RESEARCH MATTERS

Celebrating research success and opportunities at the University of Wolverhampton

ISSUE 7

Tackling cybercrime through expertise and innovation

With data now considered to be one of the most valuable assets for modern society, cybercrime is a huge global problem – and so research into this complex area is more important than ever.

Increased use of smart technology brings with it increased threats of cyber-attacks and the insights and innovations of the University's Wolverhampton Cyber Research Institute (WCRI) are increasingly being called on to find solutions.

Comprising a team of more than 20 academic staff, the Institute incorporates extensive knowledge of network and communication security, artificial intelligence, big data and cyber physical systems.

Experts work collaboratively with academic, industrial and governmental organisations to support all aspects of security and privacy, and their opinions have recently been sought by national media, including the BBC, Forbes and Daily Express.

The WCRI team investigates the use of multi-disciplinary concepts to develop innovative end-to-end security solutions to close the loop of prevention, detection and recovery from security attacks, helping to improve the resilience and reliability of the critical national infrastructure and to reduce societal impact of cyber-attacks.

Members are working on several high-profile projects, one of which looks at creating innovative new technology to support large organisations in securely sharing and regulating their data.

For this project, WCRI's Dr Gregory Epiphaniou and Professor Prashant Pillai have been awarded more than £125,000 funding over three phases to develop and test their Minimum Viable Product (MVP).

Professor Pillai said: "We are in a digital economy where data is key to the smooth functionality of everything from the government to private companies.

"However, collecting and securely distributing data in a controlled manner is a growing global challenge and we are looking to find solutions which work for large businesses."

Dr Epiphaniou added that it is hoped a University of Wolverhampton spin-out could be created at the end of the process.

Cyber security research is being further strengthened by a joint venture between the University and Herefordshire Council: the new multi-million pound Hereford Centre for Cyber Security (HCCS).

The University has approved £1.5 million to contribute to the Centre as well as successfully securing grant funding of £4 million from the Marches LEP Local Growth Fund and £1.16 million of European Regional Development Fund. Herefordshire Council has approved further funding of £3.5 million.

HCCS, which will be located on Skylon Park in the Hereford Enterprise Zone, will offer high quality research facilities as well as office space for cyber businesses and advanced training facilities.

Together, WCRI and HCCS aspire to be at the forefront of tackling threats in cyberspace on a global scale.

UNIVERSITY OF WOLVERHAMPTON

Find out more about our research at: **wlv.ac.uk/research**

EDITOR'S WELCOME

The summer period was a busy one for many colleagues. On July 23, funding bodies produced the draft guidance documents on Submissions, Panel Criteria and Working Methods, and the Code of Practice for REF2021.

A significant change has been the proposal to re-introduce individual staff circumstances, and there is much debate about this in the sector. Our institutional response to the consultation on the draft documents has been discussed in various fora and I am grateful for the input that colleagues have provided. The final guidance and criteria are expected in January 2019 and we will update you on the outcome. Meanwhile, we will be launching a number of training sessions on REF2021 to help familiarise colleagues with the new guidance and to fine-tune our submission. Find out more at: **wlv.ac.uk/ref**

August 2018 saw the introduction of the new doctoral loans. Colleagues in Registry, the Doctoral College and the faculties did much work behind the scenes to ensure our readiness. Enrolments to our doctoral programmes have already increased compared to the same time last year. If you have any questions about the new loans, please contact the Doctoral College or faculties' postgraduate research tutors.

Early September is deadline time for many Horizon 2020 programmes, and colleagues worked hard over the summer to revise previous bids or put together

new ones. I thank you for all the hard work and I hope many will be successful.

Finally, at the recent graduations, we celebrated a number of internal promotions. Many congratulations to:

- **Professor Meena Dhanda** – Professor of Philosophy and Cultural Politics
- **Professor Jackie Dunne** – Professor of Lifelong Learning and Skills
- **Professor Gary Hix** – Professor of Materials Chemistry
- **Professor Megan Lawton** – Professor of Learning and Teaching in Academic Practice
- **Professor Iza Radecka** – Professor of Biotechnology
- **Professor Rachel Slater** – Professor of International Development
- **Dr Niall Galbraith** – Reader in Health Psychology
- **Dr Paraskevi Goggolidou** – Reader in Molecular Genetics
- **Dr Jenni Jones** – Associate Professor in Coaching and Mentoring
- **Dr Wen Wang** – Reader in HR Management and Employee Relations

**Professor Silke Machold,
Dean of Research**
University of Wolverhampton

WORLD NUMBER ONE

University of Wolverhampton mathematicians have been ranked number one in the world for their research for the second year running.

