



WELCOME TO OUR

Newsletter #3

We've had a busy 6 months since November. Among the highlights have been getting our remaining labs finished and fully operational; publishing key papers, co-creating studentships with partners, sampling the rapid flowing rivers in our living labs, engaging with our local community and winning awards!

In this newsletter, we will meet new members of the team and provide a full report on the second joint research showcase hosted by Wessex Water plus CWBE's presence at the first Adelard Lecture to celebrate the University of Bath's 60th anniversary.

CWBE Team news

Our last PDRA to join the team started in January 2026. Welcome to the team Sumrati Gurtoo! Sumrati will be working in the Chemistry department on the application of high-resolution, mass spectrometry-based omics approaches to support wastewater-based epidemiology and the development of early-warning systems for population health surveillance.



She specialises in proteomics, metabolomics, and biomarker discovery, with a strong translational background in identifying disease-associated molecular signatures from complex biological matrices.



Dr Neil Byrnes, who recently passed his viva, has been recruited to the role of Post Doctoral Research Associate in CWBE for the Cam and Wellow Brook Partnership project. This project, from [WINEP](#), will be carried out by the University of Bath in partnership with Wessex Water, B&NES, Bristol Avon Rivers Trust (BART), and the Environment Agency.

This work will focus on assessing public and environmental health risks by identifying the main sources of chemical contaminants across community, agricultural, and industrial activities, while building a unified One Health platform to connect human, environmental, and ecological data. Together, these insights support the development of targeted, evidence-based interventions that enhance the ecological health of the catchment and enable ongoing monitoring of their impact.

New Partner



We are delighted to announce that we have a new partner, Bangor University. Already part of the Red-ALERT CDT, they are now a CWBE partner too. We look forward to working more closely with Prof [Davey Jones and his group](#) in the coming months.

CWBE infrastructure and facilities

Since our last newsletter we are happy to confirm that all the CWBE spaces have finally been handed over to us. The contractors have finished their work in our Microbiology lab (photos below), the last lab to be completed, and we have already started moving in to initiate work in there. The last of our office spaces are also ready and CWBE staff are enjoying their new work space.



CWBE events and activities

WESSEX WATER AND CWBE RESEARCH SHOWCASE

We held a Water Research Showcase on campus, on 24th February 2026, as a follow up event to the one held at Wessex Water in September 2025. This was a great success and we had staff and student visitors from across campus coming to look at posters and equipment on display, and they were also invited to listen to some short talks by CWBE Co-Directors and Wessex Water staff.

The showcase was a great opportunity for people to see examples of cutting-edge research tackling environmental and public health challenges. Wessex Water staff were on hand to talk about their work and the challenges they face. On show were advances in wastewater-based epidemiology, sensor technologies, data-driven health surveillance, catchment management, Smart rivers and much more. Student visitors to the stands were also able to discuss placement opportunities.

The short talks included thematic summaries from CWBE Co-Directors, Profs Barbara Kasprzyk-Hordern, Pedro Estrela, Ed Feil and Julie Barnett. The three talks from Wessex Water were on 'Micro-plastics and the water cycle - threat and management opportunities' (Megan Robertson, Senior Environmental Scientist); 'From drought to flood and back to drought: how could we better use rainwater'? (Matt Wheeldon, Director of Infrastructure Development) and 'Water companies versus society or are we all in this together'? (Ruth Barden, Environmental Solutions Director).



CO-CREATION WORKSHOP WITH UKHSA

Following on from our co-creation workshops with the Ministry of Justice and B&NES, we recently held a co-creation workshop with our partners, UKHSA and Wessex Water to explore opportunities to support WBE capacity building in the UK. We are looking forward to developing the ideas that came out of this workshop into some exciting projects. Watch this space...

CWBE STAND AT UNIVERSITY OF BATH 60TH ANNIVERSARY ADELARD LECTURE, PUMP ROOMS, BATH

CWBE was delighted to take part in the showcase of research at the first University of Bath 60th Anniversary Adelard Lectures. This new series of lectures and panel conversations are named in honour of Adelard of Bath, an influential 12th-century natural philosopher. At the first one, Government Chief Medical Officer, Prof Sir Chris Whitty spoke on Thursday 26 March in the Pump Rooms in the City. His lecture called: 'Looking back to shape a healthier future' was followed by a panel discussion that explored the challenges and opportunities in future health policy.

Before the lecture, three of our researchers, Dalia Elabaddi, Dr Neil Byrnes and Dr Tolulope Lawrence were on hand to talk about the role WBE can play in public (and environmental) health. The stand featured displays of the molecules and markers that can be detected in wastewater and included an interactive demonstration of Liquid Chromatography.



