOVATION
SHOWCASE AND CONFERENCE,
VENTUREFEST SW.

STEMM NEWS

EXETER COLLEGE CELEBRATES MULTI-MILLION POUND COLLABORATIVE BID SUCCESS FOR NEW INSTITUTE OF TECHNOLOGY FOR THE SOUTH WEST | ANTECH DRILLING WELLS IN TEXAS | LEADING AUTOMOTIVE SOFTWARE COMPANY, EIGHT TECHNOLOGY, GLOBAL HEALTHCARE SOFTWARE PROVIDER, SEE DATA & AI-POWERED PROCUREMENT MARKETPLACE, MAISTRO PLC MOVE INTO EXETER SCIENCE PARK | FORMER IBM MASTER INVENTOR JOINS SOUTH WEST DESIGN FIRM | PREPARE FOR TAKE-OFF, FLYBE ANNOUNCED AS HEADLINE SPONSORS FOR BIG BANG SOUTH WEST 2019

ABOUT EXIST AND INSIGHT

The Exeter Initiative for Science and Technology (ExIST) is a sub-group of Exeter Chamber of Commerce and Industry. The group was founded in June 2011 by a group of business leaders in Greater Exeter. The group aims to optimise interaction between science and technology businesses trading in the area, to increase awareness of Exeter as a centre for science and technology, to build relationships between education at all levels and business, and to encourage investment in the STEMM industries in the region.

ExIST Insight aims to raise recognition of STEMM organisations and its community within Exeter and the local region. The quarterly newsletter enables us to share information within the network and for external promotion to encourage increased visibility of Exeter as a science city.

Find out more
www.existexeter.co.uk

 [EXIST_Exeter](https://twitter.com/EXIST_Exeter)

Editorial & Advertising
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ISSUE 10

WELCOME TO ISSUE 10 OF INSIGHT!



We are so pleased to have been able to produce this magazine, our thanks go to ExIST's sponsors and all of the contributors who have helped us shine a light on Exeter's science and tech organisations, with more than 100 articles and features distributed through this publication.

Within ExIST we continue to review our purpose and objectives to ensure we are evolving in the right way. As well as our interaction with science and tech business we have been working on our events plan for the rest of this year. The next ExIST event will take place at the Environmental Futures and Big Data Impact Lab on 4 July.

In this issue, we have produced an event guide for Venturefest SW. This flagship event for investors, industry and innovators will bring together a full day's programme of speakers focusing on industry, workshops, a showcase of the region's most exciting tech and an exhibition under one roof at Sandy Park. ExIST is proud to support the event by producing this feature in our 10th edition – see pages 7-10.

A second major science and tech event for the region will take place at Westpoint on 24 June. The Big Bang SW is the largest celebration of Science, Technology, Engineering and Maths (STEM) in the South West region aimed at inspiring young people into science and tech careers.

There is more info on forthcoming events on page 15 – including details for the next PRISM event and Tech Exeter's conference.

And finally, we recently learnt that Exeter is another step closer to achieving our vision for an Institute of Technology – well done Exeter College and the other partners making this happen – see page 3 for more info.

Clodagh Murphy
ExIST Chair

Take part in Exeter Chamber's Successes and Challenges campaign and help us create a picture of the business environment in Exeter. Successes will be shared and celebrated and challenges will be recognised, and addressed.

Find out more, here:
www.exeterchamber.co.uk/sc



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**SUCCESSES &
CHALLENGES**

 **Exeter Chamber**
of Commerce & Industry

EXETER COLLEGE CELEBRATES MULTI-MILLION POUND COLLABORATIVE BID SUCCESS FOR NEW INSTITUTE OF TECHNOLOGY FOR THE SOUTH WEST

A multi-million pound bid to revolutionise digital, engineering and manufacturing technology education across the South West has been successful, it has been announced.

The Department for Education (DfE) has confirmed the twelve successful applicants will receive a share of £170 million, awarded to establish a network of Institutes of Technology across the country.

The Exeter element of the bid will help part fund Exeter College's plans for a new £10 million Digital and Data Hub on its Hele Road site which will meet the needs of employers by training the next generation of digital and data experts. A planning application for the Hub has been submitted to Exeter City Council.

The Hub is part of a wider £70 million masterplan over the next 20 years for the award-winning further education college. The build would provide Exeter College with an extra 26,909 square feet of floorspace for teaching.

John Laramy, Exeter College Principal and Chief Executive, said: "Exeter College is delighted that the collective Institute of Technology submission for the South West has been successful, this shows what we can achieve when businesses, universities and colleges all work together as one.

"The Exeter component of the Institute of Technology focuses on digital, data and the high level skills required by employers in the Exeter area, we are therefore delighted that the Met Office and Oxygen House were a key part of the successful bid."



The Institutes will be unique collaborations between universities, Further Education colleges, and leading employers. They will specialise in delivering quality higher level technical training and provide employers with the skilled workforce they need.

The Institute of Technology in the South West will have centres located across Devon, Cornwall and Somerset, with state-of-the-art facilities proposed for Exeter, Truro, Plymouth, Barnstaple and Taunton. These include a new Digital and Data Hub in Exeter, a new technology hub in Truro for engineering and digital teaching, and a number of both new builds and refurbished existing facilities in Barnstaple, Plymouth and Cannington.

www.exe-coll.ac.uk

SUCCESS DRILLING WELLS IN TEXAS LEADS TO FURTHER CONTRACTS AROUND THE WORLD FOR ANTECH



At the end of last year AnTech, a specialist drilling provider, drilled two wells in the Texas Panhandle using advanced, patent pending, technology developed over the past two years at its Head Quarters in Devon.

