

# KNOWLEDGE EXCHANGE NEWS 32

## FUTURE FORWARD: UNIVERSITY OF YORK DRIVES REGIONAL DEVELOPMENT

The University of York is advancing regional development through four Mayoral Investment Fund projects.

The **BioYorkshire** project cultivates the region's bioeconomy by connecting stakeholders and accelerating growth. The **Convergent Technologies in the Creative Industries (C3)** project bridges creative industries with high-tech sectors like AI and robotics, fostering innovation and economic growth. **Walmgate Re-framed**, funded by the Vibrant & Sustainable High Street Fund, revitalises Walmgate through creative place-making, enhancing its offerings and community. Finally, **Extending XR**

provides innovative technology skills training to creative practitioners in immersive technologies and AI, ensuring regional technological advancement.

The University is also a partner to two new rail sector projects. A feasibility project will assess the region's rail innovation potential and define a vision, proposition and strategy for the sector, whilst a cluster mobilisation project will form a leadership group to mobilise the sector and implement the growth strategy in order to drive innovation and growth.



David Skaith, Mayor

For further information, contact [chris.russell@york.ac.uk](mailto:chris.russell@york.ac.uk)

### UNLOCK THE POTENTIAL OF YOUR RESEARCH:

#### Upcoming training in research impact and knowledge exchange

The new semester brings an array of training opportunities designed to enhance your research impact and knowledge exchange skills.

##### **Introduction to building research impact into grant applications, 11-11:45am, 23 October via Zoom**

This new webinar is suitable for academic and professional services staff who are planning to prepare or support a grant application, especially those new to grant writing. We will explore how to plan for research impact when developing research ideas and how to incorporate impact into proposals. Colleagues in impact-related and pre-award roles will be present in the session to answer questions.

##### **Introduction to evaluating and evidencing research impact, 11-11:45am, 6 November via Zoom**

How would you know if your research has made a difference outside of academia? Being able to understand and articulate research impact can bring many benefits. This online session is suitable for academic and professional services staff. We will explore approaches for evaluating and evidencing research impact, including key considerations and best practices.

If you can't make these dates, don't worry – the sessions will be repeated later in the semester. Watch this space for more opportunities, including further sessions on engaging with business and other non-academic organisations. Have questions or want to learn more? Contact us at [impact-and-ke-training@york.ac.uk](mailto:impact-and-ke-training@york.ac.uk)

# INCORPORATING SPEECH TECHNOLOGY INTO POLICING PRACTICES: A linguistic perspective

In June 2025, Lauren Harrington, James Tompkinson, Jessica Wormald and Eloísa Monteoliva-García (Department of Language and Linguistic Science) hosted a one-day knowledge exchange workshop on “Transcription and Interpreting in Police Contexts”, funded by the University’s Place and Community Knowledge Exchange Fund.

The workshop brought together representatives from various UK police forces and government laboratories to discuss the transcription of police interviews, which are regularly used as evidence in the criminal justice system, and the role of interpreters in investigative interviewing. The schedule included four sessions, each with a brief research talk by an organiser, followed by a detailed discussion on these questions:

1. What does a good police interview transcript look like?
2. How can we safely incorporate Artificial Intelligence (AI) into the transcription of police interviews?
3. What constitutes a successful interpreter-mediated interview?
4. When should the police involve a linguistic expert in their work?

Participants provided valuable insights into policing practices and priorities, such as:



*Left to right: Jessica Wormald, Lauren Harrington, Eloísa Monteoliva-García, James Tompkinson*

- Routine methods are often shaped by cost and time limits, even if they don't represent best practices.
- AI use carries significant risks due to a lack of national guidance or regulation.

The discussions emphasised the urgent need for increased engagement between academics and those working in law enforcement to tackle the identified issues and drive significant change. This involves academic researchers working more closely with frontline officers, senior leadership, policymakers and community stakeholders to ensure a coordinated and informed response

to these issues. The workshop also sparked conversations about collaborative projects between the organisers and several police forces on key priority areas.

