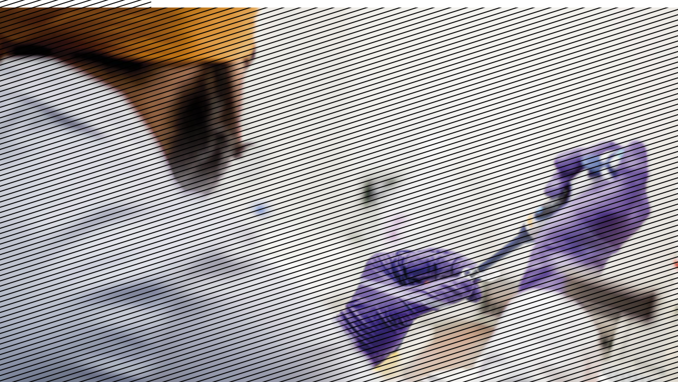
Research highlights_



_ Ways to improve the well-being of transplant patients

_ A loss of attachment to the nation state

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Autumn 2014_
Volume 02

_ The finer acoustics of medieval streets

Anglia Ruskin University

From saving lives to conserving water, our research answers the questions that matter

Contents

Welcome to Volume 02 of Research Highlights

I am delighted to introduce this issue of *Research Highlights*. Since arriving at Anglia Ruskin University in July 2014, I have been impressed by the range and quality of research that is taking place – some of which is represented in the following pages. We will now build on the excellent work to date, and look to develop research and innovation yet further.

We aspire to increase the number of research students; to fulfil our commitment to open access; to apply for and win more research grants; and, over the next few years, to deepen our involvement with research councils in the UK as well as with European and international funding bodies. Our research will continue to make a difference in the world.

Anglia Ruskin University is becoming more research-intensive, complementing its achievements in teaching and learning. We look forward to your participation and engagement: as a student, as a colleague or as a partner. Please get in touch.

Professor Richard Andrews
Deputy Vice Chancellor
Research and Innovation
Anglia Ruskin University

From pathogens to marketing
Our contributors

Dr Nektarios Tzempelikos_

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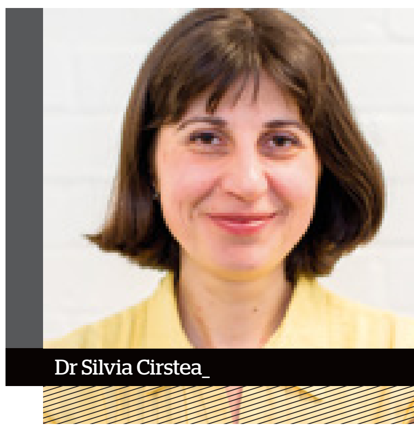
Nektarios is a Senior Lecturer in our Lord Ashcroft International Business School. His research interests include key account management, relationship marketing and customer value in the Business-to-Business (B2B) context. Nektarios' research has supported public and private organisations and been widely published, appearing in industry journals and publications.



Dr Silvia Cirstea_

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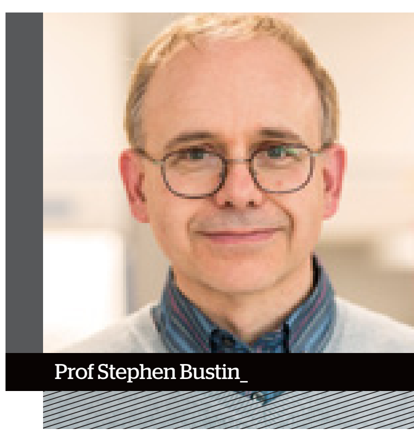
Silvia worked as a research scientist before joining Anglia Ruskin University. A principal lecturer in the field of Applied Mathematics and Media Technology, her expertise encompasses mathematical modelling and software development for emerging technologies and medical applications, acoustics, optics, signal processing, artificial intelligence, and inverse problems. Silvia has published research papers in prestigious journals and supported EU-funded projects.



Prof Stephen Bustin_

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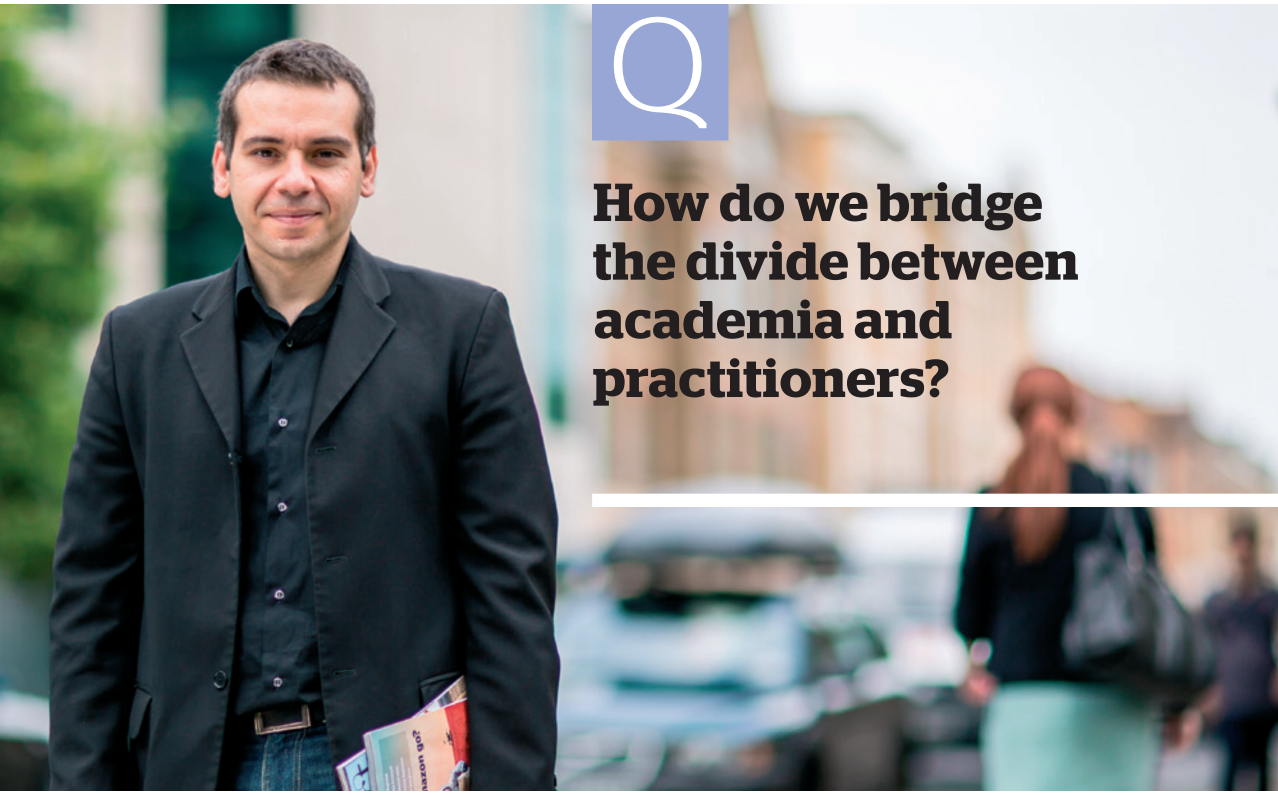
Stephen is Professor of Molecular Medicine at our Postgraduate Medical Institute. For 30 years he has investigated the biology of cancers focusing on the role of endocrine factors on tumourigenesis. Many of his publications describe important advances in colorectal and breast cancers and a continuing research theme has been translating novel ideas into clinical practice. Stephen holds editorial and committee positions in his field and is Editor-in-Chief of the Biomolecular Detection and Quantification journal.



