## RESEARCH MATTERS

Celebrating research success and opportunities at the University of Wolverhampton

#### **ISSUE 5**

## Knighthood for pioneering Professor in adult education

A University professor, internationally recognised as an expert in adult education, has received a knighthood in the New Year's Honours list for 2018.

Professor of Education Sir Alan Tuckett has dedicated an illustrious 40-year career to developing lifelong learning on a global scale and pioneered the first Adult Learners' Week.

He has received a knighthood for services to education, particularly in support of adult learning, and attended Buckingham Palace on March 23 for the formal ceremony.

Professor Sir Alan Tuckett, who was awarded the OBE in 1995, is as passionate about his work today as he ever was and is particularly interested in research around social policy and lifelong learning, and equality and diversity.

Much of his work is focused on using research to influence policy, and he has recently worked with the Government

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office for Science Foresight study on skills; the World Economic Forum on lifelong learning and the 4<sup>th</sup> Industrial Revolution; UNESCO on literacy; and gave written and oral evidence to the House of Lords Economic Standing Committee on further, higher and technical education funding.

His national conference earlier this year at the University, *The Learning Age 20 years on*, considered what has happened to the vision of a learning society since the publication of the Government Green Paper 'The Learning Age' in which David Blunkett offered a vision of the value of lifelong learning.

He said: "When I got the notice that I'd received the knighthood, I felt both humbled and honoured but also thrilled for the sector too, because adult learning doesn't get public attention.





"Learning changes things; it gives people a sense of energy and fosters passion and helps make creative and active democrats. I am delighted that the importance of adult learning to an enlightened democracy has been recognised in this way."

Professor Sir Alan Tuckett has been Professor of Education at the University of Wolverhampton since January 2015. His revolutionary approach to lifelong learning has been helping to transform lives since the mid-1970s when he helped to start the first national adult literacy campaign.

He has been awarded honorary doctorates by eight universities; fellowship of City and Guilds of London Institute, and of the College of Teachers; he is an Honorary Fellow of UNESCO's Institute of Lifelong Learning, and a Distinguished Professor at the International Institute of Adult and Lifelong Education, New Delhi, India.

Vice-Chancellor of the University, Professor Geoff Layer, said: "On behalf of everyone at the University of Wolverhampton, I would like to congratulate Alan on this prestigious and very well deserved honour."

## EDITOR'S WELCOME



Welcome to the first issue of Research Matters in 2018. The new year got off to a great

start with two colleagues successfully securing a H2020 Marie Sklodowska-Curie fellowship – further details coming soon, but congratulations in the meantime!

To help build expertise and capacity in research funding bids, the Project Support Office is once again running the Grants Academy and we hope that colleagues attending will share their learning with others.

We are currently preparing our institutional Athena SWAN submission. Data shows that we are making good progress on several fronts, including substantially fewer fixed term contracts (for both genders) than the sector benchmark, and a strengthening

### CALL FOR ERAS APPLICATIONS

Are you a University staff member who has achieved a Doctoral qualification (or equivalent) within the last five years? Do you wish to pursue an identified research project over the upcoming 12 months (24 for part-time staff)?

The University is looking for applications to the Early Researcher Award Scheme, which could support you in your aims to complete your project – including a budget of up to £5,000.

To download the application form and for further information, visit: wlv.ac.uk/ERAS. The deadline for submission is Friday 11 May 2018.

### University researcher on the Suffragette map

pipeline for women research leaders.

However, there is still much work to be

done - to have your say and input into

Athena SWAN Self-Assessment team.

Our annual research conference will

take place 11-12 June 2018 on the

plan to discuss many important issues

showcasing our staff and postgraduate

research students' excellent research.

2018 to Jill Morgan in the Research

Policy Unit: j.morgan4@wlv.ac.uk.

Please send your proposals by 18 April

theme 'Responsible Research'. We

around the relevance of research,

open research, the use of metrics

in evaluating research, as well as

this important work, please contact your faculty representatives in the University

An inspirational University of Wolverhampton academic, who has worked to tackle discrimination, was included on Amnesty's 'Suffragette Spirit Map of Britain' to mark International Women's Day.

