Wednesday June 6th 2018

Registration & coffee	**09.30-09.45**

Welcome by PVC Head of College   **09.45-10.00**
Professor Sara Owen

Session 1   **10.00-11.30**
Chair: Dr Simon Durrant
Dr Anita Backhouse
Dr Ros Kane
Professor Terence Karran
Dr Hannah Merdian
Mr Franky Mulloy
Dr Ali Bohm

Coffee   **11.30-12.00**

Session 2   **12.00-13.45**
Chair: Dr Sundari Anitha
Professor Hugh Bochel
Dr Kelly Sisson
Dr Joss Winn
Dr Kirsty Miller
Dr Danny Taylor
Professor Mo Ray
Professor Louis Kotze

Networking lunch   **13.45-14.30**

Session 3   **14.30-16:00**
Chair: Dr Ros Kane
Professor Niro Siriwardena
Dr Catherine Bochel
Dr Kay Ritchie
Mr Geoff Middleton
Mr Jim Rogers
Professor Steve McKay

College Research Strategy & Year Ahead   **16:00-16:30**
Professor Todd Hogue

Drinks Reception   **16.30-18:00**

Presentation Sessions

Time	Presentation Details
10:00 – 10:15	**Assessment Companion for Thinking Skills (ACTS) – an Erasmus+ Project** *Dr Anita Backhouse* School of Education
10:15 – 10:30	**Influencing self-management and social care for those affected by cancer – the development of an Impact Case Study** *Dr Ros Kane* School of Health & Social Care
10:30 – 10:45	**Academic Freedom in Britain: Legalities and Realities** *Professor Terence Karran* School of Education
10:45 – 11:00	**OnlinePROTECT: Working towards the Prevention of Online Child Sexual Exploitation** *Dr Hannah Merdian, Danielle Kettleborough* School of Psychology
11:00 – 11:15	**The Undulating Road to Enterprise: Experiences of an Early Career Researcher** *Franky Mulloy* School of Sport & Exercise Science
11:15 – 11:30	**Jus ante bellum, humanitarian intervention and the responsibility to protect** *Dr Ali Bohm* Lincoln Law School
Coffee	
12:00 – 12:15	**Diversity of committee witnesses in the Scottish Parliament** *Professor Hugh Bochel* School of Social & Political Sciences
12:15 – 12:30	**A Health Needs Assessment for people living with neurological conditions in Lincolnshire** *Dr Kelly Sisson, Professor Mo Ray, Thomas George, Emily Scott* School of Health & Social Care
12:30 – 12:45	**The Co-operative University Now!** *Dr Joss Winn, Professor Mike Neary* School of Education
12:45 – 13:00	**Engaging Students in Public Engagement** *Dr Kirsty Miller* School of Psychology
13:00 – 13:15	**Heart-rate based estimates of aerobic fitness, energy expenditure and substrate utilisation during exercise: validity of existing methods and development of new alternatives** *Dr Danny Taylor, Professor David Mullineaux, Geoff Middleton* School of Sport & Exercise Science

13:15 – 13:30	**Ethical Issues in self-funded care: Co-producing knowledge with older people** *Professor Mo Ray, Dr Claire Markham* School of Health & Social Care
13:30 – 13:45	**Global Ecological Custodianship: Innovative International Environmental Law for the Anthropocene** *Professor Louis Kotzé* Lincoln Law School
Lunch	
14:30 – 14:45	**Trials and tribulations in primary care for sleep** *Professor Niro Siriwardena, Professor Graham Law, Dr Murray Smith, Dr Coral Sirdifield, Dr Julie Pattinson, Viet-Hai Phung, Despina Laparidou* School of Health & Social Care
14:45 – 15:00	**Research, Impact and Engagement in Parliament** *Dr Catherine Bochel* School of Social & Political Sciences
15:00 – 15:15	**Face recognition: The problems of familiarity and variability** *Dr Kay Ritchie, Dr Robin Kramer* School of Psychology
15:15 – 15:30	**Evaluating the new participant experience and effect of 'Vitality'; a community-based physical activity programme for older adults in Lincolnshire** *Geoff Middleton, Dan Bishop, Dr Lee Crust* School of Sport & Exercise Science
15:30 – 15:45	**Decision Making in relation to Mental Capacity** *Jim Rogers, Lucy Bright, Emily Scott* School of Health & Social Care
15:45 – 16:00	**When 4 ≈ 10,000: The power of social science knowledge in predictive performance** *Professor Steve McKay* School of Social & Political Sciences
16:00 – 16:30	**College Research Strategy & the Year Ahead** *Professor Todd Hogue* College of Social Science
16:30 – 18:00	**Drinks Reception**

