Changes to out of hours arrangements
The process for obtaining out of hours access to Kilburn will be changing. We have reviewed arrangements and have determined that significantly better induction is required.
During this week we will be introducing a new system for students along with some changes to hours and access. We will then review arrangements for staff.

Announcements and news

Uli Sattler – member of Academia Europaea
Congratulations to Uli Sattler on becoming a member of Academia Europaea! The Academia Europaea is a European Academy of Humanities, Letters and Sciences, where membership is by invitation only. Invitations are made only after peer group nomination, scrutiny and confirmation as to the scholarship and eminence of the individual in their chosen field.

Associate Dean for Teaching and Learning
Dr Danielle George has been offered the position of Associate Dean for Teaching and Learning, following on from her acting role as Associate Dean.

ECU study - call for Academic participants
Equality Challenge Unit and University of Southampton are conducting a study exploring the factors that influence UK/British academics moving overseas to pursue their careers, and they are currently running a survey as part of the study.

Previous research has indicated that differences in the structures, cultures and processes in higher education in different countries may encourage some individuals to move overseas and they are hoping to establish what can be done to retain academics in the UK.

The survey is open until Friday 28 February to all academics with British nationality or citizenship (both currently in the UK and overseas) and can be accessed through this link: www.isurvey.soton.ac.uk/9599
If you have any questions please contact Dr Kalwant Bhopal.

New funded projects at NaCTeM
Supporting Evidence-based Public Health Interventions using Text Mining
MRC
PI: Sophia Ananiadou; CI: John McNaught
36 months
Funding £637,147

This project will address current limitations in Evidence-based public health (EBPH) interventions by exploring new research methods which combine text mining and machine learning to produce novel search while screening tools for public health.

We will investigate novel approaches to EBPH reviewing based on text mining-based unsupervised methods for the discovery of direct and indirect associations to support a dynamic and multi-dimensional relevance required for public health reviews. In particular, it will build on distributional semantics methods to improve term and
document similarity measures by including contextual information in a novel way. Novel descriptive clustering algorithms will be developed that will use these measures to group documents, to analyse their topics to yield meaningful cluster labels and to simultaneously yield high quality document and label clusters. The project will also produce new ranking algorithms to order and visualise meaningful associations in an interactive manner, suitable for EBPH reviewing. This is a collaborative project with NICE and the University of Liverpool.

**Mining the History of Medicine**  
**AHRC, Big Data Call**  
**PI: Sophia Ananiadou; CI: John McNaught**  
15 months  
**Funding:** £258,908

This project, a cross-disciplinary collaboration between the National Centre for Text Mining (NaCTeM) and the Centre for the History of Science, Technology and Medicine (CHSTM) at the University of Manchester, seeks to demonstrate the potential of text mining in medical history. To do this, firstly an asset will be created out of two very large, long-running digital sources, the British Medical Journal (BMJ) (1840 - present) and the London-area Medical Officer of Health (MOH) reports (1848-1972), by applying text mining techniques to enrich these data with semantic annotations.

An important aspect of this work is to build tools to identify and record terminological variation and semantic shift over time, via construction of a temporal terminological inventory from the archives. Then, a semantic search system will be developed to help historians in broadening and deepening their work to ask 'big' questions that cover long periods, without losing sensitivity to changes in terminology and meaning.

The resulting asset and tools will be used and evaluated in two case studies, exploring the modern epidemiological transition and the creation of a medical surveillance culture, two massively important and interrelated changes in British health experience, where many questions remain unanswered. The methods and results of the case studies will serve as concrete examples of how such an asset and tools can be used.

The project plans to extend its impact to the following sectors: public health, public policy, publishing, media and libraries, with a view to ensuring sustainability and wider uptake of methods and technologies.

**Research Intranet pages updated**  
The School's [research intranet pages](#) have been updated for 2014. Please take a look and send any comments to Sarah Chatwin.

**Events**

**International Centre for Social Media Research: Workshops**  
**20 Jan 14**

Events:  
09 January 2014, 11-17:00, Atlas 1&2, Kilburn building  
20 January 2014, 10-17:00, Atlas 1&2, Kilburn building  
Manchester Informatics are running 2 workshops, which will help to inform a bid for an ESRC funded International Centre for Social Media Research. The first workshops will cover Technical Challenges such as data management, tools and methods, including data analytics and visualization; the second, Substantive Themes.  
Registration required.