Q

How do we bridge the divide between academia and practitioners?

A

By changing how and where we communicate our research

Q&A_ Dr Nektarios Tzempelikos

Genuinely helping practitioners to solve managerial and real-world problems and advancing marketing practice will only come from a rethink of the academic's role in the process. Dr Nektarios Tzempelikos explains.

With sincere thanks to co-authors:

Dr Ross Brennan
University of Hertfordshire

Dr Jonathan Wilson
Lord Ashcroft International Business School, Anglia Ruskin University

And to:
Dimitra Tsokanta
Project Research Associate

What was your starting point for this work?

I was interested in examining what I perceived as a gap between the Business Marketing and Business Studies research undertaken in universities (usually communicated through traditional academic channels) and the needs of marketing practitioners and the channels they used for accessing information.

Can you give an example of this in practice?

As academics, we're required by our universities and employers to strive for publication in academic or prestigious journals. However, as part of my work, I provided results of qualitative analysis showing that, for example, only 7% of marketing practitioners had heard of the *Journal of Marketing*, which is the world's most prestigious marketing journal. This didn't indicate that they read it, merely that they knew about it. In contrast, if I have an article published in *The Economist*, the practitioner readership and awareness of my work will be very high, but no one within the university sector will be aware of it or care about it. It will also have low to no impact on the progression of my academic career.

Why is it important to bridge this divide?

It has broader relevance in terms of what we do and why we do it. There are two main schools of thought: one suggests academics must be 'academics', in the sense that their primary concern is to advance knowledge and nothing beyond. The other suggests that Business Studies must be practical and applied; it should contribute to marketing practice. Our conclusion was somewhere in between. There should be more of a balance between advancing knowledge and addressing real-world problems.

What has caused such a gap?

I think it's the nature of Business Studies as a discipline. We like to think it's an applied research subject and there to help decision makers, but in practice this is not the case. Practitioners want practical, easy-to-implement solutions to their problems, conveyed to them in a way that's easy to access and digest. If we go back to the academic journal example, there are issues with relevance and format. The research is likely to be presented as an 8,000- to 10,000-word article. It will have taken up to two years to progress through the review process, before being published in a journal that the practitioner is not aware exists. Academics in the main produce really good work, but we need to get it out there in different ways to have an impact.

What else can be done?

We can go back to basics – right back to PhD programmes in universities and how they're structured. PhD students usually come through a Masters degree, with no previous experience in the practitioners' world. As they graduate to PhD level, they evolve into academics, isolated from the business world. As a consequence, the PhD lacks applicable managerial relevance. We believe there's scope for universities to reconsider some elements of their PhD programmes, perhaps through adopting part-time PhD programmes with practitioners or requiring that PhD theses are assessed with managerial relevance also in mind. Anglia Ruskin's professional doctorate programmes are a good example of this as they offer a route to a doctorate degree for people who are working and want to use research for developing their professional practice.

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Research funding:

The research was part-funded by the Anglia Ruskin Research Excellence Award

Research matters

What inspired you?

It was realising there was such a gap between practitioners and academics in the field of Business-to-Business (B2B) Marketing. Academics are producing large amounts of research, but disseminate it in ways that practitioners in the real-world never see, hear or are even interested in. There's no benefit to writing dense articles with extremely complicated terminology if fewer than ten people are ever going to read them – none of whom are practitioners in the field. In many ways, we're just talking to ourselves.

Any surprises?

The response rate from the academics approached for the study was very interesting. It was almost 50% lower than that from practitioners. There's a message for us here.

Why does this research matter?

The main importance of this study is to highlight a knowledge transfer gap and encourage academics to think about their own role in this area. If we genuinely want to help practitioners solve their managerial and real-world problems and advance marketing practice, we need to adapt our thinking somewhat. It will not be difficult or costly; it's simply a matter of will and attitude.

Reading matter

Improving relevance in B2B research: analysis and recommendations
*Journal of Business & Industrial Marketing (2*ABS, Impact Factor: 1.000) (forthcoming)*
Brennan, R., Tzempelikos, N., and Wilson, J.

Q

How do blind people use their hearing to negotiate unfamiliar environments?