They were officially placed first in the world for the average quality of their research in the Academic Ranking of World Universities (ARWU), also known as Shanghai Ranking, published in the summer.

The research was done by the Statistical Cybermetrics Research Group, Research Institute of Information and Language Processing (RIILP), and is categorised as Library & Information Science.

A combined ranking includes three size-related measures, placing Wolverhampton 19th in the world ranking and highest in the UK for this.

Professor of Information Science Mike Thelwall said: "We are very proud… [This] reflects the hard work and innovative research of our small but dedicated team."

The ARWU is the world's oldest university ranking system and is regarded as one of the three most influential university measures.

INTERNATIONAL WWI CONFERENCE SUCCESS

The University cemented its position as one of the world's leading centres for historical research with an international conference to mark the centenary of the end of the First World War.

The Centre for Historical Research (CHR) hosted 1918-2018: The End of the War and The Reshaping of the Century in September, which was themed on 1918 and the global significance, consequences and legacies of this watershed year.

The event drew 170 delegates and featured seven keynote speakers including Professor Laura Ugolini and Professor Gary Sheffield from the University of Wolverhampton, while 61 further speakers took part in themed parallel sessions and discussions.

The prestigious event, marking the beginning of events taking place across the world in the lead-up to the Armistice's centenary anniversary, was termed "the major World War One Conference in 2018" by an attending delegate.

University postdoctoral research fellow and organiser Dr Oliver Wilkinson said: "The event played an important role in raising new debates and interpretations about the war, and its ending, with far-reaching impacts on how the conflict will be understood and remembered."

Aftermath, a public digital exhibition focusing on issues that arose after the war for ex-services, was developed by Professor Yvonne McEwen (Honorary Researcher at the University of Wolverhampton) and held in conjunction with the conference.

The conference attracted regional and national sponsorship and was held in collaboration with the Western Front Association (WFA) and the First World War Network for Early Career and Postgraduate Researchers.

Recorded talks will be hosted for free on the WFA podcast and at: **wlv.ac.uk/chr** in coming months. For more on the conference, follow: **@1918to2018** on Twitter.

Is laughter the best medicine?

Telford Innovation Campus hosted the 18th International Summer School and Symposium on Humour and Laughter, which was a resounding success.

Academics from around the world attended the event, which was organised jointly between the Faculty of Arts and Faculty of Education, Health and Wellbeing.

The programme aimed to provide an overview of the interdisciplinary nature of humour research, by considering theory and empirical evidence, addressing special research issues, discussing findings and considering some of the applications of humour and laughter.

Topics included: modern history of assessing humour, logic in jokes,

slapstick, comedy and pain explored through an interdisciplinary arts practice; and a performance of Medieval French and English Tales.

The summer school was supported by the Cogito Foundation, Switzerland. The University's organisers Josiane Boutonnet and Dr Tracey Platt wish to thank all participants and also Mouton de Gruyter for their support and sponsorship of prizes for the best presentation awards, which were won this year by: Kassandra Pineault Savard and Oumaïma Krita.

The Four Flavours of Human Disposition

Update: Current Research Information System

A new Current Research Information System (CRIS) will be introduced to the University over the next year to support its research ambitions and vision.

One of the University's strategic goals is to transform lives through research, which it continues to do through its world-leading efforts, as recognised by the most recent Research Excellence Framework (REF).

One area that the University is aiming to improve is the access and availability of its publication data, which will make future REF submissions much easier and allow greater control and visibility over its research outputs.

Working alongside WIRE, the current repository for the University's research outputs, the new system: 'Elements', from Symplectic, will further the University's capability in reporting,

tracking and enabling its research efforts.

Following a rigorous procurement process, 'Elements' will bring a host of advantages to our research operations going forward: reducing the amount of manual data inputting, allowing researchers better controls over their research profiles, and supporting Open Access compliance and assessment exercises, including REF.

The implementation comes as part of the Digital Campus transformation programme which sees £30 million investment in the University's operations and aims to maximise opportunities through knowledge, innovation and enterprise.

Work to embed the system will continue throughout 2018 and it will be available for use in March 2019, with training to follow.

