

# Newsletter

Autumn 2017 Issue 06

## NEWS



### Surviving your PhD and Viva Panel

(left to right: Dr John Harris -HPRU GI; Dr Sarah McGarrol - HPRU GI; Professor Julian Hiscox -HPRU EZI; Dr Neil Blake – UoL; Dr Jackie Duggan – PHE; Professor Stuart Carter – UoL; and Professor Paul Hunter -HPRU GI)



### Grant applications when transitioning from PhD to PDRA, Careers & Getting Work Published Panel

(left to right: Dr Marcus Blagrove -HPRU EZI; Professor Miren Iturriza-Gomara -HPRU GI; Professor Sarah O'Brien -HPRU GI; Dr Neil Blake – UoL; Dr Jackie Duggan – PHE; Professor Stuart Carter – UoL; and Professor Paul Hunter -HPRU GI)



HPRU GI and EZI PhD students

## JOINT HPRU PHD TRAINING EVENT

Following the success of the PhD Academy in January and a consultation with students on their training needs, HPRU in Gastrointestinal Infections and HPRU in Emerging and Zoonotic Infections jointly hosted a summer event for their PhD students.

On 26 July we held a special Steering Committee for each unit. PhD students, PDRAs and staff were able to 'meet the HPRU management' and contribute to the meetings. There was also a joint lunch to enable sharing of knowledge across the HPRUs.

The next day was a training day with interactive panels debating issues on: 'Surviving your PhD and the Viva' chaired by Professor Julian Hiscox (HPRU EZI); and 'Grant applications when transitioning from PhD to PDRA, Careers and Getting Work Published' chaired by Professor Sarah O'Brien (HPRU GI). On both panels was a mix of PDRAs, Lecturers and Professors to give the students a breadth of experience and knowledge from different universities as well as a PHE perspective.

The final session was an 'Editing your Thesis for Clarity' workshop run by the Liverpool Doctoral College which gave students the opportunity to bring their own writing to the session and edit it on the day.



Quadram Institute Bioscience underdevelopment

## IFR TRANSFORMING INTO QUADRAM INSTITUTE BIOSCIENCE

Work has already started on a new £multi-million food and health research centre that will become the state-of-the-art home for the new [Quadram Institute](#).

In preparation for the full opening of the Quadram Institute in Spring 2018, the Institute of Food Research became Quadram Institute Bioscience on April 28<sup>th</sup> 2017.

The Quadram Institute will be at the forefront of a new interface between food science, gut biology and health, developing solutions to worldwide challenges in food-related disease and human health. It will bring together research teams from the Institute of Food Research (IFR), with others from the University of East Anglia, as well as the Norfolk and Norwich University Hospitals' regional gastrointestinal endoscopy unit. The Quadram Institute will have the capacity for 300 research staff with a further 100 staff supporting one of Europe's largest endoscopy facilities. It will be engaged in fundamental and translational food and health research, alongside clinical studies, endoscopy and industry, working together to become a leading international hub for food and health research.



## HPRU GI Annual Scientific Meeting 2018

**7-8 March 2018, Norwich**

The 2018 HPRU GI Annual Scientific Meeting will be held at **The Assembly House, Norwich, NR2 1RQ** on 7-8 March 2018. Call for abstracts will be out shortly.



## **WHO ARE THE NIHR? #WeAreNIHR**

A new video has been released to explain who the National Institute of Health Research (NIHR) is and what it does. The video, which is less than one minute long, describes the NIHR 'in a nutshell' and features people from across the NIHR who are working towards improving the health and wealth of the nation through research.

The NIHR is asking all those funded by, supported by, working for and working with the NIHR to watch and share the video, the [NIHR's YouTube channel](#). Share on social media using [#WeAreNIHR](#)





## PROFESSOR WHITEHEAD ELECTED TO THE ACADEMY OF MEDICAL SCIENCES

Professor Dame Margaret Whitehead has been elected to the prestigious Fellowship of the Academy of Medical Sciences. The Academy is the independent body in the UK representing the diversity of medical science. Their mission is to advance biomedical and health research and its translation into benefits for society.

Professor Whitehead, alongside 45 other world leading UK researchers, has been elected as a Fellow for her contribution to biomedical and health research, the generation of new knowledge in medical sciences and its translation into benefits to society.

