

KNOWLEDGE EXCHANGE NEWS 23

ENGAGE FELLOWSHIP AWARD

Community Engaged Learning Managers Sarah Rafferty and Kate Harper have recently been awarded an inaugural Engage Fellowship by the National Co-ordinating Centre for Public Engagement (NCCPE).

Engage Fellowships are designed to offer support for testing an idea or exploring a challenge relating to public and community engagement in UK higher education. Kate and Sarah's project will focus on evaluating the impact of Community Engaged Learning (CEL) on the partners and communities they work with. Community Engaged Learning (CEL) is a bridge between theory and practice, where students collaborate with community partners on societal issues, to produce valued outputs and develop students to be socially engaged citizens.

Through the Engage Fellowship, Sarah and Kate plan to work with the Department of Sociology to develop a research methodology for measuring the impact of CEL on community partners. They will bring together colleagues and community partners working in this area to feed into the development of an analytical tool that foregrounds ethical engagement with partners while also allowing practitioners to



Community Engaged Learning Managers Sarah Rafferty and Kate Harper

gather evidence to support the scaling of these activities. This will build on existing work to develop a method to measure the growth in confidence of students participating in CEL activities.

Sarah and Kate design and deliver CEL undergraduate modules and have quickly scaled the delivery of in-curriculum activities, linking community priorities and academic learning. Kate leads the delivery of the award-winning Sustainability Clinic, while Sarah supports individual departments to embed CEL, such as through the core undergraduate Public History Module.

A total of 456 undergraduate and postgraduate students participated in a CEL-based component of their course in 2023-24, and the team anticipates engaging over 700 students in 2024-25. In 2023-24 the team worked with 38 community partner organisations, including the City of York Council, York Museums Trust, the Rugby Football League, a range of community and voluntary sector partners, small and medium-sized enterprises (SMEs) and heritage organisations. These partnerships generated 52 individual projects as part of 8 modules, each with a tangible outcome co-designed alongside the partners.

CAREGIVER-INSPIRED ROBOT-ASSISTED DRESSING

Robot-Assisted Living Laboratory (RALLA) is a state-of-the-art robotic laboratory, led by Dr Jihong Zhu, based in the Institute for Safe Autonomy (ISA). The lab is committed to advancing the capabilities of robot manipulators to assist individuals in their daily lives, particularly for elderly and disabled populations. It integrates multiple sensory modalities, including vision and tactile sensing, and employs both control and machine learning to achieve this goal.



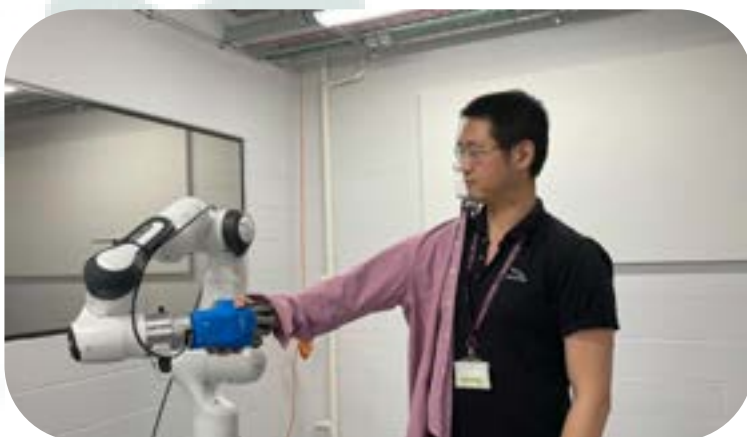
To address one of the most challenging aspects of caring for elderly people, Dr. Jihong Zhu, a Lecturer of Robotics in the School of PET and ISA, has developed an innovative approach to robot-assisted dressing in collaboration with TU Delft and Honda Research Institute Europe.

Dr Zhu can be seen demonstrating three stages of the robot-assisted dressing: start, midway and fully dressed.

As the global population ages and the World Health Organization projecting that one in six people will be over 60 by 2030, the need for novel caregiving solutions is becoming increasingly urgent.



