

UNIVERSITY OF LINCOLN

DISCOVER: Publicly engaged research at Lincoln

ant

Issue 1

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Introduction

Discover – exploring research at Lincoln 2018-19

Ensuring the benefits of research are widely reaped is vital for any 21st century university: connecting people of all ages and backgrounds with the processes and outcomes of new discoveries makes university research more relevant, accessible, interesting, valuable and impactful to society, researchers and universities.

Discover is the University of Lincoln's annual review of activities and initiatives from the University of Lincoln which engage wider society with research. It aims to inform and inspire people within and beyond the University by featuring news, views and overviews of publicly engaged research from Lincoln.

Discover features news about recent activities engaging people with research outcomes alongside longer articles on research which is actively engaging members of the wider public, across all disciplines – from health to humanities, philosophy to proton physics, archaeology to agricultural robotics...

Discover also celebrates the achievements of our publicly engaged researchers who have won Vice Chancellor's



Awards for Public Engagement with Research, and shares public engagement by individuals and teams who have been awarded PEARL grants to develop new public engagement initiatives around their research.

Public Engagement with Research – central to the mission of the University of Lincoln

Engaging wider society with its research is a top priority for the University of Lincoln. The University weaves public engagement throughout its Strategic Plan (2016-21), is a signatory to the National Coordinating Centre for Public Engagement (NCCPE) Manifesto for Public Engagement and is developing its own Charter for Public Engagement with Research.

Public engagement is important because it benefits all parties. For society, public engagement democratises knowledge, improves lives, instils skills, raises aspirations, grows resources, nurtures creativity and builds social capital. Researchers benefit by gaining new perspectives on their work, developing new skills, extending their professional networks beyond academia and being able to access new sources of funding. Universities benefit by becoming more valued, diverse, transparent, and accountable.

Public engagement goes beyond the simple one-way dissemination of research outcomes, aiming to interconnect researchers and wider publics in two-way interactions.

Professor Carenza Lewis

Professor for the Public Understanding of Research

This can happen at any stage of the research process: public engagement can involve members of the public in developing research ideas, participating in consultations, setting up research partnerships, taking part in the research process, exploring research results, driving changes in policy and practice, inspiring the next generation of researchers.

The University of Lincoln offers myriad forms of public engagement to suit anyone and everyone, including co-produced projects, chances to participate, consultations, interviews, debates, demonstrations, educational materials, interactive events, exhibitions, short courses, talks, festivals and much more. These may take place on campus or off campus; indoors, outdoors, online, on air or anywhere else. They can be followed online or explored in the pages of *Discover*.

If you would like to find out more about any of the activities shared in this issue of Discover, please get in touch with PEARL (details on reverse) and we will connect you with the relevant project lead.

PEARL: Public Engagement for All with Research at Lincoln



PEARL is an acronym for 'Public Engagement for All with Research at Lincoln'. PEARL is an initiative funded by UKRI in order to take public engagement with research at the University of Lincoln to new heights, aiming to achieve and embed a step change in its support, conduct, visibility and impact. PEARL is led by Carenza Lewis (Professor for the Public Understanding of Research and PEARL Principle Investigator) and Tim Hodgson (Professor of Psychology and PEARL Co-Investigator) supported by Sarah Harris (PEARL Research Assistant).

PEARL in 2017-18

In its first year PEARL saw appointment of a new full-time member of staff to coordinate public engagement, and introduced a number of new initiatives to enable, support and enhance public engagement with research at Lincoln:

- New research into attitudes to public engagement amongst staff and students;
- A new 'one-stop' shop website (pearl.blogs.lincoln. ac.uk) with information on all aspects of public engagement from Lincoln;
- A new annual conference, the first of which attracted more than 80 attendees in March 2018;
- A new system of Vice Chancellor's Awards for Public Engagement with Research, the first winners of which received their awards from Vice Chancellor Professor Mary Stuart CBE at the conference;

- A new fund offering financial support for activities which engage wider publics with research from Lincoln;
- New opportunities for training and professional development intended to inspire and empower more researchers at all stages of their careers to engage with wider publics;
- Designed and produced the first issue of 'Discover', a new annual report which will review public engagement from Lincoln each year, featuring news and short articles showcasing the exciting and diverse range of activity which has been on offer across all colleges of the University of Lincoln.
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PEARLs of Wisdom: PEARL Conference and Vice Chancellor's Awards for Public Engagement with Research 2018

Author: Stephen Lonsdale (University of Lincoln BA History graduate)

Stephen Lonsdale was the winner of the 2018 Vice Chancellor's Student Award for Public Engagement with Research.

This year, for the very first time, the University of Lincoln has put on a marvellous showcase of the fantastic work carried out by staff and students alike in engaging the public with research. Put on as a part of the PEARL (Public Engagement for All with Research at Lincoln) project and, headed up by Professor Carenza Lewis (the University's Professor for the Public Understanding of Research), the conference served to announce research grants for the coming year and the winners of the newly-created Vice Chancellor's Awards for Public Engagement in Research, as well as to showcase the research itself.

The conference began very well with a cup of coffee and a lapel badge - which now proudly sits on my jacket - at registration, and opened in earnest with a series of quick-fire presentations looking at what publicly engaged research staff and students had been up to over the past year or so. There was a real variety to the research presented from many different disciplines, including findings on facial recognition software, the implications of Atheism, the University's mobile robot Linda, and the treatment of cancer, amongst others. Personally, I felt that it was great to see what other faculties and colleges have been up to; there can be a surprising lack of communication across subjects.

After these fascinating talks, we were given a flavour of what to expect next year with the announcement of the research grants. I was intrigued by a couple of these, including Dr Edward Owen's pilot study on the 2018 Royal wedding in Lincoln; Dr Claire Markham's study on the sustainability of pubs in rural communities; and Dr Nadia Andreani's study on engaging primary school students with the world of micro-organisms. Dr Markham's in particular is of great interest for me, as grew I up in a small Yorkshire village where the pub really was, and is, the centre of the village community. I look forward to seeing what this publicly engaged research comes up with!

Next came the announcements of the Vice Chancellor's Awards for Public Engagement with Research: one of the main reasons I was at the conference in the first place. I already knew that I had been nominated for the Individual



Student award for my involvement in the Middlefield excavation in Gainsborough in 2016 and in the LiGHTS festival in 2017, but I hadn't a clue what the competition was like, nor indeed if I stood a chance of winning. So I was thrilled to discover that I had won the award! Down I went to the front, to have my hand shaken by the Vice Chancellor and my photograph taken. I have to admit that I felt a bit like a rabbit in the headlights! As well as my award there were three other awards given, two in the category of Individual Staff and one in Team. The former were won by Professor Anne Chick for her work on creating accessible museum exhibitions for the blind and partially sighted and Dr Niko Kargas for his work on the employment of people with autism. The latter was won by the Blue Dog team, led by Professor Kerstin Meints, who developed educational materials for children on how to behave with dogs. Richly deserved, all in all.

To top it all off was a poster reception with wine and canapés. As a student, I can always appreciate a good glass of free wine at an event like this! Still, I had a sneaky look at my award packet, and inside, I found a very nice embossed certificate and a note that I'd won a voucher for my trouble - it turned out to be an Amazon voucher, which I'm fairly certain will be spent on books! Anyway, it was a lovely afternoon. It was great to receive an award, but I was really impressed overall by the sheer amount of research and the clear desire by all involved to engage with the general public, which I think is a critical function of any university. I'm glad to see my thoughts echoed by so many, and I look forward to next year with anticipation. Here's to the PEARL Conference 2019!

PEARL 2018-19 Activity Grants

Annual PEARL grants fund new, innovative and impactful public engagement activities organised by staff or students. Following stiff competition, the below proposals were awarded funding for 2018-19.

The Value and Sustainability of the Public House in Rural Communities Dr Claire Markham (School of Health and Social Care)

Dr Markham's research explores the importance of pubs as a service to the community, and explores measures which may be taken to aid the sustainability of village pubs in Lincolnshire. The findings offer guidance to village residents, publicans and community groups on what to consider in securing the future of their village pub. Claire's PEARL grant has provided funding for two interactive dissemination seminars to share this knowledge, and inspire communities to develop new ways to support their local services. The sessions are an opportunity for the public to feed into the research and help develop ideas for future research in this area. Located in different areas, the seminars allow a broad audience to be reached and wide spectrum of opinion shared. Evaluation of these seminars will build knowledge of their impact and help develop the success of similar future events.



Storytelling in Science: inspiring primary school students to discover the mysterious world of microorganisms Dr Nadia Andreani (School of Life Sciences)

Microbiology is a complex topic to explain to children and non-expert audiences. Finding new ways to facilitate understanding of microbiology is of great importance because of the impact that developments in the field, such as the use of antibiotics or development of antimicrobial-resistance, has on our lives. Storytelling offers an opportunity for complex topics to become more accessible, fun and engaging. Dr Andreani is creating a written and illustrated story book to deliver basic knowledge of microbiology to primary schoolchildren. The book will be piloted and developed with the help of local children. The book will then be made available for purchase, and launched with workshop-style activities offering parents, teachers and children the chance to engage with the book.



Introduction to American Literature

Dr Andrew Rowcroft (School of English and Journalism)

Dr Rowcroft's research has focussed on readings of contemporary American fiction and critical theory. Through a series of workshops in American literature, culture, and politics this research is being shared with attendees. The workshops offer a chance to discuss, develop, and explore a range of ideas generated through reading contemporary US literary texts such as stories by Hemingway and poetry from Sylvia Plath, as well as providing inspiration to others who may be considering involvement in research or study. The sessions offer an opportunity to develop critical reading and debate skills, understanding of texts and an awareness of ongoing University research. Each hour-long session discusses a different selected text, provided by the funding in order to remove any financial barriers for participants. Members of the group will write a short reflection and response to the seminars to provide feedback for improving the series and understanding its impact.



Queen and Country Pilot Study: the 2018 Royal Wedding in Lincoln Dr Edward Owens (School of Health and Social Care)

The way that citizens 'feel' and 'think' about the crown remains a largely unstudied subject. This PEARL-funded pilot project is investigating how people identify with the monarchy, and understand its social and political functions. Funded by PEARL, high street and online surveys were conducted before and after the day of the Prince Harry and Meghan Markle's royal wedding. The surveys offered the chance for the public to reflect on and share their attitudes to the royal wedding and monarchy, as well as encouraging members of the public to submit records (by email) of their thoughts and feelings about monarchy, positive, negative, and ambivalent. Analysis of this data and the methods used will feed into a larger project, 'Queen and Country: Mapping Public Attitudes to the Monarchy, aiming to uncover how people have perceived a political and cultural institution that is at the symbolic centre of British national life.



Young Women and Stereotyping

Dr Stefano Belli (School of Psychology)

Young women from economically disadvantaged backgrounds have been found to be one of the groups at highest risk of anxiety and depression. Within his research, Dr Belli is aiming to investigate the reasons behind this and enhance understanding of how stereotypes affect emotional resilience and aspirations. The PEARL grant scheme has provided funding for a one-day workshop with economically disadvantaged women, run in collaboration with the Young Women's Trust and Eleanor Glanville Centre. Through focus groups, the workshop explores experience of stereotyping and discrimination. Introductory Research Skills and Dissemination sessions share current University research; develop attendee transferable skills; and build a partnership for future collaborative research. Analyses of data from the day will feed into the project and its follow-up studies which will ultimately lead to a multi-study publication. Dr Belli aims to continue to collaborate with the Young Women's Trust and network of volunteers to further develop skills and be involved in designing, conducting, analysing and distributing research.



Exploring the Lived Experience of Sleep

Dr John McKinnon (School of Health and Social Care)

Sleep research has focussed on biological measurement in monitored environments, such as sleep laboratories, and often only in association with clinical conditions. This does not take into account the meaning that sleep has for individuals, the value it holds in their lives and how it exists as part of their being. It does not allow individuals to be active in the enquiry as experts in their own lives. As such, this project is conducting qualitative interviews offering members to talk exhaustively about their experience of sleep. Members of the public are also being involved in designing the methods for this research. The data will offer insight into beliefs, emotions and judgements in relation to sleep, and the behaviours these generate. Findings will inform public health promotion and complement other research taking place.