Presentation Abstracts:

Session 1

Assessment Companion for Thinking Skills (ACTS) – an Erasmus+ Project

Dr Anita Backhouse
School of Education

Erasmus+ is a European Union initiative that aims to modernise education, training and youth work across Europe. A bid for a three-year project that focuses on the development of critical thinking skills through innovative approaches and the exchange of good practices was submitted to Erasmus+ by the University of Lincoln in March 2017. The bid was successful and the University and its partners were awarded €390,068 in September 2017. The Assessment Companion for Thinking Skills (ACTS) Project is a partnership between seven institutions in the UK, Latvia and Finland. The project aims to make the identification and assessment of thinking skills more accessible to teachers in the classroom so that they can recognise the progress their children make in their thinking. ACTS will help teachers diagnose their children's thinking ability and help the teachers to direct their support towards guiding their children to become more skilful thinkers. The project will have achieved its aim when teachers tell us that the training they have received, and the use of the ACTS assessment tools, has made them more confident to assess children's progress in thinking – they will know what effective thinking sounds like and looks like.

Influencing self-management and social care for those affected by cancer – the development of an Impact Case Study

Dr Ros Kane
School of Health & Social Care

Macmillan Cancer Support is the UK's leading cancer charity and comprises a network of millions of professionals, volunteers, campaigners and people affected by cancer. It invests around £170 million annually and has grown dramatically in recent years; for example, the number of Macmillan nurse posts increased by over 660 between 2015 and 2016 to 5,200.

In November 2013, the university signed a formal partnership with Macmillan and from the outset Ros Kane was a member of the steering group to direct and co-ordinate activities across three key areas: volunteering; student experience, and research.

To date we have received funding from Macmillan for five studies, all focused on examining ways to help improve the lives of those affected by cancer. This has included funding to support the employment of a full-time Macmillan Research Fellow within the School of Health and Social Care.

Our work with Macmillan has led to widespread regional, national and international collaboration and research activity with the potential for broad impact. This presentation will detail the programme of research, along with underpinning publications in development and the details of a progressing impact case study.

Academic Freedom in Britain: Legalities and Realities

Professor Terence Karran
School of Education

Academic freedom is considered to be of importance to academics, to universities as institutions, and society at large. Academic freedom is supposedly protected in the UK by the Higher Education and Research Act 2017 (which repeats the 1988 Education Reform Act). Work undertaken for the UCU reveals that *de jure* legal protection for academic freedom in the UK is amongst the weakest in Europe. Similarly, a large scale survey of UCU members revealed that the *de facto* experiences of academic freedom among university staff are manifestly worse than in comparable EU states. For example, 23% of respondents to the UCU survey report being bullied, 27% reported being subjected to psychological pressure, and 35.5% admitted to practising self-censorship for fear of negative repercussions.

Additional work using the same data, along with the *Times Higher*'s World University rankings shows that those UK universities that provide the greatest protection for academic freedom also tend to occupy the highest positions in the World Rankings. This suggests that reforms to HE, brought in under New Public Management reforms to enable stronger management to pursue academic excellence, have had the opposite effect. Paradoxically, academic freedom appears to be a necessary condition for academic and institutional excellence.

OnlinePROTECT: Working towards the Prevention of Online Child Sexual Exploitation

Dr Hannah Merdian, Danielle Kettleborough
School of Psychology

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.

