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## Internal news and events

**We are excited to announce the first in-person symposium of our new network 'Microbes and Society @ Exeter'!**

**Wednesday 22 and Thursday 23 June at Sandy Park, Exeter**

This two-day event will be a great opportunity to network, get to know your peers, learn about new research and find out more about the Microbes & Society @ Exeter research network. Day 1 of the meeting is free and open to everyone. Spaces for day 2 are available to those who are interested in being involved in the research network.

Deadline for abstract and registration: Monday 6<sup>th</sup> June  
For more information and registration: click for our Eventbrite page [here](#)



Tues 31 May 11.15 – 12 noon [Exeter Research Networks Internal Launch](#): Prof Neil Gow will introduce the networks and Prof Lisa Roberts will speak about the vision for this initiative and share early successes of our Networks. This kick-off event will be followed by showcase sessions where University members can learn more about each Exeter Research Network.

**Tuesday 7 June at 13.00 hours**

This event focuses on the environmental compartment of the One Health triumvirate and specifically on the role of understanding and mitigating the risks of pharmaceutical pollution.

Dr Kelly Thornber, Interdisciplinary Research Fellow in Sustainable Development, will present her work on understanding the socio-ecological systems driving pharmaceutical pollution in both Bangladesh aquaculture settings and in a UK healthcare context. Will Gaze, Professor in Microbiology, will talk to a presentation on selection for AMR by pharmaceutical contaminants in aquatic systems.

## WEDNESDAY 8 JUNE, 1.00 – 5.30PM

[Microbiology partnership building workshop](#): Facilitated by [Oxentia](#), this session aims to support the Cornwall microbiology community as a cohort, and as individuals, to explore how best to build collaborations with external, non-academic organisations. Funded via IIB's Translation Funds, this workshop welcomes all microbiology academics to join in a discussion that will explore the why, how and when to build external partnerships. The outcome of the workshop will include: access to tools, understanding best techniques, map of our research strengths, as well as the opportunity for a 121 follow up discussion with Oxentia's industry experts.

## Monday 27 June, 1.00 - 2.00

Dr Aimee Murray, Lecturer in Microbiology, is the Featured ESI Academic of the month for June. She will deliver the State of the Art talk "Not-so natural selection - the role of environmental pollution in the rise of antimicrobial resistance" on Monday 27 June 1 - 2pm. [Read more](#).

## ESI ECR networking events are back

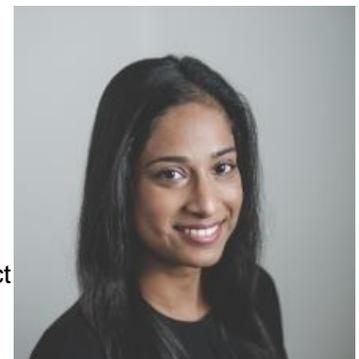
The next event will be on **June 10<sup>th</sup> 1600-1800** and be run by visiting Professor Ina Horlings. Details can be found here: <https://www.exeter.ac.uk/news/events/details/index.php?event=12136>

## Congratulations to...

**PI Dr Dhara Malavia** – GW4 Generator award

### **Understanding Use of Agricultural Azoles and its Impact on Quality of Waterbodies and AMR**

"Environmental antimicrobial resistance is an emerging global concern and agricultural azoles are one of the major contributors that have been overlooked until now. While previous studies have investigated impact of azoles in farm soils, this funding will allow us to study their presence in natural water bodies and impact on AMR which currently remains unexplored.



**Dr Aimee Murray**

### **Exploring understudied aspects of antimicrobial resistance evolution to improve environmental pollution policy.**

This is a £812k project with University of Bath, the Environment Agency and Roche.

Further details of the project can be found at:

<https://www.exeter.ac.uk/research/esi/research/projects/amr-evolution-to-improve-environmental-pollution/>



## Dr Ray Chan

Kin Wing (Ray) Chan, was awarded a three-year Wellcome Trust Research Fellowship in Humanities and Social Sciences. This project will examine the challenges and opportunities of using artificial intelligence and sensor technologies to tackle AMR and animal health challenges in China. With support from Prof Steve Hinchliffe and Prof Henry Buller, Ray will start his project in July 2022 and collaborate with research partners from Clark University, City University of Hong Kong, Nanjing Agricultural University, Fudan University and high-technology companies in China.

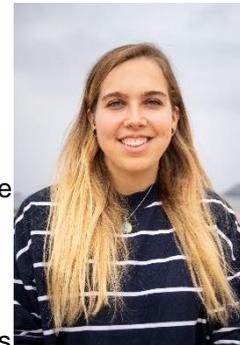
<https://wellcome.org/grant-funding/people-and-projects/grants-awarded/future-one-health-challenges-and-opportunities>



**PhD student, Emily Stevenson** has a paper out on her work with the Environment Agency on 'Antifungal exposure and resistance development: defining minimal selective antifungal concentrations and testing methodologies'.