The work was performed on a ranch in an environmentally sensitive area that also happened to be the site of a battlefield in the 1874 Red River war between American Indian tribes and the US Army.

In the ground below the ranch, there is a natural gas field that has produced for decades, but over time production has declined and now more water is produced than gas. AnTech won a contract to re-drill wells based on its ability to drill with a completely enclosed drilling system and its ability to navigate precisely underground. Both of which reduce the environmental impact of the drilling process.

The precise navigation is made possible by a new technique developed by AnTech called RockSense™ which

sends a signal to the driller at surface, identifying what type of material is being drilled as the drill bit cuts into the rock. By comparing this information to geological maps, the measurement acts as a signpost to enable the driller to drill in the right place. Surprisingly, this capability, with such precision, has not existed previously.

"Our engineers have worked hard to bring this technology to market, and it is testament to their skill and determination that we have managed to do it so quickly and effectively" said Toni Miszewski, Managing Director of AnTech. The success of this work has led onto further contracts which the company has recently signed with companies in Alaska and Australia.

www.antech.co.uk

DR CLAIRE DAVIES: CHAMPIONING LGBTQ+ PEOPLE IN STEMM



DR CLAIRE DAVIES FOUNDED PRISM, A NETWORK FOR LGBTQ+ PEOPLE IN STEMM, FOLLOWING DISCUSSIONS WITH VOLUNTEERS AND VISITORS TO THE INSTITUTE OF PHYSICS STALL SHE ORGANISED FOR EXETER PRIDE IN 2018.

In her day job, Claire is a research fellow in the Astrophysics Group of the College of Engineering, Mathematics and Physical Sciences at the University of Exeter. Insight talks to Claire about why she founded PRISM and the organisation's aims.

What inspired you to found PRISM?

Personally, I feel that a lot more can be done to be fully inclusive of LGBTQ+ individuals working and studying in Science, Technology, Engineering, Mathematics and Medicine (STEMM) but also to promote STEMM subjects within LGBTQ+ communities. There are initiatives which aim to do this on a national scale (LGBT STEM and Pride in STEM, for instance) but, before PRISM, nothing more local to the South West of England. PRISM was launched on July 5th 2018, coinciding with the first "International Day of LGBTQ+ people in STEMM", with an open event to discuss what an Exeter-wide LGBTQ+ STEMM network could provide.

PRISM MANIFESTO

- A space for local STEMM workers and students to meet and share ideas with fellow LGBTQ+ people and allies of the LGBTQ+ community;
- A platform for the work of LGBTQ+ scientists, engineers, technicians/technologists, mathematicians, and medics to be championed and celebrated;
- An opportunity for the successes (and failures) of local and national equality, diversity and inclusivity initiatives to be shared amongst Exeter-based STEMM employers.

How can SMEs interact with PRISM?

At present, PRISM is focussed on providing a quarterly talk series and networking event for STEMM

employees and students (our "PRISM Speakers" series). SME employees and owners are welcome to attend these events, regardless of their gender, sexuality and physical characteristics (sex). We are in the process of creating a web page which will feature a direct "contact us" section but, for now, we invite interested persons to reach out to us via our social media accounts.

As a network, we provide an element of community. A diverse workforce has been repeatedly shown to have a positive economic impact. The availability of an LGBTQ+ network, particularly one for individuals in STEMM fields, can help to attract individuals who may not be familiar with Exeter and be drawn to the multicultural nature of bigger cities.

What can businesses do to ensure they are fostering a supportive environment for LGBTQ+ people?

Business leaders should seek to exploit the acknowledged benefits of all types of diversity (LGBTQ+, age, race, professional background etc) at all levels of their business. In our case, treat LGBTQ+ people like everybody else, respect their choices and get to know them as colleagues and friends who are working with you to achieve the business objectives. Reach out to us when you need help although there are many "best practices" guides available online which contain information on providing a supportive environment for LGBTQ+ individuals, most notably on Stonewall's webpages.

Immediate actions include calling out homophobic, transphobic, and biphobic language, even "casual" slurs such as those classified as "banter"; using neutral language when referring to persons whose gender and pronouns you do not know, such as

NEXT PRISM EVENT
MONDAY 15 JULY
www.bit.ly/PRISMJuly

an employee's partner; respecting an individual's pronouns and encouraging all employees to include pronouns on email signatures; removing gender-specific uniform or dress-code policies; considering the safety and requirements of LGBTQ+ individuals when choosing venues for work socials and business trips and ensuring it is easy and simple for employees to change their name, including making allowances for employees wishing to have different professional and legal names.

Can you give any examples of how PRISM has celebrated the work of LGBTQ+ people working in STEMM?

We have had "LGBTQ+ role models in science" leaflets, originally designed by Joby Razzell Hollis, printed which were originally given out at Pride 2018 and are available at our PRISM Speakers events - these feature more well-known individuals from recent history (cryptographer Alan Turing and astronaut Sally Ride) together with currently active scientists (computer scientist Lynn Conway, chemist David Smith, and astrophysicist Nergis Mavalvala).