Further to this, Professor Dame Margaret Whitehead, Joint Director of the LiLaC initiative, a collaboration between The University of Liverpool and University of Lancaster, will be a member of the renewed NIHR School for Public Health Research. Funding of £20.5 million over five years is available to support the new school.



## HPRU GI WEBSITE & TWITTER

Our website address is [www.hprugi.nihr.ac.uk](http://www.hprugi.nihr.ac.uk) and Twitter name is [@HPRUgi](https://twitter.com/HPRUgi). Please don't forget to let us know about any news items, public engagement events, or anything similar, for the website, Twitter and next edition of this newsletter.

## EVENTS

### PHE Training

Public Health England are offering a range of different training courses which are open to both PHE staff and external delegates:

#### 2017

- 17-18 October – Outbreak investigation: a practical course
- 21 November – Hitchhikers Guide to Microbiology, microbiology for non-microbiologists

#### 2018

- 16-17 January – Lab4Epi Training Module
- 18-19 January – Epidemiology in a Healthcare Setting
- 23-25 January - HIS Foundation course (covers prevention and control approaches to HCAI & AMR)



- 19-23 February – Introduction to the practice of environmental epidemiology

If you would like to attend any of these courses then please contact Gloria Wilson, PHE Education and Training Coordinator at [gloria.wilson@phe.gov.uk](mailto:gloria.wilson@phe.gov.uk)

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### **Microbes Fight Back: The Growing Problem of Antimicrobial Resistance**

**Inaugural lecture: Professor Laura Bowater**

**7 November 2017, 6.30pm Julian Study Centre, University of East Anglia**

*"We rely on antibiotics to fight life-threatening infections, improve the odds of survival after routine operations and protect the animals we farm for food. But it seems that we have taken these valuable resources for granted, with more and more antibiotics becoming ineffective against the microbial pathogens that cause disease. This talk will examine how we ended up in this situation, and what can be done to avert a dystopian future in which we have no effective antibiotics to combat the 'rise of the superbugs'."*

This lecture will be followed by a drinks reception. **Free, no need to book.**

**For more information:** call 01603 592130, visit the UEA Events [website](#) or [email](#) with further enquiries.

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### **Institute of Psychology Health and Society Conference**

**14 December 2017, Foresight Centre, University of Liverpool**

This annual conference provides a great opportunity for University of Liverpool PGR students to present their findings and showcase their research to fellow students and staff.

Details will be circulated nearer the time, but we would be grateful if you could **PLEASE KEEP THIS DATE FREE**. It will be a full day event with lunch and refreshments provided.

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## **FUNDING OPPORTUNITY**

### **Early Career Researcher and Returners Fund 2017-18**

Research Policy at the University of Liverpool is delighted to announce the launch of the Early Career Researcher and Returners Fund for 2017-18. This fund supports activities aimed at positioning ECRs and Returners for future funding applications. Activities supported by the fund can include:

- Establishing new research collaborations or learning new specialist techniques
- Embedding fund holders into interdisciplinary networks
- Pump priming activities to carry out research related to future funding applications or production of a research output.

Deadlines:

- 20th November 2017





The standard sum available for proposals led by a single PI is £2,000. Interdisciplinary ideas and opportunities with Co-Is are encouraged. For joint interdisciplinary bids involving more than one named ECR/Returner applications up to a maximum of £5,000 will be considered.

For further information, including eligibility criteria, please see <https://www.liverpool.ac.uk/intranet/research-policy/ecr-returns-fund/>

Any queries should be directed to Research Policy: [restheme@liverpool.ac.uk](mailto:restheme@liverpool.ac.uk)

## STAFF UPDATES

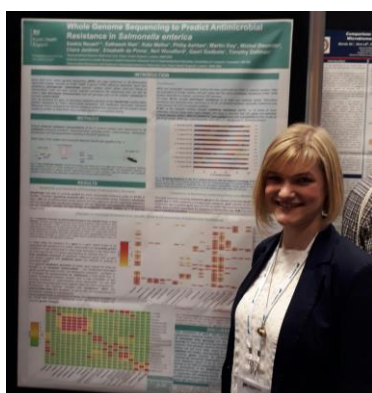
We would like to welcome **Henry Whiley** who has recently joined the team at the Quadram Institute as a Microbiology Research Technician. Henry will be based at the Quadram Institute in Norwich.

**Dr David James Allen** has moved to the London School of Hygiene and Tropical Medicine as Assistant Professor in Virology. David remains the theme leader for the Places theme, as the PHE lead.