Dr Hannah Merdian (University of Lincoln, UK) has co-founded **onlinePROTECT**, a research and applied outreach programme to support the aim of eliminating child sexual exploitation on the internet through research, training, consultation, and inter-agency collaboration, working alongside a team of collaborators and researchers. Hannah will provide an overview of the onlinePROTECT research programme, and outline some of onlinePROTECT's stakeholder engagement, working with police, child protection agencies, and offender treatment providers.

The Undulating Road to Enterprise: Experiences of an Early Career Researcher

Franky Mulloy
School of Sport & Exercise Science

Diversification of income has grown as a strategic objective of the University. Within the world of academia, there are increasing pressures to diversify income, moving away from a reliance on student fees toward other financial sources. This requires academics to be more creative in thinking how academic practice can attract, develop and nurture income. This comes under the umbrella of enterprise and income generation with a variety of funding sources available such as research funding, industry grants, government funding, consultancy, and many more. However, in academia time is a precious commodity with many of us having a number of commitments to juggle and limited time to chase multiple avenues. It is important, therefore, to be efficient with our time and try to link our research, teaching and scholarly activity to outcomes that work for us. This presentation will hopefully provide an honest and insightful account of a young academic's road to enterprise and things learnt along the way. From small successes, mistakes, steep learning curves, and ultimately ending up being awarded a 3-year Knowledge Transfer Partnership grant with industry.

Jus ante bellum, humanitarian intervention and the responsibility to protect

Dr Ali Bohm
Lincoln Law School

Just war theorists have long considered the conditions under which it might be right to go to war (jus ad bellum) and the conditions under which war should be waged (jus in bello). More recently the category of jus post bellum has been considered in the light of occupations and regime change.

This paper develops the idea of jus ante bellum as a response to these debates. This category is necessary because the jus ad bellum is very short term in its understanding of the causes of violence and the conditions legitimating a just response through warfare. This is particular important given the near certainty that war will kill people, including civilians. For the jus ad bellum criteria to retain legitimacy, states should be certain that they are also taking an appropriate long term view of the causes of violence (and suitable responses to these long term causes) under the jus ante bellum.

The paper uses the responsibility to protect doctrine as an example of how states are failing in their concepts and practice of jus ante bellum.

Session 2

Diversity of committee witnesses in the Scottish Parliament

Professor Hugh Bochel
School of Social & Political Sciences

This research considers the voices heard by parliamentary committees in their scrutiny of government actions and legislation. Committees are an important part of the parliamentary structure, and can help hold governments, public bodies, and others, accountable for their actions. They can also be seen as transmitting information about what voices parliaments hear from and value.

The research draws on the Scottish Parliament, utilising data on committee witnesses and 38 interviews with MSPs and parliamentary staff. It highlights the benefits for committees that can be associated with hearing from a wide range of voices and also emphasises that both 'demand' and 'supply' factors are important in influencing the make-up of committee witnesses, with, for example, around three-fifths of witnesses at Holyrood being male, while there are a variety of pressures and initiatives affecting witness selection and evidence gathering more generally. The research also shows that many committees already hear from a wider range of voices, although these are not always recorded and recognised in the formal records and reports of the committees. It suggests a number of ways in which the diversity and representativeness of voices heard by committees might be improved.

The (potential) impact of the research will be discussed.

A Health Needs Assessment for people living with neurological conditions in Lincolnshire

Dr Kelly Sisson, Professor Mo Ray, Thomas George, Emily Scott
School of Health & Social Care

It is estimated that 8 million people in England have a neurological condition (Thomas, 2011). Neurological conditions may be defined as damage to the brain, spinal column or peripheral nerves. In 2015, The National Audit Office found health authorities throughout the UK were making poor progress on some key recommendations to meeting the needs of people living with neurological conditions.