Through PRISM Speakers, we've provided a platform for Sally Basker (CEO of Exeter Science Park), Sophie Fardell-Rudd (principal technical officer for Network Rail), Agnes Bacon (Nanomaterials PhD student), and James Claverley (science governance co-ordinator at the National Physical Laboratory), to speak about the amazing work they do. In January 2019, I provided a summary of the fourth annual LGBT STEMinar series at a PRISM Speakers event. The national

STEMinar series event particularly celebrated the efforts of Beth Montague-Hellen, founder of charitable organisation, LGBT STEM, and the LGBT STEMinar series as well as highlighting the wide-ranging research being conducted across the UK and abroad by LGBTQ+ researchers.

What do you wish other people knew about your work?

The work I do as PRISM is voluntary and in my own time. I fit this in around my research and other commitments and responsibilities I have within the department of Physics and Astronomy at the University of Exeter. And none of what has been achieved through PRISM could have been done without the work

and support of the PRISM coordinators.

How would you encourage young people to consider STEMM careers? How can we ensure greater diversity in STEMM?

A lot can be done to increase young people's "science capital". Within scientific research, we see that individuals are more likely to go on to have careers in STEMM if family members or family friends are already working in STEMM. This is one reason why having STEMM-related stalls at events such as Exeter Pride are so important because you interact with young people and (current/prospective) parents who don't necessarily attend STEMM-specific events or museums.

Why are PRISM, and other LGBTQ+ in STEMM initiatives, important now and for the future?

GLOBAL



70 countries across the world **criminalise Male-Male homosexual relationships** (45 criminalise both Male-Male & Female-Female relationships);



In over half of the world's countries (including in 28 US states), **LGBTQ+ people may not be legally protected from workplace discrimination.**

UK



More than 10% of trans individuals experienced verbal abuse and **6%** have been **physically assaulted at work.**



45% of LGBTQ+ school students - including 64% of trans pupils - are bullied for being LGBTQ+ in Britain's schools.

STEMM-SPECIFIC



Undergraduate LGB+ students are less likely to be retained within STEM (survey did not include trans individuals nor medicine).



"Out" STEM faculty at universities (survey did not include medicine) are **7.2 times more likely to experience exclusionary behavior by their colleagues.**

References: Stonewall (2018); Engendered Penalties, The Equality Review (2007); The School Report, Stonewall (2017); Coming out in STEM, Science Advances (2018); Factors Impacting the Academic Climate for LGBQ STEM Faculty, Journal of Women and Minorities in Science and Engineering (2014).



MAISTRO PLC CHOOSES EXETER SCIENCE PARK FOR GROWTH

Maistro Plc, the AI-powered procurement marketplace for services, has moved to Exeter Science Park.

The move will allow Maistro to continue to expand its team in 2019, following this year's appointment of Chief Commercial Officer, Neale Pritchard, and the 2018 appointment of Chief Financial Officer, Ian Cleverly. Recruitment in 2019 will continue to focus on building the company's business development and engineering teams.

Laurence Cook, CEO at Maistro comments: "Our relocation to Exeter Science Park will facilitate collaboration with other tech companies that are already showcasing the innovation generated by companies throughout the region. Maistro has seen strong growth over the past 12 months and we're eager to accelerate this activity in our new home."

Dr Sally Basker, CEO of Exeter Science Park, said: "Exeter Science Park helps innovative companies to deliver extraordinary growth and we offer our tenants the space and support to allow them to do what they do best. This is the ideal location for Maistro to continue its upward trajectory and we wish them every success."

www.maistro.com
www.exetersciencepark.co.uk



GLOBAL HEALTHCARE SOFTWARE PROVIDER EXPANDS INTO NEW OFFICES AT EXETER SCIENCE PARK

Global life sciences and healthcare software company, Seedata, has more than doubled its workforce at Exeter Science Park and is moving into bigger office space on the site.

Since moving into the Science Park Centre in 2016, Seedata has seen significant growth and the team has now moved across the road into the new 'Lamarr' building. It is aiming to double its staff numbers again at Exeter Science Park within the next two years, whilst opening new offices in the USA and Australia.

John James, Managing Director at Seedata, said: "We've experienced steady growth over the past nine years as the company found its feet, but now we're looking to accelerate this and expand into offices across the globe.

"Exeter Science Park is the ideal base for us, with great transport links for when we visit customers worldwide and there is a fantastic community of like-minded businesses here, which helps to inspire growth and encourage collaboration."

www.seedata.co.uk
www.exetersciencepark.co.uk



LEADING AUTOMOTIVE SOFTWARE COMPANY IS FIRST TENANT TO MOVE IN TO EXETER SCIENCE PARK'S NEW 'GROW ON BUILDINGS'

Eight Technology Ltd. is the first tenant to move in to the Grow-on Buildings at Exeter Science Park. Founded in 2003 Eight Technology's 'Dealerweb' software helps automotive dealer groups, manufacturers and independent retailers to boost sales performance through better lead management and smarter customer communication and has relocated to a new state-of-the-art office.

Exeter Science Park's Grow-on Buildings are partly funded by £4.5m from the HotSW LEP Growth Deal Funding. The HotSW LEP has also provided £2.5m local Government funding towards the Environmental Futures Campus and £5.5m towards the Open Innovation Building, which will bring forward 20,000 sq ft of space for growing small and medium sized enterprises.