Antifungal resistance is a significant global threat to human health, with the environment playing an increasingly important role in the evolution and spread of antifungal resistance. Current environmental risk assessment guidelines do not require assessment of antifungal agents in terms of their ability to drive antifungal resistance development, and there are no established experimental tools to determine antifungal selective concentrations. This interdisciplinary project with the University of Exeter's Medical School, MRC Centre for Medical Mycology and the Environment Agency aimed to propose potential methods to generate antifungal selective concentration data. Such data can be considered in the development of regulatory guidelines that aim to reduce environmental selection for antifungal resistance. This article will be published in an upcoming special edition of *Frontiers in Fungal Biology: Experimental evolution and anti-fungal resistance*.

<https://www.frontiersin.org/articles/10.3389/ffunb.2022.918717/abstract>.



## OTHER NEWS

Jono Warren (part-time MbyRes student) shared his preliminary data and findings regarding his research investigating catchment processes and phenotypically resistant *E. coli* in bathing waters. Adapting existing Environment Agency methods to enumerate and isolate *E. coli* which are phenotypically resistant to clinically relevant antibiotics: ampicillin, cefotaxime, meropenem, and amikacin. Coupling this with data for different catchment processes: land use, climate and tidal data, dominant sources of faecal pollution, and antibiotic prescribing data. Together he hopes to be able to use this to show the impact of different catchment activities on AMR in bathing waters, explore the impact this could have on bathers, and how this could be used as part of wider AMR surveillance in the environment.



**Michiel Vos** was quoted in this short *Scientific American* piece:

[Living with Lead Creates Antibiotic-Resistant 'Superbugs' - Scientific American](#)

### Public engagement expressions of interest

TREE (Translational Research Exchange @ Exeter <https://www.exeter.ac.uk/research/tree/>) are seeking expressions of interest from AMR researchers, who are interested in participating in a pop-up shop event that is currently in development. If you have an idea for an activity, would like support to develop an activity, or want to gain experience in public engagement we would like to hear from you! To find out more, please contact Rachel Etherington, Communities Engagement Manager [r.l.etherington@exeter.ac.uk](mailto:r.l.etherington@exeter.ac.uk)

### Funding opportunity reminder: MRC/NIHR

#### [MRC/NIHR Better Research, Better Methods](#)

REMINDER: Apply for funding to improve the methods used by others in biomedical and health research.

Call opens: 6<sup>th</sup> May 2022

Call deadline: **15<sup>th</sup> June 2022, 17:00**

Project value: Up to £625k (at 100%fEC) per project, to be funded at 80%fEC

Application process: Through [JeS](#) (see guidance attached for detail)

Eligibility: PIs must have a graduate degree (a PhD is expected for most applicants) and be based at an organisation eligible for UKRI funding

Remit: Your project must focus on an area within [the MRC remit](#) and/or [the NIHR remit](#)

Out of remit: Technology or biomarker development is out of remit for funding

Note that this is an ongoing scheme. Application rounds open twice per year, closing in June and November.

This opportunity seeks to fund research that includes at least one of the following project categories:

Methodology research, Improving methods used and Improving research outputs.

Please see [the call page](#) or guidance attached for an inexhaustive list of suggested research themes for this opportunity.

Colleagues wishing to apply to this call should please add their Idea to [the T1 pipeline](#) in order for Research Services support to be allocated.

If you have project updates or resources that you think might be of interest to other members of the Network, we would be pleased to highlight them through this monthly newsletter – contact us on [AMR-Network@exeter.ac.uk](mailto:AMR-Network@exeter.ac.uk)

### Publications

[Air path of antimicrobial \*\*resistance\*\* related genes from layer farms: Emission inventory, atmospheric transport, and human exposure.](#)

[Effect of polymicrobial interactions on antimicrobial \*\*resistance\*\*: an \*in vitro\* analysis in human ocular infections.](#)

Don't forget to use **#ExeterAMR**

## GW4 AMR Alliance



### GW4 AMR Alliance

The [GW4 AMR Alliance](#) continues to welcome new members from all disciplines and working at any level.

#### How to join

Please sign up [here](#) to complete a short online registration form (this link can also be found on the [website](#) along with our Privacy Policy). If you have any queries, please do contact the AMR Alliance team at [amr@gw4.ac.uk](mailto:amr@gw4.ac.uk)

If you would like to find out more about the GW4 AMR Alliance and its aims, as well as hear about some of the research that is taking place across the four partner universities of Bath, Bristol Cardiff and Exeter, please have a look at the launch event [here](#).

#### Recent news and congratulations go to

Congratulations to all that were awarded the GW4 Alliance Grant 2022 to work collaboratively across Bath, Bristol, Cardiff and Exeter to examine fungicide management practices and its emerging impact of driving resistance to human fungal pathogens.