University of Lincoln Research Garden at the Lincolnshire Show

Caroline Riley & Jordan Watson (*Research and Enterprise*)

The Doctoral School's PEARL-funded *University of Lincoln Research Garden* is an innovative platform offering a unique opportunity for postgraduate researchers to share their work with members of the public, particularly young people. The initial location for this platform is the Lincolnshire Show, with the aim of repeating it in other locations. The platform allows budding young researchers to gain insight into areas of current research spanning the Arts, Social Sciences, Sciences and Business, and how this is impacting the environment, community, industry and beyond. *The Research Garden* offers participants the chance to be involved with live research; be inspired about all the possibilities they could study; and plant their seed for future research, in answer to the question 'What research would you do?' Through this platform, postgraduate researchers can develop their skills in communicating research as well as gaining thoughts, inspiration, ideas, feedback, perspective and even data from those visiting the *Research Garden*.



Diabetes: the Sweet and the Sour

Dr Keivan Ahmadi (School of Pharmacy)

Diabetes affects 415 million adults globally. Despite advancements in clinical practice, prevalence of the disease is on the rise. Whilst understanding of the biological, micro-level processes involved has greatly advanced, there still remains much to be explored in macro-level processes such as communication in the community of how to prevent/control diabetes. Dr Ahmadi is creating an interactive "Forum Theatre" piece which allows audiences to explore challenge and change in diabetes. The format of the piece allows audiences to select the direction of the storyline to help understand how lifestyle choices can impact on health, in relation to diabetes. Funded by PEARL, the storyline is being created through focus groups with policymakers, carers, students, children, clinicians and patients. This will feed into a larger future project to create a theatre piece which will deliver a message of challenge and change around diabetes.



Viewpoint

PRaVDA - A positive beam of hope: Professor Nigel Allinson on Experiences at the Royal Society Summer Science Exhibition 2014, London



"When scientists are able to communicate effectively beyond their peers to broader, non-scientist audiences, it builds support for science, promotes understanding of its wider relevance to society, and encourages more informed decision-making at all levels, from government to communities to individuals."

Mónica Feliú-Mójer, Scientific American, 2015

The work of university scientists and engineers is funded through the public purse, the offerings of charities or student fees. We have an obligation to offer something back beyond little-read reports and papers: to explain, to alleviate problems, to bring pleasure, to deliver a myriad of other positive effects. Communicating with others outside our ivory towers will in due course profit us by modifying public opinion and directing government policies. It is a virtuous circle.

However, my belief is that public engagement is not a case of "duty before pleasure" but a satisfying union of the two. Between 2013 - 2017 I led the PRaVDA consortium of universities, hospital trusts and national laboratories in developing a new medical imaging instrument to enhance the treatment of cancer using proton radiotherapy. This works by tracking the paths and energies of tens of millions of sub-atomic particles (protons) as they pass through

a patient to produce a three-dimensional image of the patient's internal anatomy as "seen" by the treatment beam of protons. The instrument has enough sensors to make more than 10,000 iPhone cameras and an output data stream equivalent to some 300 high-definition TV channels!

Our initial venue for sharing this research with wider publics was the Royal Society Summer Science Exhibition (July 2014) the UK's premier public engagement event for the sciences. About 20 impressive displays fill their Carlton House Terrace home for seven long days, showcasing the most exciting cutting-edge science and technology research. It provides a unique opportunity for members of the public to interact with scientists and question them about their work. More than 15,000 people visit the exhibition, which attracts extensive press and media coverage.

The event is free to the public, but it costs a lot to take part. We spent more than £30,000 creating our exhibition enabling visitors to operate a model of the PRaVDA imaging technology and also see a real human brain up close. This spend is about average, but luckily we obtained an award from the Wellcome Trust to meet most of the expense. The largest single cost was accommodation for all our team: large numbers of visitors require up to five people to staff the stand, and with days lasting from 10 am to 10pm, we needed quite a big team. The exhibition offers a fixed 2m x 4m footprint into which everything must fit. We designed everything at Lincoln, building all except some specialized printing and video production. The essentials of any good display are to attract and inform - so we included flashing lights (not forgetting health and safety notices), a moving acrylic head and a video wall, provided background information on iPads (including sideshows on cancer, radiotherapy and so on), examples of our sensors and real brain sections (very popular). Additionally, we had giveaway leaflets, LED torches, sweets (with PRaVDA written though them), wristbands and sticker books aimed at primary school children. Our design team was Chris Waltham and Dr Duncan Rowland (School of Computer Science) alongside Richard Wright and Barbara Griffin (Lincoln School of Architecture and the Built Environment) - helped by some of their final year students.

The exhibition days were full-on and after three hours on stand every one of us needed a break, though the evening soirées did help (decorations to be worn). Whole days of visits by schools were offset by visits by government ministers, a few celebrities (Dara O'Briain was the most engaged) and interviewers. Most of the team finished the day in a local Italian restaurant or the pub, or both.

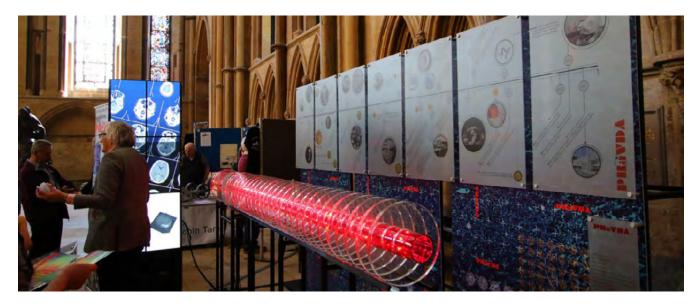
It was exciting to see my academic and clinical colleagues, many new to public engagement, talk so animatedly with our visitors. The "Big C" can be seen as a sensitive topic, especially with the young, but we found children were really fascinated and could relate what they saw to their own experiences within their close families. It was the busiest of weeks but also the most rewarding.

We kept a record of visitors' comments and the Royal Society undertook an exit questionnaire and recorded social media. From our side, I think this message from one of our team summarises our view: "I got an enormous buzz from talking to all these different people of all ages, genders, ethnicities, backgrounds etc. When this was accompanied by complementary positive feedback about our work, the marvellous stand, radiotherapy and UK proton therapy it was just wonderful. I definitely feel we promoted our cause and made the public aware of our efforts and there're definitely a few more Londoners aware about the new centre their city and Manchester will be getting. It was a privilege to have been able to participate and less difficult than I thought, mostly thanks to the stand!"

Dr Spyros Manolopoulos, Consultant Clinical Scientist, University Hospitals Coventry and Warwickshire

Our display was then exhibited for a week in the atrium of the Wellcome Trust headquarters on Euston Road, followed by two further outings – The Gravity Fields Festival in Grantham and the Spark Engineering Festival in Lincoln Cathedral – before finding its final resting place on the ground floor of the University of Lincoln's new Isaac Newton Science Building.

I ask myself if we left a lasting impression of our work, the treatment of cancer, or the worth of science in people's lives? To paraphrase the Nobel Peace Prize winner, Rigoberta Menchu, "...like a drop of water on a rock. After drip, drip, dripping in the same place, it begins to leave a mark, and it leaves its mark in many people's minds."



News

University joins network supporting the involvement of patients and publics in health research

Early in 2018 the University of Lincoln, led by **Dr Arwel Jones** (Lincoln Institute for Health) with support from **Lucy Picksley** (School of Health and Social Care), joined East Midlands Sharebank; a cross-organisational learning and development network brokering patient and public involvement (PPI) in health and social care research.

Members of the Sharebank share a common purpose in improving health and social care research by developing individual and organisational skills in PPI. The East Midlands Sharebank was developed and piloted in 2015/16 by its founding coordinators, National Institute for Health Research (NIHR) Nottingham Biomedical Research Centre, NIHR East Midlands Research Design Service, Nottingham University Hospitals NHS Trust and the NIHR INVOLVE programme.

The Sharebank network enables organisations like the University to share their know-how and experiences with a wider audience; access know-how and experiences in other organisations; support, contribute to and share the network's activities, including a suite of PPI learning and training resources, events and opportunities for staff and patients / public; and be part of a novel initiative that is supported by the National Institute for Health Research (NIHR) programme, INVOLVE.

Together network: the transformation of a fully inclusive participation service

"University of Lincoln provides opportunities for patients, service users and carers to become involved in education and research, helping equip students with the skills, knowledge, lived experience and confidence to improve the quality of care for all."

Lucy Picksley

Participation Worker, School of Health & Social Care



Feedback from users of care services identified a need for a more coordinated approach to providing opportunities to participate, while University staff reported that they wanted to see more volunteer involvement. To respond to these needs and enhance participation in

Health and Social care, **Lucy Picksley** (School of Health and Social Care), in new role of Participation Worker, has formed a new service-user network – Together.

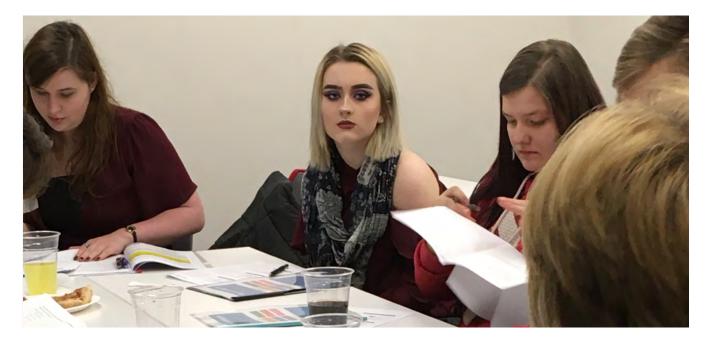
Forming the Together network involved staff in identifying service-users who could be invited onto focus groups to identify how they as volunteers wanted the Together network to run and what they wanted from it. This showed that it was important to volunteers and University staff that the group was effectively coordinated and that opportunities were widely communicated. Stakeholders wanted to know more about how volunteers connected with the University and what they could expect from the network. Together has an induction process introducing serviceusers to the volunteer process and a system by which opportunities can be communicated clearly, widely and representatively. Branding has been developed to give the network a coherent image, mission statement and online presence. A range of role descriptors have been put together to define how service-users connect with the University. A volunteer community has been nurtured through events such as Recognising Volunteers, LiGHTS festival activities and Time to Talk Mind Campaign (@LincolnHSCParticipation) and a newsletter which shares news and opportunities, offers support, gives recognition and makes sure all volunteers feel involved. Networking events help grow community links and share opportunities.

Together has raised the number of service-using volunteers involved in the network from 18 to 87. 1090 volunteer hours were given in 2017 alone, with volunteers helping develop teaching modules, participating in research projects and in helping disseminate outcomes, all enhancing the quality and relevance of teaching and research. In addition, volunteers have commented enthusiastically on the boost to wellbeing they feel they have gained from sharing their experiences through the network's Human Libraries student-volunteer speed dating style events, and satisfaction in knowing they are making a valuable contribution to course development and research.

Key references and further reading

[1] Publication: Arnstein S.R. *A Ladder Of Citizen Participation* (J. Am. Plann. Assoc., 1969, 35)

Research Higher: a new initiative developing research skills in FE students



Research Higher has been piloted by the **Lincoln Higher Education Research Institute** (LHERI), in conjunction with the University of Lincoln Students' Union, Lincoln College and Nottingham Trent University. The aim was to develop research skills in Further Education (FE) students by enabling them to carry out projects alongside experienced researchers. The FE students co-designed communitybased investigations exploring how young people make decisions about Higher Education (HE) and applying to university.

FE students are in an ideal position to conduct this 'insider' research. Their 'social situatedness' (as researchers who are also FE students) meant they were able to draw on their own social networks to produce unique insights. Participating in the programme gave FE students direct experience of carrying out university research: by working with academics to interpret and critically evaluate their research data they were able to develop new skills while simultaneously adding to the body of knowledge surrounding widening participation.

The results from Research Higher will be shared with a variety of audiences. Initially, the FE students presented findings to their families and staff and students at their college via a celebration event. A video and booklet are being produced to disseminate findings to other schools and colleges across the region. These are designed to

stimulate discussion and reflection from pupils about attitudes towards HE and encourage them to engage with the project. The conclusions and insights produced by Research Higher will also be shared with practitioners working on the HEFCE funded National Collaborative Outreach Programme (NCOP).

