

## New Researchers' Conference 12<sup>th</sup> June 2013

Early Researcher Award Scheme (ERAS) Conference Programme

Institute for Learning Enhancement www.wlv.ac.uk/ile



## ERAS 2013/14

Now accepting applications.

Deadline: 28<sup>th</sup> June 2013

#### What is the Early Researcher Award scheme (ERAS)?

- An individual research project that will yield outputs in terms of publications, further research and/or development of funding opportunities.
- A support programme to develop and enhance wider research-related skills through workshops, mentoring and progress reports.
- You will be given a budget of up to £5000 to support the completion of your project.

#### Who is eligible to apply?

- Anyone in the University at postdoctoral level now; attained within the last 5 years.
- 'Early researcher' is interpreted here as 'at the beginning of a postdoctoral career'.

Institute for Learning Enhancement Please see www.wlv.ac.uk/ERAS for details



### ERAS Programme

#### 10:30 Registration & coffee

10:45 Opening – Professor John Darling, Dean of Research (MC001)

| Time  | Group A: Developments in<br>Medical Science<br>MC438   | Group B: Understanding Language,<br>Society, Business and Law<br>MC415   |       | Group C: Improvements in Health and<br>Wellbeing<br>MC401   |
|---|--|--|-------|---|
| 11:00   | <b>Dr Paul Kirkham (SAS)</b><br>Stressful times for chronic lung disease:<br>the missing link & the need to cure a<br>global healthcare issue. | Dr Silke Machold (UWBS)<br>Researching business elites: corporate<br>governance and boards of directors                    | 11:00 | Professor Magi Sque (SHAW)  |
| 11:20   | <b>Dr Takis Athanasopoulos (SAS)</b><br>The art of how to use yin/yang concepts<br>in modern research:   | <b>Dr Irina Moore (LSSC)</b><br>Negotiating Public Space: Post-Soviet<br>Linguistic Landscape in Kazakhstan                | 11:10 | <b>Dr Nii Ankrah (STECH)</b><br>Behavioural consequences of accident<br>occurrence in construction work   |
| 11:40   | <b>Dr Farjana Begam Rowther (SAS)</b><br>Genes of Anti-Genes, for the Treatment<br>of Brain Tumours  | Dr Saidunnabi Piyal (LSSC)<br>Mortgage Rescue Scheme in England - How<br>secure are you?                                   |       | <b>Dr Tom Mercer (SAS)</b><br>Why do we forget information over short periods<br>of time?   |
| 12:00   | <b>Dr Sarah Jones (SAS)</b><br>Exploring the Potential of Cell-<br>Penetrating Peptides for Effective Drug<br>Delivery                         | <b>Dr Stuart Farquhar (UWBS)</b><br>An Examination of Board processes and<br>Effectiveness in the UK not-for Profit Sector | 11:50 | <b>Dr Hilary Paniagua (SHAW)</b><br>The Communication Experience of GPs with<br>Psychiatric Patients  |
| 12:20   | <b>Dr George Metsios (SSPAL)</b><br>PHysical Activity and Breast Cancer:<br>The PHAB pilot study   | <b>Dr Daisy Jing Tan (UWBS)</b><br>Can Social Media be Trusted in Industrial<br>Marketing?                                 | 12:10 | Dr Della Sadler-Moore (SHAW)<br>No post code - No care? The health and<br>wellbeing of itinerant canal boater's on the canals<br>of the Birmingham and the Black Country. |
| <ul> <li>13:00 Lunch &amp; networking</li> <li>14:00 PGR poster display, judging.</li> <li>16:00 Concluding remarks - Professor John Darling (MC001)</li> <li>16:15 Poster competition prize giving – Professor Geoff Layer, Vice Chancellor (MC001)</li> </ul> |  |  | 12:30 | <b>Dr Wendy Marina Walker (SHAW)</b><br>Sudden death and bereavement: Nursing<br>interventions for person-centred care  |