A

By interpreting not just the sound level, but its reverberation as well

Q&A_ Dr Silvia Cirstea

By understanding how blind people use their hearing to map environments, we're developing smarter mobility aids and better training methods for self-navigation, says Dr Silvia Cirstea.

Team members:

Prof Shahina Pardhan
Dr Andrew Kolarik
Dr Matthew Timmis
Steven Harris
Anglia Ruskin University

Collaborator:

Prof Brian Moore
Cambridge University

How did the project come about?

As part of my PhD, I looked at how to reconstruct space from two-dimensional images. Then in a job for the Medical Research Council, I studied the psycho-acoustics of hearing and models of hearing. It became apparent that there were similarities between the ways we hear, see and map the environment; it's just that the auditory cues are a lot weaker than the visual cues. The idea is that you can interpret the propagated sound and come up with a map of the environment. It's a lot more difficult than when you look at a series of images. When my colleague, Prof Shahina Pardhan, started at the Vision and Eye Research Unit (VERU) at Anglia Ruskin, we talked about this idea and how it could be translated into meaningful outcomes for the blind and low-vision community. That's how the project started. Our colleague Dr Andrew Kolarik joined VERU and we began theoretical and experimental work on this theme.

What were your research objectives?

Anecdotal evidence suggests blind people are better at understanding environments, such as whether they're in a corridor, large room or a small room, through interpreting sound reverberation alone – more so than normal-sighted individuals. Through our research, we were able to prove that this was indeed the case, regardless of whether the sound came from the front or side. We also looked at how normal-sighted and blind people perceived the absolute distance. Could they say whether the sound comes from one or five metres away just by listening? Our other objective is to incorporate features, such as reverberation and level information, into mobility aids for the blind and develop an automatic process that is able to interpret the reverberation in the environment from the noise or other known sources. This technology can then produce a map of the environment and guide the user to avoid obstacles and traffic, and stay on the correct side of the road.

How is the new mobility aid progressing?

It is still in the software development stage. I have two final-year project students who are developing bracelets and headsets that are able to push a user in one direction or another, not through using acoustic cues, but via radio frequency identification (RFID) tags in the environment. This is operating in a smart environment. The tags send information about dimensions and obstacles such as corners and stairs, then the processor on the mobility aid interprets those signals.

Can you foresee other applications for this work?

Yes. My colleague, Steven Harris, is working on a related theme. Initially, it was closely related to this work, but has now moved more into the development of virtual and gaming environments for the blind. This could be for training or entertainment, but can also work as a simulation environment for mobility. We can also see it being used in Assisted Living or Smart Home applications.

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Research funding:

The research was funded by Anglia Ruskin University

Research matters

What inspired you?

The desire to come up with better solutions for people who are visually impaired and face difficulty in their lives as a result. Unfortunately, existing mobility aids are still deficient, either in what they are able to detect, or in the way they convey what they detect. If I manage to solve this, it would be a great achievement.

Any surprises?

I was surprised that low-vision people do not show the same or better ability of interpreting reverberation compared to normal-sighted people – whereas blind people do. I wasn't expecting that.

Why does this research matter?

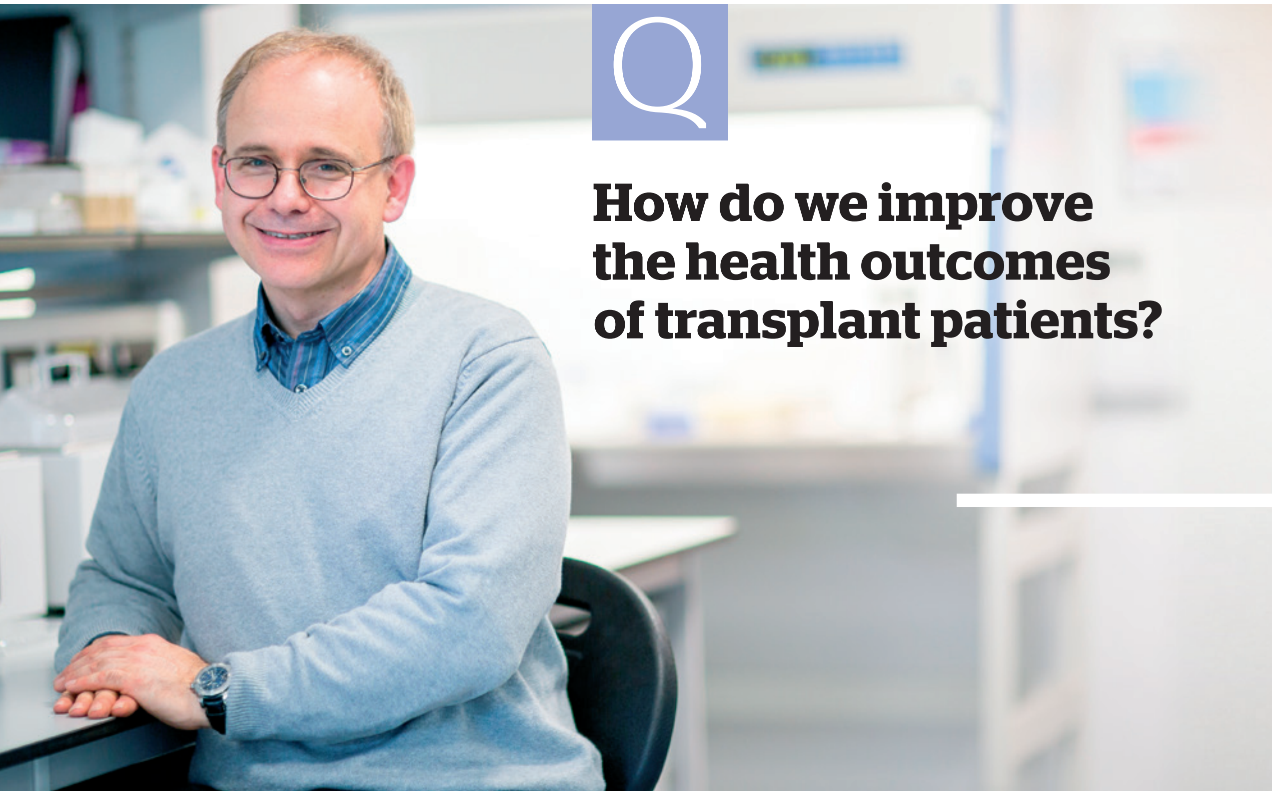
It matters to the visually-impaired community. By being able to understand reverberation, blind or low-vision people can be trained to listen better to it and manage by themselves in unfamiliar environments. This work will also inform future technology development in mobility aids.