Jim Moore, Administration and Compliance Manager - Eight Technology Ltd, said: "Having expanded rapidly in the past couple of years, we soon out-grew our previous office and sought to move somewhere that had the resources to support a growing technology firm. Exeter Science Park is the ideal location for us where we can develop ideas and grow the business alongside likeminded companies within a supportive business environment."

The internal fit-out of the office suites from concept to completion was undertaken by local independent contractor, MD Business Interiors.

www.dealerweb.org
www.exetersciencepark.co.uk

WELCOME

As the single biggest knowledge exchange between investors, innovators and academics in the region this year, Venturefest SW 2019 is a unique and unprecedented free exchange of ideas.

We are bringing together innovative and ambitious tech businesses in the South West with investors from this region so that, together, they can do great things. We are proud to say that Venturefest



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VENTUREFEST
SOUTH WEST

SW creates a mass and momentum to drive forward and connect emerging talent and investor expertise so that the region's best innovators can continue to work and grow in the South West.

Venturefest SW is creating a vibrant ecosystem for innovation and investment – we will see you there.

Venturefest SW is supported by:

The Knowledge Transfer Network (KTN), Falmouth University, the University of Plymouth, University of Exeter, Plymouth College of Art, Heart of the South West LEP, South West Academic Health Science Network, Plymouth City Council and Cornwall and Isles of Scilly Local Enterprise Partnership (LEP).

WHAT'S ON AT VENTUREFEST SW 2019

Innovation Showcase, with Thomas Westcott



Fly over the River Exe estuary without leaving Sandy Park, meet Pepper the healthcare robot who knows how you feel and taste a Devon produced yellow split pea milk. With an immersive dome, robotics, augmented reality, virtual reality and more, the Innovation Showcase exhibition with Thomas Westcott will be at the heart of Venturefest SW, celebrating the region's cutting-edge technology. Award winning, life-changing, environment-saving and entertaining, the South West generated tech on show covers AI, health technology, drones, data analysis, gaming, live entertainment and e-commerce.

Exhibitors

Browse the Venturefest SW exhibition space to meet partners, supporters, the region's business networks and commercial businesses offering a wide range of products and services.

See page 10 for our list of exhibitors.

Pitchfest

Start-up businesses delivering cutting-edge technology are thriving in the South West.

22 of the region's high-growth potential tech businesses will be pitching their innovations to investors and influencers at Pitchfest, the live pitching competition at Venturefest SW.

From data driven solutions for sustainable mining to technology for indoor farms, to the next generation of live interactive shows and anti-counterfeit product authentication, the Pitchfest applicants are exciting and diverse and reflect the breadth and depth of the technology sector in the region.

The Pitchfest semi-finals at Venturefest SW are hosted by UK Business Angels Association. Eight companies will be selected at the morning semi-finals to present in the afternoon session on the main stage, from which three winners will be chosen.

Hackfest - Inspiring the next generation of designers and engineers

Hackfest is a county-wide project across Devon for young people to come together to create product prototypes that respond to the issues of the future, led by Atlantic Youth Creative Hubs, Fab Lab Plymouth and Plymouth College of Art. About 100 students aged 14 to 19, from a range of different schools across Devon, have taken part in two-day Hackfest events in both Exeter and Plymouth in the months before Venturefest SW. These events allow local young people to learn new digital and enterprise skills, design new ideas, create products or services and pitch those ideas to experts

Winners of the Hackfest pitching sessions, selected by expert judges, will be presenting their ideas to business leaders, investors and industry professionals at Venturefest South West.

Industry Sessions and Workshops – see overleaf for full details

VIP BREAKFAST with Michelmores LLP

Make valuable new connections at the VIP Networking Breakfast.

NETWORKING CAFE with AeroSpace Cornwall

Visit the Networking Cafe to connect with other delegates and get your complimentary lunch and tea and coffee throughout the day.



All info correct at time of print. Details maybe subject to change.

MEET THE SPEAKERS



Top Row, left to right: Helen Ferrier, Tom Torkar, Mandy Nyarko, Louise Witts, Ben Mundy.
Bottom Row, left to right: Claire Pearce, Geri Cupi, Mike Downing, Gail Eastaugh

TECHNOLOGY TRAILBLAZERS, ENTREPRENEURS, BUSINESS LEADERS AND ACADEMICS HEAD UP A DAY LONG SCHEDULE OF TECH CONVERSATIONS AT VENTUREFEST SW. JOIN IN WITH INDUSTRY SESSIONS, PANEL DISCUSSIONS, WORKSHOPS AND BREAKOUT MEETINGS TO MAKE THE MOST OF THE DAY. HIGHLIGHTS INCLUDE:

OPENING ADDRESS

Opening Venturefest SW on 17th June with an overview of the region's thriving science and tech industry is David Ralph, Chief Executive, Heart of South West LEP; Vicky Hunter, Entrepreneur Engagement Manager for the South West for Tech Nation and Mark Duddridge, Chair of Cornwall and Isles of Scilly LEP. The panel will cover the South West's strengths in STEM industries, the challenges for the region and the future opportunities.

