

# National substance misuse symposium at Brookes

Students from across the UK share ideas on one of the most crucial issues of our time.

On 1 July 2008, the School of Health and Social Care hosted a one-day national symposium for PhD students researching substance misuse. The event, held at Headington Hill Hall, was organised by Professor Jo Neale, Professor of Public Health and funded through the University Central Research Fund. It attracted sixteen research students from universities across the UK, including Glasgow, Durham, Newcastle, Liverpool John Moores, Leeds, Leicester, Birmingham, Middlesex, Oxford, Plymouth, London School of Hygiene and Tropical Medicine, Ulster at Jordanstown and Oxford Brookes. Participants included full-time and part-time students; some had just started their research and others were already writing up their findings.

The day was structured around a series of presentations, relating to developing a research question, reviewing the literature, choosing a method, data collection, analyses, and writing. However, there was also plenty of time for formal and informal discussion and general networking. During the course of the day, students additionally exchanged information on their own research which covered topics as diverse as drug policy-making in Sri Lanka; crack cocaine culture(s) in the North East of England; reproductive decision-making among drug users in treatment; the impact of imprisonment on injecting behaviours; and the effectiveness of brief personalised feedback in reducing alcohol-related problems amongst university students.



Professor Jo Neale,  
Professor of Public Health

The key aim of the day was to bring together individuals from a range of disciplines with an interest in substance misuse in order to learn about each other's work and methodological approaches, as well as to debate, discuss and share ideas. It was hoped that the event would foster supportive networks between those participating and might even inspire future research and writing collaborations.

Feedback after the day was extremely positive, with participants expressing thanks to Oxford Brookes and discussing how best to stay in touch with each other and organise further meetings. By the end of the week, a lively email discussion group had already formed to help take things forward.

Turn to page 2 for the inside story of the event from the perspective of a PhD student at Oxford Brookes.

# National symposium on substance misuse – the inside story

By Mark Mason, part-time PhD student

**‘To be around a group of researchers working on the same subject was stimulating, and the environment was very enabling. The day flew by.’**



Mark Mason

I'm a part-time PhD student in the School of Health and Social Care at Oxford Brookes and have now been a researcher, for more than 15 years. My day job is in a public sector research environment and we tend to work in quite an isolated fashion. So when I got the invitation to attend the symposium I have to admit to being excited, enthralled, anxious and confused in equal measures. Why? Well I had to think hard about whether I had actually attended a symposium before, about anything, ever. I checked the dictionary (apparently it's a 'collection of opinions; a discussion') and decided that I hadn't. So with the day approaching I resolved to keep an open mind and travel in hope, rather than in expectation.

The day was constructed around eight presentations which were really helpful. Of even more use and interest to me though, were the discussions after and the opportunities I had to mingle and talk to other PhD students, informally over coffee

and at lunch. We talked about our experiences, the common challenges we faced and the different approaches we had used to overcome them. To be around a group of researchers working on the same subject was stimulating, and the environment was very enabling. The day flew by.

Doing a PhD is a big deal for me. It's a huge challenge to take on something which is more like a second job than a part-time responsibility. So events like this fulfil a number of functions for me. They keep me 'plugged into' the education world; they introduce me to people who are facing similar issues (both practical and academic) and most of all help me to realise they're not insurmountable. I found the whole day invaluable, and cannot imagine how I would have gained all that knowledge and experience in any other way. What's more, I can now definitely say that I've been to a symposium.

## Cross cultural approach to carbon saving technology

Young scientists from the UK, India and Sri Lanka came together at a recent conference on 'Sustainable Energy Technologies and Low Carbon Buildings for Climate Change Mitigation'. The resultant research networks are now taking the work forward.

The first major UK-India symposium on 'Greening events and Energy-efficient Cities for lasting legacies' (see *Research Forum*, June 2007) called for cities to adopt and implement renewable and sustainable energy strategies, and to consider major international events like the Delhi Commonwealth Games in 2010 as an opportunity of reducing the environmental impact of the event itself and the city as well.

As a follow-on event to this hugely-successful symposium, the British Council in Delhi with Oxford Brookes University and the Indian Institute of Technology, Delhi, held a UK-India-Sri Lanka Young Scientists networking conference in February of this year. The aim was to develop a core group of young UK and Indian scientists working in the area of climate change mitigation, sustainable energy, low carbon technologies and sustainable buildings. The event was by invitation and co-chaired by

Dr Rajat Gupta and Professor John Raftery from the Oxford Institute for Sustainable Development at Oxford Brookes along with Professor G N Tiwari from the Centre for Energy Studies at the Indian Institute of Technology.

The conference brought together 35 experts and postdoctoral/PhD researchers from the UK, India and Sri Lanka. They discussed, debated and learned from the leading-edge research, application and delivery of the emerging sustainable energy technologies and low carbon buildings in the developed and developing world. It was soon realised that a move towards low carbon society must be based on incorporation of a multi-disciplinary approach, which addresses cultural, behavioural and political aspects of solutions as much as the science itself. As a result of the event, research networks have developed

amongst young scientists to advance research in the field of low carbon systems, energy efficient retrofitting of existing buildings and post-occupancy building evaluation.

To disseminate the findings of the conference to the academic community, a special issue of the *International Journal of Low Carbon Technologies* will be published in 2008/2009 based on selected papers from this conference.