Reading matter

A summary of research investigating echolocation abilities of blind and sighted humans
Hearing Research, Hear Res. 310 pp. 60-68, 2014
A.J. Kolarik, S. Cirstea, S. Pardhan, B.C.J. Moore

Discrimination of virtual auditory distance using level and direct-to-reverberant ratio cues
Journal of the Acoustical Society of America 134(5) pp. 3395-3398, 2013
A.J. Kolarik, S. Cirstea, S. Pardhan

Sensory substitution information informs locomotor adjustments when walking through apertures
Exp Brain Res 232(3) pp. 975-984, 2014
A.J. Kolarik, M.A. Timmis, S. Cirstea, S. Pardhan



Q

How do we improve the health outcomes of transplant patients?

Q&A_ Prof Stephen Bustin

After identifying widespread concerns about published research results, Prof Stephen Bustin is working on developing a new technique for accurately identifying pathogens and is aiming to establish a centre of excellence for molecular diagnostics.

How did the work come about?

I have a long-standing interest in applying molecular technologies to translational research. The Polymerase Chain Reaction (PCR) is the most common molecular technique in use today and I have been working with it for many years. A review I published in 2000 has become the most cited on this technique (over 3,000 citations) and I have written and edited three books on this topic. I realised early on that there were real problems with how researchers carry out their experiments. I have spent the last 16 years identifying the pitfalls associated with this technique and suggesting solutions.

What is the impetus for establishing the centre?

Molecular diagnostics refers to the detection of cellular disease-associated biomarkers or the identification of pathogens using antibodies or the PCR. Cellular biomarkers comprise genetic and epigenetic alterations of DNA or RNA expression signatures and are used for the diagnosis and prognosis of cancers.

Unfortunately, the reliability of many of these biomarkers is open to serious doubt. Last year, we published in *Nature Methods* a survey of 2,000 peer-reviewed publications that use PCR and showed that virtually every paper we looked at was seriously flawed. We followed this up with a paper published earlier this year that looked specifically at colorectal cancer. It concluded that most prognostic biomarkers for this cancer are unlikely to be clinically useful. A second interest involves developing new approaches to improve the speed and accuracy of detecting viable and infectious fungal and bacterial pathogens.

A

Through greater accuracy in diagnosis and treatment of infection

Why focus on fungal pathogen detection?

The impaired immune system of immunosuppressed transplant patients makes any infection life threatening and so early and reliable detection of pathogens is particularly important. The problem is that, although fungi are ubiquitous, their accurate identification as infectious agents is rather challenging. The current approach (using clinicians' gut instinct to decide on the correct treatment) often leads to the administration of inappropriate antibiotics and wastes millions of pounds a year.

> "Last year, we published in *Nature Methods* a survey of 2,000 peer-reviewed publications that use PCR and showed that virtually every paper we looked at was seriously flawed."

What will this work lead to?

A better test that will save lives, we hope. The problem with current antibody-based diagnostic tests is that, while they can identify viable pathogens, they're not sufficiently sensitive for earliest possible diagnosis. PCR assays, on the other hand, are extremely sensitive, but provide no information of the infectivity of the bug they're detecting.

Our approach combines the advantages of the two methods in an assay developed by US biotechnology company, Life Technologies, called a Proximity Ligation assay. It allows us to use a quantitative PCR assay to detect the binding of an antibody that specifically targets proteins expressed only by actively growing fungi. This should allow us to detect the presence of the infectious agent up to a week earlier than is currently possible with antibody-based tests. Consequently, antibiotics administration should become more targeted, saving money and potentially lives.

Have there been any outcomes so far?

Since my arrival at Anglia Ruskin in September 2012, we've published 12 peer-reviewed papers and several book chapters, and one of the assays we helped develop is in regular use with several NHS Trusts. We're regularly invited to give talks around the world and I've just returned from two lecture tours (one of the USA, the other of India, Malaysia, Indonesia and Australia). We also received a grant from the European Molecular Biology Organisation (EMBO) to run an international workshop on the Proximity Ligation assay in Chelmsford and are recognised worldwide as being at the very forefront in our particular area.

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Research funding:

Life Technologies, San Francisco, CA
Amount of funding awarded:
$50,000

OLM Medical, Newcastle
Amount of funding awarded:
£66,000

Research matters

Your inspiration?

My inspiration is to do things that are useful and have a positive impact on people's lives. I like to work in areas where I can see some kind of impact or return within a reasonable period of time, rather than just addressing questions of scientific interest.

Any surprises?

The poor quality of a lot of the research in the field, how the results are over-interpreted and how much contradiction there is in the results published.

Why does this research matter?

The publication of erroneous results that lead to wrong conclusions can negatively affect people's lives, as we have seen with the MMR/autism farce. This has caused a great deal of unhappiness and even deaths. So it matters very much.