AGRITECH

Headed up by David Fursdon; Lord-Lieutenant of Devon and Chair of Dyson Beeswax Farming Ltd this panel will look at opportunities in farming to develop technology aimed at increasing food production, reducing waste and minimising environmental impact. The discussion panel consists of Dr Helen Ferrier; Chief Science

Adviser at the NFU, Prof. Mick Fuller; Professor of Plant Physiology & Chair of Controlled Growing Environments Group, University of Plymouth, Mary Quicke MBE of Quickes Cheese, Dr Robin Jackson Agri-tec Cornwall project director; Duchy College; and Dr Martin Stoelen, Founding Director of Fieldworks Robotics & Lecturer; University of Plymouth. This session will be followed by two facilitated workshops exploring needs and opportunities for technology developers to ensure Healthy Crops and Healthy Livestock in areas such as controlled growing environments; robotics; automation & precision agriculture; data tagging and disease resilience amongst others.

ADVANCED ENGINEERING, WITH STEPHENS SCOWN

Take part in the panel discussion featuring Rittal engineering director,

Andy Gill and Mary Anrigo, Mechdyne Corporation. Claire Pearce, project manager at Plymouth Materials Characterisation Project is leading a workshop on Electron Microscopy.

AI AND BIG DATA, WITH THE ENVIRONMENTAL FUTURES AND BIG DATA IMPACT LAB

Discussing the current & future opportunities of Big Data & AI in business will be Mike Downing, Chief Technology Officer, WPA; Robert Kathro, Impact Lab; Amanda Quartly, IBM; Richard Everson, professor of machine learning at University of Exeter and Tom Torkar, partner and head of technology and innovation at Michelmores LLP.

BLOCKCHAIN

Unravelling Blockchain innovation is Paul Harwood, Co-Lab organiser;

All info correct at time of print. Details maybe subject to change.

Alex Hughes, Senior Lecturer in Business & Project Management, Chris Archer Brown, Professor of Digital Entrepreneurship and Director of Falmouth University's School of Entrepreneurship, Julie Hawker Co-CEO of Cosmic and Geri Cupi, CEO of MonoChain.

CREATIVE

Talking virtual reality and immersive technologies, investing in digital design and manufacture for product development and sustainable design thinking and start up support for Creative Industries businesses are Viktor Brelsford, Managing Director of digital development agency One Polygon; Ben Mundy, Manager and Knowledge Exchange Coordinator at Fab Lab Plymouth; Katie Goode, Triangular Pixels and Ben Sewell, Launchpad - Falmouth University.

Leading a User Experience (UX) Design workshop is award-winning product UX designer Paula Kaminska.

ENVIRONMENT

Questioning what commercial opportunities would result from a circular economy for plastics in the south west is Adam Hall, head of sustainability at Internet Fusion and SurfDome, Liz O'Driscoll, Exeter City Futures, Emma Burlow, head of circular economy at Resource Futures, Richard Marsh, Business Development Director, Coastal Recycling, Peter Hopkinson, Professor in Circular Economy, University of Exeter and Nicky Cunningham, Impact and Partnership Development Manager, University of Exeter.

HEALTH, WITH PLYMOUTH SCIENCE PARK

Insight and input on health technology from Chris Sawyer, Innovate UK; Louise

Witts, Deputy CEO SWAHNS; Daniel Catt, Director Population Health Consulting, Cerner; Victoria Norman, CEO Signum Health and Gabriel Aguiar Noury, Post-Doctoral Research Fellow in Human Robot Interaction & EPIC Researcher; Robotics, Devices, and Startups.

MARINE

With a doubling of the Ocean Economy predicted by 2030, this session will look future opportunities in Offshore Renewable Energy with Steve Jermy, Marine & Offshore Aviation Specialist at James Fisher Marine Services and Matt Hodson, Marine Hub Operations Director, Cornwall Development Company, and innovative ways of capturing key ocean data with robotic platforms from Phil Johnston, Business Development Manager at Seiche and manager for Autonaut Unmanned Surface Vessel.

SPACE, WITH AEROSPACE CORNWALL

Considering space exploration opportunities and challenges for South West businesses is Gail Eastaugh from Aerospace Cornwall, Miles Carden, director of Spaceport Cornwall and European Space Agency Business Applications UK Regional Ambassador for the South West, Donna Lyndsay.

START-UPS & SCALE-UPS, WITH SETSQUARED

Focusing on the key areas of Grant Funding, Angel Funding, Venture Funding and Accelerating Growth is Kathryn White from Impact Lab, Mandy Nyarko, Exeter Velocities, Jason Hayward-Jones, RegenFARM, Steve Kitson from SetSquared Business Support, Jon Williams, Director at Granted Consultancy, Kezia Williamson from Innovate UK, David Fry, CEO Brain in Hand and Toby Mottram, Founder of Milkalyser.

FOR MORE DETAILS AND AN EVENT TIMETABLE INCLUDING 20 WORKSHOPS VISIT WWW.VENTUREFEST-SW.CO.UK

All info correct at time of print. Details maybe subject to change.

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VENTUREFEST
SOUTH WEST

ATTENDING VENTUREFEST SW 2019

17th June 8:30 – 17:00
Sandy Park Conference Centre, Exeter

Tickets £40 +VAT.

