



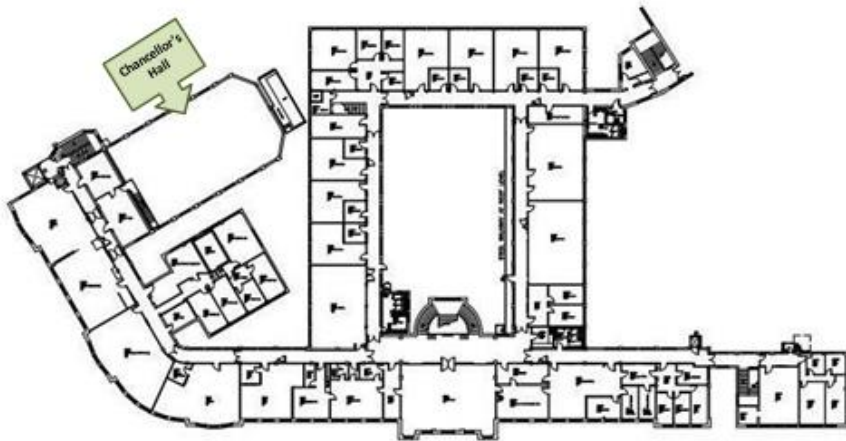
Conference programme

Annual Research Conference 2017

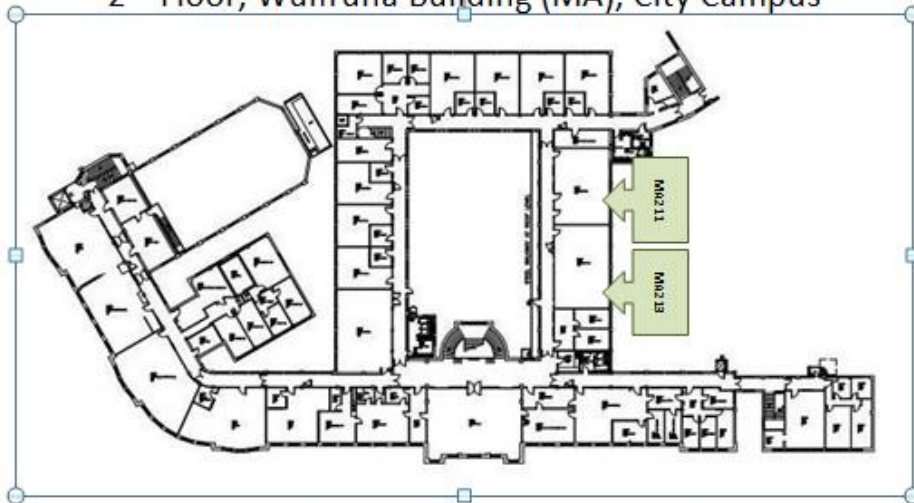
Monday 19th & Tuesday 20th June 2017



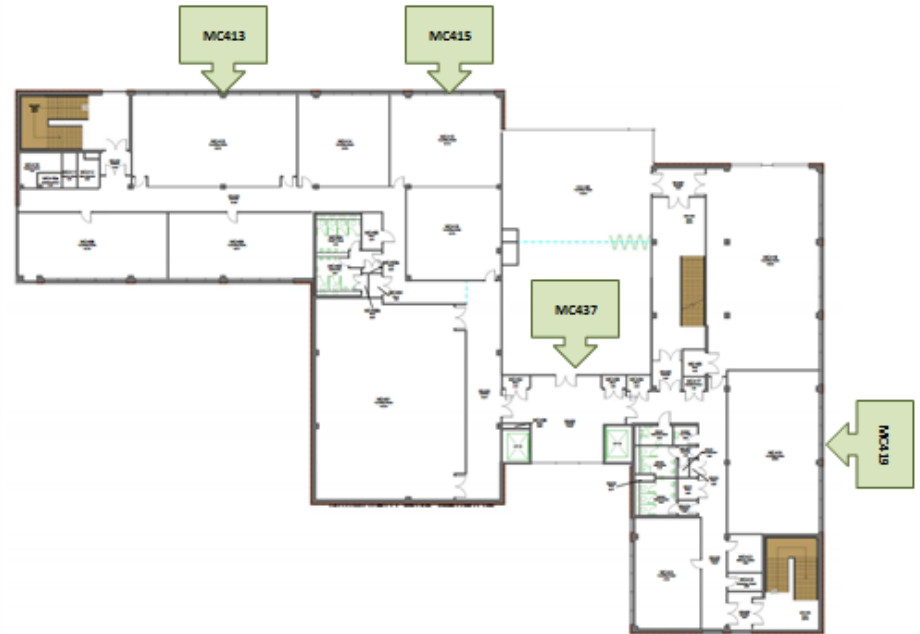
1st Floor, Wulfruna Building (MA), City Campus



2nd Floor, Wulfruna Building (MA), City Campus



4th Floor, Millennium City Building (MC), City Campus





**Day One: Monday 19th
June 2017
Research Student
Conference – Schedule of
Events**

10:00	Opening (Chancellor's Hall, Wulfruna Building)	
	<ul style="list-style-type: none"> • Professor John Darling, Dean of Research • Dr Benjamin Halligan, Director of the Doctoral College 	
	Group A (MA211)	Group B (MA213)
10:30 - 10:45	Dahiru Abdullahi (FSE) Strategic framework for solar energy implementation in Nigeria	Stuart Guy & Claire Dickens (FEHW) "3 Minutes to Save a Life" - Deconstructing student emotional distress to mitigate the risk of suicide utilising compassion and hope.
10:50 - 11:10	Aishat Bakre (FEHW) Determinants of consumption of fish in older adults	Leonard Love (FoA) Building Bridges with Custard Pies: Subverting the regime of Shakespearean Performance
11:15 – 11:30	Hussaini Bello (FSE) Influence of molecular weight of Polyoxes™ on the release rate of model highly water soluble drug (diltiazem) from liquisolid formulation in comparison their counterpart physical mixture.	Joanne Mills (FoA) Engagement and Immersion: The extent to which an expanded narrative is present within American Minimalist Music during the 1960s and 1970s
11:35 – 11:50	Ganna Borzenkova (FoA) Designing Play Equipment for the Development of Social Competencies of Preschool Children with Cerebral Palsy	Sara Smith (FSE) Doing the portfolio – shifting the paradigm to support the development of capability?
11:55 – 12:10	Isaac Danat (FEHW) Risk factors for abnormal weight in older adults: a community-based cohort study in China	Lucy Pursehouse (FEHW) "Alternative Methodologies" and their use in Health and Social Care Research: Reflecting on the Challenges.
12:15 – 12:25	Kyros Hadjisergis (FoSS) Probation Officers' attitudes towards balancing public protection and human rights in the risk management framework of MAPPA.	Robert Francis (FoA) The Drift of the Creative Writer - Reading and Writing the Black Country
12:30 – 1:30	Lunch & Networking (Chancellor's Hall, Wulfruna Building)	
1:30 – 4:00	<ul style="list-style-type: none"> • Poster Competition & Exhibition (Chancellor's Hall) • Doctoral Depictions Exhibition 	
4pm	Closing & Prize giving (Chancellor's Hall, Wulfruna Building)	



Dahiru Abdullahi
Research Student (Built Environment)
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Strategic framework for solar energy implementation in Nigeria

Energy is fundamental to economic development of any nation for industrialisation activities which is the drivers for a good standard of living. Therefore, the standard of living determinant is the good sustainable infrastructure which electricity energy is among the top social amenity that makes society sustainable.

The contemporary Nigerian Electricity industry owed the responsibility to generate, transmit and distribute stable, efficient and effective electricity system for entire Nigerian socioeconomic growth and development. Sadly, the industry has never attained forty percent of its total capacity as expected by nearly 200 Million Nigerians. Even though, research has identified challenges to the industry including technical, social, institutional, financial, security and political barriers few to mention, it is apparent that the industry has existed more than 100 years without a tangible solution the challenges. Despite the transformation of the industry into different companies with the hope to improve over the years, the idea to diversify the industry into renewable and energy mix has not been significantly considered. The failure of the diversification and integration of the public private partnership to harness the abundant natural resources from sunlight for solar, massive available land and hills for wind energy, landfill and residue for Bioenergy and lots more, has resulted that the conventional electricity is unable to sustain the commercial industries in the country.