The Healthy Ageing Research Group (HARG) were commissioned by Lincolnshire County Council in November 2017 to conduct an independent health needs assessment of adults living with neurological conditions in Lincolnshire. A systematic literature review was undertaken to establish the national picture and identify areas of concern. This was supplemented by data from a range of local and national data sets (to estimate service activity and disease levels) and a survey of people affected by neurological conditions, their carers, voluntary sector groups and medical/ allied health professionals, to identify gaps and limitations in service provision along with examples of good practice.

This presentation will explore key results from the final report, the recommendations made to the commissioners and the next steps for the project team.

The Co-operative University Now!

Dr Joss Winn, Professor Mike Neary
School of Education

"What we want and seek to obtain is a co-operative journey that will end in a co-operative university." (Rae 1909:29, quoted in Woodin, 2017: 34)

In early discussions leading to the formation of the Co-operative College, Manchester in 1919, co-operators saw themselves embarking on a journey towards co-operative higher education. This ambition has been revisited throughout the history of the College, with the hope that it would "become the nucleus of a Co-operative University of Great Britain, with a number of affiliated sectional and regional Colleges or Co-operative Institutes, as the demand arises." (The British Co-operative College 1919-1944: 9).

This paper will give an account of recent attempts to establish a co-operative university leading up to the Centenary of the Co-operative College. It will explore the ideas and practices of co-operative higher education now, situating these efforts within the broader higher education policy environment of the UK and in light of recent developments in the co-operative movement, including multi-stakeholder models of governance. It will summarise recent research into co-operative higher education and give brief accounts of those involved.

Engaging Students in Public Engagement

Dr Kirsty Miller
School of Psychology

Student engagement is at the heart of the University's Strategic plan and Lincoln has a national reputation for our work with Students as Producers. Students are 'producers of knowledge' and we support them to present their findings at national conferences and research seminars alongside their academics.

The strategic plan also focuses on the sharing of our research across communities. Public engagement can strengthen relevance, responsiveness and accountability and build trust in the institution. A next logical step is to work with students as partners in engaging the wider public, sharing research ideas, goals and outcomes, and providing opportunities for discussion. This presentation will share the challenges and successes of student partnership in public engagement and discuss the opportunities to increase this practice.

Heart-rate based estimates of aerobic fitness, energy expenditure and substrate utilisation during exercise: validity of existing methods and development of new alternatives

Dr Danny Taylor, Professor David Mullineaux, Geoff Middleton
School of Sport & Exercise Science

The use of real-time mobile (i.e. smartphone, tablet or smartwatch) applications to facilitate engagement with, monitoring, and enhancement of exercise activity is rapidly increasing. As such, there is growing demand for new health and fitness applications to offer more novel and/or wide-ranging information to users to help them understand their physical status (i.e. fitness level) and how they respond physiologically to different forms of exercise intensity (or 'workouts'). However, many of the more novel physiological parameters provided by contemporary health and fitness applications (e.g. calorie expenditure, fat oxidation, oxygen consumption) are indirectly estimated from a number of directly obtained parameters (e.g. heart rate, exercise work load) and predictive equations generated from a user's age, gender and weight. A better understanding the validity of such estimates is therefore important if decisions regarding the refinement and development of new health and fitness applications are to be well informed. The purpose of this project was to gather physiological data on healthy and active individuals (50 males aged 18-50) across a range of submaximal and maximal exercise intensities, in order to examine the validity of a mobile contemporary fitness application at estimating physiological feedback.

Ethical Issues in self-funded care: Co-producing knowledge with older people

Professor Mo Ray, Dr Claire Markham
School of Health & Social Care

There has, over the past decade, been a very significant growth in the numbers of older people who self-fund all or part of their care. Yet, older people's perspectives of self-funding are virtually invisible within a policy and research context. This project, funded by the Wellcome Trust, sets out to understand the lived experience of older people as they negotiate the process of purchasing and managing self-funded care, as well as the perspectives of key stakeholders, such as, care providers and commissioners. The study is located in three sites: Brighton and Hove, Solihull and Lincolnshire. Underpinned by an ethic of care and the principles of co-production, older citizens as co-researchers are involved in the design, fieldwork, interpretation and presentation of findings. Our approach is situated within an ethic of care framework which builds on earlier work which centred on relational ethics to co-research and to creating an opportunity for deliberation in which 'professional' and 'lay' perspectives are equally valued in exchanging knowledge. Our presentation will give an overview of our approach to the research project and comment on our early experience of fieldwork with older people and unpaid carers.