*Meet the team*

Dhara Andy Susan Neil Aimee Ray

*Acknowledgments*

INNOVATION FOR AGRICULTURE JOHN TEMPLETON FOUNDATION *Enlighten. Nurture. Inspire.* University of BRISTOL Cabot Institute for the Environment UNIVERSITY OF EXETER Minner Centre for EVOLUTION UNIVERSITY OF BATH

## GW4 AMR Alliance ECR and PGR Network

The GW4 AMR Alliance ECR and PGR Network is working to develop its community network. You can find out more, including key contacts at each of the four partner universities and information on the developing events programme, on the dedicated webpage [here](#). There is also a link to join the network on the same page.

The next Lightning Talks event will be on **Monday 13 June, 15.00-16.30 via zoom**, This is an opportunity to participate in/hear short (3 min) talks from GW4 Alliance ECRs and PGRs working in a range of AMR disciplines and to network in smaller breakout groups hosted by committee members. Booking is now open via the attached link:

<https://www.eventbrite.co.uk/e/lightning-talks-networking-event-gw4-amr-alliance-ecr-and-pgr-network-tickets-333553456367>

## External news and events

### Funding opportunities

#### Call now open: JPIAMR 15th Call Disrupting Drug Resistance Using Innovative Design

##### International collaboration to address antimicrobial resistance

JPIAMR is launching a transnational network call under the umbrella of the JPIAMR and within the framework of the ERA-NET JPIAMR-ACTION. The call *Diagnostics and Surveillance Networks* involves funding organisations from 11 countries to date.

Just a reminder that the proposal deadline is **14 June 2022**

For further details, please visit: [Diagnostics and Surveillance Networks – JPIAMR](#)

### UKRI BBSRC call

**Reminder:** strategic longer and larger grants (sLoLa): frontier bioscience 2022 to 2023 [Strategic Longer \(sLoLa\) call](#)

Your project:

- should bring together a diverse multidisciplinary team to address a complex challenge
- should have the potential to deliver transformational impact across the biosciences
- must improve our understanding of the fundamental 'rules of life' that govern biological systems.
- The full economic cost of your project must be over £2 million. BBSRC will fund 80% of the full economic cost.
- Projects can be up to five years in duration.
- **Closing date: 4pm on 14 June 2022**

## Sector news

Bristol University and Bath have had an article published in the Lancet regarding inhaled antibiotics in the fight to treat lower respiratory tract infections:

<https://www.bristol.ac.uk/news/2022/may/inhaled-antibiotics.html>

The Centre for Infectious Diseases & Research Policy at the University of Minnesota have highlighted a report by the US Task Force for Combating Antibiotic-Resistant Bacteria (CARB). It is a year 5 progress report on antibiotic resistance. See here for further details:

<https://www.cidrap.umn.edu/news-perspective/2022/05/asp-scan-weekly-may-20-2022>

## Sector events

**The British Society for Antimicrobial Chemotherapy** is holding workshops on Outpatient Parenteral Antibiotic Therapy June to September as per the link:

<https://opat-conference.com/regional-workshops/>



### Online workshop 9 June 2022, 12.00-16.20 (BST)

JPIAMR in partnership with the Medical Research Council (MRC UKRI) are hosting a workshop on antibiotic resistance, specifically looking for input from Early to Mid-Career Researchers.

Antibiotic resistance is prevalent in bacterial infections across the world, threatening many of the fundamentals of modern medicine. A huge amount of work and funding has been focussed on understanding antibiotic resistance and developing novel strategies to overcome this growing problem. The question is, where are the remaining research gaps in this area? We are asking Early to Mid-Career Researchers to give us their thoughts on this question as they move to future leadership positions to best focus future research to tackle antibiotic resistance.

[Read more and register to the workshop “New Perspectives on Bacterial Drug Resistance”](#)

*JPIAMR is in the process of updating the JPIAMR Strategic Research and Innovation Agenda, contributing to the development of the candidate One Health AMR Partnership. This activity will support this process by allowing us to collect gaps and needs in the area of bacterial resistance.*



Vaccination programs are known to be effective to both promote the prudent use of antibiotics and to prevent the spread of AMR. JPIAMR, in partnership with the [Medical Research Council](#) and [BactiVac Network](#), are holding a live webinar to identify opportunities and priorities for vaccine research from an immunological perspective to a wider translational context, in the field of antimicrobial resistance (AMR).

The objectives of the webinar are:

- To identify ways in which vaccination could be used to curb AMR
- To examine the remaining gaps in the vaccines for AMR research portfolio and discuss how to tackle these
- To better understand current attitudes to vaccination programmes, following the COVID-19 pandemic
- To scope gaps and priorities for the JPIAMR Strategic Research and Innovations Agenda

[Read more and register to the webinar.](#)

*JPIAMR is in the process of updating the JPIAMR Strategic Research and Innovation Agenda, contributing to the development of the candidate One Health AMR Partnership. This activity will support this process by allowing us to collect gaps and needs in the area of bacterial resistance.*



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