Reading matter

Real-time quantitative PCR, pathogen detection and MIQE
Methods Mol Biol. 2013 PMID: 23104279
Johnson G, Nolan T, Bustin SA

RNA biomarkers in colorectal cancer
Methods. 2012 PMID: 23079397
Bustin SA, Murphy J

A MIQE-compliant real-time PCR assay for Aspergillus detection
PLoS One. 2012 PMID: 22808087
Johnson GL, Bibby DF, Wong S, Agrawal SG, Bustin SA Agrawal SG, Bustin SA

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PROF MATTHIAS FINK

Matthias is Professor for Innovation and Entrepreneurship at our Institute for International Management Practice (IIMP), as well as being Head of the Institute for Innovation at the Johannes Kepler University Linz, Austria. His research focuses on the role of innovation in new venture creation and small business management, with work published in several leading industry journals.

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DR MARINA BOZ

Marina is Senior Lecturer in Organisational Behaviour and Human Resource Management at our Lord Ashcroft International Business School (LAIBS). Her experience includes working in human resource management and as a research assistant and associate, collaborating on several research and knowledge transfer projects related to work-life balance, interpersonal conflict at work, diversity management and gender equality at work.

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DR MARIANA LOPEZ

Mariana is a Post Doctoral Researcher at our Cultures of the Digital Economy Research Institute (CoDE). She has a background in music and sound design and completed her PhD at the Department of Theatre, Film and Television (University of York) in 2013.

Integrating people with disabilities

into regular jobs in Spain

DR MARINA BOZ

For over two decades, Spanish law has required companies with more than 50 staff to have at least 2% of their workforce composed of people with disabilities. Only recently, however, has the government enforced sanctions to make sure this law is being applied.

"Workplace teams that gain new employees with disabilities play a much bigger role in the way those individuals feel at work than they may be aware of."

Over a four-year period, Dr Marina Boz and a team of researchers examined how people with disabilities socialised and integrated with teams in ordinary job roles, that are not specifically created or intended for a person with a disability. This was not an institutionally driven project. Instead, a group of 13 companies, from small businesses to multinationals, supported this important work, through the Fundacion Focus-Abengoa. Disability support associations were also involved. "This project was unique," explains Marina. "Rather than being driven by research goals, it was demand from practitioners that made it possible and drove it forward. Participating companies were working towards meeting their legislated targets. Although they were successfully recruiting people with disabilities, they were not retaining them and wanted to know why and how this issue could be addressed."

Answering this problem took the team into new territory. "Differentiating between the many types of disability and how they might influence an individual's successful integration in the workplace wasn't an area that had previously appeared in research," says Marina. As with existing research, the team found that most company programmes regarded 'disability' as a homogeneous thing. As a result, internal programmes designed to integrate and socialise employees with disabilities were broadly the same, regardless of the new employee's particular circumstances or capabilities. "This presented challenges, both for the new employee and existing workplace teams."

"In terms of capability, there was often a disconnect between what the employee felt they were capable of doing and what the teams' and managers' expectations of the employee were," continues Marina. "There was a definite theme of low expectation towards the new employee and this also influenced how other team members related to the new employee. Goals and tasks were normally set at a lower level than the new employee expected. This was a demotivating factor and didn't encourage individuals with a disability to stay with the organisation."

Understanding or misunderstanding the new employee's disability also caused barriers to integration and good communications within teams. This was more acute in situations where the individual had a learning disability, or a hearing or oral impairment. "A significant issue here was that existing employees were not being trained in, or briefed on, how to talk to such individuals," adds Marina. "In the case of hearing impairment, for example, staff were not taught basic sign language or even made aware that they should always face the person when speaking to enable lip reading."

Interestingly, many of the organisations involved in the study were unaware that these problems around expectations, capability and communication existed. "It was only when speaking to team members and the employees with disabilities that all of this became apparent," says Marina. "The issue appears to be a system failure. During the hiring process, the HR department and the new employee's supervisor had worked closely together; all had a clear understanding of the individual's situation regarding his or her disability. However, everyone neglected to prepare the relevant teams to work with the new recruit. This proved key to the majority of the failings. It was the dynamics within the team – not the supervisor or the organisation as a whole – that was the problem."

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Research funding:

Andalucia Council for Employment
Amount of funding awarded:
€18,000

European Social Fund
Amount of funding awarded:
€12,000

Focus-Abengoa Foundation
Amount of funding awarded:
€6,000

Duration of the funding:
4 years

Research matters

What inspired you?

The social relevance of the project, its real and significant impact on the working lives of individuals with disability. Also, the possibility to collaborate with so many partners and make a contribution to each of them.

Any surprises?

I think it was that there was such a complex political landscape to navigate in order to complete the study—between the academic and governmental partnerships as well as the external organisations. At the project's outset, I wasn't expecting that we would need to spend so much time in a mediator role, but to observe and participate in this unanticipated way was a fascinating and positive experience.

Why does this research matter?

Because it shows that workplace teams that gain new employees with disability play a much bigger role in the way those individuals feel at work than they may be aware of.

Entrepreneurship: Good intentions aren't always enough

PROF MATTHIAS FINK

Why is it that so many budding entrepreneurs who plan to start a new business don't do so? The short answer is usually down to 'the economic climate' or 'lack of access to finance', but new research conducted by Prof Matthias Fink shows that the lion's share of reasons is not related to either of these areas.

"The place where the individuals are geographically and the people who are around them play a key role in their decision to start a business."

"The statistics were quite surprising," explains Matthias. "We surveyed over 3,000 people and, of those who said they wanted to become entrepreneurs and start a business, when we went back to them a year later to find out if their plans had progressed, only one third had really done so. The task was then to identify what had happened to prevent commercial ambitions from being realised."

There are several key factors it seems, and these are external to budding entrepreneurs. "The place where the individuals are geographically and the people who are around them play a key role in their decision to start a business," says Matthias. The 'who' is their community, including the budding entrepreneur's family, friends, and peer groups. The social context is particularly important for starting a business and this was explored during the study.

"Social legitimacy of entrepreneurship in the community is decisive," adds Matthias. "Those surrounded by negative perceptions of being an entrepreneur – facing comments from 'it's not secure' to 'you might fail' – were significantly more unlikely to have taken the step of starting a company than those who had more positive surroundings and encouragement." However, it's not just the social situation that impacts on whether intention turns to enterprise, explains Matthias. "There is also the question of what support is available in the budding entrepreneur's specific region. In communities well equipped with supporting resources, including education, financial resources and social support, the share of individuals realising their entrepreneurial intention was higher."