Dr Meena Dhanda, Reader in Philosophy and Cultural Politics, has supported increased participation of women in politics through her research publications from 1997 onwards, including her internationally recognised academic research on caste in the diaspora. **Professor Silke Machold** Editor and Dean of Research, University of Wolverhampton

Dr Dhanda is featured in the interactive new map, which commemorates 100 years of women's suffrage in the UK and showcases incredible women who defend human rights and campaign for a fairer society for all. It will be profiled and updated throughout the centenary year of women's suffrage.

Dr Dhanda is regularly called upon by policy makers and community groups for her expertise. She is an executive member of the Society for Women in Philosophy UK and has served as an elected council member of the British Association for South Asian Studies.

In response to her inclusion, Dr Dhanda said: "I am honoured that my research has received notice. The GEO public consultation on amending the Equality Act 2010 to protect sufferers of caste discrimination drew 13,000 responses. It is heartening to see one's research being used by policy makers."

"I am acutely aware that there are many women, far more deserving than I, who have worked tirelessly for the protection of human rights. As the lucky one to be featured from the city of Wolverhampton, I now shoulder the responsibility to live up to the honour!"



# RESEARCHER SELECTED AS BBC'S 'NEW GENERATION THINKER'



English Literature lecturer Dr Daisy Black is one of 10 'New Generation Thinkers' chosen by the BBC, following a nationwide search.

BBC Radio 3, BBC Arts and the Arts and Humanities Research Council (AHRC) announced 2018's cohort of academics at the start of their careers who have a flair for communicating their research to the public.

Dr Black will make a programme for BBC Radio 3 on her research project 'Eating God: Food in Medieval Religious Drama'. In addition, the scheme partners with BBC Four, where some of the selected academics will be given the chance to present on TV.

The 10 academics were chosen following hundreds of applications and a fourmonth selection process. They have undergone training and development with the AHRC and will spend a year being mentored by producers from Radio 3's *Free Thinking programme*. They recorded their first broadcast at the *Free Thinking* Festival in Gateshead in March, which aired on 3 April (available on iPlayer).

Dr Black, who also works as a freelance theatre director, storyteller, writer and arts advisor, said: "I'm really excited to be taking my research to BBC audiences around the country. I'm hoping to use what I learn during my time at the BBC to create opportunities for students at the University – maybe helping them with media training or creative writing."

Dr Black is currently writing a book on time and gender in late medieval religious drama. Other research interests include medieval depictions of Jews and Muslims; women in performance; spectatorship; women at sea; and medievalism in modern board game cultures.

Alan Davey, Controller at BBC Radio 3, said: "Since its launch in 2010, the scheme has supported and nurtured some extraordinary academic talent, giving the broadcasters of tomorrow a platform to present their fascinating and thoughtprovoking research to our listeners."



### Sentiment analysis software's female gender bias

Companies using sentiment analysis could be getting a distinctly female view of the world, according to latest research.

Using a large sample of UK TripAdvisor reviews of hotels and restaurants (chosen as product types important to both men and women), Professor of Data Science Mike Thelwall contrasted the accuracy of lexical sentiment analysis for males and females – this identifies sentiment-related terms, such as 'happy', 'excellent' and 'dirty' and applies a set of rules to guess the sentiment of the review.

Women reviewers used more words such as 'lovely', 'delicious' and 'amazing', while men tended to use more common factual words such as 'location', 'building' and 'beer'.

Professor Thelwall said: "This is an important difference because sentiment analysis programs rely on people expressing opinions in predictable ways.

#### Inspiring words for women in Science

Dr Sarah Jones, Reader in Pharmacology, was one of a selection of successful female scientists from around the world featured in the prestigious *Science* magazine for an inspirational article celebrating the International Day of Women and Girls in Science.

The piece featured advice and experiences to support the ambitions of females seeking a STEM career in the future.

Dr Jones, whose research has focused on how cell penetrating peptides alter the physiology and make-up of sperm, wrote:

"There is no easy fix. On one side, you should not let any of the gender stereotypes which are thrown at you affect you. But neither should you just ignore biased or inappropriate comments.