Hence the economic development is at stake and a call for urgent solution is required by researchers and energy stakeholders. Literature reveal that Solar energy is the most potential cheapest, clean and easy to install among other renewables in Nigeria. The research is therefore aimed at developing a framework for solar energy development and implementation in Nigeria. The research method for this study is literature from secondary resources and primary data through qualitative interview which is in view.



Aishat Bakre
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Determinants of consumption of fish in older adults

Although increased consumption of fish reduces morbidities and mortality in all populations, the consumption decreased in older adults and its determinants have been not well investigated. We examined the data of a population-based cohort to identify risk factors for low consumption of fish in older adults.

In 2001-2003 we interviewed a random sample of 3336 residents aged ≥ 60 years from Anhui province, China, documenting socioeconomic status (SES) and disease risk factors. In 2007-2009 we re-interviewed 1757 survivors, additionally measuring their dietary intakes. Age-sex adjusted binary logistic regression models were used to examine the associations of baseline risk factors with follow-up fish consumption at “once a week”, “more than twice a week” and “ \geq once a day” respectively, in comparison with “never eat”.

Of 1757 participants, 1697 responded to the fish consumption questionnaire; 23.0% of which had “never eat” fish over the past two years, 43.4% “once a week”, 26.9% “more than twice a week”, and 6.7% “ \geq once a day”. The consumption of fish significantly decreased with age. Participants with low SES had a reduced odds of fish consumption, (e.g. adjusted OR for “once a week” in people living in rural areas was 0.20, “more than twice a week” 0.05, and “ \geq once a day” 0.007, and the matched figures in people with financial difficulties were 0.42, 0.13 and 0.03, all $p < 0.001$). While the consumption reduced with baseline smoking (e.g. adjusted OR for eating fish at “more than twice a week” was 0.47 (95%CI 0.33-0.68) and “ \geq once a day” 0.43 (0.24-0.76), it increased with controlled hypertension (3.13, 1.21-8.22 and 3.90, 1.20-11.79 respectively). The consumption increased with heart disease and diabetes, but decreased with depression at baseline.

Targeting high-risk groups of low or little consumption of fish in older people would increase their consumption of fish.



Hussaini Bello
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Influence of molecular weight of Polyoxes™ on the release rate of model highly water soluble drug (diltiazem) from liquisolid formulation in comparison their counterpart physical mixture.

Sustained release dosage form is essentially considered for maintaining therapeutic plasma concentrations of the drug in a blood for extended period of time with high efficacy and minimum adverse effects. Liquisolid technique is regarded as a new method used in producing sustained release formulations. Polymers are chains of covalently attached monomers that employed as a potential carrier for the drugs in controlled and conventional release formulations. Among various Polymers, Polyox™ are attractive pharmaceutical excipient used in controlled release dosage forms mainly because of its insensitivity to the pH of the biological medium and ease of production.

The influence of Polyox™ molecular weight on drug release properties of liquisolid tablets has not been investigated yet. Therefore, the aim of this study was to investigate the effect of molecular weight (MW) to sustain the dissolution behaviour of model highly water soluble drug such as diltiazem (DTZ) from liquisolid formulations in comparison to their counterpart (physical mixture). DTZ: Polyox™ matrices were formulated using several Polyox™ grade (i.e. MW, ranging from WSRN10 to WSR303). Solid-state commercial DTZ is retained in all liquisolid formulation and ruled out the existence of significant drug-excipient interaction within both liquisolid and physical formulation.

The results showed dissolution pattern of DTZ from both liquisolid and physical mixture tablets to decrease as the MW of Polyox™ increased. The delayed DTZ release could be related to the rate and extend of hydrogel formation on the tablet surface. To facilitate comparison, the dissolution efficiency was calculated for liquisolid and physical mixture prepared from several grades of Polyox™. Better retardation properties were observed for liquisolid tablets containing Polyox™ with MWs WSR303 in comparison to physical mixture tablets. Therefore liquisolid formulation containing higher grade Polyox™(WSR303) are good candidate to yield a better retardation comparison to their counterpart physical mixture.



Ganna Borzenkova
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Designing Play Equipment to Aid the Development of Social Competence of Early Years Children with Cerebral Palsy

This research presents an investigation into designing play equipment for encouraging peer-to-peer social interaction of children with cerebral palsy as part of developing their social competence. The focus is on developing a new model of play equipment and engaging children in child-object-child interactions during play sessions, and thereby to create a level playing field for these children that enable them to develop their social competence naturally.

According to the statistics of the National Health Service, it is estimated that near 1800 children are diagnosed with cerebral palsy every year in the UK (NHS 2016). It is recognised that these children often have reduced social engagement, yet socialization plays a fundamental role in children's development (Vygotsky 1978; Lave and Wenger 1991; Scottish Government's Children's Rights and Wellbeing Division 2013, pp.2-3).

During this study a new design model of play equipment as an intrinsic centrepiece for obtaining social skills will be developed. Furthermore, this research explores how this will facilitate social competence in the development of children. This will contribute new understandings of design for participatory creative play and will provide a set of design guidelines for this specialist play equipment.



Isaac Danat
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Risk factors for abnormal weight in older adults: a community-based study in China

Maintaining normal weight will prevent ill health and prolong life. In the older population, it is also true, but older people have increased risks of obesity, overweight and underweight. Risk factors for these abnormal weights have been less investigated. We set up a cohort study in China to identify the risk factors.

In 2001-03 we examined a random sample of 2917 residents aged ≥ 65 years from Anhui, China, documenting socioeconomic status (SES) and cardiovascular disease risk factors (CVDRFs) and recording blood pressure and physical measurements. In 2007-09 we re-interviewed 1462 surviving cohort members, measuring body weight and height to calculate Body Mass Index (BMI). We defined participants with $BMI \geq 28$ kg/m² as having obesity, $BMI 24 < 28$ as overweight, $BMI 18.5 < 24$ as normal weight and $BMI < 18.5$ as underweight. We employed a binary logistic regression model to compute age-sex adjusted odds ratios (OR) for risk factors in obesity verse normal weight. ORs were also calculated to identify risk factors in overweight and underweight respectively.

Of 1462 participants, 1313 had their BMI measured, of which 55.9% had normal weight, 6.5% obesity, 24.4% overweight and 13.3% underweight. There was a significant association of obesity with high SES (e.g. adjusted OR in urban verse rural living was 1.75, 95%CI 1.10-2.79) and CVDRFs (e.g., hypertension 2.55, 1.30-5.01). There was a similar pattern for overweight associated with these risk factors (e.g. hypertension 1.55, 1.05-2.27), while watching TV increased the risk of overweight (1.84, 1.33-2.54). Surprisingly underweight was also related to high SES (e.g., adjusted OR of 1.49, 1.03-2.15 in urban), and inversely associated with baseline depression (0.57, 0.33-0.97) and smoking (0.59, 0.39-0.90).

Older adults in China have high levels of abnormal weight. Targeting high-risk groups would likely improve weight management.



Kyros Hadjisergis
Research Student (Law)
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Probation Officers' attitudes towards balancing public protection and human rights in the risk management framework of MAPPA.

My project focuses on the probation officers working under MAPPA and their attitudes towards balancing the rights of the offender and victim with the protection of the public. The research is creative in the sense of its originality of ideas and the presentation of the dimension of victims. More often than not the balancing process is concerned with the rights of the offender and the risk posed to the public once offenders enter the relevant management plans. Proliferation of victim movements, however, have created momentum around the rights and position of victims of crime in the probation practice. The study also refers to Restorative Justice and the potential implication of its introduction to the environment of probation. Restorative Justice has been heavily concerned with the participation of victims in criminal justice processes and their voices being heard.

I believe the project does further the university's aims and concerns around social welfare and protection of the community and vulnerable groups; it does represent an 'opportunity' to explore an area through a more innovative, restorative lens. Also the combination of interviews with probation officers and case law analysis provides an inventive methodological approach of considerable research interest. The significant element here is how the methods inform one another, and compliment the ideas advocated in the preceding literature review section. By having both the personal element through interviews and the legal position through case law, the research better grasps the reality of the probation service. Finally, the project conceptualises central ideas around criminal justice and how these are reflected in the everyday workings of the probation service in England and Wales. Namely, it aims to exemplify how MAPPA is yet another multi-agency reflection of the criminal justice system wavering between crime control and due process.



Stuart Guy & Claire Dickens

Research Students

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“3 Minutes to Save a Life” - Deconstructing student emotional distress to mitigate the risk of suicide utilising compassion and hope.