# HEIF funding – a virtuous circle

The Higher Education Innovation Fund (HEIF) has made six awards to benefit business and the community. Stimulation of further research and knowledge transfer ventures is anticipated

The ten year strategy set out in the government's Science and Innovation Investment Framework (SIIF) in 2004 reinforced the commitment to strengthen links between the knowledge base in HEIs and businesses and society, in order to increase economic impact through the Higher Education Innovation Fund. It recommended that more encouragement should be given to knowledge transfer with small and medium-sized enterprises (SMEs). Oxford Brookes has a strategy of investing in a few market-sector focused projects with the objective of strengthening links between the knowledge base in HEIs and businesses and community interests and making a positive impact upon the sustainable income of the University from business and the community. It is also anticipated that in most cases, these projects will contribute to the development of associated research which, in turn, will strengthen future knowledge transfer ventures. HEIF funding has been awarded on a competitive basis and the HEIF4 Assessment Panel has made the six following awards, worth a total amount of £1,347,331:

## **My Strong Family Consultancy**

An award of £204,978 to the School of Health and Social Care will see the creation of the 'My Strong Family Consultancy' to further work already implemented by the *Strengthening Families Programme* (SFP) 10-14 (UK) (see *Research Forum*, April 2008). Providing support to families cuts across a range of the government's policy themes and policies, including social exclusion and poverty; education; crime and anti-social behaviour and enabling parents to balance paid work and family life. My Strong Family Consultancy aims to continue to deliver high quality training courses to customers; training for experienced facilitators who wish to become trainers of trainers and ongoing mentorship and support for trained facilitators. It will also market and deliver educational courses based on SFP10-14 (UK) training at undergraduate and postgraduate level through the School of Health and Social Care's Student Designed Award.

## **Functional Foods Centre**

Research undertaken by the Nutrition and Food Research Group (NFRG) in the School of Life Sciences has international recognition and has developed the largest Glycaemic Index testing centre in Europe. The group has been awarded £331,777 to establish the first Functional Food Centre (FFC) in the UK to address the unmet need in a large and expanding market. Functional foods are food products which in addition to their nutritional

value have health promoting benefits concerned with the prevention or reduction of disease. The centre will undertake commercially funded research and consultancy to meet the growing need for testing of ingredients, development of new functional food products and for data to support food health claims. Led by Professor Jeya Henry and supported by a centre manager the FFC will complement their research services with a range of CPD and training services for food and ingredient manufacturers, in partnership with the School of Health and Social Care and the School of Social Sciences and Law.

## **Human Origins and Palaeo-Environments (HOPE) Research Group**

The HOPE research group was set up in 2007 specialising in biological/forensic anthropology, archaeological survey and excavation, artefact analysis, and environmental/forensic reconstruction with a key area of research in the Arabian Peninsula. Pilot studies conducted by the group have determined that there is a strong demand for the provision of archaeological, educational, and environmental consultancy for government ministries and development organisations throughout the Gulf region. The award of £113,911 will enable the group to create and deploy a regionally standardised protocol for site evaluation, recording and excavation that is in accordance with new legislation in the United Arab Emirates and Oman. The group is working to raise awareness of the impact of infrastructure development on heritage resources throughout the Gulf; currently underway is the upcoming BBC2 documentary entitled *The Journey of Man*, which will, in part, showcase HOPE's recent archaeological discoveries in the Sultanate of Oman. This will be complemented by a series of public lectures addressing professional researchers as well as the general public.

## **Coaching and Mentoring Unit**

The Coaching and Mentoring Group in the Business School has established strong student cohorts and a significant research reputation within the sector. The group has been awarded £285,353 to set up a Coaching and Mentoring Unit to act as the single point of contact and co-ordination for businesses, public sector bodies, academics and associates engaged in coaching and mentoring opportunities. The unit will have the opportunity to work more directly with several of the closely linked associates and visiting fellows to develop senior level, one-to-one executive coaching and mentoring with target

organisations. These will include the design and implementation of an in-house mentoring programme as well as providing support to external companies for their executives, managers and teams during change programmes. The unit will develop and deliver a specialist training programme and there could be the potential for validation and possible accreditation of in-house programmes and assessment of credit for work-based learning.

## **The Institute of Public Care (IPC) Public Care Transformation Partnership**

The Institute of Public Care, based in the School of Social Sciences and Law, has a national reputation in the field of social care and a track record in developing national products for the Care Services Improvement Partnership and the Care Services Efficiency Delivery Programme. In January 2008 the Department of Health allocated £500 million in grants to all local authorities and their partner agencies to help deliver major changes in the way in which health and wellbeing services are delivered. The award of £190,945 will enable the IPC to set up the Public Care Transformation Partnership to develop and test out new products with pilot local authorities and to work with them to develop processes and products to deliver the government's transformational change agenda.

## **Sustainable Vehicle Engineering Centre**

The number of vehicles on the world's roads is predicted to rise from 900 million currently to 1.5 billion by 2030. This number poses major worldwide challenges in terms of fuel sources, emissions, CO<sub>2</sub> reductions, manufacturing capability, materials availability, and materials reuse and recycling. It is now clear that the global automotive industry can only continue to exist if vehicles that are produced and sold in future are designed, engineered and produced with sustainability in mind. The School of Technology has been awarded £220,367 to develop a new Research Centre in Sustainable Vehicle Engineering. The centre will work with industry through consultancy and training to promote developments in the materials, design issues and concepts that will allow the development of low mass, low emission, economical vehicles that satisfy function and safety requirements whilst being as recyclable as possible. The centre will also develop and promote market forecasting reports for the automotive sector.