Global Ecological Custodianship: Innovative International Environmental Law for the Anthropocene

Professor Louis Kotzé
Lincoln Law School

Scientists suggest we are living in the Anthropocene, which signals an unprecedented global socio-ecological crisis where humans act as geological agents capable of changing the Earth system. The elaboration of the Anthropocene mindset is increasingly destabilizing society's perceptions and expectations of the regulatory institutions, such as law, that we employ to mediate the human-environment interface. The thesis of this project is that the many multilateral environmental agreements (MEAs) that must promote environmental protection have failed in their present guise to respond to the Anthropocene's socio-ecological crisis. What is needed is a comprehensively critical interrogation of MEAs, their deficiencies and deeper structural failures, and the reasons for, ways in, and extent to which these contribute to the Anthropocene, so that a contemporary solution can be crafted to reform MEAs, including potential ways to institutionalize ecological custodianship obligations. As a response to this challenge, this project seeks to answer 3 questions: i) what are the normative implications of the Anthropocene for international environmental law; ii) why and to what extent are MEAs unable to respond to the Anthropocene; and iii) how could MEAs be reformed so that they can better respond to the Anthropocene?

Session 3

Trials and tribulations in primary care for sleep

Professor Niro Siriwardena, Professor Graham Law, Dr Murray Smith, Dr Coral Sirdifield, Dr Julie Pattinson, Viet-Hai Phung, Despina Laparidou
School of Health & Social Care

Sleep is fundamental to our wellbeing, from birth to old age. Poor sleep affects health, sickness, life, death, productivity, and the wider economy. Sleep is as important to health as other lifestyle factors such as diet and exercise but, compared to these, is under-researched and under-invested in. There are effective psychological treatments for insomnia but these are not widely available, whereas less effective and potentially harmful drug treatments are commonly used.

We describe the work of members of CaHRU and our partners at the University of Lincoln and other academic institutions (Oxford, Manchester, Glasgow, Ghent), in partnership with service users, staff and healthcare organisations, locally, nationally and internationally. Over the past 15 years, using systematic reviews, observational and qualitative studies, quasi-experiments and trials, we have explored the problem of primary care for sleep, how this might be improved, and what effect this is having on sleep, prescribing, and health outcomes.

The work has led to a major multicentre trial, funded by the National Institute for Health Research (£1.8M), investigating the effectiveness and cost-effectiveness of sleep restriction therapy, a behavioural treatment for insomnia, delivered in primary care. These studies and the wider impacts of this work will be outlined and discussed.

Research, Impact and Engagement in Parliament

Dr Catherine Bochel
School of Social & Political Sciences

This presentation will discuss my work on petitions systems in the UK and how this led to impact in the Westminster Parliament, and also fed into debates about the use of e-petitions systems in the Canadian Parliament. This subsequently led to a House of Commons Academic Fellowship, which has enabled more research and brings the potential to generate further impact.

The research began in the Scottish Parliament and the National Assembly for Wales. It included interviews with petitioners, committee clerks and members of elected bodies, as well as observations of petitions committees. Among the key elements were a consideration of the extent to which petitions systems enable different degrees of participation, and a consideration of what the idea of procedural justice might tell us about them.