Dr Paul Kirkham School of Applied Sciences <u>P.Kirkham@wlv.ac.uk</u>

#### **Group Facilitator: Developments in Medical Science**

## Stressful times for chronic lung disease: the missing link and the need to cure a global healthcare issue.

Chronic obstructive pulmonary disease (COPD) is a major global health problem, which is set to become the third leading cause of death worldwide by 2020. It is characterised by deteriorating lung function as a result of a combination of emphysema, chronic bronchitis and fibrosis of the small airways. It currently affects around 10% of the population over 45 years but this rises to 50% in heavy smokers or those exposed to high levels of airborne pollution. Existing therapies for COPD are ineffective at halting disease progression and more effective therapies are urgently needed.

Oxidative stress is now recognised as being a major predisposing factor in the pathogenesis of COPD and persists long after the cessation of cigarette smoking. This is due to the continued production of reactive oxygen species (ROS) from endogenous sources, such as from the mitochondria. We have recently found that in COPD the mitochondria are defective and generate large amounts of ROS. Until recently, it was unclear as to how oxidative stress drives disease pathogenesis at the molecular level. The missing link in this chain of events would appear to be carbonyl stress. Carbonyl stress leads to unique post-translational modifications on proteins with consequential downstream effects on inflammation and immunity through triggering of a destructive autoimmune response in the lung. These findings will help towards developing novel therapies to combat this disease as well as much needed biological markers of disease severity for use by the clinician.





Dr Takis Athanasopoulos School of Applied Sciences <u>T.Athanasopoulos@wlv.ac.uk</u>

# The art of how to use yin/yang concepts in modern research: Development of advanced safer vector systems for tailored-specific gene therapy and genetic vaccine applications

Gene therapy is the use of a nucleic acid (DNA or RNA) as a pharmaceutical agent to treat a specific disease without causing an adverse immune reaction (yin). A genetic vaccine is a recombinant biological preparation that stimulates immunity (yang). Although gene therapy and genetic vaccination play opposing/contrasting roles (yin/yang), they are guided by similar/complimentary biological principles. Both processes require:

- 1. Successful uptake of vector by appropriate cells surface receptors/co-receptors (tissue specificity)
- 2. DNA/RNA vector entry into nucleus and expression
- 3. Evasion (or co-stimulation in the case of a vaccine agent) of the host immune defences.

Concepts in designing safer & tailored application-specific novel biomedicines (either as gene therapeutics or vaccines) will be presented. We will also discuss potential implications for such discoveries e.g. the need for developing large(r) team collaborations between academia and industry, effective data dissemination to the scientific community (and the public) and ways to maximize impact.





Dr Farjana Begam Rowther School of Applied Sciences <u>fbrowther@wlv.ac.uk</u>

#### Genes or Anti-Genes, for the Treatment of Brain Tumours

Malignant astrocytoma is the most common and aggressive type of tumour of the central nervous system. Despite improvements in surgery, radiation and chemotherapy, prognosis of patients is <1 year. miRNAs are anti-gene molecules which alter expression of specific genes. They are implicated in the initiation and progression of multiple cancers and in the development of resistance to chemotherapeutic drugs.

The primary aim was to investigate the expression of these miRNAs in aggressive brain tumour cells (shortterm high grade astrocytoma cultures) derived from patients. Secondly to investigate the role of specific miRNA in the development of resistance to common chemotherapeutic drugs. Microarrays technology that allows for the rapid, multiple testing of these anti-gene molecules was employed. The data generated were analysed to recognise miRNA expression pattern that are specific for cells resistant to chemotherapeutic drugs. Therefore, this will lead to the development of novel therapeutic strategies to treat patients with this type of brain tumour.





Dr Sarah Jones RIHS, School of Applied Sciences <u>s.jones4@wlv.ac.uk</u>

#### **Exploring the Potential of Cell-Penetrating Peptides for Effective Drug Delivery**

Developments in peptide research have launched an expansion in intracellular biology interventions. In recent years the promise of cell-penetrating peptides has sparked interest amongst the pharmaceutical industry as a novel yet potentially effective method for drug delivery.