# Royal Society award for work on computer vision

## Enabling computers to ‘understand’ what they ‘see’

Professor Philip Torr of the School of Technology has recently been awarded the prestigious Wolfson Research Merit award by the Royal Society for his groundbreaking work on computer vision.

Over the past 40 years the study of computer vision has become increasingly important both commercially and academically as computers and digital cameras become more sophisticated and

readily available. A huge amount of information is now available in a form which can be processed by computer. Examples of this range from face detection, common on every medium range digital camera, to complex special effects that are used increasingly in films and television programs; from autonomous robotic navigation, to safety systems installed in cars.

The rise of the internet and the storage of huge amounts of video and images online, not least on social networks such as Facebook and YouTube, has led to an increasing interest in searching and indexing images and video. In order to do this effectively it is necessary to not only see but also to understand what is in the images and videos; Professor Torr's work brings together several areas of research to enable the computer to do just this. Using complex models to capture spatial information, the computer is enabled to recognise objects within a scene.

Commenting on the award, Professor Torr said:

“This is a fantastic recognition of all the work carried out by the team at Oxford Brookes. The university has a strong commitment to research and has created a supportive environment for me and my team. My research at Brookes is immensely enjoyable, blending theoretical work with practical outcomes. The ultimate test will be to solve the deep mathematical problems concerned with vision which can bring great benefits.”

Under Professor Torr's supervision, the computer vision group has attracted nearly £2 million of research income, funding an eighteen strong group of researchers. Collaborations both with local Oxfordshire companies – Yotta, 2d3, Vicon – and international organisations such as Microsoft Research, Sharp Research Laboratories Europe, and Sony Entertainment Europe have resulted in contributions to commercial products which are now appearing on the market.

Professor Philip Torr



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## The historians' perspective at Hay Literary Festival



The Hay Festival has become the literary event of the year in the UK and in 2008 it celebrated its twenty-first birthday. Dr David Nash, Reader in History in the School of Arts and Humanities and his publisher, Oxford University Press, were therefore delighted when they were approached with a view to him speaking at the festival where a theme was the issue of artistic freedom and censorship. It is unusual for historians to be invited to literary festivals and Dr Nash along with Michael Wood (of BBC television 'In search of fame') and Orlando Figes, the distinguished historian of Russia were able to add the historians' perspective to the debate.

The subject of blasphemy (and David's work) has attracted the attention of scholars and the public at large, through some high profile cases in Britain and the recent repeal of the Common Law offence of blasphemy. It has

also become important in discussions about minority cultures and identities, including within the UN Council. David has given keynote speeches at a number of international gatherings on the issue. Understanding the history of blasphemy is key to understanding its importance in the contemporary world, as an audience of some 150 readers, journalists and critics appreciated, responding to Dr Nash's talk with pertinent and detailed questions. David's work and speech at the festival also attracted the interest of Radio Four's *The World Tonight* which interviewed him for a piece featuring discussion of religion, censorship and the future of Christian belief.

*Blasphemy in the Christian World* is published by Oxford University Press. ISBN 978-0199255160

# Brookes and Rezidor

## Taking account of a decade of collaboration

Professor Peter Harris, Professor of Accounting and Financial Management, at Oxford Brookes Business School and Knut Kleiven, Deputy President and Chief Financial Officer of the Rezidor Hotel Group, jointly reflect on the evolution of almost ten years of collaboration between their two organisations.

### The beginnings

Natural evolving associations between practitioners and academics that grow into long-term relationships are not everyday 'easy-come-by' occurrences but where they do emerge the rewards can bring real advantages to all parties. One such association which has developed over the last decade is that of Oxford Brookes and the Rezidor Hotel Group. Today, the Rezidor Hotel Group is recognised as one of the fastest growing hospitality companies in the world with currently over 300 properties, comprising high profile brands such as Radisson SAS across Europe, Middle East and Africa with the corporate offices located in Brussels. The group is also soon to launch its first Hotel Missoni in partnership with iconic Italian fashion house of that name.

Over the past ten years, the relationship between Brookes and Rezidor has evolved and diversified into a wide variety of forms, including research, scholarship and consultancy. However, tracking back to the early beginnings proved to be an interesting opportunity to reflect on how far the relationship has developed.

### A solid foundation

A key development in the relationship took place at a meeting with corporate finance executives in Stockholm in 2001 when the company decided to embrace marginal accounting techniques in the form of 'The Profit Planning Framework', a marginal analysis application, developed here at the

university, to improve routine decisions at the hotel property level and which was to be delivered across Europe.

The consulting dimension provides a natural platform for co-operation and interaction between industry and education. From a company standpoint, executives and managers gained access to new and novel marginal accounting applications which added value to routine operational decision-making information. From the university perspective, faculty members' research and development endeavours were able to be tried, tested and refined in the rigours of the 'live' commercial environment. This not only contributes to university financial resources, but facilitates ongoing cutting-edge experience for use back in the learning and teaching environment.

In research terms, Rezidor has collaborated in a variety of ways. In 2002 the company contributed funds towards the sponsorship of a three-year full-time PhD research project into the development of an industry-wide hotel 'customer profitability analysis' (CPA) model and provided access for the detailed data collection stage of the constructive case study, which extended over thirteen months. In 2003 the company supported another PhD research project into 'Hotel room rate pricing in an international Hotel Group'. They gave comprehensive access to regional and corporate executives and the hotel property management teams from 33 Radisson SAS hotels in 18 cities spread across 16 European countries. In addition to the doctoral research projects, company managers, financial controllers and corporate office executives routinely give generous data collection access to master's degree candidates for dissertation fieldwork. At the time of writing, the company has agreed to facilitate a master's candidate to carry out field interviews with key corporate office executives in Brussels as part of an investigation into 'assessing risk versus return in hotel investment appraisals'.

