

RESEARCH MATTERS

Celebrating research success and opportunities at the University of Wolverhampton

ISSUE 8

Professor Darling reflects on a successful research career

After a long and fruitful research career, renowned neuro-oncologist Professor John Darling has retired from the University.

He has spent over 40 years in higher education, including 17 years with the University of Wolverhampton, joining as a Professor of Biomedical Science before undertaking various senior roles.

Professor Darling was instrumental in establishing the Neuro-oncology Research Centre, a leading Centre set up to identify the genes that trigger the toughest brain tumours and develop new forms of chemotherapy to attack them.

As a leading figure in the field of brain tumour research, the work he has undertaken alongside his team has contributed to this under-funded cancer gaining a greater profile and attracting more funding for further research.

"Working with Brain Tumour UK has been a highlight of my career and it has been very satisfying developing the work of the Research Centre. The problem of funding is

not solved, and the charities must continue to work hard to raise money, but significant strides have been made," he said.

Professor Darling said that other career highlights included the University achieving its best REF results in 2014 while he was Dean of Research, as well as watching the research landscape change in a positive and progressive way.

"When I joined, research was something of a minority activity, but it has grown to be firmly embedded in everything we do academically across all faculties. However, you can't do research if you don't have the infrastructure in which to do it and I would like to acknowledge the role of professional services within the University who support our research activity," he said.

"I have very much enjoyed my time with the University of Wolverhampton and will



miss my colleagues and hearing all the news. The University is a fine institution with a lot of good people and I have no doubt that the future for research here is very bright."

Professor Darling has not, however, waned in his passion for research or the University and will continue to be active as an Emeritus Professor at Wolverhampton in his field of cancer research.

"After so long, it is very difficult to retire. If you still feel that you have something to contribute, then why wouldn't you carry on?"

"We are looking at interesting new compounds which could be used to treat brain tumours, as well as repurposing existing drugs for cancer research; something which is better in the short term as new drugs can take up to 25 years to be fully tested and regulated. I am very keen to carry on my research," he said.

The University community wish him all the best for the future and Professor Tracy Warr is currently acting as the Interim Director of the Research Institute in Healthcare Science and the Unit of Assessment Coordinator for UoA3.



EDITOR'S WELCOME

It probably seems quite a while ago now, but I hope you all had good Christmas vacation. The new year is certainly going to bring its challenges and opportunities.

Our REF submission is due next year, and on the 31 January 2019, the funding bodies are going to publish the final Guidance on Submissions, the Panel Criteria and Working Methods, and guidance for the institutional Codes of Practice.

Our mock REF submission is almost complete, and the constructive feedback we have received from the external assessors is feeding into improvements that the Units of Assessment are making. Institutionally, we will be providing further support for colleagues developing Impact Case Studies through the appointment of Impact Officers funded through our Research Investment Fund.



We have started drafting our Code of Practice and will launch the consultation after the final guidance is published. I would also like to remind colleagues of the REF Open Access requirements for in-scope outputs (journal articles and conference papers), as failure to deposit in WIRE within 3 months of acceptance may mean we cannot submit that output. Please contact Emily Clarke in the Library if you have questions.

As you will have seen from the media coverage, the uncertainties over Brexit are continuing. Until the UK

leaves the European Union, we still fully participate in all EU-funded programmes. Many colleagues have taken up this opportunity and in early January alone we submitted bids worth approx. £13.5 million. I would like to thank colleagues in the faculties and staff in PSO for all their hard work on this.

The Postgraduate Research Student Survey 2019 opens on the 4 February 2019. This will be the last PRES to provide us with data before our REF submission, so please ask your doctoral students to complete and give us their feedback.

I hope you enjoy reading this edition of Research Matters and please contact myself or Emma Pugh if you have any ideas for forthcoming issues.

Professor Silke Machold

THE LABOUR OF WORDS IN HIGHER EDUCATION

As higher education has come to be valued for its direct contribution to the global economy, university policy discourse has reinforced this rationale.

In her new book *The Labour of Words in Higher Education: Is it Time to Reoccupy Policy?* Professor Sarah Hayes looks at writing policy, widespread across UK universities. Recent strategies on 'the student experience', 'technology enhanced learning', 'student engagement' and 'employability' are explored through a corpus-based Critical Discourse Analysis (CDA).

