RESEARCH MATTERS

Celebrating research success and opportunities at the University of Wolverhampton

ISSUE 13

Can entrepreneurship education improve youth employment in Africa?

The University's Centre for African Entrepreneurship and Leadership (CAEL) has been engaged in knowledge transfer, applied research and policy with strong Sub-Saharan African (SSA) focus.

Research by CAEL Director, Dr Paschal Anosike, funded by the EU and the British Council, has been looking at the effects of entrepreneurship education on students' entrepreneurialism as part of our commitment to UN's Sustainable Development Targets (SDGs).

To give students skills to set-up and run their own businesses and thereby tackle high graduate unemployment, some African countries such as Nigeria have made entrepreneurship education compulsory. This is key to reducing poverty and conflict associated with high youth unemployment, which leaves young people exposed to terrorism groups like Boko Haram.

However, little research had been done to see if entrepreneurship education can be effective in conflict-torn countries.

Following a recent research project in northern Nigeria, Dr Anosike said: "We found that knowledge and skills in analysis of market intelligence and business plans were not only linked with positive entrepreneurial outcomes, but also that the strategic use of market intelligence constituted the vital momentum for the growth and survival of new ventures in the region."

He also found that living in a conflict zone provided people with motivation to engage in entrepreneurship activity, although access to financial support remains a major challenge.

His research has benefitted higher education providers (e.g., Covenant University's Hebron Start-up Lab and Bingham University's Entrepreneurship Development Centre), businesses, national governments, global think tanks and



inter-governmental bodies. For example, it fed into the African Union's recently launched Pan-African Virtual and E-Learning University's [PAVEU] entrepreneurship curriculum.

Notably, his research informed a Commonwealth/UNCTAD international workshop on developing national policies on youth entrepreneurship, attended by over 50 senior government representatives from across Africa. Following this, ten African countries have developed national youth entrepreneurship policies, which were previously unavailable.

Dr Anosike's research directly influenced the metrics used to develop and pioneer the authoritative Africa Prosperity Index (API), published recently by the London-based global thinktank Legatum Institute. The API has inspired greater and wider awareness of Africa's current and future economic prospects.



EDITOR'S WELCOME

On the 26 March 2021, five days ahead of the deadline, we submitted to the 2021 Research Excellence Framework – REF2021.

Thermal Recycling and BRIC research collaboration announced

THERMALRECYCLING ()

Thermal Recycling Limited and the Brownfield Research and Innovation Centre (BRIC) have announced a collaboration in which BRIC will instigate a research programme to further develop the understanding of the asbestos conversion or denaturing process that has been proven by Thermal Recycling.

Wolverhampton-based Thermal Recycling opened its demonstration plant in September 2020 to provide a socially and environmentally responsible alternative to asbestos disposal. The company diverts asbestos away from landfill, converts it into a new material that does not contain asbestos, and produces a sustainable aggregate.

Commenting on the agreement, Graham Gould, Chairman of Thermal Recycling said: "This research will build on the analytical work that we've already carried out looking at the chemistry of Calmag, the new material created by our conversion process of cementbound asbestos sheets."

The Brownfield Research and Innovation Centre was established in October 2017 with the support of the European Regional Development Fund Programme, with the aim of providing support to Black Country Small and Medium Enterprises (SMEs) involved in brownfield remediation and redevelopment.

Our submission included 324 staff and outputs from 40 former staff, 738 outputs, 17 unit-level and one institutional environment statement, 38 impact case studies, £25 million of research funding and 248 doctoral completions. This has also been one of the most inclusive submissions we have made to national research assessment exercises, with more staff from historically excluded backgrounds such as women, Black, Asian and minority ethnic staff, and disabled staff than ever before included. This would not have been possible without the contributions from many individuals and teams across the University.

I would like to thank especially the Unit of Assessment Coordinators, who took the academic lead putting together the UoAs; our academic staff who did such great research, reviewed outputs and wrote impact case studies; the scholarly communications team in DSAS who steered us competently through the open access requirements and collated the physical output copies; the HR team who helped check staff eligibility and supported the various Code of Practice processes; and staff in finance and registry who collated data for the environment sections. Last but not least, I would like to thank the team in the RPU for providing such exceptionally professional support

and guidance throughout the process. We are currently completing the final Equality Impact Assessment on our submission and will share the action plan arising from this.