**Horizon 2020 Cross Disciplinary Information Day**  
**27 Jan 14**

• Event: 27 Jan 2014, 9.30-3pm, Kanaris Lecture Theatre, Manchester Museum
Alexa Mills, National Contact Point for the Horizon 2020 Social Sciences and Humanities (SSH) Programme, and Laura Mora Diaz, National Contact Point for H2020 ‘Science With and for Society’ Programme (both ESRC) are coming to Manchester to discuss the details of the recent calls. There will also be sessions covering Research Infrastructures (including e-infrastructures) and Legal and Financial issues. Both Alexa and Laura are in a position to give us more details and insider knowledge on the requirements of the individual calls. **These programmes are multidisciplinary - there may be opportunities for researchers outside the obvious areas in the Faculty of Humanities.**

**Agenda and registration** (required).

### Virtual Reality Therapies for Phantom Limb Pain 29 Jan 14
Dr Steve Pettifer
14:00, Lecture theatre 1.4, Kilburn building

Phantom Limb Pain is a debilitating condition that affects a significant percentage of patients after loss of an arm or leg. These patients experience chronic pain and other unpleasant sensations in the missing limb, and the pain resists treatment. Previous research has demonstrated that pain levels can be reduced in some patients when they are immersed in a virtual environment that presents a 3D computer graphics visualisation of their missing limb, the movements of which are controlled by sensors attached to the remaining limb. In this seminar I will cover some of the recent theories on the cause of Phantom Limb Pain, and look at some of the Virtual Reality-based intervention that we’ve been developing using off-the-shelf hardware.

### Horizon 2020 Information Session on Marie Curie Innovative Training Networks 30 Jan 14

- **Event:** 30 Jan 2014, 12-2pm, Michael Smith Lecture Theatre

The call for [Marie Curie Innovative Training Networks](#) under Horizon 2020 are now out. We are running an information session on how to apply for an ITN – the session will provide an overview of the scheme and the key issues relating to planning, writing and submitting proposals to this call. The session is for both **administrative AND academic staff.** Please email Claire Faichnie to register.

### Tyndall Manchester seminar 30 Jan 14
**Globalisation and Sustainable Development: International Transport and Sustainable Development**
Jonathan Köhler of the Fraunhofer Institut
16:00, room C1, George Begg Building, Sackville Street

If you wish to attend or have any questions please contact Amrita Sidhu.

### Memristor, Hodgkin-Huxley and Edge of Chaos 14 Feb 14
Leon Chua
14:15, Lecture Theatre 1.3, Kilburn building

This lecture shows that, from an information processing perspective, brains are made of memristors. In particular, it will resolve two mystifying anomalies of the classic Hodgkin-Huxley Neuron Model. It will also identify the elusive nonlinear dynamical mechanism which gives rise to the brain's action potential to be the same as the heretofore unresolved mechanism which gives rise to Alan Turing's morphological phenomenon, as well as Stephen Smale's reaction-diffusion equation paradox, namely, a sub-critical Hopf bifurcation emerging from the "Edge of Chaos", a conceptual pearl extracted from the new "Third Law of Thermodynamics", namely, the "principle of local activity".

### Heidelberg Laureate Forum 28 Feb 14
Closing date: 28 Feb 2014
21-26 Sep 2014, Heidelberg

Applications are invited from young researchers for the [2nd Heidelberg Laureate Forum (HLF)](#). The HLF Foundation is looking for outstanding young mathematicians and computer scientists from all over the world who would like to get the chance to
personally meet distinguished experts from both disciplines and find out how to become a leading scientist in their field.

The Forum will bring together winners of the Abel Prize and Fields Medal (mathematics), as well as the Turing Award and Nevanlinna Prize (computer science) for an inspiring week in Heidelberg. There are 100 spaces available for each discipline.

**Westminster Health Forum Keynote Seminar**  
1 Apr 14  
Central London  
Timed to follow the release of NHS England’s 10 year technology strategy *Unleashing the Power of People*, due in March 2014, this seminar will provide an opportunity to consider next steps for IT in the NHS. The government and NHS organisations will invest £1 billion in IT over the next 3 years as part of the ‘Safer Hospitals, Safer Wards’ Technology Fund, so the role of new technologies in providing improved patient care will be considered, including utilising informatics in the delivery of health and social care services.

Planned sessions focus on challenges in increasing access to electronic patient records, and supporting the workforce in engaging with information systems towards the delivery of a paperless NHS by 2018. Many high-level NHS individuals will be in attendance.

**Registration** required (£190 plus VAT) – remember funding support from the School may be available. Contact Sarah Chatwin or Robert Stevens for more details.

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**Funding Opportunities**

**Research Support Office**

Please contact us through researchsupportcsm@manchester.ac.uk.

There is information about support for grant writing, submission and successful examples at http://staffnet.cs.manchester.ac.uk/reso/ and through EPS. The EPS blog The Word contains features News, Events and comment relevant to Postgraduate Researchers, Research Staff and Supervisors or PIs.

**Important: Changes in EU Funding Opportunities**

Information sessions and draft documents are becoming available for Horizon2020 (the successor of FP7 EU programme). EU research funding is important for the School so please keep an eye-out for information – calls are expected to open at the end of the year.