Face recognition: The problems of familiarity and variability

Dr Kay Ritchie, Dr Robin Kramer
School of Psychology

We know from previous research that unfamiliar face identification or face matching (telling whether two different images show the same person) is highly error-prone. Even very small changes such as removing your glasses can make it very difficult for an unfamiliar person to recognise you. Yet this seems counterintuitive to most people, particularly given our reliance on our face to prove our identity in photo-ID documents. Our poor performance with *unfamiliar* faces stands in stark contrast with our ability to recognise *familiar* people across very varying images. The problems of familiarity and of variability become particularly important when we think about photo-ID and specifically the verification of new passport photos. Someone who knows the applicant well is asked to verify the image as a good likeness. In this talk I will ask whether this is the best idea for photo-ID verification, basing my arguments on our recent research on face identification.

Evaluating the new participant experience and effect of 'Vitality'; a community-based physical activity programme for older adults in Lincolnshire

Geoff Middleton, Dan Bishop, Dr Lee Crust,
School of Sport & Exercise Science

Introduction: The study aim was to examine the effect of 'Vitality': a community-based group physical activity programme for older adults and explore user experiences.

Methods: An intervention group (n16), representing new Vitality members (55-79yrs), and a non-intervention control group (*n*16) were assessed before and after an 8-week period on a range of 1) physical and functional measures validated for use with older adults and 2) psychological measures: self-efficacy for exercise, physical activity enjoyment and the quality of life. Semi-structured focus groups explored facilitators and barriers of attending.

Results: There was a between group difference (interaction) and the intervention group the improved test performance on the 6-minute walk; 430.5 (±38.1) to 473.5m (±37), 8-foot up and go; 6.5 (±1) to 6.0s (±1.1), the chair sit and reach; -2.3 (±11.2) to 0.6cm (±10), (all p<0.05). No differences were found with all other outcomes. Key themes highlighted facilitators; *unique and bespoke, retirement transition, perceived improvements, offer of support networks.* Barriers were; *misconceptions and assumptions, inconsistent opportunities, accessibility and availability of classes.*

Conclusion: Participation in the community-based programme led to several physical and functional benefits for older adults. Importantly, the programme did not regress any aspects of physical or psychological health.

Decision Making in relation to Mental Capacity

Jim Rogers, Lucy Bright, Emily Scott
School of Health & Social Care

The Deprivation of Liberty Safeguards (DOLS) provide essential legal protection for individuals in hospitals and care homes who lack the capacity to consent to being there. Conducting the necessary assessments which are required by these regulations currently costs the NHS and Social Care system over £1 billion per year (Law Commission Impact Assessment 2015).

Given the burden on the care system in terms of both time and money and the numbers of citizens who are subject to these assessments it is important that correct guidelines are followed in relation to the capacity assessment and that self–determination and supported decision making is encouraged wherever possible.

Mental capacity assessments are central to the assessment process in both existing and new proposed legislation (Liberty Protection Safeguards).The award from the College Research fund enabled us to interview key staff involved in three different roles within the process, about the factors that influence their judgements about mental capacity, based on vignettes presented to them shortly before interview.

The presentation will offer interim findings. The full data from the study will have relevance to all involved in the DOLS process, but also to other health and social care staff, who are routinely involved in mental capacity assessments.

When 4 ≈ 10,000: The power of social science knowledge in predictive performance

Professor Steve McKay
School of Social & Political Sciences

Computer science has devised leading methods for predicting variables from a set of information; can social science compete? This paper sets out a social scientific approach in a particular competition designed to test different approaches to predicting outcomes for families: the Fragile Families Challenge. In this competition investigators were challenged to predict six key outcomes for families 15 years after a birth, using information from up to age 9. Overall, social science did contribute towards predictive performance whilst needing to learn more about data science methods for further progress.

Key insights included: new variables constructed according to social scientific theory (e.g. a measure of shame relating to hardship); lagged values of the target variables; using predicted values of some outcomes to inform others; validated scales rather than individual variables. The models were competitive: a four-variable logistic regression model was placed second for predicting unemployment, narrowly beaten by a model using all the available variables (>10,000) and an ensemble of algorithms. Similarly, a relatively small random forest model (25 variables) was ranked 7th in predicting material hardship. Machine learning approaches proved far superior to linear regression for modelling the continuous outcomes.

Notes