Inspired by human caregiving techniques, Dr Zhu designed a bimanual assistive dressing framework that mimics the method employed by healthcare professionals. This system is equipped with two robots working in tandem: an interactive robot that holds the person's hand and guides their arm movements, and a dressing robot that manages the clothing. The system overcomes several challenges that have hindered previous robotic dressing aids, such as the difficulty in tracking arm postures due to visual occlusions and the complexities of interacting with flexible clothing materials.



This research not only advances the field of assistive robotics but also holds promise for improving the quality of life for the elderly and reducing the burden on human caregivers. As society ages, innovations like these will play a crucial role in ensuring dignified and efficient care for our older population.

The scheme is reported by the **BBC**, the **Independent**, **York Press**, and featured in **IEEE Spectrum Video Friday**.

If you have any questions or queries please get in touch at jihong.zhu@york.ac.uk.

INNOVATE YORK: EMPOWERING BUSINESS GROWTH



Innovate York is a unique initiative designed to support businesses in York, fostering innovation and growth through innovation workshops. These sessions focus on specific areas crucial for business development, providing participants with the tools and insights necessary to drive their companies forward. The workshops are facilitated by Dr Jo North, who brings a wealth of knowledge, ensuring that attendees gain practical, actionable insights that can be directly applied to their businesses.



Delivered through the CPD unit, these workshops are structured around real-world case studies, interactive exercises and peer learning, creating a dynamic and engaging environment. This hands-on approach not only enriches the learning experience but also helps participants to develop a deep understanding of the concepts discussed. By the end of the programme, participants will have completed their own Innovation Growth Plan — a customised strategy outlining actionable steps tailored to their specific business needs and goals.

One notable success story is that of Tutorfox, a York-based start-up founded by Anna Sinclair. Tutorfox

offers a streamlined platform that connects students with skilled local tutors for in-person tuition, handling everything from messaging to payments. Facing the typical challenges of a new business, Anna turned to Innovate York’s workshops for guidance. Through the workshops, she gained valuable insights into Horizon Scanning and Competitor Analysis, which helped refine her business strategy.

The result has been transformative. Anna implemented new revenue streams, hired a marketing intern, and joined the Phase One business incubator programme. Reflecting on her experience, Anna said, “The Innovation Workshops provided me with clarity, focus, and tools to

create a comprehensive business plan. The ongoing mentoring support and connections with the Internship Programme and Phase One business incubator have allowed me to propel my business forward.”

Innovate York stands out as a vital resource for entrepreneurs and established businesses alike, offering the support needed to innovate and grow in a competitive marketplace.

Find out more about **Continuing Professional Development** and **Enterprise Works and Entrepreneur Support**

UNLOCKING RESEARCH IMPACT AND KNOWLEDGE EXCHANGE

In July, an Introduction to Impact and Knowledge Exchange session was held on campus and attended by 26 people, representing all faculties and including staff from both academic and professional services roles.



“It was a really enjoyable session and... very reassuring that my research project is definitely on the right track [in terms of impact].”

Dr Penny Bickle, Senior Lecturer in Archaeology, shared her experiences on engaging diverse groups with her research on prehistoric diets during our session.

The session introduced the essentials of research impact and knowledge exchange, exploring the different types of research impact and outlining the support available across the institution. Attendees had the opportunity to reflect on their impact goals and started considering steps towards achieving impact from their work.

Guest speaker Dr Penny Bickle, a Senior Lecturer in Archaeology discussed her experiences engaging diverse audiences with her research on prehistoric diets. This included

running a ‘feast weekend’ event at Stonehenge, undertaking different engagement activities at music festivals and developing educational resources for use in schools. Penny gave fascinating insights into how the various types of knowledge exchange she undertook delivered impact for the heritage sites and changed public attitudes towards the past.

Attendees found the introductory training session valuable saying it improved their knowledge and that they intended to apply the learning

to their own work. One attendee reported: “It was a really enjoyable session and ... very reassuring that my research project is definitely on the right track [in terms of impact].”

Further introductory sessions will be offered in the new academic year, and the slides from July’s session are available on the [internal Research Impact training webpage](#).