What can be done to address the shortfalls? And how do we help more people to turn entrepreneurial intentions into action? Matthias's advice for budding entrepreneurs is simple: "Basically, it's important to be part of a community that rates entrepreneurship as a legitimate career choice." The other factors that need addressing are more in the hands of policy-makers. Matthias cites key ones as "fostering greater understanding and more positive attitudes towards entrepreneurial activity in communities and improving practical support systems and resourcing for those intending to start a business."

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Research funding:

Academy of Finland

The Anniversary Fund of the Austrian National Bank

Research matters

What inspired you?

I wanted to understand what, apart from money, is hindering entrepreneurs from following their intentions to start businesses.

Any surprises?

I would say it was that we got such clear results from our study. There are clearly identifiable reasons why people do not start a business and the largest share of these are non-financial hurdles. If you look at the media and public discourse, it's all about financial issues. However, this debate needs to be refocused.

Why does this research matter?

It will inform and support policy-makers to design appropriate policy interventions for fostering entrepreneurship and encouraging budding entrepreneurs to act. In a broader sense, if we support the concept that entrepreneurship helps our economy to grow and generate wealth for the population, then the more entrepreneurship there is, the better it will be for all of us.

Reading matter

Ewald Kibler, Teemu Kautonen & Matthias Fink
Regional Social Legitimacy of Entrepreneurship: Implications for Entrepreneurial Intention and Start-up Behaviour, Regional Studies (2014)

A modern approach to medieval acoustics

DR MARIANA LOPEZ

Most of the research regarding medieval arts and culture has centred on music, writing and visual arts. The study of the acoustics of performance spaces, especially for medieval drama, has been neglected. Research jumps from Greek and Roman acoustics to the Globe Theatre in late Elizabethan times. Medieval acoustics are generally only mentioned when discussing religious buildings and this work focuses solely on internal acoustics. But what went on culturally outside such buildings? In York, in the United Kingdom, the answer is ‘quite a lot’, and acoustics mattered greatly.

To further this area of research, Dr Mariana Lopez has been working in the field of virtual acoustics to digitally model and recreate the acoustic environments of York streets during medieval times. In particular, Mariana has examined how street acoustics may have influenced the development and performance of the York Mystery Plays.

The York Mystery Plays were performed to audiences in public streets by members of the craft guilds, who used wagons as their stage. Auditory aspects, along with the words themselves, were central to conveying the messages contained in the plays, more so than the physical movements of the performers. This would have presented unique challenges, as Mariana explains: “Performances had to be heard over the sound of the normal workings of the streets, including frequent church bells and a cacophony of pedestrian activity.”

Mariana’s research attempts to demonstrate that there is more to the spaces used for medieval drama than we have considered until now. “This is mostly measurable through something called Interaural Cross-correlation Coefficient (IACC-Early),” adds Mariana, “which is related to the early sound reflections arriving at the sides of the listener and that make sound sources seem broader than they are. It is very possible that medieval drama organisers knew how to modify the staging conditions of their plays – from the use of wagons to the position of performers – to make the most of the acoustics of the street spaces.

In addition to giving us a better understanding of our cultural history, there are modern applications for this research. “For instance, we have evidence that may help us make informed decisions about how to preserve and restore our relatively untouched medieval streets,” says Mariana.

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Research funding:

Department of Theatre, Film and Television (University of York)

The International Office (University of York)

The Audio Engineering Society

> **“It is very possible that medieval drama organisers knew how to modify the staging conditions of their plays.”**

Research matters

What inspired you?

When I was a Masters student at York, I read about work in the field of acoustical heritage. I found the idea fascinating, being able to not only focus on the visual aspects of a site, but to also think about how we can learn from past cultures through the acoustics of buildings and, in this case, our very streets.

Any surprises?

I was surprised by the acoustical characteristics of the particular street space I studied: Stonegate, in central York. This space, which in many ways wouldn’t seem ideal for the performance of the sung parts of the plays, turned out to have some acoustical characteristics equivalent to those found in concert halls of a very high standard.

Why does this research matter?

The York Mystery Plays are a key aspect of York’s cultural heritage. Their importance to York is demonstrated by the fact that the wagon plays are still performed there every four years, with a large number of people from the wider community participating. I think it’s important that we use new digital technologies to study these historical events to help them, in some ways, remain alive for modern audiences.

Reading matter

The Application of Impulse Response Measurement Techniques to the Study of the Acoustics of Stonegate, a Performance Space Used in Medieval English Drama
In Acta Acustica united with Acustica, Vol. 99, No. 1, January/February 2013, pp. 98-109
López, M, Pauletto, S and Kearney, G

Opinion

OUR RESEARCHERS FOCUS ON PRESSING MATTERS, FROM CITIZENSHIP AND CLIMATE CHANGE TO OUR CHILDREN'S WELL-BEING

Contributors_

DR JAMES ROSBROOK-THOMPSON

"I'M LOCAL AND FOREIGN"

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James joined us after completing his PhD at the London School of Economics and Political Science. His teaching specialisms encompass the sociology of 'race' and race-thinking, globalisation and education, and the ethnographic method. Research interests include raciology, urban sociology, delinquency and disorder, the sociology of sport, cosmopolitanism and notions of belonging. James has written numerous articles about sociology and a book on the sociology of sport.

DR CANDICE HOWARTH

OUR FUTURE WITH CLIMATE CHANGE HAS ARRIVED

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Candice is a Senior Research Fellow in our Global Sustainability Institute (GSI). She leads the Climate Action and Cultural Systems theme, where her research concentrates on climate communication, action and behaviour change, and the impacts of climate scepticism. Highly in demand, Candice was seconded to the UK Government's Department of Energy and Climate Change in 2014, where she worked on international climate change engagement.