Student mental health and suicide has become a prominent focus of media attention and concern for Higher Education Institutions (Morris, 2016; Jenkin, 2017). The University of Wolverhampton has introduced new thinking and ideas to mitigate the risks of student suicide. Influenced by the findings of Martin (2010), stigma was clearly highlighted as being the potent force in preventing university students coming forward with mental health distress for fear of labelling and diagnosis. This “Us and Them” approach highlighted by Martin (2010) has informed the University in its approach. This has been achieved by successfully moving the University ontologically and epistemologically towards compassion and hope and away from the medicalisation of student mental distress (Foucault, 1977). A suite of compassionate training resources developed by Cole King et al (2011) have assisted with this process. The initial training targeting staff who are first responders to student distress including security, student support and accommodation services has seen a reduction in students requiring referral to specialist mental health services and attending student support with suicidal ideation.

The aim of the paper is to present a critical argument supporting the adoption of post-modern/post structural positioning in mitigating student suicide risk.

The authors focus on the need for deconstruction of the biological model of psychiatry in relation to successfully mediating student distress and suicide risk. With a consideration of why we should move practice towards mitigation of suicide risks instead of suicide risk assessment. The authors further challenge the myth of the inevitability of suicide, and why compassionate and hopeful responses by staff matter and make a difference.



Leonard Love
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Building Bridges with Custard Pies: Subverting the regime of Shakespearean Performance

As a new way of exploring post-modern theatre practice, Jacky Bratton (2003) has pioneered the concept of 'intertheatricality'. Modelled on intertextuality, it attempts to communicate the relationship between theatrical texts. Critically, it goes beyond the written text and explores the shared language of entertainment which includes the 'systems of stage', genre, convention and memory. She argues that all entertainments 'within a single theatrical tradition' are interdependent, although 'the single performance is a moment of crystallisation'.

My paper will hopefully discuss the process of 'intertheatricality' by discussing the works of Derby based theatre troupe, Oddsocks. Since forming in 1989, Oddsocks have adapted and performed several of Shakespeare's plays in various performance venues and stages. Their adaptations deliver a subversive approach to mainstream Shakespeare by forming a panto-Shakespeare hybrid of form and content. Stephen Purcell (2013) states that 'Shakespearean parodies frequently employ audience participation in order to establish a sense of disjunction from the official discourses of the Shakespearean text'. It may seem apparent that popular conventions of entertainment, such as audience participation, inherent in Oddsocks adaptations relate to an archaic, carnivalesque approach to performance aimed primarily at an 'unsophisticated' audience (McNamara- 1974). However, I will argue that the process of adapting for the purpose of 'entertainment' benefits not only a mass understanding of Shakespeare's texts, but also establishes a crucial relationship between practitioners and academics that ultimately dismiss the apparent, elitist viewpoints. Initial research has investigated binary frameworks between 'high-brow' and 'low-brow' theatre and, hopefully, this paper will open the debate to 'entertainment' establishing its own 'hegemonic' ideology which could or should be utilised in popular theatre.



Joanne Mills
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Engagement and Immersion: The extent to which an expanded narrative is present within American Minimalist Music during the 1960s and 1970s

This paper summarises the progress of an investigation into the American 'minimalist' music of the 1960s and 1970s, specifically that of La Monte Young, Terry Riley, Steve Reich and Philip Glass, to explore the potential influence of their work on contemporary immersive creative practice.

The research considers an examination of the venues that these composers used, and their cross-disciplinary collaborations of the period under investigation. It also addresses the issue of whether process-driven Minimalist music can be considered to have an 'expanded narrative' which exists outside of the work itself, with regards to the relationship between audience <> work <> environment, and how these works contribute to, and impact on, immersive creative practice within both their own recent works and those of contemporary visual artists.

These four composers, whom Keith Potter describes in his subject entry for Minimalism in the Grove Music Online database as "pioneers in the evolution of musical minimalism" to varying extents shared education, connections, training and concert programmes throughout their careers. All four also have examples in their repertoire of immersive audio-visual and environmental works, which this investigation highlights.

This investigation will contribute new knowledge to the development of immersive art, by focusing on the work of early Minimalist composers, which have so far been missing from its lineage; and as such has the potential to inform both fine art practices and musical composition, and also may be of interest to art history, musicology and narratology.



Sara Smith
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Doing the portfolio – shifting the paradigm to support the development of capability?

This study explores how key stakeholders on a programme leading to registration as a Biomedical Scientist (BMS) position themselves in their role and the subsequent impact of this upon the development of the capable BMS. It utilises a constructivist grounded theory (CGT) approach to explore the perceptions and experiences of individuals and groups to develop an interpretative portrayal and deeper understanding of the implementation of pre-registration training in one region of England.

The methodological approach was divided into two stages. The first employed thematic analysis of professional documents to direct the development of a questionnaire. Responses from the questionnaire provided an 'ice-breaker' to guide stage two of data gathering. This stage employed focus groups and interviews to enable a greater understanding of how individuals make sense of their experiences. Initial and focused coding allowed synthesis and conceptualisation of the data gathered and provided direction for the study.

The findings expose the challenges of integrating professional registration training into awards. Barriers of time and regulatory body requirements were initially identified. However, CGT enabled recognition of unacknowledged barriers; individuals' identification as a 'stakeholder' and the influence of the scientific paradigm upon positioning. From understanding how individuals address these barriers the themes of 'doing the portfolio' and 'gaining BMS currency' emerged. The registration portfolio has become an objective reductionist measure of learning, reflecting the positivist typology of practice in this profession. Socio-cultural influences upon practitioners are not acknowledged, hindering the development of professional capability and currency.

Recommendations highlight how supporting students to develop not only technical skills but also professional capability requires a paradigm shift from a positivist episteme to one enabling a shared understanding of the stakeholder role, the role of reflective practice and the influence of the socio-cultural environment upon learning across the programme.



[Lucy Pursehouse](#)

Research Student

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“Alternative Methodologies” and their use in Health and Social Care Research: Reflecting on the Challenges.

The seminar aims to focus on my current research, There will be an exploration of some of the methodological challenges of working with a ‘newly’ emerging and innovative research paradigm, and further consider its potential to enhance the researchers teaching and learning practice.

Lucy is a Senior Lecturer in the Institute of Health and Wellbeing and prior to moving into higher education had a professional background in Mental Health, working in a variety of roles across the Health and Social Care Sector. Her research interests centre on stigma in mental health, innovative pedagogies and learning from lived experience. She is currently completing an autoethnographical inquiry that merges the aforementioned themes, as part of the Professional Doctorate in Health and Wellbeing at the University of Wolverhampton. As well as being a lecturer and registered nurse she holds an MEd in Education for Primary Health Care from the University of Manchester and BA (Hons) in Medical Related Studies and Geography from the School of Oriental and African Studies, University of London.



Robert Francis
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The Drift of the Creative Writer - Reading and Writing the Black Country

In this talk and performance I aim to present some of the methodology of my creative writing process. I first want to set out some ideas on Agnostic Thinking: a line of research that accepts the fraught situation of the practice-led researcher - a position that is required to balance the space between artist and critic. The Agnostic thinker embraces and plays with this academic ambivalence.

I will then set out what I mean by the term Drift. Using Psychogeography and Auto-Ethnography as examples, I'll discuss how the practice-led researcher can utilise a magpie / pick and mix methodology in the discussion of their creative craft.

These theories will be backed up with examples of my research, including a reading of my novella and poetry.