CWBE impact and public engagement

RESEARCH WITH IMPACT CAMPAIGN

CWBE Director, Prof Barbara Kasprzyk-Hordern, was featured in the recent University of Bath's Research with Impact campaign on [How Bath research - from pharmacology and psychology, to chemistry and social policy - is protecting consumers and improving health.](#)

PUBLIC ENGAGEMENT WORKSHOPS

Wessex Water's involvement with the Innovative Pathway Control 2 (IPC2) project in part relates to supporting the University of Bath (UoB) in delivering monitoring and evaluation of social prescribing within the Somer Valley catchment. The B&NES Social Prescribing Steering Group was established to design an overall strategy framework document ensuring a unified local social prescribing definition and future delivery model for the area - including the Somer Valley. To support one of the steering group's planned actions, two of the PhD students affiliated to CWBE, Estelle Corbett and Saoirse Fitzgerald, led workshops (funded by the University of Bath Public Engagement team) across primary care, secondary care, the third sector, and the local authority to provide a dedicated space for stakeholders to debate local definitions, and evaluation metrics and monitoring requirements.

Following on from their May 2025 workshop which focused on defining local definitions of social prescribing, the evaluation workshop was held in November 2025. The event was well attended across the invited groups, with attendees from primary care [3], secondary care [1], the third sector [10], and the local authority [3]. Discussions focused on the reasons for evaluating social prescribing, the outcomes currently being assessed, the challenges associated with evaluation, and what an ideal evaluation design would look like in relation to their goals. The last workshop is anticipated to take place in Summer 2026 with a final report to follow.

CWBE CO-DIRECTOR, PROF ED FEIL, FEATURED IN THE FINANCIAL TIMES.

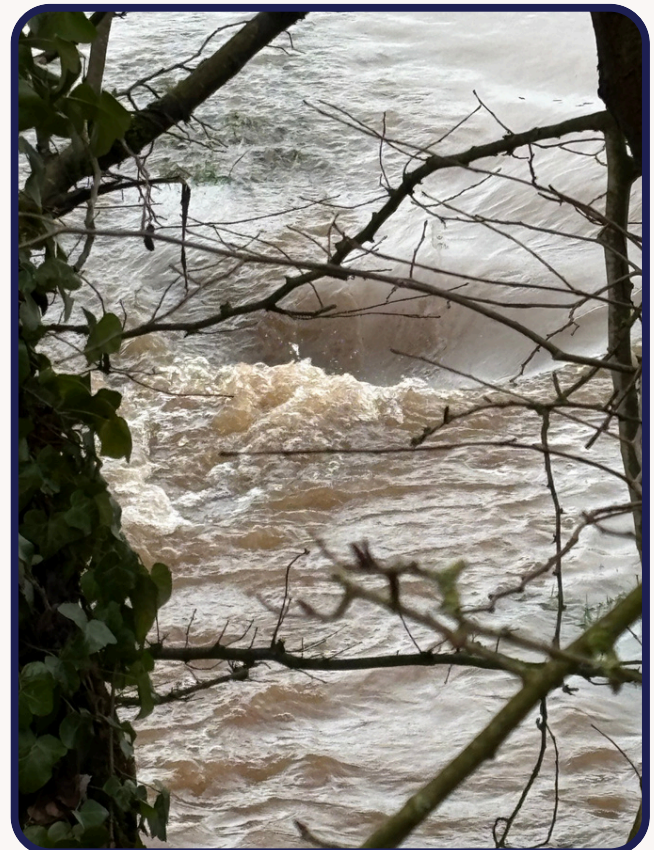
As the UK Health Security Agency expands its wastewater surveillance network, Ed's expertise on pathogen surveillance using wastewater was featured in an [article in December 2025](#). Ed highlighted how CWBE is using the technology not only for testing dangerous pathogens, but also antibiotics and the spread of antimicrobial resistance genes in sewage and rivers. He also mentioned how wastewater monitoring can be used at individual premises such as hospitals and airports to provide more detailed insights into particular community's health.

In other news

WINTER SAMPLING CAMPAIGN - FLOODED RIVERS AND MISSING EQUIPMENT

A team from CWBE, led by Dr Nicola Ceolotto, has successfully completed another sampling campaign near the Paulton and Radstock WRCs. This time, over 20 staff and students volunteered to help across 8 days in early February. For newbies, this meant some training on how to use the equipment, how to put on waders (before or after the life jacket?) and safety protocols. During the days of sampling, team members gained comprehensive hands-on experience, and learnt how each decision (from site selection to sampling approaches) directly affects the quality of the results.

This time, the weather was...wet. This meant the rivers were fast and full and not always safe safe to enter get the flow measurements. But the team did their best. Another problem this time was vandalised equipment - we had to say goodbye to one of the autosamplers which disappeared overnight from its riverside position.