Find out more about our research at: **wlv.ac.uk/research**
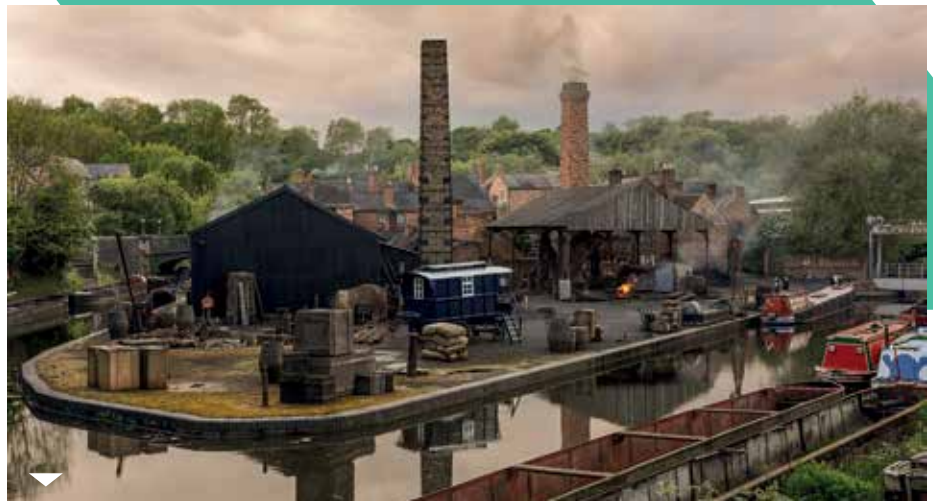
New book examines concepts of 'filth' and 'dirt'

Dr William Pawlett, senior lecturer in Media, Communications and Cultural Studies, is exploring concepts of dirt and impurity for a new book.

Dr Pawlett's work was recently publicised in humanities journal Theory, Culture and Society. His latest research examines why some things, and some people, are treated like dirt, and looks at the difference between 'dirt' and 'filth' in society.

He said: "In a sense, we prize and even venerate the filthy, as well as being somewhat afraid of it, whereas we generally eliminate and reject the dirty. It is as if filth and dirt exist in two different worlds, in religious terminology the world of the sacred, and the world of the profane."

EXPLORING THE SMELLS OF THE BLACK COUNTRY

The University secured over £2,000 funding to conduct pioneering research into the past and present smells of the Black Country.

In partnership with Black Country Living Museum, Wolverhampton Art Gallery and the Black Country Chamber of Commerce, the University undertook this exciting project during two community research events.

Snidge Scrumpin' was held at Black Country Living Museum and Wolverhampton Art Gallery as part of the Being Human Festival, the only national festival of the humanities in the UK.

The events, themed around 'origins and endings', were selected to be part of Being Human by the festival organisers, the Arts & Humanities Research Council, the British Academy, and the School of Advanced Study, University of London.

Sebastian Groes, Professor of English Literature in the School of Humanities, said: "Smell is unique because it has the ability to take us right back to our childhood. Snidge Scrumpin' maps the specific smells that belong to the Black Country, from Banks's Brewery's hoppy stink to groaty pudding and spicy curry."

Snidge Scrumpin' is a pilot project for nationwide research into the creation of a UK map of smell and memory. In Black Country dialect, 'Snidge' means 'nose' and 'Scrumpin'' is 'foraging'.

EU PRAISE FOR INNOVATIVE ICT PROJECT

A project led by the University to develop innovative ways of using technology in education has been hailed as a success story by the European Commission.

The Living Schools Lab (LSL) created a network of primary and secondary schools of more than 500 teachers across 12 European countries, with 15 partners, to showcase and demonstrate best practice and bridge technological skills gaps.

It promoted a whole-school approach to ICT use, scaling up best practices and supporting professional development opportunities for teachers.

LSL was identified by the European Commission's Innovation Radar, which highlights excellent innovations in EU-funded research and innovation framework programmes.

Project lead investigator Diana Bannister MBE, Assistant Director of Pedagogic Partnerships and Head of Postgraduate Taught Provision in Education, visited schools across all 12 countries and kept a blog of her visits, attracting over 250,000 views during the course of the project.

She also developed a common framework for the teachers to use to support their school vision and professional development.

Find out more about our research at: **wlv.ac.uk/research**