The ability to target numerous intracellular candidate sites for therapeutic interventions could offer unparalleled opportunities for drug development and the early signs coming out of early stage and translational research are very encouraging. Dr Sarah Jones unveils the latest advances in cell-penetrating peptide technologies, both here at the University of Wolverhampton and amongst our close international collaborators. Highlights include;

- Characteristics and potential applications of cell-penetrating peptides, including "penetrating the impenetrable"
- The utilisation of cell-penetrating peptides to expand the repertoire of "druggable" targets
- Tissue-specific targeting with cell-penetrating peptides
- The importance of facilitating close cooperation between academia and industry





Dr George Metsios School of Sport, Performing Arts & leisure <u>G.Metsios@wlv.ac.uk</u>

#### PHysical Activity and Breast Cancer: The PHAB pilot study

The aim of this study was to develop and utilise a cost-effective home-based physical activity intervention in breast cancer survivors in order to investigate its effects on quality of life. 100 patients with breast cancer were randomised into two groups: physical activity and controls.

The physical activity group received a face-to-face consultation (month 1), followed by a support telephone call (months 2 and 3) while during the last two months (4 and 5) patients received leaflets encouraging their participation in home-based physical activity. The controls received only information about the benefits of physical activity using commercially available leaflets.

All patients were assessed at baseline, three and six months. Results revealed a significant increase in quality of life in our intervention group but not controls. Based on the results of this trial, we have developed and currently utilise in clinical practise an exercise referral scheme for breast cancer survivors.





Professor Magi Sque School of Health & Wellbeing <u>M.Sque@wlv.ac.uk</u>

#### **Group Facilitator: Improvements in Health & Wellbeing**

Magi Sque holds a joint appointment with the University of Wolverhampton's School of Health and Wellbeing and The Royal Wolverhampton NHS Trust as Professor in Clinical Practice and Innovation. Magi's remit is to provide research leadership and support and be a role model for health care practitioners in the caring sciences. She has begun the process of unlocking research talent in the Trust and School to create a fully functional, jointly branded, self funding, and income-generating community of practice. Endorsed by Trust and School its purpose will be to address research and development that is of particular concern to the caring sciences, whilst fostering a culture of enquiry and practice innovation, in which people thrive.





Dr Nii Ankrah School of Technology <u>Nii Ankrah2@wlv.ac.uk</u>

#### **Behavioural Consequences of Accident Occurrence in Construction Work**

Accidents are a feature of construction work. On average, 58 people die every year in construction with a further 7576 injured to some degree. A significant amount of research has consequently focused on accident causation to provide a sound basis for intervention towards reducing the risk posed to workers. However less attention has focused on the after-effects of accident occurrence. Whilst accidents do cause some amount of trauma, how such trauma manifests and its subsequent effects on project delivery remains unclear.

Using insights from trauma theory and a qualitative research design with data collected via interviews with construction workers, this study sets out to develop some understanding of the behavioural consequences of accident occurrence through an analysis of the relationship between accident experience and behaviour. The findings shed light into issues such as stress and job dissatisfaction which affect behaviours of workers. It is argued that this has implications for the design of support mechanisms to help employees cope and development of strategies to mitigate negative effects on productivity and performance.





Dr Tom Mercer School of Health & Wellbeing <u>T.Mercer2@wlv.ac.uk</u>

#### Why do we forget information over short periods of time?

Individuals often view forgetting as a nuisance or as evidence of a faulty memory system. Despite this, forgetting is extremely common and can occur within seconds, but it still remains poorly understood. This project aimed to investigate the causes of forgetting and examined interference within verbal memory. Participants with intact memory (aged 18 to 51) were asked to learn pairs of words for a recall test. Their memory was assessed immediately after the final word pair and also following a short interval.

In some conditions, different interfering tasks were presented during the interval. Postponing interference significantly reduced forgetting, although any interfering event was capable of disrupting recall. Conversely, there was also evidence of time-based forgetting.