The impact of the project is being evaluated using a logic model approach. This approach looks at the resources that went into the project; the activities undertaken; materials produced; and the impact the project has had. Evaluation data recorded will include the number of completed projects, the range of stakeholders who engage with the project, and the benefit from the information these produce. Using this approach, the Research Higher team will examine the benefit generated by the project; for instance, creating a genuine two-way interaction between participants and the University of Lincoln to produce original research, and inform the way a national outreach programme is delivered.

It is envisaged that this pilot project will lead to a larger scale project, collaborating with young people across Lincolnshire to highlight the value of engaging with research. This will also help to research the changing educational priorities of young people, and consider ways to encourage those from non-traditional backgrounds to consider HE as a destination.

Key references and further reading [1] Project website: researchhigher.blogs.lincoln.ac.uk

The Community Lab



On 4th November 2017, a small group of researchers from the School of Psychology led by **Dr Kay Ritchie** ran the ESRC-funded 'Community Lab' - a full day of interactive, family-friendly exhibits at Skegness Aquarium. The event ran as part of the ESRC's Festival of Social Science, a nationwide programme of over 300 events which takes place each November. The hands-on activities (including colouring in for the very young children) covered a range of recent research from the School of Psychology including colour vision, migraines, face perception, eye tracking, and understanding facial expressions in monkeys.

The aim of the day was to take the research to the public by holding the event in a popular location where people wouldn't usually expect to find members of the University. All psychology staff at the event were involved in engaging members of the public in conversations about research and exploring visitors' opinions. In a day-long event, visitors were free to spend as long as they wished at the event, enabling in-depth conversations about social science topics that mattered to them. The diverse range of exhibits on offer meant there was something of specific interest to most attendees. Formal feedback using questionnaires showed that the majority of attendees were family groups of all ages and indicated that more than 90% of the attendees agreed or strongly agreed that the event was interesting, educational and accessible. The formal feedback was supplemented by anecdotal verbal feedback from visitors, in which the enthusiasm, particularly from young people, was a real highlight for the researchers. Lots of children were very excited to 'test their skills' on the demos and several of the young attendees said they had a new interest in psychology as a result of attending. Key positive outcomes of the event thus appear to include newly-sparked interest in psychology specifically, and in science more generally, in young people.

One lesson from The Community Lab is the value of activities which take place outside the University and beyond the city of Lincoln. The Community Lab used Skegness Aquarium as a venue in order to bring research out of the University and straight to the wider public in their own community or holiday venue. Many of the attendees at the event had no prior contact with the University or university researchers, rendering the positive outcomes particularly impactful. Future events may want to consider using equally unusual venues to widen participation.

Key references and further reading

[1] Quiz: Can you tell if this monkey wants to bite? (news.nationalgeographic.com/2017/06/barbary-macaque-facial-expressions-quiz, 2017)

- [2] Publication: Maréchal et al. *Experience-based human perception of facial expressions in Barbary macaques (Macaca sylvanus)* (peerj.com/articles/3413, 2017)
- [3] Magazine article: Ritchie et al. *Why (and how) Superman hides behind glasses: the difficulties of face matching* (jgeekstudies.org/2016/09/18, 2016)

Communication across cultures: an international student-led conference

'World Hello Day' aims to promote peace all over the world, bridge barriers between every nationality, promote tolerance and understanding and to create a better place to live for everyone by encouraging people to get to know each other... starting by saying "hello". 'Communication across Cultures' was the second in a series of annual conferences organised by **Dr Valeria Carroll** in the School of Health and Social Care as part of 'World Hello Day' in Lincoln.

The Lincoln event aimed to involve students, practitioners, academics and members of the general public. BSc Health and Social Care students were responsible for conference organisation and evaluation, while discussion workshops were run by MSc Social Work students. A programme including guest speakers, workshops, poster displays and stands explored themes including 'Globalisation versus Brexit: International Students' Experiences' (Dr Valeria Carroll), 'Young People's Experience of Adapting to a New Country' (Dr Karen Pfeffer), 'A Personal Perspective on HE Education in Russia' (Dr Aidan Jayanth), 'Delivering Ambulance Service Care that meets the Needs of Eastern European Migrants in Lincolnshire' (Viet-Hai Phung)' and an Italian contribution on 'Teachers' Values: Friends or Foes' (Lucia Bombieri) comparing schools in Russia and Italy. Student research posters included topics such as using memory strategies in Saudi Arabian middle schools, communicating road safety guidance through the internet, nurses' age perceptions and the experiences of child stars. The conference was opened by the Mayor of Lincoln, Chris Burke and attended by approximately 350 delegates including members of the public; representatives of the community engagement team, charities and voluntary centre services; and University of Lincoln students.

Key references and further reading [1] Event website: cacc.blogs.lincoln.ac.uk

How Lincoln became the capital of earth architecture

Dr Marcin Mateusz Kolakowski's (Lincoln School of Architecture and the Built Environment) research focusses on natural architecture - constructing buildings made of unprocessed materials such as straw, earth, bamboo or timber – exploring the relationship the natural building movement has with social dynamics and culture, particularly with regard to the Lincolnshire 'mud and stud' design.

EBUKI Clayfest Conference

For a week in July 2017 Lincoln became the British and Irish capital of earth architecture thanks to the annual EBUKI (Earth Building UK and Ireland) Clayfest conference taking place at the Heritage Skills Centre at Lincoln Castle and the University of Lincoln. People from across Lincolnshire were able to attend workshops, trips, showcases and talks on the emerging science of clay from the most prominent British and Irish experts and enthusiasts in natural architecture, aiming to inform and change perceptions of earth architecture. Clayfest offered an opportunity for networking, collaboration and discussion around future projects. The event also allowed researchers to gather qualitative and quantitative data in the form of interviews and questionnaires.

One highlight of the Clayfest showcase was Dr Kolakowski's lecture on his research into mud and stud buildings, accompanied by a visit to a small experimental building, the 'Hexagonium'. This 6-walled construction at the University of Lincoln campus was produced by Lincoln School of Architecture and the Built Environment students in collaboration with the East Midlands Earth Structure Society (EMESS). The aim was to investigate whether mud and stud buildings could comply with modern building regulations, a common question amongst local natural builders. A variety of different construction methods were being used so their insulation properties could be compared in this 'open air laboratory'. Findings from this will be used to produce practical guidelines for local builders, particularly in informing the building of a new mud and stud building at the Village Museum in Skegness.

The conference had a significant impact in promoting local natural architecture, inspiring new research and attracting thousands of visitors. A small model of a mud and stud building was constructed in Lincoln Castle grounds as a physical reminder that Lincolnshire should be known not only for its prominent Gothic cathedral but for its vernacular clay architecture, which also makes ingenious use of local materials and has fascinating past and potential future.

- [1] Conference programme: ebuki.co/Conference%20Programme-08-06-2017.pdf
- [2] Project website: naturalarchitecture.blogs.lincoln.ac.uk/hexagonium
- [3] EMESS website: mudandstud.blogspot.com

Centres In Spotlight...

Eleanor Glanville Centre – making university culture more inclusive

The Eleanor Glanville Centre is the University of Lincoln's interdisciplinary centre for inclusion, diversity and equality. The Centre, established in 2016, is led by **Professor Belinda Colston** (School of Chemistry), **Leila Lamoureux**and **Dr Nicole Fielding**, alongside a team of senior
academics and researchers from across the University.
The team run a range of activities and initiatives intended
to develop and embed a more inclusive culture across the
University, including Be Inspired!; Editalks, TOES and the
Newton Academy.

Be Inspired! is a popular public lecture series which showcases research undertaken by under-represented groups. One popular 2018 talk was Sean Morton (Nurse and Senior Lecturer, School of Health and Social Care), exploring the under representation of men in nursing, which attracted more than 50 students, staff and members of the public.

The Eleanor Glanville Centre's Editalks are modelled on Tedtalks, but with a focus on equality, diversity and inclusion. The series aims to make Lincoln's research accessible to the public and bridge the gap between research and industry, by demonstrating its impact on communities around Lincolnshire.

The TOES programme (Tinker, Observe and Explore in Science) is funded by a Biochemical Society Diversity in Science grant in the Schools of Education and Psychology. TOES aims to increase the science capital of young children by engaging parents and developing toolkits to improve connections between school science and everyday life. 'Science Capital' (SC) refers to how and why young people engage with science, with research showing that increasing the SC of young children leads to a more diverse participation in post-16 study and careers in STEMM.

The Newton Academy is a science club for girls aiming to inspire the next generation of female scientists and engineers. Founded by Professor Belinda Colston and Dr Nicole Fielding in 2014, the academy has enrolled 152 girls aged 10–14 from across Lincolnshire, aiming to take them on a scientific voyage of discovery, which will build confidence, transforming their attitudes towards including science in their post-16 educational choices. Feedback from both parents and the girls has been positive.



"The Newton Academy has been (and still is) an amazing experience for [my daughter]. She has thoroughly enjoyed all the experiments and opportunities she has been offered. It has inspired her to try different experiments at home and opened her eyes to the fact that more women are needed in science. She looks forward to the sessions. As a parent, I thank you for offering this fantastic opportunity for the girls. It makes Science fun and enjoyable. I am so pleased [my daughter] has been a part of it."

Parental comment - April 2017

From 2018, the long-term impact of the Academy will be evaluated in collaboration with the University of Lincoln Schools of Education, Psychology and Computer Science.



Key references and further reading [1] Centre website: eleanorglanvillecentre.lincoln.ac.uk

'Breakfast Briefings' by Lincoln Institute for Agri-food Technology (LIAT) share new ideas

"The potential is huge for technological innovations to boost productivity on either side of the farm gate. Other sectors that have been able to adopt robotics and automation are already reaping the rewards. A farm is nothing like a car factory - the environment and demands change constantly - but advances in agri-tech will soon make digital technologies, like autonomous robots, far more accessible for farmers. The challenge for scientists, industry and government is to break down some of the persistent barriers to adoption, both real and imagined. If we can do that, the benefits of innovation should be felt right across the food chain."

Professor Simon Pearson, Director of LIAT

As research in robotics, artificial intelligence, genetic sequencing and data analysis gathers pace, a new era of agricultural technologies are emerging, and LIAT is at the forefront of this Agricultural Revolution. In 2016 LIAT secured almost £3 million in funding from government grant scheme Agri-Tech Catalyst to deliver research projects in collaboration with food and farming businesses of all shapes and sizes, and other research partners from across the region. Research topics range from whole genome sequencing to innovating control of a food-borne pathogen that infects poultry, through to studies on 3D vision for robotic weeding.

LIAT's work in agri-robotics, modelled on the Mars Rover, is gaining considerable national and international interest. Agricultural robot Thorvald has been featured on the front page of the Financial Times, on BBC Countryfile, at the 2017 UK Agri-tech Investment Summit in London and more. The RASberry project (Robotics and Autonomous Systems for Berry Production) is adapting Thorvald to carry out autonomous soft fruit-picking, significantly decreasing production costs and addressing labour shortages. This requires development of a mobile platform suitable for strawberry fields; software for fleet management and infield navigation; and the development of protocols for long-term operation and safe human-robot collaboration.

This research is being directly informed by academics and industry alike, all with a vested interest in its outputs, which will help to solve the challenges facing the agri-



food sector here in the UK and the broader issues of global food security.

As well as sharing research through participation, conferences and the media, LIAT run regular networking events, such as its Breakfast Briefings series, offering the opportunity for people beyond the University to engage with its research. The popular monthly Breakfast Briefings each address a current issue within agriculture such as 'Agroforestry' (9th April 2018) and 'Food and Farm Waste - from Waste to Resource' (9th Nov. 2018), led by a range of internal speakers and guest industrial and agricultural experts. With 30-45 people attending each event, the series offers an opportunity for the University and local agricultural community to share and inform the latest research, change practice and discuss opinions and concerns around current issues. The events have generated interest and discussion, leading to additional connections and collaborative project work. LIAT academics are supporting local farmers and landowners in the field, looking at ways to improve soil quality, make their businesses more resilient and enhance biodiversity on their land.