This book is written for anyone with an interest in the future of universities.

Professor Hayes joined the University of Wolverhampton in November 2018 as Professor of Higher Education Policy and will be among speakers at a University event on 27 February 2019: *Reoccupying Higher Education Policy: Developing Regional and National Approaches*. For more details email: educationobservatory@wlv.ac.uk.



PhDs offering overseas knowledge exchanges

Opportunities for PhD students at the University of Wolverhampton can include overseas visits, exchanging information and knowledge with partner institutions.

One such recent example was Kate Butcher, a final year PhD student studying Biomedical Science under the supervision of Professor Weiguang Wang. She was invited to China to discover more about research work undertaken there.

Professor Wang's collaboration with Professor Bin He from Sichuan University, Chengdu, enabled Kate to take a two-month trip to observe and learn about disulfiram nanotechnology and its testing. The University of Wolverhampton's Cancer Research Group, with support from the

European Union Marie Curie IIF Scheme and British Lung Foundation, has been exploring the use of Disulfiram (DS), an anti-alcoholism drug, on the basis that it may potentially be used as an alternative cancer treatment therapy.

Kate said: "I was very excited to have this opportunity as I was able to see the whole process of developing a drug formulation and following this drug to testing. I observed chemistry-based techniques such as polymerisation, nanoencapsulation, and characterisation of a material.

"The learning opportunities have greatly enhanced my understanding and improved my confidence for the future as a young scientist."



Anthropologist joins University

Social anthropologist, Dr Agnieszka Radziwinowiczówna has joined the Faculty of Arts with her research on the new post-Brexit regulations targeting the citizens of the EU member states living in the UK.



The two-year BRAD (Brexit and Deportations) project, supervised by Dr Aleksandra Galasinska scored 94.4% by the reviewers of the European Commission and was granted £172,000 Individual Fellowship under Marie Skłodowska-Curie Actions.

The full title of the project: *Brexit and Deportations: Towards a comprehensive and transnational understanding of a new system targeting EU citizens*, best describes its research objectives.

Agnieszka will focus on several aspects of this new regime; immigration policies, agencies that enforce them, public debate that accompanies changes in migration policies and their implementation. She will also be looking at migrants that become deportable, as well as return migrants and stayers back in sending countries who consider migrating to the UK and who adjust their mobility strategies according to, or resisting, migration policies.

Dr Radziwinowiczówna previously worked at the University of Warsaw, Poland. She studied the experience of Mexicans deported from the USA to Mexico, while working as a visiting fellow at the University of Michigan in Ann Arbor (USA) and at the Metropolitan Autonomous University in Iztapalapa, Mexico City.

She said: "I am very excited to continue my research on deportation at the University of Wolverhampton, and to co-operate with Dr Galasinska on the BRAD project. It is a great opportunity to capture important socio-political changes within the Brexit context, right in the heart of such a diverse region, while being part of the vibrant interdisciplinary research community of the Faculty of Arts."

RESEARCH HIGHLIGHTS IMPACT OF FEMALE-AUTHORED SCIENTIFIC STUDIES

University research revealed scientific studies published by female authors attracted more student readers than those by male authors.

Professor of Data Science Mike Thelwall believes the findings suggest female authors may have an unrecognised effect on students' education. He said their scientific impact may be undervalued by citation metrics in some countries.

To conduct the research, Professor Thelwall obtained sets of articles from 2014 with known first-author gender from all narrow fields and five countries. He compared average Scopus citation counts and Mendeley reader counts between male first-authored and female first-authored articles in each set.

The study showed that female authored pieces across 100 subjects attracted up to six per cent more student readers than those by male authors.

Professor Thelwall cautions early career scientists, particularly female researchers, to look beyond citations for evidence that their research has a broader impact.



In other news, Professor Thelwall was also listed as one of Clarivate Analytics' Highly Recited Researchers 2018. This list recognises world-class researchers selected for their exceptional research performance, demonstrated by production of multiple highly-cited papers that rank in the top one per cent by citations for field and year in Web of Science.



Research looks at gender stereotyping in nurseries

Nursery activities such as dressing-up, football and storytime can be coded as either male or female pursuits and limit children's attitudes to equality, University researchers have discovered.