These findings have important implications for our understanding of memory and suggest a simple strategy for reducing interference-based forgetting. The wider applications of this research will also be discussed, particularly within the context of wellbeing.





Dr Hilary Paniagua School of Health & Wellbeing <u>H.Paniagua@wlv.ac.uk</u>

#### The Communication Experience of GPs with Psychiatric Patients

Communication between clinicians and patients is at the heart of psychiatric practice and is said to be particularly challenging (McCabe 2008) as it influences patient outcome indirectly or can be therapeutic in its own right. So far there has been little research undertaken on the psychiatric interview and there are practically no guidelines regarding what clinicians need to say or do. It is critical to define empirically the importance of the GP/patient relationship at this time, because of the current challenges facing GP commissioning where there is a requirement for mental health service providers to improve their efficiency and effectiveness.

The question consequently is What is the GP experience of communicating with psychiatric patients? Applying the approach of discourse analysis to analyse 15 GP interviews it is becoming evident that practices vary. There are differences in behaviour according to local experience and perceived confidence. Though some attributes come naturally while others not, GPs mainly feel the advantage of knowing their patients well which promotes their relationships. This project offers both an opportunity to gain new knowledge about GP/patient practices and aims to offer evidence-based recommendations to the health profession.





Dr Della Sadler-Moore School of Health & Wellbeing <u>DellaSM@wlv.ac.uk</u>

## No post code - No care? The health and wellbeing of itinerant canal boaters on the canals of the Birmingham and the Black Country.

The 200 miles of canals within Birmingham and the Black Country provide a still water environment for itinerant, live aboard boaters. Recently, stories came to light from within the canal boat community regarding their experiencing difficulties when seeking access to health and social care. A review of the academic literature found no evidence on the health and wellbeing dimensions of being an itinerant live aboard boater, in particularly no publications where the views and voices of this community can be heard. This presentation shares early findings from one aspect of a larger research project titled 'Care on the Cut'.

Twelve itinerant live aboard narrow boaters were recruited using a snowballing technique, 'the towpath telegraph'. Data was collected using an open ended interview lasting 30 minutes to one hour. Following verbatim transcription interview data was analysed using a thematic approach (Sadler-Moore 2009). Some finding common to itinerant boaters health and wellbeing will be presented: 'it's a lifestyle choice', 'no post code - no care?', 'we're below the radar' and 'continuity - discontinuity of care'. The research was approved by an independent ethics committee, all participants gave written consent and the findings are reported using pseudonyms to ensure boaters anonymity.





Dr Wendy Walker School of Health & Wellbeing <u>W.M.Walker@wlv.ac.uk</u>

#### Sudden death and bereavement: Nursing interventions for person-centred care

Approximately 500,000 people die in England each year, and the care received at the end of life is a national health concern. Despite growing regard for community care and a non-institutional death, the majority of all deaths occur in an acute hospital setting. Death may be sudden and unexpected, and the resultant family grief is often more pronounced.

Person centred care is a core component of health policy, yet little is known about its application in the context of sudden death and bereavement. This study utilised an existing theoretical framework of person-centred nursing to determine interventions for the delivery of person centred bereavement care in adult acute care settings. Key qualities of person-centredness are presented, based on the reported views and experiences of suddenly bereaved family members. The study findings provide insights of relevance to local and national bereavement care policy and practice. An important consideration for person-centred practice is movement away from sudden bereavement as a 'here and now' event, toward a pathway of individualised care that envisions the longer-term.





Dr Silke Machold University of Wolverhampton Business School <u>S.Machold@wlv.ac.uk</u>

#### Group Facilitator: Understanding language, society, business and law

#### **Researching business elites: corporate governance and boards of directors**

Corporate governance is, in simple terms, about how organisations are directed and controlled. Boards of directors are one of the most important governance mechanisms, and directors form a corporate elite with power and influence beyond the boardroom.

The presentation will commence with an outline of my research on boards focusing on 1) normative dimensions of corporate governance, 2) behavioural perspectives on boards as teams and 3) diversity in boards and top management teams. The challenges of developing 'good' theory and robust and rigorous research designs will be discussed next. Finally, the presentation will conclude with reflections on how to translate research into practice to achieve impact.