Following the event's success, the organisers delivered another workshop on transcription and interpreting in police contexts in Vauxhall, London, which was hosted by the Home Office's **Accelerated Capability Environment**. These workshops will ensure research findings directly support law enforcement, and facilitate continued exploration of collaborative opportunities for safe and appropriate AI implementation in this sector.



# BIOSCIENCE: THE MUSICAL

**Dr Ciara Loughrey (Hull York Medical School, Postdoctoral Research Associate)**

**What does a bio-scientist do? Do you picture lab coats, microscopes and petri dishes? Or sitting in the Cambodian wilderness monitoring bird calls? How about liaising with economists, social scientists and clinicians to determine the most feasible way to develop a successful vaccine?**



One message Dr Ciara Loughrey wanted to get across in the pilot run of a new science outreach project – *Bioscience: The Musical* – is that biological research spans a huge range of topics and daily activities and an even greater diversity of individual scientists. Inspired by the hit musical *Six*, she aimed to use music as a tool to tell the stories behind the work, capturing the personalities and motivations of biologists, whilst conveying scientific concepts accurately to a general audience.

With funding from the Biology Department, University of York, Ciara worked with Emma Boneham (School of Arts and Creative Technologies) to

create a musical showcase of the Department's research. They led seven undergraduate students, all with an interest in music as a means of storytelling. Through workshops with Biology researchers they developed parody songs, based on the biologists' research and music tastes, to perform at the York Festival of Ideas. The final show featured research on topics including immunology, parasitology, conservation, neuroscience, plant metabolism and mosquito engineering, and aimed to break stereotypes about scientific research.

As part of the project, the students toured Biology facilities to see how research is conducted in real life, and they integrated this into their

performances. Additionally, they gained paid work experience and an insight into career options. The pilot received positive feedback from audience members, the student team and the researchers involved.

As well as successfully conveying complex science to the general public, the cross-disciplinary connections fostered by *Bioscience: The Musical* will support future projects and increase the visibility of research happening at UoY.

The pilot event is available on **YouTube**. Get involved! Contact Ciara at [ciara.loughrey@york.ac.uk](mailto:ciara.loughrey@york.ac.uk)

# COMBATING MALARIA WITH GM MOSQUITOES

**Originally native to South Asia, the mosquito *Anopheles stephensi* is a malaria vector which thrives in urban environments and is spreading across Africa at an alarming rate. After almost a decade of declining rates of malaria, progress against this disease has stalled in the last few years.**

Despite government-driven efforts to control the mosquito population with fumigation techniques, widespread insecticide resistance in *Anopheles* has proven difficult to overcome. In response to this, our research group at the Alphey lab is focusing on an alternative strategy that utilises genetic modification techniques to halt the spread of malaria.

Our team aims to help affected regions through an effective, temporary and environmentally friendly technique called a 'daisy drive', with funding support from the Gates Foundation. This design works by spreading a desired gene through a wild population over multiple generations, but only when co-inherited with a specific protein system. This protein system is gradually lost from the gene pool, thereby eventually halting the spread of the desired gene. In this context, this could be an anti-malarial gene that can immunise populations long enough to eradicate the disease in a given area.



However, mosquito release strategies like this one heavily rely on public support and engagement. Due to the negative perception of mosquitoes in the public eye, we must inform and explain to people how modified mosquitoes can be used for good. For example, before and during a field trial, we regularly meet with locals through town meetings or door-to-door surveys. The purpose of these interactions is to create a collaborative environment whereby residents' feedback and discussion can be taken on board,

further influencing the field trial planning process.

Ultimately, the end goal of this project is to have a fully functional "daisy drive" released into the wild. Whilst our project is still in the development phase, there is hope that soon we can implement our research in a practical setting to stay ahead of emerging threats like malaria.

For more information contact  
[alex.dodds@york.ac.uk](mailto:alex.dodds@york.ac.uk)