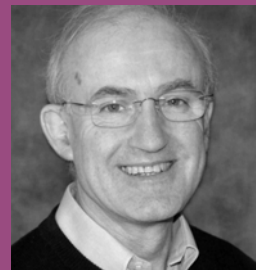
### An evolving relationship

During the past decade the relationship between Brookes and Rezidor has evolved and flourished through a climate of openness, personal interaction and exchange, created by the various participants. Brookes is proud of the association with Rezidor and this is

reciprocated. The company provides extensive opportunities for relating theory to practice, whilst the university offers new developments and applications for company practitioners. Following the university's recent presentation of the research findings from the aforementioned company-sponsored CPA project in Brussels, Rezidor has set up a development team to customise and test the CPA model in the new Radisson SAS EU Hotel in Brussels with the view to implementing the model across the organisation. The CPA model represents one of the most significant steps forward in hotel management accounting since the introduction of the Uniform System of Accounting for Hotels pioneered in the USA in the 1920s – a shining example of the mutual benefits of collaboration!

In essence, the relationship between the two organisations promotes and enhances what can best be described as a 'virtuous circle' of benefit to all involved. Developments from research and enquiry lead to scholarship and publication for academics and practitioners. This, in turn, leads to advisory and consulting opportunities, both of which the research (new knowledge) and the consulting (industry exposure) feed back directly into the learning and teaching environment. Maybe not a 'marriage made in heaven', but surely a 'pragmatic liaison here on earth'!

Professor Peter Harris



Knut Kleiven





# Professor Michael Todinov

Sarah Taylor from Brookes' Research and Business Development Office interviews Professor Michael Todinov from the School of Technology.

Michael Todinov's background is in Mechanical Engineering and Engineering Mathematics and his research area is Reliability and Risk. Before joining Oxford Brookes University in 2007 as a Professor in Mechanical Engineering, he was Head of Risk and Reliability in the School of Applied Sciences at Cranfield University. He has written three books and numerous solo-authored research papers and given invited lectures and seminar presentations. A significant part of his research has been funded by the nuclear, automotive and offshore oil and gas industries. Professor Todinov's name is associated with work on the foundations of the risk-based reliability analysis, statistics of inhomogeneous media and statistical theory of failure locally initiated by flaws.

**Q: What first sparked your interest in your current field of research?**

My interest in Reliability Engineering and Risk Management was not really sparked, but developed gradually, over a number of years.

In 1993, I began developing probabilistic models for analysing the kinetics of phase transformations and was fascinated by the power of the Monte Carlo Simulation. In a system with a specified volume, nuclei arise randomly and grow with a constant radial rate. The problem was to derive an equation that describes the evolution of the quantity of transformed phase with time. This problem was essentially a problem from stochastic geometry and was not new and an equation already existed – the famous Johnson-Mehl-

Avrami-Kolmogorov (JMAK) equation. However, the answer this yielded did not accord with common sense and is in fact incorrect for a small number of growing nuclei in the system! Subsequently, I developed an alternative to the JMAK equation that yields correct results for any number of nuclei growing in the system.

The final decision to move into probabilistic research came when I was working as a research scientist in Birmingham University. Then I initiated research on statistics of inhomogeneous media which was part of a research contract with the nuclear industry. I was so enthusiastic about the new area of research that in the summer of 1997, instead of going on holiday I started developing software of a micro image analyser.

In 2001 an excellent opportunity arose, to remain permanently in the area of probabilistic modelling – a position as Lecturer in Reliability and Risk, at Cranfield University.

**Q: What is the most recent/current project (research project, book, article etc) you are involved in and what particularly interested you about the work?**

Interestingly, I am currently doing research where the JMAK equation experience is being repeated with another famous equation – the Weibull distribution. This distribution has been used for over sixty years to predict probability of failure locally initiated by flaws in materials and thousands of papers have been published about it. However it fails in its predictions in some very common and simple cases and has turned out not to be the mathematical formulation of the weakest-link concept as nearly everybody currently believes. It is truly amazing to realise that thinking, even in science, is often in a rut. I am planning further research and possibly a grant application to supply an alternative to the Weibull distribution and chart the domain where the Weibull distribution can be applied safely.

My most recent project was a consultancy project. It involved developing a high-speed algorithm for repairable stochastic flow networks with converging flows, from multiple sources. A very fast discrete-event simulator was developed, that handles very large systems and a basic version was demonstrated to British Petroleum (BP) who contributed cash towards a consultancy contract to adapt the basic version of the simulator to oil and gas production systems and provide some extra functionality.

Together with two colleagues from the School of Technology, I am now seeking funding from EPSRC to develop a capability for optimising the network topology in order to deliver a maximum flow at a minimum cost for building the network. We intend to extend the application area of the simulator by including complex networks typical for the telecommunication industry.

**Q: Multi-and interdisciplinary work is increasingly important these days – what other disciplines/subject areas would you like to work with and why?**

Because of its broad interdisciplinary nature, this field has a great potential to naturally attract researchers from various seemingly unrelated disciplines, such as mechanical and electronic engineers, mathematicians, software engineers, financial engineers, project managers, social scientists, ecologists, psychologists, and medical specialists handling health risks. This list goes on.

This is a cross-cutting field that underlies engineering design, safety and safety-critical systems, management of technical assets, projects and finances, optimising the

performance of complex systems, network modelling, security, decision-making and trading on the financial markets. Decision-making and trading on the financial markets could be just gambling if they are not based on sound principles for risk reduction.