The week commencing the 7 June 2021 is our annual Researchers' Week. We are kicking off with two days of our Annual Research Conference (ARC) followed by three days of researcher development events with a special focus on EDI, research integrity and research impact. I would like to thank Jill Morgan and Debra Cureton for organising ARC and Researchers' week respectively, and for all the work and creativity that has gone into this exciting programme.

In this issue of Research Matters, we feature a number of stories about working in partnership in research. This includes collaborations with companies, local governments, charities, health organisations, and universities in the UK and overseas. Following on from the previous issue, we continue the introductions of our clinical professors who hold joint appointments with us and the Royal Wolverhampton Trust.

Please continue to share your stories and successes with us.

Professor Silke Machold S.Machold@wlv.ac.uk



Academics
working on
Erasmus+
TEFL project
in Palestine

Professor John Traxler, Dr Howard Scott, Dr Matt Smith and Dr Brendan Bartram have been working on an Erasmus+ project to modernise the teaching of English as a foreign language in Palestinian HE.

The three-year project targets students, academics, technicians and teachers. The University team has been developing training materials, delivering training events and training the trainers.

CREATING A TRAVEL APP TO MAKE TRAVEL WITHOUT A PERSONAL CAR EASIER

Dr Panos Georgakis and Dr Adel Almohammad from the School of Architecture and the Built Environment have been working on an EU Horizons 2020 funded project to help investigate the implementation of a Mobility as a Service (MaaS) platform as a solution to future transport demands.

Continuing urbanisation is posing a real threat to the operation of transportation services in large metropolitan areas, and encouraging a greater uptake of public transport, along with shared car and bike services, could be a solution.

However, citizens will not give up private vehicles as their preferred mode of transportation unless they are offered a service that provides an equal sense of convenience, reliability and flexibility.

It's hoped the MaaS concept will provide a service that offers travellers

seamless mobility, easy access to different modes of transport based on their needs, relief from the unforeseen costs associated with owning a car, while still having access to one through sharing and rental schemes, and control over travel time and costs.

The MaaS4EU project – which involved an international multidisciplinary consortium made up of local and national transport authorities, universities and research bodies, transport operators and companies – investigated the implementation of a MaaS platform from the points of view of business, end users, technology availability and current policies and legislation.

A prototype app, which integrates a range of travelling elements including personalised route planning (featuring a supply and demand optimiser using real-time updates), booking, and payment across a variety of different modes of transport and companies, was created and trialed in Manchester, Luxembourg and Budapest.

Despite the coronavirus pandemic, and resulting travel bans hindering the number of passengers on the cities' transport systems, the project received encouraging results. After using the MaaS4EU app, customers were positive about the service and using it in the future.

Dr Georgakis conceptualised the overall journey planning approach and led the implementation of the system. He was also the lead author of one of the project's research papers. Dr Almohammad contributed to the integration of real-time information systems as part of the solution and the analysis of the evaluation results.

The launch event took place at the beginning of 2019 at Anadolu University, Turkey. In April that year, Palestinian partners from HEIs came to Wolverhampton for a three-day course, including workshops, conference sessions and college visits.

Dr Scott and Dr Smith then spent a week in Ramallah, Palestine, where through HE visits, they increased their understanding of context and unpicked what Palestinian teachers felt was necessary to support the materials they were creating and how they wanted to deliver them. Dr Smith describes it as "a really powerful week".

Near the end of 2019, another visit to Wolverhampton was hosted, in which Palestinian teachers took part in training focused on developing constructivist approaches to active learning, teaching and assessment, including flipped learning and problem-based learning. The training looked at ways to embed these pedagogies in course material.

The team then worked with the Palestinian partners and colleagues at Chemnitz University of Technology in Germany on course materials, looking at the pedagogies that underpin the delivery of the materials, creating a handbook to accompany them.