**Reminder - H2020 drafts available**

EU funding-related documents are placed by the University’s EU team at: http://documents.manchester.ac.uk/search.aspx  
The easiest way to find these documents is to search using the keyword: ‘Horizon 2020’

A great resource recommended by the ICT National Contact Point is http://www.ictic.org/, which also provides handy overview documents.

**Tools and services for synthetic biology**  
15 Jan 14  
Registration: 8 January 2014  
Closing date: 15 January 2014  
The Technology Strategy Board (TSB), BBSRC, EPSRC, and the Welsh Government are investing up to £3.8m in business-led collaborative projects to develop innovative tools and services for the UK synthetic biology industry. Between £100k and £350k is available per project (up to 1yr).

**EPSRC - NSFC Call for Collaborative Research between UK and China**  
20 Jan 14  
Register intent to submit: 16:00 20 Jan 2014  
Closing date: 16:00 19 Feb 2014
Collaborative projects between researchers from the UK and China in partnership with the National Natural Science Foundation of China (NSFC) are requested in the area of ‘Sustainable Materials for Infrastructure’. Up to £3M is available across the theme areas from the EPSRC Engineering Theme (including development of novel holistic sustainable pathways for recovery and retention of value) with matched equivalent resources from NSFC (up to 2M RMB per project). It is expected that up to 6 proposals will be funded.

Proposals should include leading UK researchers wishing to either develop contacts with leading researchers from NSFC institutes in China or to deepen existing collaborations.

**UK-China partnerships in sustainable manufacturing** 22 Jan 14
- Briefing event: 22 Jan 2014
- Closing date: 26 Mar 2014

EPSRC, the Technology Strategy Board and China's Ministry of Science and Technology (MOST) are inviting expressions of interest for collaborative R&D projects (involving both a UK and Chinese applicant) that make manufacturing processes more sustainable. Funding of £500-800k is available for 1-2 yr projects. The aim of this competition for academics is to work with academic or industrial partners in China. Attendance at the **Briefing event** is strongly recommended – [webinar](#) also available.

**End Use Energy Demand-Working with the Centres** 06 Feb 14
- Closing date: 4pm 06 Feb 2014

RCUK Energy Programme is requesting **Expressions of Interest** to encourage researchers to work with the centres. Two types of proposal are invited:
1. Smaller Standard Research proposals (up to £300k) for individuals at an early stage of their career to work with the [DEMAND centre](#) e.g. on trends in energy demand; ICT-use in increasing operability, control and visibility.
2. Standard Research Proposals (up to £600k) to work with the other [EUED Centres](#)

**Research Institute in Trustworthy Industrial Control Systems – Phase 2** 13 Feb 14
- Closing date: 13 Feb 2014

EPSRC and CPNI are inviting proposals for research as part of the recently-announced 'Research Institute for Trustworthy Industrial Control Systems (Cyber Security)’. There’s an indicative total budget from the sponsors of £1.6M over 3 years for an expected 4 projects. Funds are available for substantial research projects to run alongside and complement that of the Phase 1 project [Research Institute in Trustworthy Industrial Control Systems](#). N.B. Submission into Phase 1 is not a pre-requisite for submission into Phase 2.

**Pfizer Inflammation Competitive Research Programme** 26 Mar 14
- Closing date: 26 Mar 2014

Pfizer have launched the third cycle of their ‘Inflammation Competitive Research Programme’ (I-CRP) for the funding of research in the field of inflammation and this is now open to applications. Awards of £50-100k are available for projects between 12 and 18 months. This programme aims to inspire high-quality and innovative research in the field of inflammation to further the understanding of disease and contribute to excellence in patient care. Areas of interest for this call include Imaging, Early diagnosis and treatment, Epidemiology and Patient-recorded outcomes.

**Prize and Award Opportunities**

**Philip Leverhulme Prizes 2014** 14 May 14
- Closing date: 4pm 14 May 2014

The [Philip Leverhulme Prizes](#) recognise the achievement of early career researchers whose work has already attracted international recognition and whose
future career is exceptionally promising. The prize scheme makes up to 30 awards of £100k a year, across a range of academic disciplines. The broad 2014 subject areas are:

- Biological Sciences
- History
- Law
- Mathematics and Statistics
- Philosophy and Theology
- Sociology and Social Policy

Nominations will be considered irrespective of a nominee’s departmental affiliation. Please contact Robert Stevens asap if you have a nomination in mind.

### Featured Research Outcomes

**Did you know…** papers featured in the newsletter also go on display in the Kilburn Building (outside 2.7)? Send your new publications to Robert Stevens so that more people get to know about your research.