Finally, many apologies for the lateness of this newsletter, but due to a back injury following a fall at Lime Street station, our Project Officer, **Victoria Grimbly**, has been off work recovering. She is now back at work.

## STUDENT NEWS

At the PHE Applied Epidemiology Scientific Meeting in Warwick, **Helen Hughes** presented a poster on 'Impact of the 2016 European football tournament on ED attendances in multiple European countries'.



**Saskia Neuert** attended the Microbiology Society Annual Conference in Edinburgh held on 3-6 April 2017 and presented a poster on 'Whole genome sequencing to predict antimicrobial resistance in *Salmonella enterica*'.

At the 6<sup>th</sup> International Giardia & Cryptosporidium 2017 conference hosted in Havana, Cuba, **Richard Elson** on 26 April 2017 conducted an oral talk on 'National increase in reports of Cryptosporidium in the United Kingdom during 2015 -2016'.

On 7 July 2017 **Suzanne Rotheram** presented at the International Medical Geography Symposium in Angers France on 'How do places and people shape inequalities in gastrointestinal infections in households with young children?'



**Natalie Adams** and **Tanith Rose** have conducted two studies using the IID2 Study dataset, both of which have recently been published.

The first study, published in the European Journal of Public Health, aimed to investigate the relationship between socioeconomic status (SES) and infectious intestinal disease (IID) using data from 6,836 individuals of all ages who participated in a community cohort in the IID2 Study. This study found that lower SES was associated with a significantly lower risk of reporting IID symptoms. There was a low response rate which varied by SES and this may have partially explained the findings; however it is possible that the findings reflect differences in exposure to or recognition of symptoms of IID by SES.

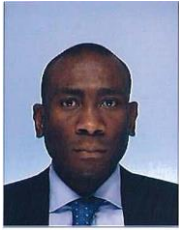
The second study, published in BMC Infectious Diseases, aimed to investigate socioeconomic inequalities in symptom severity and sickness absence due to IID. Among 1164 IID cases, those of lower SES versus high had twice the odds of experiencing severe symptoms. Lower SES was also associated with higher odds of sickness absence; however this association was attenuated after adjusting for symptom severity. The findings from these two studies offer further insight into inequalities in the risks and consequences of IID.

**Further details can be found under the Publications section below.**



On 13 September 2017 **Clare Baker** attended the 19<sup>th</sup> International Workshop on Campylobacter, Helicobacter and Related Organisms (CHRO) in Nantes, France. She gave an oral presentation on 'Using genomics to investigate historic outbreaks of campylobacteriosis in the United Kingdom' as part of the WGS and outbreak investigation session.

## PhD STUDENT PROFILES



### Obaghe Edeghere

Obaghe started his PhD studentship in August 2017 with HPRU supervisors Sarah O'Brien, Alex Elliot and Roberto Vivancos. His project aims to identify and explore opportunities for using internet data (search engine and social media) for health protection surveillance activities that support routine disease monitoring and outbreak detection/response.

Obaghe has a medical degree from University of Port Harcourt, Nigeria and a Master's degree in Public health from Cardiff University, Wales. After a period of training in hospital medicine, he undertook the five-year (post graduate) specialist public health training programme of the UK Faculty of Public Health. He now works for Public Health England as a Consultant Epidemiologist working on infectious disease surveillance & control, outbreak investigation and health protection related research (with a particular focus on syndromic surveillance systems and healthcare associated infections/Antimicrobial resistance). Outside of work he likes to cycle (although not competitively), read fiction and non-fiction, and follow the formula 1 season.



### Caoimhe McKerr

Caoimhe joined the HPRU team in January 2017 as a joint appointment across both Gastrointestinal Infections and Emerging and Zoonotic Infections, with supervisors Sarah O'Brien, Roberto Vivancos, Rob Christley and Rachel Chalmers from Public Health Wales. Her project is around understanding and identifying the populations at risk of *Cryptosporidiosis*.

Caoimhe was an epidemiologist at the Health Protection Agency for four years, and before that spent four years in local public health. Most recently, she completed a two-year Field Epidemiology/EPIET program with Public Health England and the European Centre for Disease Control, involving various research projects and outbreak investigations across the world. Outside of work, she enjoys family time, reading and 70s rock music.