As in everyday life, almost every decision is about striking a balance between potential loss and reward. No risk, no reward. This is why it is quite risky to go through life without risking anything! You do not have to be 'a Jack of all trades', however, to succeed in this vast field. You need to achieve balance between at least two 'trades': the probabilistic and the engineering side.

An example of an emerging new area with a significant potential for interdisciplinary research and expansion is the 'Quantitative analysis and optimisation of networks' and in particular, the link between the topology of the network and its desired level of reliability and performance.

**Q: What are your research plans for the next five years and how does applying for research funding fit within these plans?**

For me, developing strong reliability and risk research and teaching in the School of Technology is very important. Reliability and risk is a dynamic and fast-growing field as evidenced by the increasing number of publications in this area. For instance, since moving to Oxford Brookes in January 2007, I have personally published eleven (mostly journal) papers. I am saying this to show that in the vast area of Risk and Reliability, it is not a problem to find new research topics yielding high-impact publications. At the moment, this field is a research gold mine.

Apart from publishing actively in top reliability and risk journals we are also seeking to attract industrial support and establish collaborative networks through KTP. Funding from EPSRC, EU and direct funding from industry (consultancy projects) will also be used for developing strong reliability and risk research.

**Q: How do you see your research career developing over the next ten years?**

My desire is to continue to create new probabilistic concepts, models and tools in engineering. The deterministic concepts and models, on which mechanical engineering is largely based, have been useful so far, but they are not up to the challenge of dealing with uncertainty. Our world is not a deterministic, clockwork world. This has already been proved by the success of ideas from quantum mechanics, evolution theory and genetics, which underlie modern science. The real world is riddled with uncertainty and risk management is about removing a large amount of it. My recent book, published in 2007, discusses generic principles and concepts for technical risk reduction and new methods for risk-based reliability analysis. This is just the start. I

hope to attract other engineering colleagues, software experts and mathematicians around developing more generic principles and techniques for reliability improvement and risk reduction. Such work will serve the engineering community well. I would also like to be able to continue my work on optimising the networks architecture, in order to achieve a particular level of service at a minimum risk of failure and a minimum cost for building the networks. This, I believe, will have a strong impact on the design of a wide range of networks: telecommunication systems, oil and gas production systems, water-distribution systems, computer networks, transportation networks, distribution networks involving plants and retailers, etc.

**Q: Who do you think has most shaped your research career and why?**

My MSc thesis at the Technical University of Sofia which focused on developing algorithms and software for optimal cutting out of sheet and bar material was the start of my research career. The thesis was part of a big research project which I had to accomplish and defend in front of excellent mathematicians. I am grateful to my supervisor, Professor Pentchev, for giving me this opportunity and for providing the resources I needed to accomplish the project which was a tough challenge and confidence builder. It took many months to complete and many sleepless nights were spent in front of the computer, in search of efficient algorithms. Professor Pentchev did not tell me at the start that the problem had no exact solution, so I managed to find one by using dynamic programming and combinatorial geometry.

As I look back, I must admit, my research career was also shaped by the people who hampered it. The obstacles they put in my path hardened my resolve, sharpened my skills and were used as fuel for my desire to succeed.

**Q: If you did not have a job in a higher education institution, where would you like to work and why?**

You have probably guessed the answer. I would be a programmer: part of this strange breed of people who wonder why they are getting paid to do work that they would be doing anyway. For me, programming in Pascal and C/C++ has been a livelihood and hobby since I was a student. It helped tremendously in my research, especially in developing the simulation routines with which I verify my theoretical results.

I regret that the current trend in mechanical engineering education places more emphasis on using ready-made software tools and less emphasis on building your own. Even the most sophisticated user environments cannot match the flexibility and power that a programming language provides in problem solving.

# Work on temperature sensing attracts top industrial fellowship

Tim Barry, MPhil/PhD student with the Electronic Circuit and System Design Research Group (ECSDRG), in the School of Technology has been awarded an Industrial Fellowship by the Royal Commission for the Exhibition of 1851. These Fellowships are aimed at individuals working within British industry and allow companies to devote time to research and innovation that they could not otherwise afford. This is achieved by paying the university fees and half of the Fellow's salary over the three year period of research. In addition, £3,500 of international

travel expenses per year allows the Fellow to travel to centres of excellence within their field. Upon completion of the Fellow's research programme, the University is awarded an honorarium of £10,000.

Tim works for Calex Electronics Limited of Leighton Buzzard on the design of non-contact infra-red (IR) thermometers. The company is one of the world leaders in this niche area of temperature sensing which has applications in the measurement of inaccessible objects such as moving parts on machines, or in dangerous environments such as high voltage junction boxes. IR temperature measurement is also used in instances where contact with a thermometer could cause a change in the process being measured, such as measuring the temperature of small components. It is also widely used in the food industry as a non-contact temperature measurement which will not contaminate food samples.

An IR temperature measurement is achieved by detecting the energy radiated by the surface of an object, and using signal

processing techniques to convert this to a temperature reading. This allows for fast, accurate measurements. However there are several factors that can lead to errors in the readings. These include environmental factors such as ambient temperature, rate of change of ambient temperature, and the presence of gases or steam within the field of view of the sensor. Also, when measuring reflective surfaces, the instrument must distinguish between energy radiated from the surface, and energy reflected from its surroundings.