BIO26 CONFERENCE

Prof Pedro Estrela gave a keynote talk at the Bio26 conference in Makhanda, South Africa in January 2026, where he presented his work on the development of biosensors and portable systems for monitoring of health and water/wastewater markers.

He also gave an invited seminar at Rhodes University and participated in a workshop on models of stakeholder engagement with the Biotechnology Innovation Centre and the Institute for Water Research at Rhodes University.



INDIA VISIT



On a recent trip to India, Prof Ed Feil met with several researchers to discuss potential collaboration. It brought together researchers across BLiSC (NCBS/TIGS), SRM Chennai, and IIT Chennai to explore shared interests in infectious disease epidemiology, genomics, and wastewater-based surveillance.

Discussions at BLiSC revealed particularly close alignment with TIGS colleagues whose work on AMR, One-Health surveillance, and wastewater epidemiology intersects directly with ongoing Bath and CWBE activities, opening clear opportunities for shared pipelines, data exchange, and comparative analyses.

Follow-up meetings, participation in a major bioengineering conference at SRM, and exploratory conversations at IIT Chennai about research links and student exchanges—further reinforced the potential for sustained UK–India partnerships.

VICE CHANCELLOR'S AWARD

Huge congratulations to CWBE Director, Professor Barbara Kasprzyk-Hordern, who was awarded the Vice Chancellor's Research Medal at the winter graduation ceremony in Bath. This award recognised Barbara's pioneering work in advancing analytical methods to detect trace contaminants and health biomarkers in water systems which has been adopted globally to inform public health and environmental policy. Congratulations Barbara!



FELLOWSHIP ELECTION

Congratulations too, to CWBE Co-Director, Professor Julie Barnett who has been elected to the [Fellowship of the Academy of Social Sciences](#) in recognition of her substantial contributions to social science for public benefit. Julie's work within CWBE involves collaborating with colleagues across chemistry, electrical engineering, mathematics and the life sciences to help shape and implement an effective One Health approach, developing new tools that support human, animal and environmental health. Read more [here](#).



CWBE papers - latest

Please check out our [website](#) for a full list of all our papers. Here are some recent highlights:

[Spatial Occurrence and Distribution of Micropollutants \(Pharmaceuticals and Personal Care Products\) in the eThekweni Catchment, South Africa](#)

Tolulope I. Lawrence, Natalie Sims, Barbara Kasprzyk-Hordern, Sreekantha B. Jonnalagadda, Bice S. Martincigh. Environmental Pollution Available online 14 April 2026, 128139

[Spatiotemporal profiling of antimicrobial agents during wastewater treatment – a national study](#)

Adegbenro P. Daso, Holly J. Tipper, Daniel S. Read, Barbara Kasprzyk-Hordern. Environmental Advances, Volume 23, April 2026, 100696

[Understanding the Role of Deconjugation of Phase II Metabolites in Wastewater: Implications for Wastewater-Based Epidemiology](#)

Elliss, H., Hricova, K., Griffiths, E., [Byrnes, N. A.](#), [Fail, B.](#), [Hawkins, E.](#), [Proctor, K.](#), Robertson, M., [Bagnall, J.](#) & [Kasprzyk-Hordern, B.](#), 9 Feb 2026, (E-pub ahead of print) In: Environmental Science & Technology. 60, 7, p. 5789-5803

[Pharmaceutical pollution from health care: a systems-based strategy for mitigating risks to public and environmental health](#)

Thornber, K., Bentham, M., Pflieger, S., Kirchhelle, C., Adshead, F., Owen, S., Holmes, H., Brown, A. R., Farmer, C., Eii, M. N., Niemi, L., Wöhler, L., Wilson, E. C. F., Wade, M. J., Tyler-Batt, W., Taylor, M., Sowman, G., Southall, P., Smith, R. & Routledge, C., Redshaw, J., Pitchforth, E., Pegg, M., Moore, K., Kirkham, G., [Kasprzyk-Hordern, B.](#), Helwig, K., Gibb, S., Fleming, L. E., Comber, S., Collins, R., Brown, H., Brophy, S., Brazier, R. E., Blitzer, H., [Barnett, J.](#), Arendt, R., Alexandre, J. C. & Tyler, C. R., 31 Jan 2026, In: Lancet Planetary Health. 10, 1, 14 p., 101404.

[Wastewater analysis as a global toxicovigilance tool for the monitoring of new psychoactive substances](#)

Nadarajan, D., Laimou-Geraniou, M., Chappell, A., Baduel, C., Bijlsma, L., Boogaerts, T., Burgard, D. A., Castiglioni, S., [Ceolotto, N.](#), Driver, E. M., Sodre, F. F., Kassinos, D. F., Quintana, H. F., Gerber, C., Gracia-Lor, E., Gracia-Marín, E., Halden, R. U., Heath, E., Huchthausen, J. & [Kasprzyk-Hordern, B.](#) & [21 others](#), , 15 Jan 2026, In: Water Research. 289, Part A, 124847.