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## PUBLIC INVOLVEMENT AND ENGAGEMENT, IMPACT AND KNOWLEDGE EXCHANGE

### PUBLIC INVOLVEMENT AND ENGAGEMENT ACTIVITIES

Involving and engaging the public in our research is a key focus for the unit. Here are some activities that took place over the spring and summer terms:

#### Patient and Public Involvement and Public Engagement Strategy

The HPRU GI PPI and PE strategy has 6 strategic objectives which include: enabling patients and the public to input



into the direction of the HPRU; embedding PE across all the themes; and presenting HPRU work directly to the public and seeking their engagement at events. This strategy was reviewed by lay members on the Steering Committee as well as Senior Management. The strategy is now available to download from the [HPRU GI website](#).



#### The Cut Science Café, Halesworth

Gary Barker, a HPRU GI member, held a talk on 31 March about 'Thinking, fast and slow' looking at the dual process approach to decision making in relation to healthcare seeking behaviour for people with GI infections. Whilst Gary was talking Rebecca Osborne, artist in residence, was illustrating the talk as an animation for the audience to follow.

#### Public Engagement Training

On 4 April 2017 HPRU GI and HPRU in Emerging and Zoonotic Infections joined together to organise and fund a bespoke training day in Liverpool on 'Presenting about Science'. This day was aimed at PhD students and HPRU researchers and run by James Piercy, from Science Made Simple. James holds the LAMDA gold medal in public speaking, is a trainer for FameLab International and recently won the Royal Society Radio prize. The training focused on enhancing public engagement skills in order to present to and engage effectively with different audiences. This training day was also repeated in Norwich on 26 April.



#### Brilliant Club

Dr Erica Kintz, PDRA, ran 6 tutorials from February to May 2017, as a Brilliant Club tutor. Her tutorials were given to Year 9 and 10 students focussing on 'Food Poisoning and Outbreaks'.

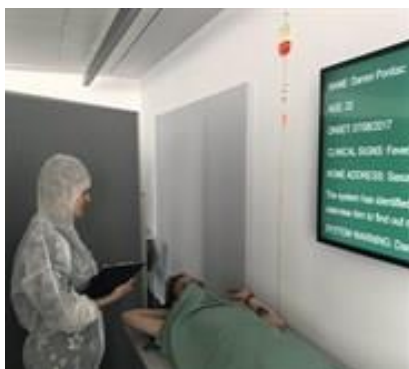
[The Brilliant Club](#) is an award-winning charity that seeks to increase the number of pupils from under-represented backgrounds to progress to highly selective universities.

#### Norfolk and Norwich University Hospital Open Day and Fete

Along with colleagues from the Quadram Institute Bioscience, Dr Lee Kellingray and Saskia Neuert organised a stand at the Norfolk and Norwich University Hospital Open Day and Fete held on 10 June 2017, where they informed people of all age groups about the new Quadram Institute, clinical trials undertaken at the institute, 'good' and 'bad' gut microbes and faecal microbiota transplantation.







### Summer School

On 27 June 2017, PhD student Caoimhe McKerr, in collaboration with HPRU in Emerging and Zoonotic Infections, ran an outbreak activity as part of the University of Liverpool's Faculty of Health and Life Sciences' Summer School week for Year 10 students. The team simulated a disease outbreak scenario and asked participants to work out what had infected the patients.

### Bug Terror!: Outbreak in a box

Following on from this successful event, Caoimhe McKerr has won a bid for Wellcome Trust Public Engagement Grant (as part of a wider collaboration with HPRU in Emerging and Zoonotic Infections & the University of Liverpool's Institute of Global Health) for a reusable and modifiable resource for teaching elements of outbreak investigations, aimed at school children.

### Society for Applied Microbiology Annual Meeting

On 7 July 2017 Gary Barker, a HPRU GI member, gave an invited talk on 'Risk Assessment: Past, Present and Future' at the SfAM Conference at the BALTIC Centre in Gateshead.



### Meet the Scientists

On 8 July 2017, Dr John Harris, Anna Pulawska-Czub and Victoria Grimbly ran a stall for young children and their families at the World Museum Liverpool, during a hands-on science day as part of the University of Liverpool's Meet the Scientist event.

Our Troublesome Tummy Bug stall, with the aid of 'Gerry the Gut', a giant inflatable intestine, saw over 800 children and adults consider Gastrointestinal pathogens and illnesses and how personal and kitchen hygiene can improve public health.