In order to optimise the performance of IR thermometers, research into signal processing techniques which can be used to minimise or eliminate these errors is being conducted by Tim within the ECSDRG, which is headed by Dr Khaled Hayatleh. The ultimate aim of the research is to increase the accuracy and repeatability of measurements, leading to a novel high performance IR temperature sensor. This will expand the market for non-contact IR thermometry and lead to greater efficiency in processes that require reliable temperature data.



Tim Barry

## Street life, street culture

how has the urban environment shaped our everyday lives?

Dr Fabrizio Nevola, Senior Lecturer in History of Art in the School of Arts and Humanities has been awarded £49,963 as part of the Arts and Humanities Research Council's £5.5 million strategic research programme *Beyond Text: Performances, Sounds, Images, Objects*. Dr Nevola will be joined by Dr Igea Troiani, Senior Lecturer in Architecture in the School of the Built Environment under the direction of Professor Evelyn Welch at Queen Mary's, University of London.

The Street Life and Street Culture network will involve art historians, architectural historians and theoreticians, planners, artists and critics, film-makers and an actor, who will create an interdisciplinary, international community drawn from the UK, USA and Europe. It will consider how streets shaped and informed the daily lives of urban communities in the past, and how this historical experience relates to contemporary realities. Central themes to the early modern urban experience and to today will be discussed, such as gossip, the circulation of news and street sounds in relation to public spaces across time.

A further two themes will focus on the relationship between time-based processional movement and permanent urban change; and how the street is a site for urban protest or the policing of violence. Events will take place in the UK, Italy and the USA.



# Parenting in England c.1760-1830

## Did Sensibility and Romanticism change parenting?

Dr Joanne Bailey, History Department, School of Arts and Humanities, has been awarded £35,274 from the Leverhulme Trust, £5,655 from the British Academy, and £800 from the Scouloudi Foundation, to fund her new research project on 'Parenting in England c.1760-1830: gender, identity and generation'. One over-arching question stands at its heart: what did the two generations of men and women born and reaching adulthood between 1760 and 1830 feel and think about being parents?

Two profound cultural shifts, Sensibility and Romanticism, influenced the ways in which parenting was constructed and experienced in England c. 1760-1830. It is well known that both shaped ideas about the nature of childhood in an increasingly child-oriented society. Sensibility's impact is traceable from the 1760s, perhaps best represented by Jean Jacques Rousseau's *Emile, ou de l'éducation* [1762], which gave prominence to the notion of childhood innocence. Like John Locke, Rousseau envisaged childhood as a distinctive phase requiring specialised

treatment. But in his recommendation of an enforced upbringing amongst natural surroundings, which protected the maturing child from the hazards of sophisticated civilisation and adult authority, he parted company from the Lockean inculcation of reason for under twelves. Education should be a form of play, learning from activities not people. Romanticism, gathering force across Europe at the turn of the eighteenth century gave further depth to this conceptualisation of childhood by associating it with divinity, awarding it redemptive powers over adults, and by exploring its place in forming the unique adult self. This project will show how these cultural movements also entailed a re-imagining of parenting that was perhaps equally profound.

The project will be structured around three themes. Firstly, it will consider the relationship between gender, ideals, and the experience of fatherhood and motherhood. This will include parenting as both individual experience and as public discourse. The second theme will be the construction of the

self as a parent and through being parented. Here people's memories of their parents and men's and women's descriptions of their own feelings and behaviour as parents will be of interest. Other forms of parenting, such as surrogate and grandparenting will form a third strand for investigation, as will the transfer of social cultural values across generations. The monograph that will result from this research is under contract to Oxford University Press.

Dr Joanne Bailey



# What do cancer patients need from primary care?

## A newly funded study will shed light on how to optimise care and support for cancer patients and their families.

Dr Eila Watson, HRH Prince Sultan Chair in Supportive Cancer Care in the School of Health and Social Care has successfully won almost £60,000 from Macmillan Cancer Support for an 18 month project which commences in October 2008. The study is led by Oxford Brookes University, in collaboration with researchers from the Universities of Oxford, Birmingham and London, and East Berkshire Public Care Trust, and has significant user involvement, including two members of the Thames Valley Cancer Network User Group on the project management group.

The main aim of the study is to explore the role of primary care in caring for and supporting patients with cancer and their families. Limited evidence is available on what type and frequency of follow-up care and support is effective in meeting the needs of patients following a diagnosis of cancer, and also on how to provide support to family caregivers. Reports indicate that patients see an important role for primary care;

however their role is very poorly defined at present. Current recommendations are that practices establish a cancer register and conduct a review with new cancer patients within six months of diagnosis. However, this recommendation is not evidence-based and it is not known to what extent practices are implementing the review. Information is needed about the nature and scope of reviews that are being implemented, and whether or not they are perceived as useful by patients. Furthermore, this recommendation does not address the potential needs of family members or the needs of patients and their families in the period following a recurrence of cancer.

The study will interview patients and their family members from across the Thames Valley area and will describe their experiences of GP/Primary Care Team involvement in their care in the first three years following a cancer diagnosis or a cancer recurrence, and their views on the optimal role for the primary care team. The findings from the interviews will be translated into a series of recommendations/strategies for the involvement of primary care in the care and support of cancer patients and their families following diagnosis. These recommendations/strategies, together with a

summary of the experiences and views of patients and their families will be presented to each of the participating general practices, and their views on implementing the findings will be sought.

It is hoped the study will highlight areas of unmet need as well as those aspects of primary care provision which have worked well or otherwise. By so doing, the study will provide much-needed evidence to feed into policy reviews, and through this to improvements in the quality of care received by cancer patients and their families.