#### Transatlantic Digging into Data Challenge 2013

NaCTeM has been awarded a grant on "Mining Biodiversity" as part of the transatlantic Digging into Data challenge 2013, which targets how computational techniques can be applied to big data in the humanities and social sciences.  

http://www.diggingintodata.org/Home/AwardRecipientsRound32013/tabid/201/Default.aspx

Overall, 14 teams representing collaborations from Canada, US, UK and the Netherlands were successful in this round which is the third in the series since 2009. NaCTeM's project is one of only four UK projects to have been awarded in this round: http://www.jisc.ac.uk/news/transatlantic-digging-into-data-challenge-2013-winners-announced-15-jan-2014

NaCTeM is collaborating with the Biodiversity Heritage Library (BHL) and the Smithsonian Institute in the US and the University of Dalhousie (Visual Text Analytics Research Laboratory and Social Media laboratory) in Canada with the aim to transform BHL into a next generation social digital library resource. The partners will combine text mining with interactive visualisation techniques and crowdsourcing, to provide access to a fully interlinked and indexed BHL via the creation of a semantic search system. A social media environment will allow different users to interact and collaborate on science and public education, raising awareness of the changes in biodiversity over time.

PI: Ananiadou  
CI: Navarro  
Funders: AHRC, ESRC, Innovation.ca, Institute of Museum and Library Services, JISC, NEH  
Funding: £98,922  
Duration: 18 Months

#### Enhancing eScholar using Text Mining

NaCTeM has been awarded two grants to enhance eScholar.

1. The first award will identify interdisciplinary links in eScholar based on the analysis of semantic document clusters. This is a collaborative project between NaCTeM and the University of Manchester Library.  
Funder: UMRI Pump Priming Programme  
Funding: £42,548  
Duration: 6 months
2. The second award will support search for EPS PhD students in eScholar using faceted search based on semantic types and technical terms.

Funder: EPS Strategic Research Fund
Funding: £10,000
Duration: 3 months
PI: Sophia Ananiadou

**Best paper success for one of our students**

The following paper, based on the work of a PhD student in Computer Science, Aqeel Al-Naser, was awarded Best Paper of the International Conference on Information Theory and Applications (IVAPP/VISIGRAPP), Lisbon, Portugal January 5-8 2014

Aqeel Al-Naser, Masroor Rasheed, Duncan Irving and John Brooke, ”Fine-Grained Provenance of Users’ Interpretations in a Collaborative Visualization Architecture”. **Systems Biology to Identify Molecular Targets for Vascular Disease Treatment**

Robert Stevens, Andy Brass
Funding body: EC
Award amount: €278,660

The aim of the SysVasc project is the identification of key factors in the progression of macrovascular disease. SysVasc will develop an ambitious systems medicine approach to uncover molecular pathways involved in the progression of macrovascular disease from early stages to clinical events. Manchester’s role in this multi-site, FP7 funded project is to create knowledge management infra-structure that will allow these analyses to take place over the data generated by other partners; Manchester will also undertake some of those analyses.

**Visualising and optimising very large scale protein sequence-activity data for synthetic biology**

Steve Pettifer, Terri Atwood (CS/FLS) and Doug Kell (Chemistry)
Funding body: UMRI Pump Priming Programme
Award amount: £33k

Synthetic biology has the potential to radically reduce the cost/difficulty of creating the proteins that form the active ingredient of around a fifth of all medicines, however new tools are required to visualise/manage the data involved. This project begins the process of adapting our existing protein analysis tools for use in the domain of synthetic biology.

**EPS Faculty Strategic Fund**

The ‘Dean’s Fund’ has supported 107 out of 185 proposals this year, including success in the School. Read about SCS successful proposals in the newsletter over the next few weeks. Well done to those involved…

**Human Brain Project**

Dave Lester
Funding body: Faculty Strategic Fund
Award amount: £10,000

It is a common misconception that the Human Brain Project is a "one billion Euro Project"; in fact, so far, only €60 million has been awarded for the first two and a half years. To receive funding under Horizon2020, the consortium, along with any new partners will have to bid for further funds. The purpose of this pump priming grant is to enable travel and networking to commence on the bid documents for the next phase, a task that explicitly cannot be charged to the EU.

**Support for FPGA Hard-Core Projects**

Dirk Koch, Petrut Bogdan
Funding body: Faculty Strategic Fund
Award amount: £10,000
Thanks to a £10,000 grant from the Faculty Strategic Fund, we are able to setup a Computer Engineering Club in the School of Computer Science. This will give students access to hardware for building own (mostly FPGA related) projects. As a first outcome of this initiative, a couple of CS and EE students will start Hard-Core Projects at the end of the month (see sites.google.com/site/1uphardcore/). This includes various activities including Mandelbrot set computation, machine vision and camera-based human machine interfaces. The grant will also be used to organize hackathons.

*Have we missed something? If you have some award news that you would like us to know about please contact [Sarah Chatwin](mailto:sarah.chatwin@uni.edu).*