PROF SARAH REDSELL

SHOULDN'T WE TALK MORE ABOUT CHILDHOOD OBESITY?

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As our Professor of Public Health, Sarah has an academic and clinical background in nursing and public health, together with research skills in health psychology. Sarah's research has primarily focused on communicating aspects of health and well-being with parents of infants and children, including developing and testing interventions for health professionals and service users. Sarah's work has also explored barriers to immunisation and identifying and preventing obesity during infancy.

DR JAMES ROSBROOK-THOMPSON

"I'M LOCAL AND FOREIGN"

Citizenship is a major area of interest for the media, policy-makers and the wider community. The legal dimension of citizenship has, of course, always been important and there's been much discussion around formalities and competencies, such as tests and language requirements. Recently, however, people are talking more about the substantive dimension of British citizenship – that is, the more abstract values, such as practices, meaning and feelings of belonging.

Our sense of citizenship and belonging is not necessarily aligned with our country of birth or legal status. I was keen to explore this subject in a recent study. We found that many of the participants, drawn from a semi-professional football club in inner London, shared a sense of 'denizenship' (of resident non-citizenship). This was a key component of their make-up, despite a formal status of being 'British citizens', either by birth or qualification. That begs the question: how do we foster a sense of belonging in someone who's legally British, but who has no actual feelings of belonging to or allegiance with the nation state (whether that's Britain or elsewhere)?

For the study's participants, the pervading sense of belonging was tied to a neighbourhood, a constellation of council estates, or their particular side of the M25 (the other side was where the 'English people' lived). Here we had an assertion that to be local was, by definition, to be 'foreign', or to trace your ancestry elsewhere; "I'm local and foreign." This presents an interesting challenge for policy-makers for whom British and non-British or migrant status is one of the common differentiators.

Human variation, that is the sorts of ideas people use to make sense of the differences between people, is most commonly defined through obvious differentiators such as race, ethnicity, and a family's original country of origin and/or geographic location. Used in conjunction with citizenship status, quantitative measurements can be taken to describe the population of an area. However, these categories or differences were not the ones described by the study's participants. Their reality – their sense of belonging – had much more to do with their local setting and the other people within it; namely, how recently you'd arrived in the country, your seniority within the team and the council estate you lived on had much more currency than the more commonly-used designations of variation.

OUR SENSE OF CITIZENSHIP AND BELONGING IS NOT NECESSARILY ALIGNED WITH OUR COUNTRY OF BIRTH OR LEGAL STATUS.

I think that this figure of the denizen, or resident non-citizen, needs to be examined with more depth than before. Quantitative statistics don't necessarily give an accurate picture. We must undertake more qualitative ethnographic fieldwork and the voices of 'denizens' need to be heard more clearly. Danny Dorling, who's a Professor of Geography at Oxford, talks about London being the most unequal city in the developed world. I think there's definitely a link between such inequality and this sense of disenfranchisement or non-relationship with the country.

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Research funding:

Anglia Ruskin University has supported the dissemination of findings

Research matters

What inspired you?

I've been interested in sport since I was a youngster and this stayed with me as my focus changed to academia. While in the USA, I became interested in the differences between the UK and US in terms of capturing kinds of human variation through sport. People talked about players of (so-called) different races having different capabilities, strengths and weaknesses. In the US, everything is rendered in terms of numbers through statistical analysis; perhaps not so much work has been done on the qualitative ways in which people make sense of human variation, particularly the everyday ways.

Any surprises?

The biggest one was the pervasiveness of the idea of non-attachment to the nation state.

Why does this research matter?

We need to raise awareness of the everyday notions of belonging and feelings of belonging in the inner city. I also hope the research underlines the importance of ethnographic fieldwork and the battery of methods available to sociologists.

Reading matter

Sport, Difference and Belonging: Conceptions of Human Variation in British Sport. London: Routledge. Rosbrook-Thompson, J. (2012)

'I'm Local and Foreign': Belonging, the City and the Case for Denizenship.' Urban Studies. London: Sage Rosbrook-Thompson, J. (Forthcoming)

DR CANDICE HOWARTH

OUR FUTURE WITH CLIMATE CHANGE HAS ARRIVED

Achieving an international agreement on climate change is not an impossible task

There is broad consensus that 'something' needs to happen, but refining that 'something' into an agreement between some 190 plus parties currently involved – ahead of the upcoming Conference of the Parties on climate change (COP) in Paris in 2015 – is taking a team of expert negotiators some time. Can it be achieved? I believe so, but much of its success will rely on clear communication, engagement and robust negotiation between stakeholders at every level of society.

Through co-operation between business, NGOs (Non-Governmental Organisations), DECC (the UK Department of Energy and Climate Change), academics and civil society organisations, the UK's position on climate change and its future targets for energy efficiency and renewable solutions are being finalised. These will be shared through a variety of engagement activities between the co-operating parties. All of these groups are participating in greater lobbying efforts, both within their own networks and memberships and more broadly. The goal is to reach an agreement before the COP in 2015. Is an international agreement or a political approach the solution to managing the impact of climate change? Not solely, but it's certainly part of the bigger picture and this bigger picture is part of the challenge.

It can be difficult for individuals to see how they can have an impact on the outcomes of climate change or how an international agreement has any real-world relevance. Accordingly, it's time to re-examine how we discuss climate change, not just in terms of the issues and contributing complexities, but of our response as well. We need to link dialogue back to the domestic and individual contexts. We must clearly articulate to regular people, that is those not directly involved in the process, what these international negotiations mean to them and how the outcomes might affect their lives. Making the bigger picture relevant to the individual is key to bringing about action and behavioural change. This is a huge barrier across many communities – many of which don't necessarily understand the impacts their behaviour can have on climate change.