Tickets include access to all Venturefest South West panel discussions, workshops, exhibition, Innovation Showcase, Pitchfest finals, complimentary lunch and tea and coffee throughout the day.

www.venturefest-sw.co.uk



MEET THE EXHIBITORS

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www.aticornwallinnovation.co.uk

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www.aerospacecornwall.co.uk

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www.devonchamber.co.uk

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www.digitalskillspartnership.blog.gov.uk

EXETER CHAMBER OF COMMERCE

www.exeterchamber.co.uk

EXETER INITIATIVE OF SCIENCE AND TECHNOLOGY (ExIST)

www.existexeter.co.uk

FEDERATION OF SMALL BUSINESSES (FSB)

www.fsb.org.uk

EUROPEAN SPACE AGENCY BUSINESS APPLICATIONS

www.business.esa.int

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www.southcoastmarine.org.uk

SOUTH WEST ACADEMIC HEALTH SCIENCE NETWORK

www.swahsn.com

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Venturefest SW is supported by: The Knowledge Transfer Network (KTN), Falmouth University, the University of Plymouth, University of Exeter, Plymouth College of Art, Heart of the South West LEP, South West Academic Health Science Network, Plymouth City Council and Cornwall and Isles of Scilly Local Enterprise Partnership (LEP).

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All info correct at time of print. Details maybe subject to change.

FORMER IBM MASTER INVENTOR JOINS SOUTH WEST DESIGN FIRM



Plymouth based digital agency Elixel welcomes highly experienced IBM Master Inventor and UX designer, Rob Breeds, to its team. This addition is part of its development plans to help boost productivity in the region's biggest businesses through unlocking their latent talent and improving communication across departments.

Elixel was founded in 2012 by four students while studying their final year of Digital Art and Technology at

Plymouth University. Over the last 7 years Elixel have built digital products and services for clients such as Game, JP Morgan and everyone's favourite puppet Sooty.

The strength of Elixels' base has meant that since November 2017 they have doubled their personnel, growing to a highly skilled team of eight, whilst turnover and profit have grown by over 30% two years in a row.

Gavin Jones, Managing Director of Elixel said, "The growth of Elixel over the last 18 months is evidence that businesses are looking for help to innovate. They are realising that they need help to overcome the challenges that stand in their way. We help them achieve improved customer experience, faster time to market and more engaged employees."

Rob Breeds, Head of User Experience Elixel: "I am delighted to be welcomed on board the Elixel team. I've watched them grow as a company and developing the design community in the South West. We've now got a real opportunity to help businesses take advantage of the value in collaborative design thinking to build better products and services."

www.elixel.co.uk

PREPARE FOR TAKE-OFF, FLYBE ANNOUNCED AS HEADLINE SPONSORS FOR BIG BANG SOUTH WEST 2019

CSW Group are delighted to announce Flybe as Headline Sponsor for the Big Bang South West Fair 2019, working in partnership with Devon County Council. This innovative science, technology, engineering, and mathematics (STEM) event, building on 9 years of continued success, will take place at Westpoint Exeter on Tuesday 25th June 2019.

Flybe will have a large presence on the show floor within the event, which provides a fantastic range of activities to engage and inspire the 6000 visiting students expected on the day. Engineers, pilots and cabin crew from Flybe will be on hand to talk to students and highlight the career opportunities available within the aviation industry.

Students can expect to have a go at flying a plane on their simulated flight activity, undertake an engineering challenge and experience a selection of aircraft maintenance based activities.

Speaking about this flagship event, Flybe's CEO, Christine Oumieres-Widener said, "We are very happy to be the headline sponsor at the Big Bang event this year. It will be a fantastic opportunity to reach out to many young potential future pilots and engineers. At Flybe we strongly believe in inspiring young generations to pursue careers in aviation and the best way to do so, is to have them directly engage with our pilots and engineers who will be available at the



stand to talk to them. Also, we have launched the Flyshe campaign which is designed to highlight the importance of addressing the huge talent shortage in aviation industry by inspiring young girls and women to consider roles that are traditionally male-associated. So I would like to use this opportunity to personally invite them to visit our stand and talk to us, as I am sure they will discover that there are no glass ceilings in the sky."

www.cswenterprise.co.uk/services/big-bang

FORMING THE BLUEPRINT FOR 21ST CENTURY HEALTHCARE

INSIGHT MEETS TRACEY COTTAM, ROYAL DEVON & EXETER NHS FOUNDATION TRUST



AS PART OF THE EXECUTIVE TEAM FOR THE ROYAL DEVON & EXETER NHS FOUNDATION TRUST (RD&E), TRACEY COTTAM IS DIRECTOR OF TRANSFORMATION & STAKEHOLDER ENGAGEMENT, OVERSEEING A WIDE PORTFOLIO INCLUDING LARGE SCALE TRANSFORMATION, QUALITY IMPROVEMENT, CENTRAL PROGRAMME MANAGEMENT AND CONTINUOUS IMPROVEMENT, INTERNAL AND EXTERNAL STAKEHOLDER COMMUNICATION AND ENGAGEMENT, INCLUSION AND CHARITABLE FUND RAISING.

Since June 2018, in partnership with the medical director, Tracey is also the joint senior responsible officer for the MY CARE Programme – a clinically led transformation programme enabled by the introduction of new digital technology. The programme will go live in June 2020 and will establish a new way of delivering care to the public and patients improving the quality of their experience.

Tracey has a background in senior leadership roles across different sectors including automotive, retail, logistics, consultancy and healthcare.

Q: How will MY CARE change the care sector?