Professor Traxler has been supporting the development of quality assurance procedures. He said: "It was vital for a sustainable outcome for these processes to be embedded and owned by Palestinian academics in the future. We've been working on underlying principles, such as responsibility, collegiality, sustainability, visibility and reflection. This is clearly a slow process and needs commitment and consistency."

The University team are also fostering research in TEFL with Palestinian partners and putting research papers together.

New professors in clinical practice and medicine



Professor Helen Steed

Professor Helen Steed is a consultant gastroenterologist at the Royal Wolverhampton NHS Trust with specialist and clinical research interests in inflammatory bowel disease (IBD), nutrition, and medical education.

Her research investigates the effect of pregnancy in IBD on gut microbiota and biomarkers and bile acid malabsorption. Furthermore, her innovative nutrition projects focus on reducing the impact of complications around usage of enteral feeding tubes.

Professor Steed's work contributed greatly to the Living in Silence project, a collaborative multi-disciplinary project with colleagues at the School of Art at the University of Wolverhampton. This project used an innovative, art-focused approach to increase the awareness of IBD amongst the South Asian community, where such conditions are little known and understood, enabling the wider community to support sufferers.

Ongoing collaborations with the School of Art and Crohn's and Colitis UK include a project on IBD and parenthood, delivering research outcomes in the form of art to increase awareness and promote health messages to patients.

Professor Steed has collaborated with the Royal College of Physicians London to look at research engagement amongst physicians and was involved in producing the 2020 Research For All report. She currently chairs the Food and Function Research group for the British Society of Gastroenterology (BSG) and has recently been appointed to the post of Secretary for the BSG and will be serving a four-year-term for the charity.

Professor David Churchill

Professor David Churchill is a consultant obstetrician at The Royal Wolverhampton NHS Trust, where his principle area of interest is obstetric epidemiology. He is currently investigating the effects of iron deficiency anaemia on mother and baby, together with its treatment and prevention. He is also collaborating on work investigating the mechanisms of iron absorption and inflammation.

Professor Churchill led the first survey of national practice examining the screening, diagnosis and treatment of anaemia in pregnancy. This work found major deficiencies in clinical practice and a national report released on the NHS Blood and Transplant website recommended the implementation of processes to improve the management of iron deficiency anaemia.

He also has an active interest in diabetes and has completed a national case—control study of diabetes ketoacidosis in pregnancy (DKA). This is a rare complication in pregnancy and the study findings will directly affecting practice in the UK.

He is interested in researching rare diseases in pregnancy and is a member of the UK Obstetric Surveillance System steering committee, and he will soon open a study on Haemophagocytic Lymphohistiocytosis.

Finally, with his team at New Cross, he is constructing Patient and Public Involvement group to engage pregnant women with research.



CHORD in the spotlight

The University of Wolverhampton has a diverse range of different research centres and institutes across the institution; some better known than others.

One that you might not know about is the Centre for the History of Retailing and Distribution (CHORD). It was set up in 1998 to give new impetus to the study of the history of retailing and distribution and aims to bring both British and international scholars together to engage in research; no matter their period of interest, discipline or methodology.

Its members work in a range of different organisations, from museums and store archives, to other higher education institutes, as well as independent scholars. They specialise in a number of disciplines including history, sociology, business, and economics. Without CHORD they would be unlikely to cross paths, despite having a common interest in retail history.

Professor Laura Ugolini, who directs the Centre, said: "Retail has been an important part of daily life for an incredibly long time. The pandemic and the closure of shops has emphasised its importance in socialising and as a leisure activity too.

"When looking back on the history of popular stores, we can see their origins and growth, how consumer patterns have changed and shops with them. This helps explain why our retail economy looks the way it does now."

The Centre regularly hosts events, which moved online due to the pandemic, allowing more international members to attend and present. Moving

forward, they hope to do a combination of online and inperson events.

Current research topics within the Centre include: charities and retail; retailing of clothing, especially rural dress; 19th Century retail and retail markets; and retail credit.

The Centre will soon be launching bookings for its autumn seminar series on its website: retailhistory.wordpress.com

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