[Convergence and global molecular epidemiology of Klebsiella pneumoniae plasmids harbouring the iuc3 virulence locus: a population genomic analysis](#)

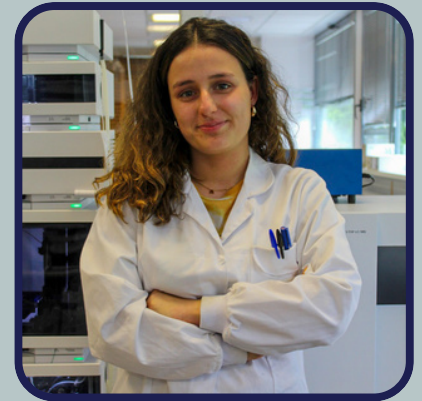
[Gibbon, M.](#), Couto, N., [Cozens, K.](#), [Habib, S.](#), [Cowley, L.](#), Aanensen, D. M., Corander, J., Thorpe, H. A., Hetland, M. A. K., Sasser, D., Merla, C., Corbella, M., Ferrari, C., Turner, K. M. E., Sirikanjana, K., Dulyayangkul, P., Charoenlap, N., Thamlikitkul, V., Avison, M. B. & [Feil, E.](#), 6 Jan 2026, (E-pub ahead of print) In: The Lancet Microbe. 101236

[A new multi-residue method for PFAS analysis in wastewater for environmental and public health risk assessment](#)

Dalia Elabbadi, Harry Elliss, Megan Robertson, John Bagnall & Barbara Kasprzyk-Hordern. Analytical and Bioanalytical Chemistry (2026) 418:2917–2938

Staff spotlight

This time we cast a spotlight on [Dr Andrea Estévez Danta](#), a Post Doctoral Researcher based at the University of Bath. She is currently working on the development of wide-scope WBE pipelines for the estimation of human exposure to hazardous chemicals presented in household products. Andrea was originally recruited to the CWBE PDRA Omics role but soon after she was awarded a fellowship by the Spanish Government. However, Andrea decided to carry out her 2 year project here so has become an essential member of the team after all.



Q1: CAN YOU GIVE US A BRIEF OVERVIEW OF YOUR AREA OF EXPERTISE?

My expertise is developing analytical methodologies to monitor population health status using wastewater-based epidemiology and human biomonitoring.

Q2: WHAT IS YOUR FAVOURITE THING ABOUT THE WORK YOU ARE DOING?

In general, I really enjoy my work because every day is different, a new challenge, a new adventure. Prof. Barbara Kasprzyk-Hordern's group has allowed me to explore a new line of research within the WBE focused on the use of proteins as biomarkers of exposure, which makes every day and every advance we make fascinating.

Q3: WHAT / WHO IS YOUR BIGGEST SOURCE OF INSPIRATION?

My greatest inspiration is people who are passionate about their work but who can also maintain a balance with their personal lives, and this is especially noteworthy in the case of women in science.

Q4: WHAT ARE YOU MOST PROUD OF IN YOUR CAREER SO FAR?

I am proud of the sacrifices I have made to get where I am today. A career in science is not easy, and I am aware that I still have a long way to go, but I am motivated and ready to continue.

Q5: IF YOU COULD TRAVEL ANYWHERE IN THE WORLD, WHERE WOULD YOU GO AND WHY?

I would love to visit Asia, experience a different culture and see different landscapes. However, now that I live abroad, my mind is always on travelling home.

Q6: WHAT ARE YOU MOST PASSIONATE ABOUT OUTSIDE OF WORK / STUDY?

Now that I've moved to a different country, my biggest hobby is discovering new places. I try to organise my weekends so that I can go for walks in my local area or take the train to visit nearby towns.

READ ANDREA'S LATEST PUBLICATIONS:

[Differences in drug use across three neighbourhoods with varying socioeconomic levels: a wastewater-based surveillance study.](#) Lluís Corominas, Rocío Inés Bonansea, Iria González-Mariño, Ian Zammit, Sergi Badia, Sara Rodríguez-Mozaz, Lubertus Bijlsma, Carlos Pernas-Fraguela, Rosario Rodil, Rosa Montes, Andrea Estévez-Danta, José Benito Quintana, Marta García Sierra, Elena Domene, Mar Satorras, Miren López de Alda. Journal of Environmental Chemical Engineering
Volume 14, Issue 2, April 2026, 121294

[Recent trends in wastewater-based epidemiology of pharmaceuticals. Methods and applications](#) Carlos Pernas-Fraguela, Rosa Montes, Rosario Rodil, Verónica Castro, José Benito Quintana, Andrea Estévez-Danta. TrAC Trends in Analytical Chemistry Volume 198, May 2026, 118746