MY CARE will improve experience for patients, carers and staff by joining up care and connecting people in a way we cannot today. Healthcare is a complex business, meeting the needs of patients and carers requires healthcare professionals, and I include our dedicated administrative colleagues in that group, to co-ordinate a wide range of activities; from diagnostics to treatment, the provision of medication to ongoing care.

MY CARE will give everyone involved in patient care at the Trust and beyond, an improved and joined up service enabled by a single electronic patient record on which to record information and more importantly make clinical decisions to improve health outcomes.

I want to stress though that technology on its own won't make all of this happen. As part of MY CARE we are working with hundreds of colleagues, patients and carers to redesign the way we deliver healthcare, all of which will be enabled by better ways of working which capitalise on the ability to better share information.

This people-led, technology-enabled clinical change to services delivered in hospitals and at home, offers the blueprint for 21st Century healthcare.

Q: How do you use science and tech to benefit people's lives?

Healthcare is all about people – those receiving care and those delivering it. Behind healthcare is science and technology. The RD&E already has a global reputation for innovation and involving people in this work.

Hip replacement surgery was changed globally thanks to the work of clinicians from the RD&E. We were one of the first Trusts in the country to introduce robotic prostate surgery which significantly improves outcomes and speeds up the recovery of patients.

MY CARE will bring together scientific health and transformation expertise together with world-leading technology to benefit patients, carers and our staff. For example, within our electronic patient record system there is a feature called My Chart. My Chart is an app or online portal for patients which will give people greater control over their healthcare and enable the remote monitoring of some conditions. Remote monitoring will mean we will be able to assess people in their own homes and make arrangements to see them when the need arises, not as a matter of routine. This is really significant. Very often we see patients just to “check”, and this is inconvenient for our patients and takes clinical time away from treating those most in need.

Q: What do you want to achieve in your role in the next 12 months?

Well my main priority over the next 12 months will be MY CARE. **This is the single biggest clinical transformation programme ever undertaken in Devon, and the first of its type to be implemented across both acute and community settings in the UK, so both exciting and challenging in equal measures.**

At the heart of the programme are people, those that need care and services from us (our public, patients and carers) and those that are entrusted to deliver care and services (our staff). Our focus over the next c.12 months will be to engage people in delivering this transformational change – we will listen to their views and ideas, connect different groups of people to take a joined up view of what changes make sense, and encourage everyone to innovate and be ambitious so that we get the best outcomes for people.

Q: What does your average day look like?

My day usually starts between 7.30 and 8.00 AM and usually ends between

“**HEALTHCARE IS ALL ABOUT PEOPLE – THOSE RECEIVING CARE AND THOSE DELIVERING IT. BEHIND HEALTHCARE IS SCIENCE AND TECHNOLOGY.**”

6.00 and 7.00 PM. Most days, there will be a number of meetings to attend and conversations with people. From a MY CARE perspective, the pace of activity is fast with several phases of the programme to be implemented within set time periods between now and June 2020.

As part of a great programme team I can be working on a range of topics including clinical pathway improvement, communication and engagement, staff training, configuration of the new IT system

or helping the RD&E organisation to deliver this change. Ultimately I, along with Adrian Harris (the Trust’s executive medical director), am accountable for the successful delivery of the MY CARE Programme, so my primary focus is to enable this to be done.

Q: What do you wish other people knew about your work?

One of the most inspiring parts of my role is working as part of the MY CARE Programme Team. It took nearly 6 years of hard work to secure national approval and funding for the Programme, and now it’s a real privilege to be delivering what’s been described as “For the RD&E it’s the biggest change we’ve seen since 1948 when the NHS began.” (Adrian Harris, RD&E executive medical director).

I would like everyone to know how committed the MY CARE team of nearly 650 people are to a shared purpose of improving the experience of people (our public, patients, carers and staff). The outcomes and results of MY CARE will benefit everyone, supporting individuals to live healthier lives.



MY CARE Digital Transformation

Credit: Royal Devon & Exeter Foundation Trust



MY CARE Clinical Pathway Improvement

MY CARE PROGRAMME

MY CARE is a clinically led transformation programme enabled by a comprehensive electronic patient record. At its heart, are people – those that need care and services from us (our public, patients and carers) and those that

are entrusted to deliver care and services (our staff). Through the programme we will engage people in the co-design of a new model of delivering care and services together with making information more accessible, both at home and any care delivery setting.

There will be a range of positive outcomes for people – those we are here to serve (public and patients) and our staff together with numerous quality, safety, capacity releasing and financial benefits.

INSPIRING THE NEXT GENERATION

TO PUT EXETER AT THE CENTRE OF THE UK'S DATA REVOLUTION



EXETER COLLEGE'S STEPHEN MARIADAS IS INSPIRING THE NEXT GENERATION OF DATA ANALYSTS TO MEET THE SKILLS NEEDS OF THE 21ST CENTURY AND HELPING TO POSITION EXETER AS THE CENTRE OF THE UK'S DATA REVOLUTION.

In January 2019 Stephen was awarded a Technical Teaching Fellowship from the Education and Training Foundation (ETF) in partnership with the Royal Commission for the Exhibition of 1851. One of three in the UK, fellowships are awarded to outstanding practitioners who are recognised for their high impact teaching practice and the delivery of effective outcomes for learners.