Dr Eila Watson



# News in brief

**Dr Fabrizio Nevola**, School of Arts and Humanities, won the 2008 RIBA Sir Nikolaus Pevsner International Book Award for Architecture for his book *Siena: Constructing the Renaissance City* (Yale UP, 2007). Siena, one of the major artistic centres of medieval and Renaissance Italy, is renowned for its striking architecture and its beauty as a city. This book is the first to focus on Siennese architectural and urban history during the 15th and early 16th centuries.

**Professor Margaret Harris**, School of Social Sciences and Law, has been awarded £80,272 from the Economic and Social Research Council (ESRC) in support of her project on 'Reading attainment and reading strategies in deaf adolescents with a cochlear implant'. The project will examine the claim that cochlear implantation (CI) – the insertion of a string of electrodes into the cochlear that enable speech processing – leads to higher levels of attainment in literacy. The study will focus on reading ability among adolescents, since the key issue is whether the reported early successes in literacy are sustained until school-leaving age. Comparisons will be made between CI users implanted early in life and those implanted later, and also between CI users and users of conventional hearing aids.

**Dr Rajat Gupta**, School of the Built Environment, has been invited to sit on the London 2012 Carbon Management Strategy Technical Advisory Group run by London Organising Committee of the Olympic Games (LOCOG) and Paralympic Games. The objective of the advisory group is to provide independent guidance to LOCOG and any other organisations involved in the commissioning and delivery of a Carbon Management Strategy (CMS) for the London 2012 Olympic and Paralympic Games. Dr Gupta has also been invited to sit on the British Standards Institution (BSI) Shadow Committee for CEN TF-190: Energy Efficiency and Savings Calculations. This committee will suggest future methodologies for energy and carbon calculations for buildings and organisations.

**Professor Jeya Henry**, School of Life Sciences, has been appointed to the global panel that will set world guidelines on fat consumption for the next decade. Professor Henry is one of two experts from the UK invited to the consultation being held jointly by the Food and Agricultural Organisation of the United Nations and the World Health Organisation. A dozen scientists will meet to synthesise current literature from around the world and come out with updated recommendations on daily nutritional needs. The consultation is part of a rolling programme where guidelines are set every 15 years or so for recommended consumption levels of fats, proteins and energy.

WIRED, an ongoing collaborative project devised by **Dr Paul Whitty** in the Sonic Art Research Unit (SARU) in the School of Arts and Humanities will see the release of works from the project with harpsichordist Jane Chapman by NMC, the most important contemporary music label in the UK. WIRED is the creation of a series of new works for the harpsichord in a variety of combinations with contact microphones, live electronics and MAX-MSP, alongside analogue and digital signal processors. **Dr Paul Dibley** and Paul Whitty have both created new works for the project as have composers from Keele University, University of Sussex, and the Guildhall School of Music & Drama.

Members of the Business School attended the third International Conference on Services Management at Penn State, The Pennsylvania State University. The conference was co-organised by the Business School, Pennsylvania State University and the International Institute of Management in Technology in India. **Professor Mark Saunders** delivered a keynote speech on 'Improving service relationships using the service template process: from defining problems to owning solutions' and **Dr Levent Altınay**, **Dr Yuksel Ekinci** and **Dr David Bowen** all presented papers. The fourth International Conference on Services Management will be hosted by the Business School in May 2009 and will address cultural and socio-economic complexities of the internationalisation of service organisations and their social responsibilities to different stakeholder groups.

**Dr Ian Davey-Wilson**, School of Technology, has been awarded €10,000 from the EU Leonardo programme to develop a postgraduate module on teaching enterprise in Engineering in collaboration with colleagues in Turkey and Austria.

**Dr John Runions**, School of Life Sciences has recently been elected as a member of the Cell Biology Committee of the Royal Microscopical Society.

**Dr Tom Betteridge**, School of Arts and Humanities has been awarded an Arts and Humanities Research Council (AHRC) grant of £243,513 for a project examining the Court Drama of the Reign of Henry VIII. The project includes restaging John Heywood's *The Play of the Weather* at Hampton Court Palace in 2009. *The Play of the Weather* is the perfect play to perform at Hampton Court because it combines the formality of a court drama with the bawdiness and rough humour that was an essential part of Henry's Court. 2009 will be the anniversary of Henry VIII's accession in 1509 and the project will form an important part of the events planned to mark the occasion.

**Professor Magnus Ryner**, School of Social Sciences and Law, has been shortlisted for the Annual Book Prize of the International Political Economy Group (IPEG) of the British International Studies Association (BISA). The book *Europe at Bay: in the Shadow of US Hegemony* was co-authored with Professor Alan Cafruny, Hamilton College, USA. The winner will be announced in December 2008.

**Dr Pritam Singh**, Business School, has been offered a Visiting Professorial Fellowship by the Centre for Contemporary Studies, Jawaharlal Nehru University (JNU), Delhi. Jawaharlal Nehru University (popularly known as JNU and named after independent India's first Prime Minister Jawaharlal Nehru) is a world renowned university and it is in the *Times Higher's* league table of top world universities. Dr Singh plans to use this opportunity to develop his ongoing research work on federalism and development. His recent book *Federalism, Nationalism and Development: India and the Punjab Economy* (Routledge 2008) develops a template to analyse regional unevenness in federal entities. He intends to develop his work by focusing on the analysis of the impact of globalisation on shaping regional development and nationalisms in general and South Asia in particular.