The University of Wolverhampton worked with the London Early Years Foundation (LEYF) on the research, which attracted national media attention.

The research, involving pre-school children, found that at this early stage of their development, children have a unique opportunity to change their minds about what boys and girls can

do or be. However, if a balanced approach is not achieved, social norms learned in families, communities and peer groups will influence and reduce choices, aspirations and social achievements.

This then perpetuates the stereotypical gendered roles, with boys potentially rejecting nurturing and caring careers and girls limiting their potential to explore interests in science, technology, engineering and maths.

Dr Helen Perkins and Tracey Edwards from the University led the study and said children need to see our diverse society reflected in nurseries.

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

REPORT HIGHLIGHTS CREATIVE APPROACHES TO CRIMINAL JUSTICE

Professor Laura Caulfield's research on the positive impact of arts and culture in offender rehabilitation has been highlighted in a national report.

Her research examines creative approaches to rehabilitation and has shown significant evidence that participation in the arts has a positive impact on wellbeing, attitudes and behaviours.

The Arts Council publication *Arts and Culture in Health and Wellbeing and in the Criminal Justice System* highlights her findings that taking part in arts projects



leads to increased participation in formal education and work-related activities as participants wish to use their newly developed skills.

Professor Caulfield's research focuses primarily on rehabilitation and the needs of women in the criminal justice system and she is currently leading projects for the Ministry of Justice and Irene Taylor Trust.

She said: "I'm interested in why people end up in bad situations and what can

be done to either prevent that from happening in the first place or to prevent that happening again.

"Participation in the arts has been shown to have a calming, positive effect."

Recent work includes a fashion project in a women's prison, she was involved with the development of an art residency at HMP Grendon, and a music programme targeting young people serving community sentences in Birmingham.

Recognition for dance science research

Professor Matt Wyon's contributions to dance science research have been recognised with two high-profile awards.

At the One Dance UK Awards ceremony, he was presented with both the award for 'Dance Science' and 'Research in Dance – Impact'.

The One Dance UK Awards recognise the inspirational work of professionals working in the dance sector. The annual celebration marks the work of dance artists, teachers, practitioners, educators, schools, choreographers, companies, venues, scientists and writers who contribute to the dance sector throughout the UK.

Professor Wyon said: "My research focuses on enhancing the performance and the health and wellbeing of dancers.

"Our aim at the University is to promote evidence-based research in the applied sciences that enhance dance performance and reduce the incidents of injury and I work closely with staff and doctoral students, often in collaboration with colleagues from around the world.

"I'm absolutely thrilled to have been recognised at these awards for my contribution to dance science research."

A panel of expert judges, drawn from the dance sector, reviewed over 800 nominations to arrive at a shortlist of three nominees for each category. The final winners were announced at the awards ceremony in Leeds.

Funding for kidney disease research

The Polycystic Kidney Disease Charity, Arran Brown Rainbow Foundation and University of Wolverhampton are jointly funding a pioneering three-year research project.

ARPKD (autosomal recessive polycystic kidney disease) is a rare disease that affects the kidneys and liver. It is usually diagnosed in babies and young children and occurs in roughly one in every 20,000 live births.

Although ARPKD affects the kidneys and liver, the immediate risk to about a third of babies born with the disease is lung underdevelopment.

ARPKD is caused by a change in the DNA of one of the building blocks of the cell that controls how signals are communicated in the cell. This change in DNA and cell miscommunication causes cysts to form in the kidneys and expand in size and number with age.

The rate at which cysts form and expand might depend on the interactions of the various genes and building blocks of the cell with each other. One of these genes is called

ATMIN. Previous research funded by the PKD charity has shown that ATMIN modifies how signals are communicated in kidney cells, affecting kidney formation.

During the three-year project, researchers will investigate ATMIN's interactions with the main gene that causes ARPKD (called PKHD1). Normal and diseased cells will be studied to see how defects in these genetic interactions relate to disease progression and severity.

The research will be undertaken at the University of Wolverhampton and UCL Centre for Nephrology London by Taylor Richards, a PhD student. He will be supervised by Dr Evi Goggolidou, of Wolverhampton, and Professor Patricia Wilson (UCL).



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