"My advice is to stand up for yourself and bring biases and misconceptions into the open in order to debunk them, even if this feels uncomfortable. Often, gender bias results from pervasive cultural stereotypes rather than a conscious desire to discriminate. Women academics, especially once well established, have a responsibility to address stereotypes to not only ensure gender equality but also to enhance the employability and career progression of our female graduates."

"When comparing opinions for product aspects that appeal differently to men and woman, female sentiments are likely to be overrepresented, biasing the results.

"This is the first evidence that lexical sentiment analysis is less able to detect the opinions of one gender than another. Care should be taken when drawing conclusions about gender differences from automatic sentiment analysis data."

Accuracy was found to be significantly lower for male-authored reviews than for female-authored reviews for restaurants and all types of hotels tested. The findings have been published on research site Emerald Insight.

## Lecturer's research role for Routledge

Pete Bennett, Senior Lecturer in Post-Compulsory Education, has recently been given the opportunity to co-found a new international research series for Routledge.

Pete is co-editor of the new Routledge Research in Media Literacy and Education, working with Professor Julian McDougall of Bournemouth University, himself a former University of Wolverhampton academic.

Pete said: "This series is dedicated to a more extensive exploration of the known territories of media literacy and education, while also seeking out 'other' cartographies.

"It is especially interested in how media literacy and education relates to feminism, critical race theory, social class, post-colonial and intersectional approaches and how these perspectives, political objectives and international contexts can 'decenter' the field of media literacy education."

The call is out for proposals with the first tranche of books appearing in 2019 which will include Pete and Julian's next project (with John Potter of UCL), *The Uses of Media Literacy*.





### INTERNATIONAL PATENT FOR PROBIOTICS WORK

The probiotic industry is worth over £200 million a year in the UK, with many people choosing to supplement their diets to increase their intake of live beneficial bacteria for its reported health benefits.

Dr Iza Radecka and her team are hoping to revolutionise the industry, after receiving an international patent for their invention of a special coating to help people absorb more of this bacteria.

The team from the microbiology department have been working on their research for a number of years. They initially discovered that many probiotics die off due to acid levels in the stomach and benefits are significantly diminished before they reach the intestines where needed.

They developed a special coating, polyy-glutamic acid ( $\gamma$ -PGA), which protects against stomach acid. The applied biopolymer is completely biodegradable and is able to remain intact in the stomach and continue to the intestine, where it disintegrates, releasing the bacteria.

It was announced earlier this year that the y-PGA has been awarded an international patent after Dr Radecka's team showed that beneficial bacteria, including Lactobacillus and Bifidobacteria strains, were able to survive for up to four hours when they were protected with the polymer – non-protected bacteria only survived for up to two hours.

Latest research has now shown that  $\gamma$ -PGA can be successfully used to immobilise probiotic Bifidobacterium strains and help them survive during storage in acidic fruit juices, such as orange and pomegranate.

Dr Radecka said: "Our work is very significant for the probiotics industry, which is rapidly growing as consumers seek the benefits of good bacteria."

The team is now focusing on scaling up the process of production of PGA and working with industry to develop the patent commercially.

The new technology could also be used for the delivery of certain drugs and even increase calcium absorption.

### STAFF ENGAGEMENT IN THE YMCA

Employee engagement at the YMCA (Black Country Group) has come under the spotlight in research being undertaken by University academics.

In 2016, Dr Wen Wang and Dr Jan Firth from the Business School were commissioned to carry out a two year research project, due to complete in April 2018. The work has already made a significant impact on enabling managers of the organisation to understand factors that have affected current employee engagement; and the impact of staff engagement on employee outcomes (employee attitudes, absenteeism, turnover intention). Findings of the project, which have broader implications and are applicable across the not-for-profit sector, have been presented to the board of YMCA and received very positive feedback with a potential further project under discussion.

Currently, Phase 2 of the project – to develop a Competence Framework to improve staff engagement – is being undertaken.

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