Stephen, who has worked for most of his career in the IT industry before switching to teaching, is passionate about making sure the Data Analytics apprentices not only get the best possible teaching, but during the course they can also apply their skills

to real-world problems. Knowing how to deal with the issues seen in organisations, rather than a textbook, is critical to delivering the Data Analysts of the future.

It is a very exciting time for the future of digital, engineering and manufacturing technology education across the South West, with the recent announcement that a new Institute of Technology will be established. The Exeter element of the bid will help part fund Exeter College's plans for a new £10 million Digital and Data Hub on its Hele Road site.

Insight caught up with Stephen to learn more about his work.

What is your role at Exeter College?

I work closely with employers in our region to match our Data curriculum to their needs. I also deliver on the Higher Level Data Analytics apprenticeship programme – in particular getting our learners qualified as Data Science associates (Dell EMC).

The Teaching Fellowship is a fantastic achievement – how were you selected?

I had to complete an overview of the work I was doing with Data in the south west as an 'expression of interest'. Following a successful shortlisting completed a ten page application detailing what I had done and the differences it had made. There was also a strong focus on what could be shared nationally as an exemplar.

How will the Teaching Fellowship change your role? How will it benefit your students and the College?

I will spend approx. a day a week ensuring the best practises from what we do in Exeter are used as a model for others to follow. We are at the forefront of delivering data skills to learners. I will also use the time to expand the attraction of careers in data, visiting schools, careers fairs and building resources that can be used by others.

When you get to the end of the year, what do you want to have achieved? What will be a success for you?

Success will be having a re-usable package of data activities that have been proven to inspire young people in the opportunities in working with data. I would love to be able to share this at

a national conference of peers in July 2020 to help build these skills, and have an impact, nationally.

How do you want to work with / how can you engage / how can you help SMEs in Exeter and the region?

The recent successful bid for an Institute of Technology in the South West and the dedicated state-of-the-art data facilities this will bring to Exeter mean that we will have the professional work and teaching space required to properly engage with all types of business in the region. The Institute's lead will come from local employers to help us shape the curriculum to meet their needs.

The only way to make data 'real' is to have real-world problems from local employers. Having SMEs from a broad range of industries – from healthcare to sports, retail to engineering – highlighting the issues they face will help sell this to as many young people as possible. Learners that already have an idea of the type of industry and skills they want to head into in the future but don't realise what data skills can do for them in their chosen direction.

“ **VERY EXCITING TIME FOR THE FUTURE OF DIGITAL, ENGINEERING AND MANUFACTURING TECHNOLOGY EDUCATION ACROSS THE SOUTH WEST** ”

What does your average day look like?

The best days involve bringing a hot topic from the news and working on it with up to 18 students – letting them challenge current thinking based on the discoveries they can make from the data available – or having several learners from very different industries debate how processes and data work within their organisation. The icing on the cake is visiting a new local employer and seeing them get excited when they realise what they could do with a new, or current, employee that has the latest skills in data.

Data Analytics is not about just working in technology – being able to talk through a company's way

of working and presenting and communicating a new way of working can be ground-breaking.

The work I do is heavily involved in real-world problems and being able to solve them together with the learners is incredible. Emphasis is put on softer skills as these are very important. For example, working effectively as part of a team, and being able to present to different stakeholders is also a crucial part of our curriculum.

Does your work connect Exeter nationally / globally and how?

Being able to share what we are doing with a national conference of peers in July 2020 to help put Exeter and South West at the centre of the UK data revolution. The new Institute of Technology will bring in being able to connect nationally with other centres of excellence.

Why Exeter?

The EDISC programme has been integral to driving data skills in our city – the backing of Oxygen House, Met Office, Exeter City Council, Exeter University and Exeter College has been fundamental in promoting Exeter as a world-class city for data.

www.exe-coll.ac.uk

EVENTS CALENDAR

ENVIRONMENTAL INTELLIGENCE SUMMIT

**Wednesday 22 May 2019
10am – 7:30pm**

XFI Henderson Lecture Theatre,
University of Exeter, Rennes Drive,
Exeter, EX4 4ST
bit.ly/EnvironmentallIntelligenceSummit

BIG BANG FAIR SOUTH WEST

**Tuesday 25th June 2019
9am – 3pm**

Westpoint, Clyst St Mary,
Exeter EX5 1DJ
www.nearme.thebigbangfair.co.uk

EXIST QUARTERLY EVENT

**'Can Exeter become a World Leader
in Air Quality?'**

**Thursday 4th July 2019
8:30am – 11am**

Environmental Futures & Big Data
Impact Lab, Met Office Collaboration
Building, Upper Richardson, Exeter
Science Park, EX5 2FS

Mark Roberts, Lightfoot
Dr Matthew Hort, Met Office
Dr Beccy Mitchell, University of Exeter
Book via: www.bit.ly/ExISTJuly2019

PRISM SPEAKERS

**Monday 15th July 2019
7pm – 10pm**

The Workshop, Exeter Phoenix, Gandy
Street, Exeter, EX4 3LS
www.bit.ly/PRISMJuly

TECHEXETER CONFERENCE

Wednesday 11th September 2019

University of Exeter Business School,
Rennes Dr, Exeter EX4 4PU
www.conference.techexeter.uk

**EVENTS
ISSUE 10**

CELEBRATING 10 EDITIONS



A focus on science, technology, & innovation for the business community

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