**Day Two: Tuesday 20th
June 2017
Research Conference –
Schedule of Events**

10:00-10:20	Opening – Professor John Darling, Dean of Research (MC437)		
Time	Group 1 (MC419)	Group 2 (MC415)	Group 3 (MC413)
10:30 – 11:00	Prof Kristina Niederrer (FoA) Designing with and for People with Dementia	Prof Dariusz Galasinski (FoA) 'See you later!' Constructions of suicide as non-final in men's suicide notes.	Prof Dave Hill (FSE) Enhancing Antimicrobial Research & Development
11:00-11:30	Dr Nikolaos Stylos (FoSS) "Hop on the bus and enjoy Brum!" The value of developing sightseeing at an emerging urban destination	Prof Ross Prior & Dr Jackie Pieterick (FoA) When Pedagogy Met Andragogy	Prof Weiguang Wang (FSE) Disulfiram – An anti-alcoholism medicine will give cancer patients new hope
11:30-12:00	Dr David Boyda (FEHW) Typologies of Lifespan Trauma, Psychotic Symptoms and Risk of 12-month Suicide	Dr Debbie Orpin (FoA) 'Never been proven to work in the real world': Appeals to the notion of 'the real world' as a discursive strategy in vaccine-critical discourse	Dr Tina Smith (FEHW) Sedentary behaviour: Impact on your bones...or not?
12:00-12:30	Dr Mathew Dagleish (FoA) The Seeing Ear: Soundtrack as Alternative to Audio Description for Theatre	Dr Rebecca Butler (FSE) Design and Evaluation of a Fully Flexible, Technology Enhanced, Learning Space Suitable for Team Based Learning	Dr Steve Iafrazi (FoSS) Institute for Community Research and Development (ICRD)
12:30-12:40	Richard Evans (RIILP) An Iterative Approach to Automatic Sentence Simplification	Prof Claire Hannibal (FoSS) Choices at the checkout: Understanding the sustainability credentials of everyday products	Thaïsa Whistance (FoSS) & Sarah Brown (FSE) situated learning experiences for training students in healthcare interpreting
12:40-12:50	Michael Oakes (RIILP) Computer Stylometry of C.S. Lewis's The Dark Tower and Related Texts.	Dr Rebecca Butler (FSE) Does a 'Good' Learning Space, Lead to Enhanced Teaching & Learning and/or Student Satisfaction?	Prof Stephen Britland (FSE) Ointment in the fly
12:50-1:30	Lunch Break & Networking (MC437)		
1:30-2:10 (40 mins)	Matt Bellingham (FoA) The Chooser - a practical introduction to a simple-to-use algorithmic music tool	Prof Ruslan Mitkov (RIILP) Don't get me wrong..... What's next?.... Intelligent Translation Memory systems	Prof Ross Prior, Prof Fiona Hackney (FoA) & Mah Rana (artist). Embedding Art as Research within Higher Education
2:10-2:40	Ella Haruna and Dr Canford Chiroro (FoSS) The Centre for International Development and Training (CIDT)	Dr Danny Hinton (FEHW) Could a simple measure of test familiarity make job selection fairer for minority ethnic applicants?	Richard Glover (FoSS) Problems 'Black Bloc' anarchist protestors pose for public order law
2:40-3:10	Dr Fiona Morgan (FEHW) A forgotten minority'? Student carers at the University of Wolverhampton	Katie Wood (FSE) The University of Wolverhampton Cyber Research Institute	Prof Keith Gildart & Dr Stephen Catterall (FoSS) Class, Coal Mines, Cotton Mills, & Northern Soul
3:10-3:40	Prof Mohamed Arif (FSE) Brownfield Research Challenges for the UK	Dr Francesco Paradiso (FoA) Hospitable offbeats: jazz improvisation and the unconditional welcome	Dr Arun Arjunan (FSE) Numerical modelling of the vibro-acoustic behaviour of roll-formed steel studs in gypsum board partition walls
3:40-4:10	Dr Dean Kelland (FoA) Falling slowly	Dr Ezekiel Chinyio & Dr Silvia Riva (FSE) Human stress factors in construction	Dr Ben Halligan (RPU) Modelling Affective Labour: On Terry Richardson's Photography
4:10-4:30	Close – Dr Benjamin Halligan, Director of the Doctoral College (MC437)		



[Professor Kristina Niedderer](#)
Professor of Design and Craft
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Designing with and for People with Dementia: Developing a Mindful Interdisciplinary Co-Design Methodology

This presentation discusses the MinD project research into designing for and with people with dementia, which takes the particular focus on supporting the subjective well-being and self-empowerment of people with early to mid stage dementia.

Existing research is for the most part focussed on functional support and safe-keeping from the perspective of the carer. References to decision-making and empowerment are predominantly related to action planning for dementia care or advance care planning. References to care and social interaction show that caregivers tend to take a deficit-oriented perspective, and occupation of people with dementia is often associated with doing 'something' with little focus on the meaningfulness of the activity. Furthermore, caregivers and people with dementia tend to differ in their perspectives, e.g. on assistive devices, which might offer support.

The MinD project, has therefore developed an interdisciplinary co-design methodology in which the voices to people with dementia contribute to better understanding and developing mindful design solutions that support people with dementia with regard to their the subjective well-being and self-empowerment a well as meaningful and equitable social engagement.



[Dr Nikolaos Stylos](#) (ERAS Fellow)

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"Hop on the bus and enjoy Brum!" The value of developing sightseeing at an emerging urban destination

The world tourism market is worth an estimated 10% of global GDP (\$7.6 trillion). As urban destinations tend to increasingly attract the interest of tourists, more and more cities compete for a portion of this large market to support their local economies. In this vein, marketers need to predict the plans and behaviour of tourists to understand the factors that affect an individual's likelihood to (re)visit a tourist destination.

This study investigates factors that make tourists likely to revisit Birmingham by examining the direct and indirect effects of a bus sightseeing experience as part of an overall tourist experience. To do so, tourists have been approached to participate in the field research study while being aboard the bus and structural equation modelling has been employed to analyse the primary data collected. The study contributes to the wider tourism marketing literature and may support Birmingham City Council's efforts to shape the local tourism destination strategy.



[Dr David Boyda](#)

Lecturer, Psychology

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Typologies of Lifespan Trauma, Psychotic Symptoms and Risk of Suicide

Traditional population based models examining childhood trauma and psychotic symptoms have a tendency to find child sexual abuse has a strong predictive relationship with schizophrenic syndromes or psychotic symptoms (Cutajar et al., 2010). In addition, a large body of research has found significant relationships with psychotic symptoms and suicide, although the aetiology of this relationship is not well understood.

The study utilized data from the Adult Psychiatric Morbidity Survey (APMS, N=7403). Childhood and adult trauma was assessed using measures designed to capture childhood and adult maltreatment. Psychotic symptoms were assessed using the Psychosis Screening Questionnaire (PSQ).

Resultant analysis revealed four latent typologies: A sexual re-victimization class, a high childhood trauma class, an emotional neglect class with psychotic symptoms and a baseline class. Furthermore, psychotic symptoms only manifested in the presence of moderate levels of emotional abuse and this class conferred the highest risk of suicidality (ideate, plan and attempt).

The results are in contrast to existing literature which argues childhood abuse and in particular, child sexual abuse confers the highest risk of manifesting psychotic symptoms. Crucially, this study shows it may be the combination of emotional neglect and psychotic symptoms which confer the highest risk of suicide over and beyond high levels of trauma alone.



[Dr Mathew Dalglish](#) (ERAS Fellow)
Senior Lecturer in Music Technology
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The Seeing Ear: Soundtrack as Alternative to Audio Description for Theatre

Theatre performances conventionally rely heavily on visual information, for instance to convey narrative, or establish scene and context. This can pose significant challenges for blind and visually impaired audiences. Audio description for theatre attempts to surmount these barriers by translating the visual elements of a performance into a spoken commentary that fits between on-stage dialogue. However, a number of possible human and technological issues arise.

This ERAS project explores the use of an ambiently diffused soundtrack as an alternative to audio description for theatre. Specifically, the soundtrack retains the emotive and creative function common to film, but also provides an auditory interface (i.e. a way in) to the performance. Like audio description, it supplements or replaces 'lost' visual information, but does not imply a singular interpretation, or require specialised or othering equipment.

Implications of the new methods include increased social inclusion, enhanced experience and reduced institutional cost.



[Richard Evans](#)

Research Fellow

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An Iterative Approach to Automatic Sentence Simplification

I discuss a new automatic method to improve the accessibility of English sentences by converting them into sequences of simpler sentences which contain fewer compound clauses and nominally bound relative clauses. In the field of natural language processing, parsers are programs that automatically analyse input sentences and provide information about syntactic structure. Their accuracy and reliability is inversely proportional to the lengths of the sentences that they process. This makes parsers unsuitable for use in text simplification tasks where long complex sentences are precisely the ones that require analysis.

In this talk, I present a method to perform automatic sentence simplification without a parser. I describe a text collection that was hand-annotated with information about the linking and bounding functions of various lexical and punctuational markers or signs of syntactic complexity. I then describe the two major components of a sentence simplification system. The first component is a sign tagger which automatically classifies signs of syntactic complexity in accordance with the annotation scheme used in the corpus. The second component is a sentence transformation tool which rewrites sentences containing compound clauses and nominally bound relative clauses into sequences of shorter single-clause sentences. This iterative rule-based method uses pattern matching to identify various parts of sentences containing complex noun phrases and compound clauses. In each iteration, two new simpler sentences are assembled from these parts to be processed in subsequent iterations while the antecedent sentence is deleted.