Key references and further reading

[1] Centre website: agrifoodtech.blogs.lincoln.ac.uk

^[2] Conference presentation: Das et al. Discrete Event Simulations for Scalability Analysis of Robotic In-Field Logistics in Agriculture – A Case Study (eprints.lincoln.ac.uk/32170, 2018)

Regular Events In Spotlight...

A View of University of Lincoln LIGHTS Expo from Stephen Lonsdale

The communication of research to the general public can be a difficult task, as research data and processes are complex and understanding can require an underlying expertise of the subject in question. Since 2016, the University of Lincoln has put on an annual campus-wide day of talks, workshops and activities, all with the aim of engaging the public with cutting edge research by university staff and students. For the first two years LiGHTS, organised by **Professor Carenza Lewis** (Professor for the Public Understanding of Research), was funded by the European Commission as part of the continent-wide chain of events. The second event, in September 2017, saw more than 50 activities take place, themed under six headings: Arts and Humanities, Health and Wellbeing, Sciences, Life Sciences and Robots/Engineering.

Arts and Humanities offered a diverse array of activities. Carenza Lewis' exhibition reconstructed history, offering participants the chance to try a mock archaeological excavation that revealed what pottery can tell us about the impact of the Black Death on settlements. Professor Belinda Coulston's exhibition on Ada Lovelace, the first computer programmer, inspired attendees about the eponymous pioneer and her novel achievements. Professor Anne Chick's 'The Good, The Bad and The Beautiful' multi-sensory exhibition showed how museum and gallery exhibits can be designed to enable engagement for the visually impaired.

The Health and Wellbeing offer included a number of excellent activities and exhibits, including Dr Simon

Durrant's talk on 'Why and How to get a good night's sleep' and Professor Nigel Allinson's 'Proton Therapy: a positive beam of hope for cancer patients' exhibit, complete with a rather impressive scale model of the apparatus in question.

The Science/Life Sciences group included laboratory tours and a bat-watch 'walk and talk' evening around Lincoln Castle. There were also many activities on offer for younger audiences, including workshops enabling children to extract DNA from food; find out about bacteria by growing their own; and look at how scientists create new chemical compounds, in a session on 'Making New Substances'.

The Robotics and Engineering section offered perhaps the most eye-catching display of exhibits - nothing quite catches the public's imagination like robots, as a wealth of science fiction demonstrates. Visitors to Lincoln's newly opened Isaac Newton building were given the opportunity to view 'Pepper the Robot Plays Noughts and Crosses', 'Meet MARC the Robot' and enjoy an original dive into a fusion of VR and 3D printing with the 'Virtual Blacksmith's Forge'.

Overall, the day was a great success for the university with more than 1500 visitors, and the event has been an excellent means of opening up the University to the outside world.





LiGHTS Spotlight: Bother with bacteria



Antibiotic resistance is one of the major global challenges of our time, with some estimates suggesting that by 2050 this may cause 10 million deaths per year. People who are now children will be in the front line of this war. This interactive workshop aimed to spread the message to this generation before it is too late.

In the UK, we have all seen the posters reminding us that we shouldn't expect to be prescribed antibiotics for simple infections such as colds and flu, but is this enough? What can we all do to help slow down the rate at which bacteria become resistant to antibiotics, the wonder drugs which saved millions of lives in the twentieth century and made surgery safer than it has ever been before? One key message of the World Health Organisation is that as individuals we can improve our hygiene so that we suffer from fewer infections and therefore need antibiotics less often, giving bacteria fewer chances to develop resistance.

The 'Bother with bacteria' hands-on workshop, run by **Dr Clare Miller** (School of Life Sciences), aimed to get this message across to children in ways which they would remember. Run in September 2017 as part of the LiGHTS research festival, it was aimed at KS3 and Upper KS2 classes, and was enthusiastically over-subscribed, having the particular benefit of being linked to curriculum learning aims for this age group. In the workshop, pupils learnt about the wide range of bacteria that exist all around them and how their own habits of hand-washing could help alleviate the problem of antibiotic resistance. They then used agar plates to culture the bacteria living on their own skin and a week later they were able to join a Skype session to look at their results and discuss the findings. The Skype session added a really useful extra dimension to the session as the pupils were able to look at their own results, which turned a standard lab exercise into a dynamic and sustained learning opportunity. It was so great to see how enthusiastic the pupils and their teachers were about the workshop and how keen they were to return to the University for future activities.

The activity feedback received was very positive, with staff and pupils alike stating that they found the activity interesting, informative, enjoyable and would recommend it to others, with participants also enthusing about the Skype follow-up session. Several awestruck pupils who said they hadn't realised before how important it was to wash their hands properly, vowed to make extra special efforts to do this effectively from now on. This all shows the impact of the activity and the ways in which it improved participant knowledge, potentially bringing about important changes in habits underpinned by a new understanding of the 'Bother with bacteria'.



Key references and further reading

[2] Campaign website: Public Health England (antibioticguardian.com/keep-antibiotics-working, 2018)



^[1] Report: The Review on Antimicrobial Resistance (amr-review.org, 2016)

^[3] Further information: World Health Organisation (who.int/antimicrobial-resistance/en)

LiGHTS Spotlight: DNA - The building blocks of food

"One of the best parts of public engagement is the ability to engage with young minds, enthuse and excite them about science. However, research on cancer drug resistance is a difficult subject both scientifically and emotionally – especially for young children. One way to excite them about science and not scare them about diseases from an early age is by "playing" with science – such as by having fun and getting hands dirty extracting DNA from food using only household reagents or making "protein" structures from sweets."

Dr Stefan Millson, Workshop Organiser, School of Life Sciences

Dr Stefan Millson's (School of Life Sciences) DNA workshops for LiGHTS 2017 enabled children (aged 6-18) and the general public to look at how changes in DNA and protein structures can lead normal cells to change into cancer cells. Workshops for different ages had different foci: younger visitors built "DNA" out of Lego and extracted DNA from food, while older age groups used a Lego robot system to explore how cancer cells behaved. However, the key to all the workshops was a high level of hands-on interaction.

Feedback suggested that the workshops excited students about science because they had a chance to undertake a small experiment – extraction of DNA – in a real biochemistry laboratory, using scientific equipment that they normally only get to see on TV. The lesson seemed to be that you learn more when you are having fun!



Key references and further reading

Social media: facebook.com/MillsonLab/
 Further information: Cancer Research UK

(cancerresearchuk.org/about-cancer/causes-of-cancer)





Summer Scientist

2018 saw the seventh year of 'Summer Scientist' when over 250 children aged three to ten have the chance to get a taste of scientific research at the University of Lincoln.

"Summer Scientist is a chance to show children that science can be fun, and inspire the next generation of scientists through interactive games, and also a way for us to involve our local community in the work we do as a university."

Dr Niko Kargas, Lead Summer Scientist Organiser, School of Psychology

A series of accessible games and activities allow children to explore aspects of psychology research such as cognitive development, visual perception, impulsive behaviours, coordination, emotion and altruism. A total of 14 different activities were delivered by a team of researchers alongside 60 student volunteers.

As well as offering research involvement for people beyond the University, the event feeds back into research, with data about cognition and developmental psychology collected from many of the games, asking the question 'why would one child respond to something one way, and another child behave differently?'

Games included;

• **Game of stickers!** – What factors affect a child's decision to cooperate with their peers? In this team

game, children had the chance to give stickers to others, or decide not to.

- Finding Dory! Using cartoon characters, videos of dogs, and videos of facial expressions, this game used a 'guess the emotion' game to record eye movements. The aim is to help researchers understand how children develop emotion reading skills.
- Play a game with a little robot! A collaboration between the Schools of Psychology and Computer Science used Nao the humanoid robot to interact with children in a sorting game. This study aimed to look at what children think of the robot, as part of studies into how robots might be able to help improve the lives of people with autism through support with social and cognitive skills.
- Catch the shape! This activity asked children to learn specific sequences of shapes, using cartoon characters. A memory game followed by a shape detection game then asked the children more about these shapes, telling researchers more about learning and memory in children.

As well as the research games and activities, a fun zone allowed the chance for children to get involved with face painting and discovery games, including hook-a-duck.

Key references and further reading [1] Event website: summerscientist.blogs.lincoln.ac.uk



Lincoln Philosophy Salon

Dr Daniel Came (School of History and Heritage) works on Nineteenth-Century German Philosophy (especially Arthur Schopenhauer and Friedrich Nietzsche) and the Philosophy of Religion. His published research has led to invitations to participate in public debates across local, national, and international platforms, including radio and podcast discussions with online viewing figures in the hundreds of thousands. Daniel has twice debated the world's foremost apologist for Christian theism, William Lane Craig, and he has recently been invited to debate the well-known and controversial Mail on Sunday columnist, Peter Hitchens.

Daniel has given talks at philosophy cafés across the country and is the convenor of the Lincoln Philosophy Salon, founded on his arrival at the University in September 2017. The Philosophy Salon is a public lecture series with a strong pedigree of recent speakers. Last year's speakers included internationally renowned Professors of Philosophy A.C. Grayling, Angie Hobbs, David Papineau, and Nancy Cartwright. Attendees have commented that;

"The quality of the speakers has been outstanding... it's a winner and thank you for setting it up. It has certainly made Lincoln life much more interesting."

Talks attract audiences from all walks of life, giving Lincoln residents an opportunity to engage in discussion with some of the world's leading philosophers in a local venue – the atmospheric function room ('The Great Chamber') at The Cardinal's Hat pub on Lincoln's High Street. Due to the popularity of the talks, events are now live-streamed online, thus enabling the audience to grow further in size and reach. Recent talks have attracted viewers from as far afield as USA, Egypt, Croatia and Vietnam!

"As a retired manager from manufacturing industry...I do find the Philosophy Salon a richly stimulating and thought provoking evening. These are topics which I wouldn't have encountered in my working life and thus I may describe them as entertainment. Just what my generation needs. Attendance is always impressively high; now have to arrive an hour ahead to be sure of a seat".



The events are of significant impact and benefit to the community, each well attended with audiences of 40+ people;

"I am 70 years old and have never studied philosophy. Since the Philosophy Salon started I have attended most events and although I find some of the talks rather difficult to follow, I find the evenings to be very stimulating and interesting. I consider it important to keep challenging the mind and exploring new interests and Lincoln is very fortunate to have such a vibrant and well supported event."

Key references and further reading

[1] Edited Book: Came, D. Nietzsche on Morality and the Affirmation of Life (eprints.lincoln.ac.uk/30425, 2018)

[2] Journal article: Came, D. *Theism and Contrastive Explanation* (hull-repository.worktribe.com/OutputFile/445892, 2017)
[3] Researcher website: daniel-came.weebly.com/audio-and-video.html

Digital Student Ambassador Group – engaging people in the development and implementation of digital technologies

The Digital Student Ambassador Group (DSAG) was set up in 2015 by **Dr Hanya Pielichaty** (Lincoln International Business School), collaborating with Lincoln Executive Development Centre and Threshold Studios, with two aims. The first was to provide opportunities for staff, students and members of the public to engage with, develop and implement digital technologies within the teaching, learning and business environment. The second was to enhance DSAG members' digital capabilities and in turn enable other students, staff and members of the public to do the same.

DSAG has run two Digital Talk Series programmes which harness student knowledge and utilise expertise from representatives of national and international businesses, organisations and festivals to build attendee confidence with regards to technology, digital narratives, social media and technology in business. Embracing the 'Student as [Digital] Producer' concept developed at the University of Lincoln by Professor Mike Neary, DSAG members attended events such as business conferences, Camp Digital (Manchester, 2016) and Digital Transformations (London, 2017) to learn about new digital technologies and their implementation in teaching and business environments. Students bought this knowledge back to DSAG and, through Digital Talk Series workshops, shared their learning to help develop best practice.

The 2015/16 Digital Talk Series ran from February through to April and consisted of four guest speaker slots and three DSAG run workshops for University of Lincoln staff, students and local business members. In 2017 the talks were opened up to the public in order to engage a wider audience with digital education.