Dr Irina Moore School of Law, Social Sciences & Communications <u>I.Moore@wlv.ac.uk</u>

#### Negotiating Public Space: Post-Soviet Linguistic Landscape in Kazakhstan

The purpose of this paper is to gain an understanding of the extent to which language practices coincide with official language policy in urban Kazakhstan. The constitution names Kazakh as the state language and Russian as the language of interethnic communication. There is also a state strategy of "Tri-unity of Languages", which includes English, as a means towards the faster integration of Kazakhstan into the international economic and educational environment.

A linguistic landscape approach is used to investigate language practices in the capital, Astana. For this purpose, a representative collection of digital photographs of public signage is collected from the three main districts of the city. These are analysed quantitatively and qualitatively, in terms of the frequency of appearance of specific languages, the order of their appearance in multilingual signs, font size, colour, etc. The paper reports on this investigation and finds a considerable difference between official policy and language practices. The study of linguistic landscape is relatively new. To date, only a few research projects have analysed post-Soviet linguistic landscape. Consequently, this paper highlights potential contributions of such an approach to the study of language and identity politics and helps deeper understanding of language use in the post-Soviet space.





Dr Saidunnabi Piyal School of Law, Social Sciences & Communications <u>S.Piyal@wlv.ac.uk</u>

#### Mortgage Rescue Scheme in England- How secure are you?

Under the Mortgage Rescue Scheme the Government can arrange for a local authority or a social landlord such as a housing association to buy the home of an owner-mortgagee and for him/her to continue to live there as a tenant. However, the local authority or the housing associations have always had an ambiguous tenure status which has altered depending upon which Government was in power at the time.

Therefore, this Scheme is likely to increase insecurity for tenants in the future, particularly for those on low incomes. Additionally, this Scheme significantly influences some statutory and conventional rights. With these issues in mind, this study is an attempt to determine the reasons why the Scheme was introduced collecting qualitative data through interviews with authorities and weighing up academic opinions. It will form the basis of an evaluation as to the effectiveness of the Scheme in order to propose ways to improve. The findings from this study have implications for authorities concerned with the Scheme. It is intended that recommendations from this study will inform changes and legislative amendments to overcome the present difficulties so as to increase security and benefits to tenants.





Dr Stuart Farquhar University of Wolverhampton Business School <u>S.S.Farquhar@wlv.ac.uk</u>

## An Examination of Board Processes and Effectiveness in the UK Not-For Profit Sector

This paper draws on Forbes and Milliken's (1999) seminal conceptual contribution to research on boards of directors by treating the board as a small, cognitive decision-making team.

In this paper, a model of board processes, board tasks (control, service and strategy) and board effectiveness is developed and tested in the UK not-for-profit sector. The model was tested through a survey of board members in the UK charitable sector. The findings provide useful insights into the workings of boards in the not-for-profit sector and help provide a greater understanding of the factors that enhance board effectiveness.





Dr Daisy Jing Tan University of Wolverhampton Business School <u>D.Tan@wlv.ac.uk</u>

#### **Can Social Media be Trusted in Industrial Marketing?**

This research aims to investigate the role of social media on initial trust formation in the Business-to-Business (B2B) market. It builds on the existing Initial Trust Formation model developed by McKnight, Choudhury and Kacmar (2002). The current study extends the model by incorporating an additional dimension of social capital, which is inherent in social media but missing from the existing model. It enriches theory on initial trust formation in the Web 2.0 era. A cross-sectional survey is carried out among business LinkedIn users in the UK and China to generate comparative data on Disposition to Trust, Institution-based Trust, Interorgnisational Trust and Trust Outcomes.

Tentative findings suggest that these two countries demonstrate different patterns of social-media-mediated trust formation. Such findings could help professional social media websites offer sales-related service for B2B relationship building and maintenance; they also highlight to both UK and Chinese businesses the potentials of engaging in such activities.