The method achieves acceptable levels of performance when rewriting sentences containing compound clauses but much less accuracy when rewriting sentences containing nominally bound relative clauses. Major sources of error include the limited coverage of the sentence rewriting rules and the system's inability to discriminate between various types of clause coordination.



[Dr Michael Oakes](#)

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Computer Stylometry of C.S. Lewis's *The Dark Tower* and Related Texts.

Clive Staples Lewis (1898 – 1963) was a prolific writer, and his best-loved fiction is probably his Deep Space trilogy, *The Screwtape Letters*, and his “Narnia” series of children’s books. Shortly after Lewis’ death, Walter Hooper, the literary executor for the Lewis Estate, claimed to have found an unpublished fragment of fiction, which was published much later (1977) as *The Dark Tower*. There is some overlap between *The Dark Tower* and the Deep Space trilogy, as they share a number of characters such as McPhee, Ransom and even Lewis himself.

This presentation looks at the provenance of the unfinished novel *The Dark Tower*, generally attributed to C.S. Lewis. The manuscript was purportedly rescued from a bonfire shortly after Lewis’s death by his literary executor Walter Hooper, but the quality of the text is hardly vintage Lewis. Using computer stylometric programs made available by Eder et al.’s “stylo” package and a word length analysis, samples of each chapter of *The Dark Tower* were compared with works known to be by Lewis, two books by Hooper and a hoax letter concerning the bonfire by Anthony Marchington.

The main findings were that the first six chapters of *The Dark Tower* are stylometrically consistent with Lewis’s known works, but the incomplete chapter 7 is not. This may be due to an abrupt change in genre, from narrative to pseudoscientific style.



[Matt Bellingham](#)

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A developing user interface and software design project.

Algorithmic composition systems allow for the partial or total automation of music composition by formal, computational means. Typical algorithmic composition systems generate nondeterministic music, meaning that multiple musical outcomes can result from the same algorithm. This means that there is a likelihood that the output is different each time the algorithm runs.

Such systems typically offer only limited levels of control to musically skilled users who lack detailed technical knowledge of programming. This tends to mean that, for this user group, such systems are either insufficiently usable or insufficiently musically expressive.

This workshop will allow participants to explore an emerging user interface design for algorithmic composition which allows for progressive disclosure and flexible construction while remaining simple for the end user.



[Ella Haruna](#) & [Dr Canford Chiroro](#)

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The Centre for International Development and Training (CIDT)

CIDT is a leading university institution achieving high impacts on international development policy and practice through delivering capacity strengthening consultancies and project management. CIDT's practice-led research in over 140 countries has generated cutting edge reports and evidence for Development Aid clients, developing country governments and civil society. These significant sources of evidence offer huge potential for publication and contribution to academic debate. As a self-funding Centre, historically CIDT has focussed on delivery of consultancy contracts and business development and has not been research active in the academic way traditionally accepted by the University. Recent University investment into CIDT is intended to significantly increase its academic output, and develop CIDT staff capacity to convert large data sets into academic research. The desired outcomes of this investment will both increase CIDT global impact and strengthen the University Research outcomes.

Over the next four years under new EU-funded grants, CIDT will develop collaborative partnerships with the University of Dschang, Cameroon and the Faculty of Forestry, National University of Lao. CIDT past projects piloted University curriculum development in natural resource governance in these two institutions in two continents, and there is huge potential to build on this work. CIDT has brokered new institutional linkages in Rwanda and Ethiopia - two countries, where strong political will exists to advance knowledge and capacity required to achieve low carbon climate resilient economies. It is expected that CIDT will contribute significantly to developing these links.

The research investment will allow CIDT to work with academic staff in these four partner institutions on the authorship of joint peer reviewed academic articles. Case studies and findings from the engagement will feed CIDT's re-emerging academic teaching programme – especially the newly approved MBA (International Development).



[Dr Fiona Morgan](#) (ERAS Fellow)
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‘A forgotten minority’? Student carers at the University of Wolverhampton

This presentation considers the preliminary findings of an action research project investigating the experiences of students at the University of Wolverhampton who have caring responsibilities for a family member or friend who requires support due to having an illness, impairment or substance misuse issue.

Students were asked their views in an online survey and supplementary interviews about how their caring role impacts on their university education, and the types of support they need to promote their educational success. The strengths and limitations of using a photo elicitation method, which provided interview participants with the option of taking their own photographic images to convey their experiences of being a student carer, are also discussed.

A key objective of the research project was to gather views from student carers about the university’s institutional systems, processes and support and provide evidence to support the need for change if improvements could be made.



[Professor Mohammed Arif](#)

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Brownfield Research Challenges for the UK

One of the main challenges we are facing in the UK is the lack of building land on which to house our growing population on a small island. Of course, for a finite period, we can continue to build on our limited green land. This has been a regular feature of urban expansion. An alternative is to 'recycle land' and use old industrial and urban land for new developments (i.e. for residential, commercial and industrial purposes). However, we are faced with problems, as much of this 'brownfield' land is contaminated and polluted. Contaminants include a whole range of heavy metals and toxic hydrocarbons (Webb et al., 2012). Land management strategies demand we re-use former occupied land for construction. In that way, we can conserve green field land for the present and future generations.

Urban regeneration is a central focus of the Springfield Campus development. This is the £250 million regeneration of the old Springfield brewery site. The brewery was built in 1873, but destroyed by fire in 1991. In true 'phoenix' fashion, a new University of Wolverhampton (UoW) campus is emerging from this derelict brownfield land. Indeed, Springfield will be a 'field laboratory' for the regeneration of brownfield land.

An integral component of the Springfield Project is the 'Brownfield Research and Innovation Centre' (BRIC). BRIC was established in 2015 to co-ordinate research into the issue of brownfield land regeneration. BRIC will contribute by co-ordinating a data information and research centre and developing innovative technologies on the appropriate use of brownfield land.

This presentation will consider how BRIC will contribute to long-term plans for urban regeneration in the West Midlands. The long-term strategic plan of the UK Government is for the region to become 'The Midlands Engine,' creating growth and employment within the UK economy. The target is to expand the regional economy from its current contribution of £19 billion per year Gross Valued Added (GVA) to the UK economy to a GVA of £36 billion per year by 2030. To achieve this target, the region needs over 45,000 new homes and over one-million square metres of building land. The regeneration of the estimated 800 brownfield sites in the West Midlands, including the 147 in Wolverhampton, is at the core of these plans. BRIC will play a critical role in this urban regeneration.



[Dr Dean Kelland](#) (ERAS Fellow)
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Falling Slowly

Falling Slowly is a performance-based artwork that addresses Slapstick Comedy. The work seeks to interrogate the genre and challenge the audience to ask questions about the role of the comedian and the subsequent exchanges between audience and performer. The practice research has produced multiple series of events derived from the artist performing a repeated 'slapstick' act in live situations. Once in 'character' the artist performs the act to live audiences that is taken from, and embedded within, the history of slapstick (references such as Charlie Chaplin & Buster Keaton) yet is ruptured through the inadequacy and repetition of the performance. The audience reaction within this situation helps to illuminate the role of tragedy and the culturally gendered stereotype of the flawed male within comedy.

The Slapstick 'character' is presented in real comedy settings yet is incapable of delivering comedy material (The 'Slapstick' Fall) appropriately to an audience. Cultural context, defines comedy socially and politically, and the comedian in return acts as a mirror that reflects the era's motifs back upon itself. My place within this work is as catalyst and originator, the fabricator of the source material explored through my position as both author/performer and conduit.

The work has been showcased at the "Floating Worlds" Exhibition, Bahrain & the Flatpack Film Festival, UK.



[Professor Dariusz Galasinski](#)

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‘See you later!’ Constructions of suicide as non-final in men’s suicide notes.

In this presentation I shall explore men’s constructions of suicide as non-final. I am interested in how suicidal death is represented as an act which does not terminate the note author’s life and his presence the daily lives of his family and friends.

The data come of the Polish Corpus of Suicides’ farewell letters (<http://www.pcsn.uni.wroc.pl/>) and consists of over 200 notes of men who died of suicidal death in the last 30 years in Poland. The paper is anchored in the constructionist critically oriented discourse analysis.