A highlight of LIBS Digital Talk Series 2017/18 programme was 'The Digital Generation - Where do we belong?' (in partnership with Frequency Festival) with a panel comprised of renowned YouTuber Alice Thorpe, LOVFilm Project Coordinator Benjamin Reynolds, LIBS Digital Student Ambassadors and i-D Magazine Arts & Culture Editor Matthew Whitehouse. Also popular were talks given by Mark Walker (Marketing Director at Attest), Ceirnan "Excoundrel" Lowe (Caster and Advisory Board Member for British Esports Association), as well as student-led DSAG workshops, including; 'Your Digital Narrative - Vlogging and blogging'; 'Global Identities in a Digital World' and 'Digital Circuits: How to...'.



Participants have found DSAG talks particularly impactful in developing understanding to deal with some of the challenges that the current fast-paced development of digital technology brings, with the series addressing:

"...some very current issues that young people specifically may be facing in this new digital era, as well as bringing clarification to newly emerging digital platforms, an example being the esports talk. Each was fascinating in its own right, with use of interaction and audience engagement balanced correctly. I thoroughly enjoy the use of guest speakers and panels, the I-D hosted talk was especially interesting, due to the foregrounded effect that image and representation has on us; it really generated some good arguments and points that many people wouldn't even have considered before."

Attendee Feedback, 2018

"The Digital Talk Series has enabled members of the public to engage with students and colleagues from the university's International Business School. Members of the Digital Student Ambassador Group (DSAG) have shared their ideas about digital identities, global technologies, vlogging and blogging in an inclusive and accessible manner enabling members of the public to interact in a productive and valuable way which has fostered a joint appreciation for digital progression and capabilities."

Dr Hanya Pielichaty,

DSAG Founder, Lincoln International Business School

- [1] Project website: dsag1718.blogs.lincoln.ac.uk
- [2] Social media: twitter.com/DSAGUoL

LIBS Connect: Embracing Diversity in the Workplace



The new LIBS Connect network, organised by **Lincoln International Business School,** is providing world-class opportunities for the local business community to network with peers and the University, running themed events discussing, developing and networking around topics of mutual interest.

At LIBS Embracing Diversity In The Workplace (8th March 2018), in collaboration with Eleanor Glanville Centre and Lincolnshire Business Growth, staff from the University of Lincoln welcomed more than 100 representatives from local, national and international organisations to the campus for a day exploring how the local business community could embrace diversity and make workplaces more inclusive.

Guests represented businesses from a wide range of sectors and sizes including Selenity, Siemens, A. Schulman Ltd, The Minster School, Associated British Ports, the Woldmarsh Group, Resonance Voice Training, Lincolnshire Business Growth Hub and many more.

Coinciding with International Women's Day 2018, keynote speakers Caroline Killeavy (CEO, Lincolnshire YMCA) and Dr Sally Everett (Deputy Dean, Anglia Ruskin University) offered the audience practical, theoretical and innovative ways of ensuring a workplace is inclusive to all. Discussion of the challenges and opportunities afforded to business by employing people from different backgrounds used the 'World Café' format of round table discussions about different challenges around inclusion, with each table focussing on a different question and delegates moving tables for each question to ensure they connected with as many different people as possible. The final talk of the day, by Dr Deirdre Anderson (Head of People and Organisations, LIBS) challenged participants to become more aware of our unconscious bias, which happens when we judge people and situations without realising.

Following discussion, delegates were asked to pledge their commitment to being more inclusive in the workplace and society. Pledges included promising to "call out" any discriminatory behaviour, to be more aware of colleagues' differences, to be more aware of unconscious bias and look for more flexible ways of working.

Feedback showed the impact on the local business community:

"The World Café was great - informative and engaging, I learnt lots!"

Richard Hardesty, Operations Manager at Anglian Water

"[I enjoyed] meeting like-minded people... because we all can fall into the everyday acceptance of it is what it is BUT it takes courage to make change and it will not happen on its own."

Dawn Owen, Head of Training at Grafton Buildbase

Dr Craig Marsh, Director of LIBS, summed up the importance of community-University engagement opportunities:

"The day generated many great ideas on how to embed inclusivity, starting from the top. It is significant that local businesses have taken the step to sign our charter and we are confident that this has heightened awareness around this important issue. LIBS Connect has become a pivotal event in Lincolnshire, providing a unique blend of practical business advice complemented by academia."

Key references and further reading

[1] Network & Events: lincoln.ac.uk/home/lbs/executivedevelopment/libsconnect

Future 2.0



On 7th November 2018, **Future 2.0** returned to the university to give local school children and attendees the chance to experience and learn about scientific research through an epic Star Wars themed adventure. In its second year, the free one-day festival welcomed 1,000 members of the public on to campus, including young people from schools and colleges; showcasing past, present and future technological innovation, featuring academic experts from across the University.

Influenced by the renowned space opera film franchise Star Wars, visitors were given the opportunity to jump into the film's galactic world and experience the technological revolution that has defined the 40 years since the first film's release. The expo was made up of a number of areas: the 'Space Zone', 'Game Zone', 'Robot Maker Zone' and more, allowing visitors to experience a multitude of interactive activities.

Young gamers were able to join famous 5.4 millionsubscriber YouTube sensation and University of Lincoln alumnus Thomas Ridgewell, aka TomSka, famed for his comedy sketches, cartoons, and self-directed short films, for a question and answer session. The Space and Interactive Zones offered opportunities to learn about the technologies being used to research space and to get hands-on with new technologies such as robotics and virtual reality. A 360 degree pop-up Space Dome offered visitors the chance to learn more about moon landings while a Virtual Reality experience took them to new destinations. The latest 3D printing technology was demonstrated in action, allowing young people to create their own 3D work. Star Wars characters were on hand to meet face-face and help demonstrate the new technologies shaping our future. The 'Robot Maker Zone' offered young engineers the chance to build their own robot before testing it to its limit in the Robot Wars arena. The event also gave schools the opportunity to compete in designing creative, innovative and robust robots.

"Technology is changing so much about how we interact with the world and each other. The jobs of tomorrow will look dramatically different to those of yesterday and, as a university preparing young people for a wide range of industries and professions, we're keen to help people of all ages explore emerging technologies and ideas about the future in fun and interactive ways. Future 2.0 is a great opportunity for young people to take a look behind the scenes of science and technology research within the University, have fun with some of our sci-fi inspired exhibits and activities, and hopefully be inspired about the possibilities of digital technology."

Emma Jubbs, Assistant Director of Recruitment, Communication, Development & Marketing

Key references and further reading

[1] Press release: Future 2.0 Returns with YouTube Star TomSka, Robot Wars and Sci-Fi Fun (lincoln.ac.uk/news/2018/10/1493.asp, 2018)

Publicly Engaged Research Projects

International Bomber Command Centre Digital Archive

Professor Heather Hughes (Lincoln International Business School) Date: 2018 Location: Lincoln

The International Bomber Command Centre (IBCC) Digital Archive is part of a wider project to commemorate RAF involvement in the 1939-1945 bombing war in Europe. The IBCC opened on Canwick Hill in 2018 as Lincoln's newest visitor attraction, hosting a memorial and memorial gardens remembering service personnel who lost their lives; and an exhibition, educational suite, café and shop in the Chadwick Centre. The University of Lincoln team, led by Professor Heather Hughes, has been a partner in preserving and sharing the heritage of Bomber Command, supported by a £3.1m Heritage Lottery Fund grant which has involved two ambitious initiatives: building an online archive and devising and producing content for the IBCC exhibition.

There are many sensitivities about the way the bombing war is remembered: while some UK veterans still feel that they have not received due recognition, the decision to undertake area bombing of German cities remains subject to debate within both Britain and in mainland Europe. Developing IBCC thus involves 'difficult' heritage. The response of University of Lincoln researchers has been to facilitate the telling of an inclusive 'people's story' – a bottom-up, eyewitness account of those events from as many perspectives as possible: civilian, military, male and female, from many different nationalities spanning both sides of the conflict.



Key references and further reading [1] Project website: ibccdigitalarchive.lincoln.ac.uk



To date, over 1000 interviews have been conducted and 1800 collections of personal memorabilia which would otherwise have been unseen by more than a small circle of family members have been scanned. This immense task has been made possible through the assistance of some 150 enthusiastic volunteering members of the public, many undertaking tasks they never imagined they could attempt. They have interviewed veterans; scanned, cropped, rotated and watermarked images of logbooks, diaries, letters, photographs and other memorabilia; produced inventories; transcribed handwritten documents; reviewed transcriptions of interviews; and produced descriptive metadata for our content management system.

As well as relating to the research interests of the IBCC staff (on the memorialisation of war, Bomber Command ground crew, digital preservation), this project has given rise to several new student research projects at PhD and MA levels, at the University of Lincoln and in several Italian universities.

All these tasks have started with training events. Many volunteers live locally, or at least in the UK, yet in the same inclusive spirit that informs all our work, and facilitated by digital technology, the project has included volunteers spread far and wide, from Italy to New Zealand. All have risen to an important occasion and have excelled at all their various responsibilities.

The six-person IBCC team at the University of Lincoln is immensely proud of this publicly engaged research which has enriched all those who participate with new skills, knowledge and networks while simultaneously delivering new resources for even wider publics to explore.

Community Gardens – residents transforming local places

Dr Jennifer Jackson (Lincoln International Business School) Date: 2012-13 Location: Lincolnshire



Community gardens aim to 'grow' the capacity of communities to bring together residents to transform neglected inner city areas. One community garden project is Green Synergy, which has set up multiple gardens involving many volunteers around Lincoln's Abbey Ward, including the Shuttleworth House Residents Group and the Tower Estate Action Group.

Recent research has investigated the role and value of community gardens using an engaged research approach including interviews, focus groups and a workshop with local volunteers. The process aimed to be as relaxed as possible, with researchers taking part in gardening sessions and chatting with volunteers to establish relationships before interviews began.

Interviews aimed to gather viewpoints and experiences of community garden members, and while there were common questions within interviews, participants rather than the researcher led the 'research conversations'. This co-produced, exploratory approach foregrounded the concerns and questions of community members, making the research more valuable and relevant as it centred directly around what people wanted to know more about. The major themes that emerged were individual and community narratives of the value and meaning of community gardens in Lincoln's Abbey ward.

The workshop was held at Croft Street's Community Centre to further discuss the impact and experience of Green Synergy and the effect of community gardens in empowering residents to change their neighbourhood landscape. Green Synergy members led the discussions, with researchers present as note-takers and facilitators. The discussion explored the benefits of community gardens as well as the difficulties of developing community groups and bringing communities together within such projects.

Overall, this co-produced research project provided a 'space' for the many participants to reflect on what the community gardens provided as well as an opportunity to look towards what may be important and valued for future directions. It captured not just a snapshot of viewpoints of community gardening and its effect on communities, but a rich narrative about the experience and impact of community gardens which is being used for further development of Green Synergy.

Key references and further reading

[1] Project website: greensynergy.org.uk

^[2] Report: Jackson, J. Green Synergy Report (eprints.lincoln.ac.uk/13434, 2014)

^[3] Publication: Jackson, J. *Growing the community – a case study of community gardens in Lincoln's Abbey Ward* (doi.org/10.1017/ S1742170517000643)

Lincoln Food Strategy

Professor Nigel Curry, Professor Jacquelyn Allen-Collinson and Dr Claire Markham

(Health Advancement Research Team) Date: 2015-18

In 2015 Lincolnshire County Council (LCC) approached the University of Lincoln interested in research to help tackle the problems of obesity in the county. The University's Health Advancement Research Team (HART) suggested this might be achieved by 'reconnecting' people with food. To explore this, the University funded research into the 'state of food', with the city of Lincoln as a case study. The research team worked with 33 groups in the city, now collectively termed the Lincoln Community Association for Food Endeavour (CAFÉ), producing a Food Strategy for the city^[1] and a full research report^[2].

The Food Strategy: Community Research

The research involved an extensive review of local food projects in Britain and Europe, alongside research into Lincoln's food system using a series of semi-structured interviews with people working within various stages of the food system. This aimed both to inform understanding of current practice and obtain views on which new initiatives were likely to be successful. Subsequently, a focus group with various stakeholders in the local food scene discussed initiatives proposed for inclusion in the new Food Strategy. The final Strategy embraces the whole food chain and the benefits deriving from each element, addressing food issues within the City and outlining innovations that are already taking place, as well as 25 new proposals.