**Dr Elizabeth Hurren**, School of Arts and Humanities has received a £5,235 Wellcome Trust Broadcast Award. The award, which is the first of this kind to be awarded to medical humanities, will fund the scripting and filming of a docudrama taster on the history of childbirth for Channel 4. If it is successful, the taster could be a precursor to a series of programmes entitled *Every Body*, with each programme in the series looking at different aspects of the history of the body and linking history to current scientific, ethical and moral developments.

**Professor Martin Haigh**, School of Social Sciences and Law has been awarded Senior Fellow status by the Higher Education Academy's Senior Fellowship Committee in recognition of his contributions to higher education.

The Business School's Centre for Creativity and Enterprise Development, led by **Richard Beresford**, has won funding of £200,000 to undertake a three year project for the National Endowment of Science, Technology and the Arts (NESTA) and the South East England Development Agency (SEEDA) aimed at helping build the capacity and capability of FE colleges to foster a culture of enterprise and innovation in young people. Within this broad remit, central objectives of the project are to profile the current capacity and capability of colleges in the South East Region in this regard, to undertake a programme of

activities aimed at increasing them, and to evaluate the effectiveness of the programme in generating these outcomes.

**Dr Dai Griffiths**, School of Arts and Humanities, was appointed a Fellow of the Mannes Institute for 2008 during a ceremony held at the Eastman School of Music in Rochester, New York in June. The Mannes Institute for Advanced Studies in Music Theory is an exclusive musical think-tank and offers distinguished professional music scholars from around the world a unique opportunity to gather together in a setting outside of the conventional conference format to teach, challenge, and learn from each other. This year's Institute explored the dynamic fields of jazz and popular music in depth from a variety of perspectives.

**Professor Laura Spira**, Business School, has been invited to co-chair, with Professor Martin Hilb of St Gallen University, Switzerland, the fifth European Institute for Advanced Studies in Management workshop on corporate governance in Brussels in November 2008.

**Dr Christiana Payne**, School of Arts and Humanities, has received an Arts and Humanities Research Council (AHRC) Research Leave Grant for £17,549 to complete a book on the Pre-Raphaelite landscape painter John Brett (1831-1902), and to write the catalogue for an exhibition of his portraits and figure drawings. The exhibition is scheduled to take place at the Barber Institute of Fine Arts, University of Birmingham, and the Fitzwilliam Museum, Cambridge, in summer/autumn 2010. John Brett has long been recognised as the most important landscape specialist in the Pre-Raphaelite movement, but insufficient attention has been paid to his religious and scientific interests, and his portraits and drawings are known only to a few scholars.

# Diary

October – December 2008

## Wednesday 22 October 2008

### Public Lecture – Edith Wharton: a life in books

Janet Beer, Vice-Chancellor, Oxford Brookes University

Main Lecture Theatre, Gipsy Lane

18:00 – 19:30

Book online at [www.brookes.ac.uk/publiclectures](http://www.brookes.ac.uk/publiclectures),

or contact the Events Office on 01865 484864, email [events@brookes.ac.uk](mailto:events@brookes.ac.uk)

## Wednesday 29 October 2008

### Public Lecture – Five fatal money mistakes – and how to avoid them

Danby Bloch, Pro-Chancellor, Oxford Brookes University

Lloyd Lecture Theatre, Gipsy Lane

18:00 – 19:30

Book online at [www.brookes.ac.uk/publiclectures](http://www.brookes.ac.uk/publiclectures),

or contact the Events Office on 01865 484864, email [events@brookes.ac.uk](mailto:events@brookes.ac.uk)

## Wednesday 12 November 2008

### Public Lecture – The inspiration behind the Eden Project and the Lost Gardens of Heligan

Tim Smit, Chief Executive and co-founder of the Eden Project

Main Lecture Theatre, Gipsy Lane

18:00 – 19:30

Admission is by ticket only.

Book online at [www.brookes.ac.uk/publiclectures](http://www.brookes.ac.uk/publiclectures),

or contact the Events Office on 01865 484864, email [events@brookes.ac.uk](mailto:events@brookes.ac.uk)

## Wednesday 26 November 2008

### Applying for research funding - why is this important?

Boardroom 1, Headington Campus, Gipsy Lane

12:30 – 16:00 (lunch provided)

To book a place, please contact [louise.wood@brookes.ac.uk](mailto:louise.wood@brookes.ac.uk)

## Wednesday 3 December 2008

### Public Lecture – Knowledge-based digital prototyping of construction projects

Professor Joe Tah, Professor of Project Management, School of the Built Environment

Lloyd Lecture Theatre, Gipsy Lane

18:00 – 19:30

Book online at [www.brookes.ac.uk/publiclectures](http://www.brookes.ac.uk/publiclectures),

or contact the Events Office on 01865 484864, email [events@brookes.ac.uk](mailto:events@brookes.ac.uk)

## Tuesday 9 December 2008

### Political and sociological perspectives: international contexts

Part of the 'Changing notions of the human subject' series of seminars

Harcourt Hill

For further information and to book a place please contact [mpye@brookes.ac.uk](mailto:mpye@brookes.ac.uk)

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Details of research supervisory and research student training are available on the Graduate Office website: [www.brookes.ac.uk/research/Graduate/Graduate.html](http://www.brookes.ac.uk/research/Graduate/Graduate.html)

Details of research seminars taking place in each of the Schools are available at: [www.brookes.ac.uk/res/news/seminars](http://www.brookes.ac.uk/res/news/seminars)

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Published by Oxford Brookes University Corporate Affairs Directorate.



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