I shall discuss two main strategies of constructing non-finality of suicide. The first strategy consists in very informal, cursory farewells (such as “See you later!”) suggesting a brief parting and assuming a further encounter in the not-so-distant a future. The other includes a variety of discursive means constructing a presence of the farewell letter author after his death.

I shall end arguing that such discourse analytic findings may be of a significant practical and preventative importance.



[Professor Ross Prior](#) & [Jackie Pieterick](#)

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When Pedagogy Met Andragogy

Professor Ross Prior and Dr Jackie Pieterick present a performed reading of a critical dialogue between two provocative fictional characters: a 'stuck-in-the-mud pedagogue' and 'forward-thinking andragogue'.

Based on the authors' own research, these opposing characters contrast in ideology and philosophical assumption bringing to life a heard narrative as well as the unspoken assumptions and thoughts. The performed duologue encourages lecturers in Higher Education to clearly understand the difference between the two learning and teaching approaches, think about why we might need to shift to andragogy as a more appropriate model in HE, and foresee the impact of this change.

An audience discussion will follow the duologue, exploring how this shift in various disciplines might impact learning and teaching.



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‘Never been proven to work in the real world’: Appeals to the notion of ‘the real world’ as a discursive strategy in vaccine-critical discourse

There has been organised resistance to vaccination since mass vaccination programmes were first introduced. Vaccination programmes have been highly effective in protecting public health, so it is of great concern when a vaccine scare arises and vaccination uptake falls to dangerously low levels. One such scare happened in the early years of this century, when there were fears that the measles, mumps and rubella (MMR) vaccine could cause autism. Since discourse can shape the way the public view things, in order to gain insight into how health communication can be ameliorated, it is useful to examine public discourse about health issues. This paper reports part of a larger study of some of the discursive strategies used in vaccine-critical discourse.

This presentation examines the use of the expression (in the) real world in the JABSforum corpus, a corpus of over 2000 forum threads downloaded from the website of the JABS (Justice Awareness and Basic Support) campaign group, the most high profile UK-based vaccine-critical group at the height of the MMR controversy. The use of an expression such as (in the) real world is interesting since it presupposes the existence of a contrasting world. The world real, in this expression, encodes an implicit negative evaluation of the contrasting world. This study finds that (in the) real world is used to imply a contrast between the lived experience of parents with the experience of the medical-scientific community. Appeals to the ‘real world’ are thus used to encode a negative evaluation of the medical-scientific authorities and to challenge pro-vaccine arguments.



[Dr Rebecca Butler](#)

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Design and Evaluation of a Fully Flexible, Technology Enhanced, Learning Space Suitable for Team Based Learning

Team Based Learning (TBL) was introduced to the University's MPharm program in 2014, as the predominant method of teaching years 1 and 2, with more limited usage in year 3. Despite recognising benefits very quickly, using large flat-bed classrooms was challenging. In October 2016, we were able to move past these challenges, as we opened a bespoke TBL Suite, equipped with projection and touchscreen computer technology.

Unlike many projects reported with regard to teaching space design the team did not have the luxury of planning a bespoke area which would be accommodated in a new build. Relocation of laboratory facilities had led to a selection of old teaching labs being available for repurposing. The design team were allocated a space (approx. 30 m x 7.5 m) which was to accommodate up to 114 people (up to 16 teams). It was envisaged that the space would also be used for other teaching styles and pedagogic activities but the priority was to ensure this was suitable for a TBL session meaning that this design was pedagogy-led rather than estates-led. The space was not large enough to accommodate 114 students if tables were included, therefore, the Node© chair has been utilised to accommodate the large cohort size and allow transition from individual test mode to team mode, which are essential aspects of TBL.

This interactive presentation, which will imitate aspects of TBL, will describe TBL and the flexibility required in the classroom leading into how the space was designed, how technology has been incorporated and how it is being used. It will also include research undertaken using a post-occupation evaluation survey indicating the impact the space has had on the TBL teaching approach.



[Professor Claire Hannibal](#)
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Choices at the checkout: Understanding the sustainability credentials of everyday products

Placing a value on goods that have been produced or traded in a manner deemed to be environmentally and/or socially sustainable is a relatively recent phenomenon. Whilst consumers are becoming increasingly interested in how everyday products are traded, the information required to make a choice at the checkout is often in short supply. The complexity of today's multi-national supply chains can make it difficult to collect accurate product data. A plethora of labels, initiatives and codes of conduct designed to assure a product's sustainability credentials often leads to confusion rather than clarity.

The session will present the emerging findings of a study examining how social sustainability is measured and communicated across global supply chains. Drawing on interviews conducted with organisations that work to assess social sustainability, the session will outline the challenges of measurement and pose questions about the type and quality of information that is provided to consumers. The session will highlight the variation in approaches to measuring social sustainability, thus demonstrating that there is no standard practice for assessment. Whilst differing approaches to assessment may be appropriate, the session will raise questions as to whether there are key areas of similarity whereby good practice can be shared.

The session will conclude by outlining plans for further development of the project and for asking session participants for feedback on the work conducted thus far.



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Does a 'Good' Learning Space, as Determined by the Student Body, Lead to Enhanced Teaching and Learning and/or Student Satisfaction?

Despite huge investments in new learning spaces across the HE sector very little is understood about the relationship between learning and the spaces designed for learning. Although many studies have been carried out with regard to how students feel about the learning spaces they use, research tools have not been developed (or satisfactorily combined) to enable the relationship between preferred spaces and enhanced learning outcomes to be fully understood (Cleveland, 2014). Students often feel they learn better in modern, well lit, air conditioned spaces, but this is not convincingly supported by data or observational evidence (Douglas, 2001; Scott Webber, 2004; Temple, 2007).

This mixed methodology study, which included a student survey, formal space audit and observational studies sought to discern how students explore and negotiate the formal and informal spaces the institution provides and how they 'own' or transform these to become learning environments. Understanding how students utilise space and learn within the spaces they inhabit, will enable the HE sector to actively harness and enhance those spaces for independent and co-learning opportunities and design better learning spaces in the future. This poster will reveal the initial findings and highlight the progress made towards unpicking the complicated relationship between space and learning.



[Professor Ruslan Mitkov](#)

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Don't get me wrong..... What's next?.... Intelligent Translation Memory systems

We witnessed the birth of the modern computer between 1943 and 1946; it was not long after that Warren Weaver wrote his famous memorandum in 1949 suggesting that translation by machine would be possible. Weaver's dream did not quite come true: while automatic translation went on to work reasonably in some scenarios and to do well for gisting purposes, even today, against the background of the latest promising results delivered by statistical Machine Translation (MT) systems such as Google Translate and latest developments in Neural Machine Translation and in general Deep Learning for MT, automatic translation gets it wrong and is not good enough for professional translation. Consequently, there has been a pressing need for a new generation of tools for professional translators to assist them reliably and speed up the translation process. First Krollman put forward the reuse of existing human translations in 1971. A few years later, in 1979 Arthern went further and proposed the retrieval and reuse not only of identical text fragments (exact matches) but also of similar source sentences and their translations (fuzzy matches). It took another decade before the ideas sketched by Krollman and Arthern were commercialised as a result of the development of various computer-aided translation (CAT) tools such as Translation Memory (TM) systems in the early 1990s. These translation tools revolutionised the work of translators and the last two decades saw dramatic changes in the translation workflow.

The TM memory systems indeed revolutionised the work of translators and now the translators not benefiting from these tools are a tiny minority. However, while these tools have proven to be very efficient for repetitive and voluminous texts, are they intelligent enough? Unfortunately, they operate on fuzzy (surface) matching mostly, cannot benefit from already translated texts which are synonymous to (or paraphrased versions of) the text to be translated and can be 'fooled' on numerous occasions.

What is next? We cannot get it wrong: it is obvious that the next generation of TM systems will have to be more intelligent and one way forward would be to equip them with Natural Language Processing (NLP) capabilities. NLP can come to help and propose solutions towards addressing this objective. The talk will present recent and latest work by the speaker and his colleagues at the Research Group of Computational Linguistics, RIILP in achieving this. The first evaluation results of this new generation TM matching technology are already promising....



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Could a simple measure of test familiarity make job selection fairer for minority ethnic applicants?

Cognitive ability tests are a powerful way to predict an applicant's future job performance. However, many ethnic groups score consistently lower than the White majority on these tests, representing an often unseen barrier to opportunity in Western societies. One potential explanation for these differences is test familiarity.