Lincolnshire CAFÉ: Implementation and Community Engagement

Beyond the Food Strategy's production, the 'Lincolnshire Café' consortium of 33 groups involved in the research, chaired by Professor Nigel Curry, remains responsible for implementing and sustaining the Strategy. The Café represents a cross-section of food stakeholders across the city, including representatives from LCC, the Church, the University of Lincoln, private organisations, voluntary organisations, schools, politicians, local businesses and consultants as well as public health representatives.

Lincolnshire CAFÉ works with local organisations to promote healthy and sustainable food through raising awareness, better advertisement of local events and increased opportunities to get involved in all things food – for example through community café Mint Lane Café and Grow Lincoln who run events such as 'into the café' and 'on to the land'. Food poverty is also being addressed through a number of initiatives, including Lincoln Community Larder and the Lincoln Food Bank, as well as more targeted support such as Lincolnshire Businesses for Breakfast.

There are also numerous food education champions (such as Washingborough Academy), community food and garden projects such as Green Synergy, Adaction and many more which the project has brought together to increase visibility and awareness of food as a resource and opportunity for building skills and communities – including through national television programmes.

By treating Lincoln's food system as a whole, the Strategy has given a larger-picture view and helped identify and reduce food waste by developing opportunities for symbiotic partnerships. These include the surplus food initiative in which waste food from supermarkets is now a low-cost market commodity offered through Mint Lane Café: wastage which would have otherwise cost the supermarket £60-£90 per ton in waste disposal costs is now addressing food poverty.

The Strategy and the work done to implement it is widely impactful, with the city of Lincoln now awarded Sustainable Food City status.



Key references and further reading

Report: Curry, N. et al. A food strategy for the City of Lincoln (eprints.lincoln.ac.uk/24922, 2016)
 Report: Curry, N. et al. Feeding Lincoln: multiple benefits from considering food as a local system (eprints.lincoln.ac.uk/23505, 2016)

Transitional States: Hormones at the Crossroads of Art and Science

Dr Chiara Beccalossi (School of History and Heritage) leading a global programme of activists, artists, writers, journalists, doctors, speakers **Date:** 2018 **Location:** Lincoln, London, Barcelona, Bologna



Transitional States: Hormones at the Crossroads of Art and Science is linked to a five-year Wellcome Trust research programme (2015-2020) 'Sexology, Hormones, and Medical Experiments in the "Latin Atlantic World": Local Power and International Networks, 1918-1985' in which Dr Chiara Beccalossi (School of History and Heritage) aims to advance knowledge and understanding of the history of sexology (the study of human sexual life or relationships), focussing specifically on the development of hormone treatments in Southern Europe and Latin America in the twentieth century.

Public engagement with this research has four key aims. Firstly, to collaborate with other academics, LGBTIQ organisations, artists and medical doctors in gender clinics to draw on each other's expertise and to enrich the research. Secondly, to inform and educate the public in a creative way about the uses of medicine to enrich and/or repress non-normative sexualities and gender identities. Thirdly, to consolidate a network of groups and individuals that are active around lesbian, gay, bisexual, transsexual, intersexual and queer (LGBTIQ) topics. Fourthly, in Lincoln specifically, to bring together the general public and LGBTIQ students to create a broader understanding of LGBTIQ issues; for this reason the exhibition was run during LGBT History Month (February 2018). Transitional States is an international touring video and art installation complemented by a series of public discussions, featuring fourteen international artists and collectives who offer new perspectives on how we use hormones to improve and sometimes constrain our lives. The installation explores how hormone use has affected sexuality, gender identity and fluidity, the medicalisation of women's bodies in relation to birth control, menopause and ageing, and how this has given or denied people the freedom to express themselves. 36 speakers including LGBTIQ activists, artists, writers, journalists and medical doctors took part in discussions on topics explored through the exhibition during visits to Lincoln, London, Barcelona and Bologna.

Feedback on the exhibition is gathered via the exhibition website which offers the catalogue free to those who answer three quick questions, supplemented by data on exhibition and event attendance as well as social media engagement. The impact of the public engagement will be analysed in detail after the programme is complete, but feedback to date already shows how the exhibition is enriching the lives of LGBTIQ people. In particular it is contributing to changing attitudes towards trans people, disrupting mainstream media representation of trans people and raising awareness of LGBTIQ issues.

The exhibitions and the programme of events were:

- Project Space Plus Lincoln UK (1 27 February 2018);
- Peltz Gallery, London UK (10 May 11 June 2018)
- Centre de Cultura Contemporània de Barcelona (CCCB) Spain (4 – 28 October 2018)
- LABS Gallery Arte Contemporanea, Bologna, Italy (22 November – 15 December 2018).

Key references and further reading

^[1] Project website: transitionalstates.com

^[2] Exhibition catalogue: transitionalstates.com/catalogue

A Lincoln Ghost Story

Dr Scott Brewster, Dr Alex Bevan, Eleanor Bryan and Michelle Poland (School of English and Journalism) **Date:** 27th November 2017 Location: University of Lincoln



'A Lincoln Ghost Story' celebrated the enduring popularity of the supernatural tale, and its close connection with Christmas, in a local setting with its own haunted reputation. A sell-out audience of 120 people gathered at the White Hart Hotel in late November 2017 for an evening of story-telling and discussion exploring why ghost stories still matter to us in the twenty-first century.

"I'm fascinated by the abiding fascination with the ghost story in literature, film, television or amongst online communities. A Lincoln Ghost Story was designed to highlight the importance of ghost stories in establishing a sense of place for local communities, and to celebrate the power of storytelling connected with the supernatural. It was a really enjoyable evening, and has generated an appetite for similar public events in the near future."

Dr Scott Brewster, Organizer, School of English & Journalism

The evening featured an evocative talk by the Lincoln Ghost Walk Guide, who shared her experiences of recounting ghostly tales in the historic streets of Lincoln and brought to life stories of haunting presences within the very walls of the White Hart. There was also an illustrated lecture on television Christmas ghost stories by Dr Derek Johnston from Queen's University Belfast, author of Haunted Seasons (2015) and an expert on adaptations of ghost stories to screen. In the spirit of families sharing ghostly stories by the fireside at Christmas, the evening also featured readings from M. R. James and Edith Nesbit by Dr Kelly Jones (School of Fine and Performing Arts), a specialist in theatrical representations of the supernatural.

The event reflected the strong research culture in Gothic literature at the University. A week before the event, Scott launched The Routledge Handbook to the Ghost Story, co-edited with Dr Luke Thurston (University of Aberystwyth), the first collection to examine the ghost story tradition in a truly international context, with contributors drawn from the Americas, Africa, Europe, Asia and Australasia. Attendees at the White Hart event described the evening as "engaging and immersive", "interesting, informative and entertaining" and observed that "the mixture of presentations was fascinating" and "it's certainly made me want to learn more about ghost stories".

Key references and further reading

[1] Social media: twitter.com/lincoln_ghosts

^[2] Press release: *Classic ghost stories come to life in an evening of supernatural tales, talks and theatre* (lincoln.ac.uk/news/2017/10/1402.asp, 2017)

E-Story

Dr Erin Bell (School of History and Heritage) and **Dr Florian Gleisner** (International Study Group) with; PARRLIT (Italy), UNIR-ES (Spain), ERI (Slovenia), IFIS PAN (Poland), KDKKA (Hungary), Euroclio (Netherlands) **Date:** 2015-18 **Location:** International

"Digital integration in teaching and learning is a necessary step for European schools, especially when it comes to the teaching of History...digital, audiovisual and multimedia sources still represent an unexploited potential for the teaching of History in a European perspective."^[1]

E-STORY is an international EU-funded (Erasmus Plus) project running from 2015-2018. It aims to offer history teachers new training (both online and face-to-face) in the use of audio-visual (AV) technology and to produce resources and tools supporting continued professional development in teaching, learning and lesson planning, which teachers can then share with colleagues. Over 36 months the collaborators: University of Lincoln, PARRI-IT (Italy), UNIR-ES (Spain), ERI (Slovenia), IFIS PAN (Poland), KDKKA (Hungary) and Euroclio (Netherlands), are developing an extensive range of online resources, apps and training, with each teacher/class producing an open educational resource, generating a library of 42 elements. A series of knowledge exchange training events have been run in Bologna (November 2015 and May 2018), Piacenza (February 2016), Logrono (April 2017), Hilversum, Netherlands (February 2018) and Lincoln (March 2018), which are open to all history teachers and trainee teachers. An online support centre for the use of project tools has also been established in order to ensure the sustainability of this resource.

The initiative has been evaluated using questionnaires and face-to-face feedback. This shows the impact to have been particularly high amongst teachers in nations with less well-developed IT/AV training and trainee teachers looking to plan their first encounters in the classroom. The project has enriched the quality, innovation and level of challenge offered in schools across Europe through upskilling teachers, providing new resources and inspiring increased interest of students towards the humanities. There is also now a network of teachers and their trainers interested in



innovating the methods of teaching History that will foster multiculturalism, universalization of teaching values and integration between partner countries.

A key highlight of the project outcomes has been in bringing together teachers, historians and media scholars from across Europe, who have been able to learn from each other. The project has changed attitudes towards what is possible, by removing some of the financial and technological obstacles to increasing innovation in professional development for history teachers in many European schools, as well as offering opportunities for teachers to share ideas about what is possible in the classroom.

- [1] Project website: e-story.eu
- [2] Association website: euroclio.eu
- [3] Project material: beta.historiana.eu

Unearthing Middlefield's Utopias

Professor Carenza Lewis, Dr Anna Scott (School of History and Heritage) and Dr Ian Waites (Lincoln School of Design) Date: 2016-17 Location: Gainsborough, Lincolnshire and Somerset House, London



Middlefield Lane, Gainsborough, was a 1960s council housing estate which was one of many created in postwar Britain based on the 1928 'garden city'-inspired plan of Radburn, New Jersey. The aim in the UK was to replace crowded insanitary 19th century slums with better quality housing. Providing access to open space was a key priority, hence houses faced not onto streets but communal pedestrianised greens, intended to create a sense of community where people could move around and children could play in safety. In New Jersey, Radburn is a national monument, but in the UK, time, policy-makers and public opinion have not been kind to such estates, and the approaches of the original planners have been condemned as unrealistic utopianism which neither understood nor met the real needs of residents^[2]. At the University of Lincoln, Dr Ian Waites' research has however challenged this view^[3], and in 2016 he and archaeologist Professor Carenza Lewis secured Arts and Humanities Research Council (AHRC) funding to see what archaeological evidence might reveal about how the Radburn greens were actually used by their 20th century inhabitants.

More than 100 people living on or around the estate took part in developing the project and excavating 20 archaeological 'test pits'. Most of these were on Middlefield Lane's iconic 'Radburn' greens, and revealed four times as many child-related finds (such as marbles and plastic toy fragments) as would normally be found in domestic gardens. This strongly suggests that the 'Radburn' greens at Middlefield Lane were indeed used, as intended, by children for outdoor play. This suggests that the ideals of the 1960s Radburn estate planners were in fact appropriate for contemporary social needs, and challenges those who have suggested such estates declined because of inherent weaknesses in their original design.

Involving estate residents also demonstrated the value of community archaeological excavations to disadvantaged communities, who rarely have the opportunity to take part in such activities on their doorstep. Feedback showed 90% of participants rated the excavations as excellent, and that they particularly appreciated the opportunity to work collaboratively within the local community and to learn something new. Furthermore, more than 80% felt the experience had helped them develop or improve transferable skills including team working, verbal communication, working persistently, working to set standards and interpreting evidence.

More widely, more than 800,000 listeners heard about the project through a Radio 4 broadcast in June 2017 and a hands-on exhibition about the project was featured in the national 'Being Human' festival in November 2018 at the Waterside Shopping Centre in Lincoln. The project thus not only advanced understanding of the history and value of social housing but also, through its publicly engaged approach, generated an inspiring shared community experience which connected residents with the history of their estate and built social and cultural capital by engaging residents in university research and developing transferable skills.