There's also a blame mentality to overcome. People often say: 'Why should we do something when China's not doing anything? It's building a new coal power plant every fortnight.' Whether accurate or not, we should also look at the other side of the coin; the reason for a growing number of power plants is to support a higher demand for product manufacture from countries including the UK. In fact, China, for example, is quite focused on acting on the climate change agenda, particularly when it comes to local air pollution.

The conversation needs to move away from this kind of thinking towards highlighting not only what we can do as individuals, but also the positive action already being undertaken on a broader international scale. There's much to be proud of. Framing messages in a positive way – that have individual relevance – will make a lasting impact on addressing and managing the effects of climate change.

Candice was on secondment to the UK Government. Working in the Department of Energy and Climate Change's (DECC) International Climate Change Stakeholder Engagement team, she led on NGO and Civil Society engagement.

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Research funding:

Department of Energy and Climate Change
Amount of funding awarded:
£60,000

Duration of the funding:
12 months

Research matters

What inspired you?

I'm incredibly passionate about climate change. I want to contribute to implementing the right solution that works for people.

Any surprises?

My secondment [to the Department of Energy and Climate Change] really opened my eyes to the political and negotiation landscapes around international climate change. I'm a lot more sympathetic to the process now. As a result, my subsequent work has been considerably more productive and effective, as I can see it does make a difference, but perhaps not in ways that are most obvious from outside the process.

Why does this research matter?

Climate change underpins everything we depend on and do. The reality is that the climate is changing; the world we live in now is different from how it was when we were children. People talk about a future with climate change and I would say that this future is already here. This doesn't mean we have to completely change our lifestyles in response. While a common perceived barrier to behaviour change is 'the Government isn't doing anything about it', I encourage people to appreciate what is happening. Reaching an agreement in 2015 is not the end of the line. In fact, it's the beginning of a new process to implement action; one in which we can all play a part.

Reading matter

Practitioner's work and evidence in IPCC reports.
Nature Climate Change, 4
Viner, D & Howarth, C (2014)

CRUCIAL TO PREVENTION IS OVERCOMING HEALTHCARE PRACTITIONERS' CONCERNS THAT RAISING THE TOPIC OF INFANT OBESITY MIGHT JEOPARDISE THEIR RELATIONSHIP WITH PARENTS.

PROF SARAH REDSELL

SHOULDN'T WE TALK MORE ABOUT CHILDHOOD OBESITY?

Childhood obesity is a significant public health issue. In 2012, 22% of children aged 4-5 years and 33% of 10-11 year olds in the UK were overweight. Yet the risk factors for childhood obesity can be identified during infancy (under one year) or even earlier. If we can recognise the infants most at risk of childhood obesity, we can target resources at them and their parents.

It's important to raise parents' awareness about obesity risk factors, such as infant feeding practices – it's not just what you eat but also about eating patterns. Along with researchers at the Universities of Lincoln and Nottingham, I undertook a study in 2009 that revealed some parents would want to know if their baby had a greater risk of obesity. However, healthcare practitioners (GPs, practice nurses and health visitors) said they were reticent about giving information about obesity as they did not want to stigmatise parents. These healthcare practitioners knew they needed to be sensitive and non-judgemental in their discussions with parents about obesity, but some felt they lacked the skills to do this effectively. They were concerned about getting it right and did not want to unnecessarily worry or upset parents.

Overcoming healthcare practitioners' concerns that raising the topic of infant obesity might jeopardise their relationship with parents is crucial to prevention. The research team I was part of realised that guidance was needed to improve healthcare practitioners' confidence in recognising infants at risk of developing childhood obesity and to help them work with parents on strategies for change. Consequently, we undertook two further research projects. In 2011, the team developed a questionnaire to identify childhood obesity risk during infancy. This questionnaire is now called the Infant Risk of Obesity Checklist (IROC). A year later, we undertook a review of all the papers published worldwide that described and tested interventions that could be used to prevent obesity in children under two years of age. This work led to the creation of a guideline for health visitors to help them with obesity prevention during infancy. This guideline is available to health professionals via the Institute of Health Visiting website www.ihv.org.uk.

The next project started in September and the team consists of researchers from Anglia Ruskin, Cambridge, Lincoln and Nottingham universities, and healthcare practitioners. It is funded by a Medical Research Council grant. The first stage will be to create a computer-based programme for health visitors that will include the Infant Risk of Obesity Checklist. The programme will be called the ProActive Assessment of Obesity Risk during Infancy (ProAsk). The second stage involves health visitors using the programme with parents to raise awareness about future obesity risk. The team hopes ProAsk will guide discussions between health visitors and parents about possible strategies for prevention. At the end of the second stage of the project, parents and health visitors will be asked their views about the ProAsk programme and how it worked in practice.

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Research funding:

Medical Research Council

Amount of funding awarded: £151,576

Duration of the funding: 1 September 2014 – 28 February 2016

Research matters

What inspired you?

I worked as a health visitor in Nottingham in the early 1990s before entering academia. About six years ago I stumbled across a paper that proposed that obesity risk could be identified very early in a baby's life. As a researcher, I wanted to explore what models we could use that could communicate this risk, while not alienating parents. It's about balancing this need for information with the possible stigma of labelling an infant as 'obese'.

Any surprises?

Our earlier work discovered that health visitors felt they weren't allowed to tell parents how to feed appropriately with formula milk. They said they weren't really supposed to talk about anything other than 'breast is best'. We feel that parents who formula feed need help too.

Why does this research matter?

We want to understand if knowing your baby is at greater risk of being an overweight child is important to parents. If so, it is vital that parents are empowered to make informed decisions about the way they feed and soothe their babies, supported by a healthcare practitioner who can communicate the evidence in a sensitive way.

Reading matter

Development of an algorithm to estimate overweight risk in childhood from predictors during infancy.
Pediatrics, Published on-line 15th July 2013, e414-e421 (doi: 10.1542/peds.2012-3858)
Weng SF, Redsell, SA, Nathan, D Swift, JA, Yang, M, Glazebrook, C.

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