For this project, a scale was designed to measure test familiarity, which was administered to 400 participants. This data will be used to refine the scale so that it can be distributed globally to test publishers to incorporate into their assessments. This data will then be analysed to establish whether test familiarity scores can explain ethnic group test performance differences.

If this can be demonstrated, it will be proof of concept for a future solution that will allow for accurate job selection that is fair to all. This represents a potential solution to a problem that has affected society for over 100 years.



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The University of Wolverhampton Cyber Research Institute

The Wolverhampton Cyber Research Institute (WCRI) based at the University of Wolverhampton city campus and the Hereford Centre for Cyber Security (HCCS) which is to be based on the Skylon Park, Enterprise Zone, at Hereford (on land owned by Herefordshire County Council), aspire to be at the forefront of developing and leading an International Cyber Knowledge Hub to tackle threats in the cyberspace.

WCRI will ensure further high quality impacted research and knowledge transfer income that will emerge from the initial investment into WCRI. This in turn will result in the University of Wolverhampton being a leader in world class research/innovation within cyber. HCCS will be a dedicated knowledge dissemination area will be required for the university and tenants, with the emphasis on research dissemination. This shall underpin the WCRI which is under development as a research, innovation and business engagement aspect of the over university cyber project.

This presentation outlines the progress and achievements since January 2017 in the development of both the Cyber centre of excellence and Cyber Research Institute. These achievements include establishing national and international relationships with other cyber institute and university that have a proven cyber security track record and engagement with business in the cyber sector.



[Dr Francesco Paradiso](#) (ERAS Fellow)

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Hospitable offbeats: jazz improvisation and the unconditional welcome

In this presentation, I will outline the key findings of my ERAS project. The project questions the way we relate to each other by scrutinising the link between music and ethics. It focuses on jazz improvisation during jam sessions and Jacques Derrida's analysis of the ethics of hospitality. It responds to the question: what can we learn from musicians' ethical experience through their performance and improvisatory practice?

The research is being conducted in collaboration with scholars and musicians at the International Institute for Critical Studies in Improvisation (University of Guelph, Canada); Columbia University (USA); and Leiden University (The Netherlands). The research methods involve analysis of texts and musicians' performances; interviews; and focus groups. As cross-disciplinary study, the project is raising questions concerning the ethics of sound and its implications for community development.

In April 2017, I visited the University of Guelph, where I conducted interviews and gave a guest lecture; and Columbia University, where I met with a leading scholar in ethics and philosophy. Some of the outcomes of these visits will be illustrated and discussed during this presentation. The outcome of my ERAS project will be a journal article that aims to open new fields of enquiry in the ethical implications of music and Derrida's philosophical legacy. The article will be submitted for publication to the journal Critical Studies in Improvisation.



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Human stress factors in construction

Construction is a valuable activity that contributes facilities and assets to many stakeholders like roads, airports, schools, hospitals and houses. Construction contributes immensely to the GDP of many countries. Technological advancement has greatly improved the way construction is currently carried out with many mechanised tools and procedures. However, construction still involves the use of huge human resources: over 1million employed in the UK.

Some site-based construction activities are fraught with risk; and deaths sometimes occur in the course of projects. In addition to this, construction companies are often expected to deliver their projects within tight timescales, budgets and quality standards that should satisfy diverse stakeholders who in turn have different expectations. These factors combine to make most construction activities stressful. Given the large number of employees in the construction industry, a means of reducing the human stress in this sector is worthwhile. Hence research is being carried out at the University of Wolverhampton to detect and then inhibit the onset of stress amongst construction workers.

This EU-funded project (aka INSTINCT) started in January 2017 and is set to last two years, culminating in the development of an IT APP for blocking stress. So far the INSTINCT project has carried out literature reviews to establish the current thinking and inform other aspects of the research. This literature review reveals some stress-triggering factors which are discussed in this presentation. These factors include: the atmospheric conditions of construction sites (temperature, wetness, coldness, ventilation, illumination), high noise levels and tight time-scales.



Professor David Hill

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Enhancing Antimicrobial Research & Development

Antibiotics were discovered by Fleming in 1928 and first mass produced for infection control during the 1940s. Since that time a significant number of antibiotics have been discovered and incorporated into widespread use for infection control and prevention in addition to controlled use as animal growth promoters and in food preservation. Over the years microorganisms have evolved mechanisms for protecting themselves against antibiotics with the consequence that most major infectious microorganisms now show antimicrobial resistance (AMR) to one or more antibiotics. The extent of the problem is exacerbated by the fact that no new antibiotics have been discovered in the last ten years.

The damaging effects of AMR are already manifesting themselves across the world. Antimicrobial-resistant infections currently claim at least 50,000 lives each year across Europe and the US alone, with many hundreds of thousands more dying in other areas of the world. Initial research, shows that a continued rise in resistance by 2050 would lead to an increase from a current level of 700,000 deaths to 10 million people dying every year and a reduction of 2% to 3.5% in Gross Domestic Product (GDP). It would cost the world up to 100 trillion USD.

We are at the beginning of a substantial national and international drive for increased investment in training and research into AMR in a diverse range of areas. This has led to the development of a new research cluster, the 'University of Wolverhampton Antimicrobial Research and Development' (UWARD) group. This group is structured around four key themes of:

- 1) Synthetic Antimicrobials
- 2) Plant Antimicrobials
- 3) Antimicrobial Enhancement
- 4) Drug Delivery

All these themes match with the government recommendations of the O'Neill report (2016). This positions the group perfectly for taking advantage of increasing funding opportunities nationally and globally for R&D into antimicrobial developments and the provision of new researchers in this field.



[Professor Weiguang Wang](#)

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Disulfiram – An anti-alcoholism medicine will give cancer patients new hope

The medical need for better cancer therapies is urgent while drug development is slow (15 years/drug), risky and costly (\$1.5 billion/drug). This has led to an increasing appreciation of the potential of translation of clinically used old drugs into new application.

We have shown that disulfiram, an anti-alcoholism drug used in clinic for over 60 years, demonstrates specific activity against a wide range of cancers. Importantly, we have been able to demonstrate that disulfiram specifically destroys cancer-stem-like cells and enhances the cytotoxicity of conventional first-line anticancer drugs. Although disulfiram shows strong anticancer activity in laboratory, clinical use of disulfiram as an anti-cancer drug is limited by its rapid degradation and extensive metabolic conversion in the bloodstream.

To overcome this bottleneck, we recently used nano-biomaterials to wrap disulfiram and extend its half-life in the bloodstream from 4 minutes to over 7 hours and obtained very promising anticancer activity in cell culture and in different cancer, e.g. brain, breast, liver, lung, pancreatic cancer and mesothelioma.

We have set up national/international collaboration in the UK, USA, Europe and China, with support from the Breast Cancer Campaign, Brain Tumour Charity, British Lung Foundation and the European Union Marie Curie IIF Scheme. Patents have been filed from our invention which won silver prize in SET for Britain held in the Parliament in 2016. The success of our study will significantly benefit our cancer patients and NHS.



[Dr Tina Smith](#) (ERAS Fellow)
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Sedentary behaviour: Impact on your bones...or not?

Little is known about the effects of sedentary behaviour on bone health. Impact forces that are generated as the foot makes contact with the ground during physical activity can act as a stimulus for bone maintenance and development. Therefore, prolonged sedentary behaviour may put individuals at risk of poor bone health. This study examines associations between sedentary behaviour and, mechanical loading at the lumbar spine during daily activity, bone mineral density and functional ability.

To explore the underlying mechanics associated with bone health, we have combined biomechanical data from daily activities collected within the laboratory with that from free-living situations. Demanding an innovative approach to collecting and handling the large quantities of biomechanical data obtained whilst participants' went about their typical day-to-day activity.

A unique insight into the mechanical loading of bone during day to day activity and its relation to bone health for the lumbar spine is being obtained. This will inform further research exploring the mechanical loading characteristics of physical activity required for the development and maintenance of bone in the lumbar spine, for both sedentary and non-sedentary individuals. In turn this will contribute to the design of exercise interventions for optimal bone health.



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Institute for Community Research and Development (ICRD)

The University of Wolverhampton has a long and distinguished history of providing applied research that drives policy developments, of delivering effective community-based transformational projects and of promoting social mobility. It has a unique and unrivalled reputation for working collaboratively with public and private sector agencies to provide social regeneration platforms and for using its partnership networks to champion for change.