- [1] Project website: middlefielddig.blogs.lincoln.ac.uk
- [2] Book: Ravetz, A. Council Housing and Culture: The History of a Social Experiment (London: Routledge, 2001)

^[3] Publication: Middlefield: the development of a provincial post-World War Two council estate in Lincolnshire, 1960–1965 (eprints.lincoln.ac.uk/19753, 2015)

Striking Women

Dr Sundari Anitha (School of Social and Political Sciences) Date: 2014 - to date Location: University of Lincoln

Dr Anitha was recognised for her work involving people in research at Lincoln at PEARL 2018 Conference with a Highly Commended: Public Engagement with Research award.

The role of South Asian women migrants in the UK workforce has been largely ignored by historians, but this has become increasingly important over the last 50 years. Research by Dr Sundari Anitha (University of Lincoln) and Professor Ruth Pearson (University of Leeds) has explored South Asian women's participation in two industrial disputes in the UK: Grunwick and Gate Gourmet, and placed this within the wider context of the history of migration to the UK and the struggles for workers' rights. At a time when the rights and security of migrant workers in the UK is in question, this work is a timely reminder of the contribution women workers of South Asian descent have made to UK industry and industrial relations.

A range of online interactive resources have been developed to share this research, funded by the Arts and Humanities Research Council, with the aim of raising awareness of this 'hidden history', challenging prevailing stereotypes of South Asian women as passive and confined to the domestic sphere, and highlighting the positive contributions made by migrant workers to securing rights for all workers. The resources aim to inform schools and community organisations in particular about migration, women and workers' rights in the UK and beyond.

A website^[1] presents original artwork, photographs, personal testimonies of the strikers, posters and other contemporary material alongside research findings, workbooks, time-lines, case studies, learning objectives and classroom activities to teach Citizenship, History and Geography. The website also contains a downloadable two-part comic telling the life stories of two South Asian women in the UK: Jayaben Desai, the leader of the Grunwick dispute in North London; and Jatinder Kaur, involved in the Hillingdon and Gate Gourmet industrial disputes. A mobile exhibition which was also produced as part of the project is available for schools, community organisations and libraries to borrow.

The resources have been hugely successful in reaching, informing and inspiring visitors. In February 2018, the site welcomed its 2 millionth visit since 2014, while the exhibition has travelled to over 20 venues across England



and Scotland, receiving more than 800 visitors altogether. Comments from visitors demonstrate their surprise at their previous lack of knowledge of this history, their increased awareness and their changed attitudes, while teachers have commented that these resources have supported their students' learning.

"As a trade unionist, anti-racist, and a Geography teacher, I recommend this amazing resource. As a teacher in a girls' school with a very diverse population it is always good to find resources that the students can directly relate to. This website, together with the comic and exhibition, presents material about migration in an accessible and memorable way and is entirely appropriate to our GCSE unit 'Moving World'. Issues of migration and workers' rights are as important today as they were in previous times, with the proliferation of call centres and outsourcing, and as immigration from Eastern Europe and elsewhere brings in new workers. The story of Jayaben Desai, the Grunwick strike leader, deserves its place in British Trade Union history and the Striking Lives comic reaffirms that."

Des Barrow, Geography Teacher and NUT Representative, Hackney Secondary School, London

Dr Anitha notes the impact this project had on her appreciation of the importance of reaching out to wider audiences as she realised first-hand:

"...what a large audience exists for the findings of academic research, if appropriate age-specific, visual and interactive methods are used".

Key references and further reading [1] Project website: strikingwomen.org.uk

Lincoln Research Project Engages with First World War Centenary

Professor Jane Chapman (School of English and Journalism) and **Professor Ross Wilson** (University of Chichester) **Date:** 25th November 2017 Location: Chichester Festival Theatre, University of Chichester

World War 1 is not a topic usually associated with humour, but since 2011, Arts and Humanities Research Council (AHRC) has funded research led by the University of Lincoln to contribute to international engagement connected with the Centenary of the First World War. One of several projects led by Professor Jane Chapman studied over 750 forgotten cartoon strips. These appeared in trench newspapers and regimental journals across the world. In November 2017, around 150 people had the opportunity to share in this archive material in an event at the Chichester Festival, one of the UK's most well-established and leading annual arts festivals. A theatrical production of one of the most famous trench publications, 'The Wiper's Times', a satirical magazine, was followed by Professor Jane Chapman and Professor Ross Wilson's talk. This explored the importance of trench soldiers' newspapers, particularly focussing on the topics of humour and morale. The research leaders presented on the same stage and utilised the same scenery as the preceding play.



This created an engaging atmosphere and space, where audience members were offered an immersive opportunity to see archive material and ask questions to the panellists about the influence of satire on life in the trenches.

Feedback collected by Chichester Festival organisers indicated that the participants experienced changes in views and opinions, broadening their attitudes about the First World War as a result of the event.

Key references and further reading

- [1] Publication: Chapman, J. et al. Illustrating war-time: cartoons and the British and Dominion soldier experience during the Great War, 1914-1918 (eprints.lincoln.ac.uk/27579, 2018)
- [2] Publication: Chapman, J. et al. Comics and the World Wars A Cultural Record (eprints.lincoln.ac.uk/17004, 2015)
- [3] Publication: Chapman, J. et al. *Dominion cartoon satire as trench culture narratives: complaints, endurance and stoicism* (eprints. lincoln.ac.uk/16064, 2014)

Life as a German Prisoner of War in Sutton Bridge during the First World War

Professor Jane Chapman and Dr Andrew Kerr (School of English and Journalism) **Date:** 10th September 2017 Location: Sutton Bridge



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The life of First World War prisoners of war (POWs) in south Lincolnshire was brought to life in September 2017 by an exhibition staged by the Long Sutton and District Civic Society. This popular community event drew on AHRCfunded research conducted by Professor Jane Chapman and Dr Andrew Kerr, via the Everyday Lives in War Centenary Commemoration Centre. Project research has included extensive local investigation in partnership with community groups in the area.

The findings and primary source materials were displayed at Sutton Bridge Golf Club as a series of posters and a full colour pamphlet was produced and distributed by the University of Lincoln research team. The exhibition was enhanced by questions from more than 150 members of the public to the research team, including members of the Civic Society. The event also included a guided tour of the golf course grounds, encompassing key structures from both the First and Second World Wars including the warehouse of the former docks in which, the team believes, POWs were billeted.

Public comments and feedback on the event were overwhelmingly positive, with many taking the opportunity to engage in animated discussion about the research process with members of the team and the Civic Society, as well as sharing stories of their own family history and their knowledge about local home front life during the First World War. The exhibition was considered so successful that the Civic Society have now repeated the poster exhibition at a subsequent public engagement event at the local Parish Council, and the research team are still receiving requests from the public for copies of their (free) booklet, telling the story of the German POWs in South Lincolnshire.

Key references and further reading

- Blog post: Life in the POW Camp in South Lincolnshire (everydaylivesinwar.herts.ac.uk/2017/08/life-in-the-pow-camp-in-southlincolnshire, 2017)
- [2] Blog post: German POWs in Sutton Bridge, Lincs' collaboration with Long Sutton and District Civic Society (everydaylivesinwar.herts.ac.uk/german-pows-in-sutton)
- [3] Blog post: AHRC/HLF Everyday Lives in War (lcrj.blogs.lincoln.ac.uk/ahrchlf-every-day-lives-in-war)

Self-Management in People Affected by Cancer: A Rural-Urban Comparison



David Nelson, Dr Ros Kane; Dr Ian McGonagle; Dr Christine Jackson (School of Health and Social Care) **Date:** 2017 – 2018 Location: East Midlands

Whilst the needs and challenges of people affected by cancer in rural areas have been well documented, there is a lack of research exploring the impact of living in rural versus urban areas on people's ability to self-manage their health following cancer treatment.

Part-funded by Macmillan Cancer Support, this research project is using a combination of quantitative (selfcompleted postal questionnaires) and qualitative methods (in-depth interviews) to compare differences in selfmanagement practices and behaviours of those affected by cancer between rural and urban settings, and to identify and explore barriers and facilitators to self-management.

From the outset, people affected by cancer guided the research to enhance its quality and relevance^[1]. The project Steering Group includes a public representative with a past diagnosis of cancer and experience as a carer and, prior to data collection, the research materials (invite, information sheet, questionnaire, consent form) were piloted with five volunteers affected by cancer, providing feedback via email/telephone conversations which inputted directly into the final materials that were used for data

collection. All participants were given the opportunity to receive a summary of the results.

Research participants were recruited from a database of cancer patients at United Lincolnshire Hospitals NHS Trust and University Hospitals of Leicester NHS Trust. A total of 227 completed questionnaires collected data on demographics, rural-urban residence, health-promoting behaviours, patient activation (knowledge, skills and confidence to self-manage), and confidence to perform specific self-management tasks and behaviours. Following the questionnaire, a series of follow-up in-depth interviews have been conducted with a range of individuals (age, gender, cancer diagnosis, treatment received, ruralurban residence) across the East Midlands. Findings will be shared during a public and stakeholder event at the University of Lincoln in June 2019.

The results will increase our understanding of the influence of the rural and urban context on the self-management of people affected by cancer, providing a more solid evidence base for providing tailored and appropriate support.

^[1] Publication: Brett J. et al. A systematic review of impact of patient and public involvement on service users, researchers and communities (doi.org/10.1007/s40271-014-0065-0, 2014)

Memory Lane – reminiscence and wellbeing in dementia care

Collaborators: Rachael Mason and Rachael Hunt (School of Health and Social Care) **Date:** October 2016 – May 2018 Location: Lincoln



Between October 2016 and May 2018, Rachael Mason and Rachael Hunt alongside students from the Schools of Psychology and Health and Social Care collaborated with a local care home to explore how working with the University could strengthen local ties and enable students to explore care homes as a career choice.

The project aimed to offer enjoyable activities through which people living with dementia could benefit from social interaction with students. For students, in line with HEA 'Embedding Employability' frameworks, this was a chance to extend their professional networks, develop specialist, technical and transferable skills, and boost their confidence, resilience and adaptability.

The project was supported by a successful University of Lincoln Student Engagement in Educational Development grant of £1000 which funded materials for the activities with residents. The project was co-designed between the care home manager and the University, including students. Students and care home staff participated in training in dementia awareness, safeguarding, running activities, and becoming a 'Dementia Friend', prior to starting the project. The students worked closely with care home staff and residents to design and deliver reminiscence activities using games, arts and crafts, newspaper cuttings, maps and photos, all aiming to offer social engagement.

A total of 12 students engaged in this project and three members of the care home staff team were directly involved in the designing and training for the project, while all care home staff helped to supervise the activities when on duty. Approximately 12 residents of the home were involved.

Students and care home staff completed qualitative evaluation forms after the activities and at the end of the project with the aim of understanding how participation in the project had benefited themselves and the residents, and how improvements could be made in the future. Analysis of the data identified four main themes: skill development (of students and staff), knowledge and understanding (particularly of dementia), working with others and benefits to residents. This final theme demonstrated the impact the project had on the residents of the home, with one student commenting:

"...the project went really well, and we made a positive difference to the residents. I noticed that they were happier and responded better each time we went back in to visit them. I also felt that when we were there they interacted more with each other as well, I noticed this difference from the first week to the last"

In terms of student development, one individual commented;

"I have gained so much from this experience. I am able to take charge in certain situations that before I would've found quite daunting. I also now have the skills to work with elderly people and more so with dementia patients"

^[1] Online article: *Memory Lane Project at Canwick House in Collaboration with the University of Lincoln* (canwickhouse.com/category/elderly-care, 2017)

^[2] Conference presentation: Mason, R. et al. *Development and evaluation of the process for final placement application: a review of the new student led allocation system* (eprints.lincoln.ac.uk/25325, 2016)

Older people: care and self-funding experiences

Dr Mo Ray and Dr Claire Markham (School of Health and Social Care), Dr Denise Tanner (University of Birmingham), Dr Lizzie Ward (University of Brighton) Date: 2016 Location: Lincoln, Brighton, Birmingham



The number of older people paying for social care has soared in recent years due to changes in the funding, organisation, and eligibility criteria of publically funded social care. Although very large numbers of people are being affected by this, little research has been undertaken into the experiences of older people in self-funding, and their voices are consequently largely absent from policy and practice debates. This Wellcome Trust-funded project aims to fill this gap through research in three locations: Brighton, Solihull and Lincolnshire, in a collaboration between Dr Lizzie Ward (University of Brighton), Professor Mo Ray (University of Lincoln) and Dr Denise Tanner (University of Birmingham) together with local community partners, older co-researchers and local stakeholders in each area including health and care service commissioners, practitioners and providers.