Whilst academic interests have directed part of the University's research and community development activities, the majority has been driven by the needs of its local communities. The West Midlands region is characterised by having low levels of unemployment, low skills attainment and high levels of deprivation. Of the 5.6 million individuals living in the region, 8.8% are unemployed or economically inactive with the majority residing in the Black Country (34%) and Birmingham (14.9%). 21% of the region's population has no formal qualifications and lacks the skills necessary to satisfy the needs of employers. This creates regional median gross income levels that are 13% lower than national averages and builds sections of the community where long-term, intergenerational, worklessness is the norm. The combination of worklessness and low-income levels compromises social inclusivity and leads to the levels of deprivation reported within the region.

Indications are that worklessness and low skills attainment within the region are likely to continue in the short to medium-term unless more evidence-based, community-led interventions are developed. This regional need gives the University the opportunity to extend its community research and development work, and increase its level of community engagement, through the creation of a new Institute for Community Research and Development (ICRD). By developing the ICRD, the University will be able to consolidate its considerable experience of delivering evidence-based research-relevant projects and achieve its strategic ambition of having significant regional and national influence.



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Situated learning

The notion that Sign Language Interpreting is a Practice profession brings up interesting questions for interpreter training in terms of understanding the pedagogical methods that other practice professions use in training their future professionals. One of the inherent difficulties in delivering healthcare training is that fact that often experiences have to be simulated via roleplays as we cannot ethically 'practise' in real situations. This means that we have to be pedagogically creative. With this in mind, we looked at the profession of Nursing (a well established practice profession) and their use of 'situated learning/situated cognition' and high-fidelity simulation to train medical students.

In the academic year 2015/16, a pilot was undertaken to train final-year undergraduate sign language interpreting students in healthcare interpreting, in the simulation suite which is used to train nursing students. This suite is a state-of-the-art mock clinical environment, complete with hospital wards and mannequins that react appropriately to medical intervention. The training was delivered by two senior lecturers in Interpreting, who are also qualified interpreters and a senior lecturer in nursing who is a registered adult health nurse.

Following this pilot, a questionnaire and interviews were undertaken to determine whether the experience was useful and how it could be improved upon. Following that feedback, the session was run again in 2016/17, with the addition of a Deaf participant, who took the part of the patient in a series of roleplays.

This presentation will focus on the theoretical frameworks which underpin situated-learning and the way we have designed our situated learning experiences for training students in healthcare interpreting. This model has direct transferability for a range of settings in applied practise and it is a highly valuable CPD tool for field practitioners.



[Professor Stephen Britland](#)

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Ointment in the fly

For centuries the medical literature has emphasised the beneficial effects of facultative calliphorid larvae (maggots) in wound healing, however the underpinning pharmacological mechanism remains unproven. Crosstalk between components of insect secretions and receptor-mediated wound repair mechanisms in human skin cells is one possibility.

The present study found that plasmin-like activity from *Lucilia sericata* larval alimentary secretions caused upregulation of *cyr61*, a connective tissue growth factor closely linked to angiogenesis, in primary human dermal microvascular endothelial cells in vitro. That upregulation of *cyr61* was inhibited by protease inhibitor cocktail, protease-activated receptor type 1 (PAR1) antagonist, and anti-*cyr61* antibody confirming a PAR-mediated event. Unlike human plasmin, insect plasmin was not inhibited by human neutrophil elastase suggesting an evolutionary adaptation to confer robustness to insect enzymes within challenging biochemical environments typified by open wounds.

Serendipity of nature possibly, but these findings strongly support a credible pharmacological mechanism underpinning an ancient remedy in wound care.



Professor Ross Prior (FoA), Professor
Fiona Hackney (FoA) and Mah Rana (artist)
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Embedding Art as Research within Higher Education

This round table discussion will explore the various multidisciplinary visual and performing art forms as ways to provide a rich contribution and understanding of research within Higher Education.

Based on their own research, the session will hear from some contributors of a forth-coming book on the subject, providing the opportunity to share their art-based research, practice and philosophy.

In what will be an invaluable discussion of artistic research, the session is of direct benefit to arts researchers and educators addressing the key challenges and possibilities in a rapidly changing education environment.



Richard Glover

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“When we smash a window...” Black Bloc anarchists and protest: some legal implications

In recent years there has been a trend for some protestors, in particular anarchists forming a ‘Black Bloc’ at demonstrations, to attack property as a form of political expression or ‘propaganda by deed’. Such protestors typically attack banks and the branches of large corporations, but refuse to accept that damage to property amounts to ‘violence’. The ‘Black Bloc’ poses a number of problems for the law.

The cornerstone of public order law in England and Wales is the common law ‘preventive justice’ doctrine of breach of the peace. In the recent case of *Hicks v Commissioner of Police for the Metropolis*, the Supreme Court endorsed the definition of breach of the peace contained in the case of *Howell* - that the essence of the doctrine is violence or the threat of violence, rather than a mere disturbance of normal life. However, later cases have suggested that remarks in *Howell* that damage to property in the presence of the owner’s presence would be a breach of the peace indicate that violence to property in the absence of an owner would be insufficient. This has important legal implications for police intervention to prevent violence.

This presentation doubts the correctness of this interpretation of *Howell* and also examines some of the implications for human rights law of the Black Bloc’s actions at demonstrations. Some activists contend that their actions are ‘performative violence’ and should be regarded as ‘symbolic-expressive’ rather than as simple violence. The police are duty-bound to facilitate freedom of expression, but whether the right extends so far may be doubted. Although the ‘Black Bloc’ phenomenon remains relatively small it is potentially problematic and presents challenges for the law.



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Class, Coal Mines, Cotton Mills, and Northern Soul

The Northern Soul scene emerged in Britain during the late 1960s. However, it is a cultural and music scene largely associated with the 1970s.

Its followers were predominantly white, 'working class' young men and women, but does this denote that there was a distinctive class perspective about the scene? Was there something particularly 'northern' about Northern Soul in the cultural sense and in the identity it engendered?

This presentation explores the complexities of the Northern Soul Scene and argues that it offers a distinctive lens for reappraising the history of the 1970s in general and more particularly the historiography of youth culture and popular music.



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Numerical modelling of the vibro-acoustic behaviour of roll-formed steel studs in gypsum board partition walls

Partition walls using roll-formed steel sections are widely used in modern construction due to their popularity over traditional masonry partitions to reduce construction cost and time. Higher sound levels in modern urban areas due to traffic noise, electronic entertainment and home machinery require dwellings to provide improved acoustic insulation for these stud walls. Common practices are introducing sound absorbing infill-material or by increasing the mass of the plasterboards. However, this doesn't affect the sound transmission through the steel frame that act as sound bridges reducing the overall acoustic efficiency of the structure.

Stud manufacturers are making great efforts to improve the acoustic insulation of steel studs by testing various designs. However, the prediction of sound transmission through stud walls at a design stage is a challenging problem due to the Fluid-Structure Interaction (FSI) between the structure and fluid systems. Consequently, this work provides an initial investigation into the possibilities of using the Finite Element Method (FEM) to simulate and analyse the vibro-acoustic behaviour of stud based partition walls. The development of a FE model that can predict the sound reduction index (R) of stud based partition walls at 1/3 octave band is presented. Acoustic behaviour of partition walls using three different stud geometries are analysed using the proposed model. Furthermore, the study is extended to analysing the influence of stud slot configurations on sound bridging. The validity of the FE model is assessed by comparison with experimental data complying ISO10140 standards. The FE model developed in this study is capable of visualising the spatial sound pressure level and the acoustically induced structural vibration, thus establishing a new viewpoint for the diagnosis and reduction of noise levels at a design stage.



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Modelling Affective Labour: On Terry Richardson's Photography

Contemporary photographer Terry Richardson works with digital aesthetic that, at first glance, looks to the “porn chic” of yesteryear. And yet his images, in the collections Kibosh and Terryworld, anticipate the contemporary public recalibration of ideas of intimacy as associated with Social Media, tally with contested ideas of the sexualisation of female empowerment as associated with elements of Third Wave Feminism, and can be read in relation to Antonio Negri's theories of art and immaterial labour.

In the latter respect, Richardson's images, upon reflection, raise key questions about new forms of labour. In his images, the very idea of work, from its post-Fordist phase to Neoliberal times, is brought to the fore.

This proposed paper, drawing on my recently published article on Richardson (in Cultural Politics; Duke University Press), will illustrate and explore his images in these contexts.

Warning: Potentially distressing content

The Doctoral College

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The logo consists of a cluster of overlapping triangles in various colors: pink, yellow, blue, green, and orange.

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