This three-year qualitative study takes a participatory approach co-produced with older people, involving

knowledge exchange with key stakeholders in order to advance theoretical understanding of the ethical issues surrounding the risks and responsibilities involved in selffunded social care. By using co-production to engage more effectively with older people, the project aims to generate knowledge that is authentically rooted in the experiences of older people, which can then be brought into dialogue with commissioners, service providers and practitioners to inform policy and practice.

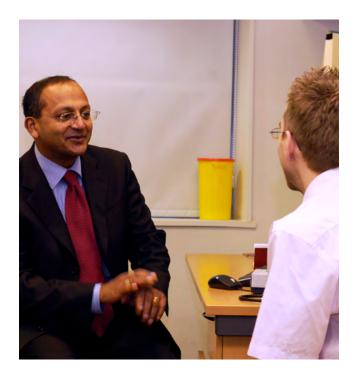
In Lincolnshire a team of ten older co-researchers from across the county is working with university researchers and community partners to co-design the processes used for data collection, data analysis and knowledge exchange. Participants will include older people who are funding their own care; family members or informal carers who are supporting older self-funders; and practitioners, providers, and commissioners of social care.

^[1] Research group website: harg.blogs.lincoln.ac.uk

^[2] Publication: Brett J. et al. A systematic review of impact of patient and public involvement on service users, researchers and communities (doi.org/10.1007/s40271-014-0065-0, 2014)

Engaging the Public in Improving GP Care for Insomnia

Professor Niro Siriwardena Director of Community and Health Research Unit (CaHRU) **Date**: 2007-2018 **Location**: Lincolnshire



Resources for Effective Sleep Treatment (REST) is a programme of research, initially funded by the Health Foundation, involving service users from its initial conception right through to design and dissemination^[1]. It seeks to improve primary care for people with insomnia and sleep problems and reduce inappropriate prescribing of sleeping tablets. This research has informed guidance to clinicians on hypnotic prescribing and led to a series of educational resources, workshops, seminars and an e-learning programme which has been accessed by over 10,000 worldwide^[1]. These resources have overall directly led to changes in how GPs manage insomnia. Overall the impact has been an increased public and professional awareness and greater use of psychological treatments for insomnia by GPs, with direct benefits for patients^[2]. The research has also resulted in improvements to policy and practice, by contributing to a better understanding of deficiencies in care and by developing and testing methods which have improved delivery of care for sleep problems and insomnia, improving quality of life for patients.

Researchers worked with service users from the outset to help design the programme and make it more relevant to patients and the public. Service user representatives worked with the project team to raise public awareness of insomnia and improve care for insomnia through informational videos^[2] and a national UK television documentary, in which we were featured and which covered the findings of our research^[3]. The late Andrew Harrison, our patient and public involvement representative, was involved in its initial conception, its wider focus on people presenting with sleep problems in primary care, the steering group, design of the studies, and the methods of disseminating learning through the REST website^[1].

The impact of the activity was assessed directly through hits on the REST project website and indirectly through reports from GPs and other health professionals of how the resources have improved their care for patients. Our online e-learning resource providing information and education to practitioners, the REST e-learning package^[1], has had over 16,000 visits from 12,000 unique visitors from 160 countries across five continents (data from Google analytics). GPs, both internationally and nationally have given very positive feedback about the resources, including reporting that they will use the learning in day-to-day practice. The TV documentary^[3] on sleep in which the project was featured led to a significant increase in traffic to the REST website^[1] with over 1,000 hits in the month following the documentary.

In addition, a paper published by the team and collaborators^[1] received wide press and radio coverage in local (BBC Radio Lincolnshire), national (Times, Telegraph, Daily Mail, Radio5live) and international (US, Australasia, Asia) media.

Key project highlights include involvement of service users from conception to dissemination; greater engagement of professionals through a stronger patient voice in the research; wide media interest through television, radio, web and other new outlets; change in professional behaviour and better patient care through improved training of GPs and other healthcare staff.

Key references and further reading

[1] Project website: restproject.org.uk

 ^[2] Online article: Stories of outstanding impact in primary care (health.org.uk/newsletter/stories-outstanding-impact-primary-care, 2015)
 [3] TV Broadcast: ITN Tonight, ITV1, Waking up to insomnia (communityandhealth.blogs.lincoln.ac.uk/2011/11/18/rest-project-featured-onitn-tonight-documentary-on-insomnia, 2011)

Dog Bite Prevention

Professor Kerstin Meints, Victoria Brelsford, Dr Janine Just, Mirena Dimolareva and Dr Elise Rowan *(School of Psychology)* **Location:** *Internation*

The University of Lincoln's current Dog Bite Prevention Team were awarded the Vice Chancellor's Public Engagement with Research team award at PEARL 2018 Conference.

Dog bites account for millions of injuries annually with the highest risk in children. Dog bites cost more than \$53.9 million in the US, \$7 million in Australia and around £10 million in the UK. As only overnight stays are counted in such hospital statistics, not all bites are included. Interview data show dog bite rates in children of up to 47%. With steep increases in dog bites in recent years (HSCIS 2014), effective prevention has been demanded by medical and veterinary professions.

The Lincoln Dog Bite Prevention Team currently comprises a range of projects on the behaviour and perceptions of children and adults around dogs. One of the projects, The Blue Dog, is an interactive dog bite prevention programme, initiated by Professor Tiny De Keuster (University of Ghent) involving multidisciplinary scientists, behaviour specialists, professionals and artists. Research under the lead of Professor Meints at Lincoln provided further input and assessed the Blue Dog to be a successful prevention tool, with clear improvement in children's recognition of risk factors.

The Blue Dog combines education and entertainment to teach children and parents about safe behaviour with dogs and aims to enhance health and wellbeing of children and improve animal welfare. It contains a DVD, parent booklet, and the Blue Dog App. Over 80,000 copies were distributed in 21 countries, the booklet has been translated into 17 languages and the App enables continued and broad international reach. Blue Dog has led to improved public understanding of child-dog interactions and risk contexts as well as changes in policy and professional practice. Dutch, Belgian and German governments endorsed Blue Dog as a prevention tool and implemented its use. The tool has been distributed internationally in veterinary and educational practice. Public awareness of dog bite risk factors has been further raised by international media coverage.

Stakeholders were involved throughout the research process and the current research taking place is responding to further questions raised. The team's research programme has broadened considerably over recent years with children and parents taking part in and benefitting from the research, including teaching dog body language and, most recently, running dog-assisted interventions in over 20 schools in the UK, including in the local community.

To ensure appropriate usage of Blue Dog resources continues, "Train the trainer" programmes and workshops for the public and dog trainers are run regularly across Europe. The Blue Dog website provides information for dog owners, parents, children and teachers with free teacher tool kits. The Lincoln team have also linked with animalassisted intervention providers to publish safety guidelines for these.

The NHS has adopted Blue Dog as dog bite prevention tool of choice and Blue Dog is recommended internationally by the American Veterinary Medical Association, the Federation of European Companion Animal Veterinary Associations, the German Veterinary Medical Society and the German Federal Chamber of Veterinarians. Blue Dog was recognised for its ongoing impact by the World Small Animal Veterinary Association Global One Health Award in 2017.

- [1] Publication: Meints, K. et al. *Don't kiss a sleeping dog: the first assessment of "The Blue Dog" bite prevention program* (eprints.lincoln.ac.uk/2729, 2009)
- [2] Publication: Meints, K. et al. *Teaching children and parents to understand dog signalling* (doi.org/10.3389/fvets.2018.00257, 2018)
- [3] Blue Dog App: ios.me/app/1290238272/the-blue-dog



OnlinePROTECT - prevention of online child sexual exploitation

Dr Hannah Merdian (School of Psychology) and **Professor Derek Perkins** (West London Mental Health NHS Trust and Royal Holloway University of London) **Date:** 2017 – 2018 **Location:** Local, national and international

As internet access has become ubiquitous, law enforcement, child protection agencies and clinical services have observed an exponential increase in the number of individuals committing online sexual offences involving children. Initially conceptualised as an 'old crime, new technology' phenomenon, the unique characteristics of this population were poorly understood, and there was a lack of standardisation in the treatment approaches across offender management services. OnlinePROTECT aims to maximise the capacity of research into online child sexual offending to help service providers reduce harm to children and young people.

OnlinePROTECT has been developed by research team Dr Hannah Merdian and Professor Derek Perkins working with collaborators and researchers from the Universities of Lincoln and London, supported by PhD student Danielle Kettleborough, OnlinePROTECT's social media officer. The team work closely with police, child protection agencies and offender treatment providers, delivering training workshops to professional practice stakeholders both nationally and internationally, including the New Zealand Department of Corrections, the European Police College, and the International Association of Internet Hotlines. 'Before-and-after' feedback data from the workshops show 100% of attendees felt their knowledge of the topic of online sex offending and how a psychologist might approach working with an offender had increased, with average reported levels of knowledge more than doubling. 96% of attendees also showed increased appreciation of academic research, with the average score given increasing from 5 to 10. 100% of attendees reported increased confidence in conducting risk assessments, with average levels of confidence increasing five-fold.

The project is also helping professionals to engage more effectively with people who access illegal images of children. New guidance on assessing and planning treatment for offenders has been successfully tested with health professionals and service-users, in partnership with treatment provider Lucy Faithfull Foundation. The project has also established the International Working Group for Best Practice in the Management of Online Sex Offending; a policy advisory group collaborating with organisations such as Europol, the National Crime Agency, NSPCC, IATSO and partner universities.



Key references and further reading

[1] Project website: onlinePROTECT.org.uk

[2] Social media: twitter.com/online_PROTECT

[3] Publications: staff.lincoln.ac.uk/hmerdian

Happy Classrooms: Happy People

Dr Helen Childerhouse (School of Education) Date: 6th November 2017 Location: University of Lincoln

In November 2017, 114 children and teachers from local primary schools visited the University of Lincoln to take part in the ESRC Festival of Social Science event 'Happy Classrooms: Happy People'. Researchers wanted to find out what made children happy at school and how schools could become happier places. This responded to prior research suggesting that stress experienced by some children and teachers may be due to pressures from assessment and learning progression.

The research used games to create an environment in which children and adults felt comfortable and more able to talk about their feelings, ideas and suggestions. Participants could share their thoughts on graffiti walls, whiteboards and postcards, while children who found this difficult were encouraged to work with a peer who could help or scribe for them. Adults were discouraged from providing support to help ensure children felt they could say what they wanted. Everyone who completed a postcard with a suggestion for how the classroom could be a happier place was entered into a prize draw. Two schools were awarded £50 gift vouchers for them to spend on resources to contribute to making their classrooms happier.





457 anonymous comments were written on the graffiti walls, whiteboards and postcards, encouraging most participants to share their thoughts several times, with the graffiti walls proving particularly popular. Comments were sorted into themes using a deductive coding approach to provide new insights. Many responses referred to how children felt about different school subjects such as English or Art. Some children felt it was important that their teacher was kind, helpful and approachable. Many children talked about their love for learning and reported that they were happy at school: for most, simple suggestions about additional resources (crayons, iPads, brightly decorated classrooms) seemed to be sufficient to enhance their learning environment. Some children suggested that their classroom could be a happier place by reducing noise levels and providing more places for children to go where they could be calm and safe. Overall, the responses highlighted the importance of a pleasant physical environment, good relationships and shared expectations.

The event demonstrated that children are keen to share ideas about classrooms, and indicated that further research could build a more comprehensive picture of what children feel makes them happy.

^[1] Festival website: esrc.ukri.org/public-engagement/festival-of-social-science/about-the-festival

^[2] Publication: Childerhouse, H. Supporting children with 'Social, Emotional and Behavioural Difficulty (SEBD)' in mainstream: teachers' perspectives (shura.shu.ac.uk/16546, 2017)

^[3] Publication: Crow, F. *Learning for well-being: Personal, social and health education and a changing curriculum* (Pastoral Care in Education, 2008)





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