Victoria Grimbly, HPRU GI PPE/PPI lead also created a handy Zine (a handmade mini magazine) for the event. This Zine targeted young scientists, aged 8-11, with interesting facts on bacteria and viruses that they could take away with them to help raise awareness of food safety issues.

To read more and see further pictures visit the [GI website](#).

## UPCOMING EVENTS

There are numerous ways in which researchers can get involved, including the following events - please contact [hprugi@liverpool.ac.uk](mailto:hprugi@liverpool.ac.uk) for further information.



### Norwich Science Festival

21-29 October 2017, Norwich

From the science of gin through to the scientific secrets of Doctor Who, there is something for everyone in this year's Norwich Science Festival, which returns **21-29 October 2017** during half term.



The bumper brochure, featuring over 125 events, has just been released, and includes nine days of celebrity talks, inspirational shows and exhibitions, hands-on family fun, cutting-edge research, and science activities for all ages and all levels of knowledge.

Tickets are now on sale, via [norwichsciencefestival.co.uk](http://norwichsciencefestival.co.uk), for headline talks including **Helen Sharman – Britain's First Astronaut**, shows from TV/radio scientists and celebrities Ben Garrod, Mark Thompson, Adam Rutherford, Lizzie Daly, Nicholas Crane and Johnny Ball.



### Science Jamboree 2017

25 & 26 November 2017, University of Liverpool

In November the University will be hosting its second Science Jamboree for local Beavers, Cubs and Brownies from Merseyside and Cheshire. The event can only run with the support of dedicated student and staff volunteers to help design and deliver interactive sessions, which when complete our young visitors gain their science- related badges.

### **Mentors needed**

University of Liverpool academic, professional services staff, post-docs and post-grad research students are invited to register as Mentors. Mentoring is a small leadership role which will involve about 3-6 hours between October and November. Mentors support a student group to refine ideas for sessions to make them manageable, achievable and safe. They work with the team to keep track of their progress during the project and make sure they complete tasks to deadlines.

If you are interested in being a mentor contact: [scijam@liverpool.ac.uk](mailto:scijam@liverpool.ac.uk)

**For further details about what being a Mentor involves visit:**

<https://www.liverpool.ac.uk/central-teaching-hub/science-jamboree-2017/mentors/>

## INVOLVE

### INVOLVE at 21

28 November 2017, Church House Westminster, London

INVOLVE's national conferences bring together people with a passion in public involvement in health, public health and social care research. This includes members of the public, service users, researchers, research commissioners, public involvement leads and representatives of voluntary sector organisations. The INVOLVE conference has a proud tradition of attracting both national and international delegates.

As INVOLVE turns 21 this year, the conference will celebrate successes, demonstrate how we can learn together from challenges and barriers, share good practice and energise the public involvement community to strive to the next level. The conference will highlight INVOLVE's new national leadership areas identified by "Going the Extra Mile," and be led by the launch of the public involvement standards.

Registration has closed, but if you would like to be added to a waiting list for places which may become available nearer the date due to cancellations, please email your contact details to: [london@profbriefings.co.uk](mailto:london@profbriefings.co.uk)



### Engage Conference –Exploring Collaboration

6-7 December 2017, Bristol



The National Co-ordinating Centre for Public Engagement's 2017 conference will be held 6-7 December 2017 in Bristol, and provides an opportunity for all those interested in HEI public engagement to come together, to be inspired, challenged and refreshed. For details of how to register visit their [website](#).



### The Conversation

The Conversation is a collaboration between editors and academics to provide informed news analysis and commentary that's free to read and republish. The University of Liverpool is a founding partner and academics can sign up to write articles <https://theconversation.com/uk>

If you are involved in any relevant activities, please inform the HPRU GI Administration Team at [hprugi@liverpool.ac.uk](mailto:hprugi@liverpool.ac.uk). Please provide the activity title, brief description, date, audience (schools, public, etc.), audience numbers, and any photographs or additional information.

## IMPACT AND KNOWLEDGE EXCHANGE

In April 2017 HPRU Researchers **Dr Sarah McGarrol** and **Tom Inns** provided advice to the Public Health Manager for NHS Wirral who has recently been seconded to the Wirral Council Environmental Health team. Advice was sought and input provided on gastrointestinal infection cases and where to target interventions.

## NIHR COMMUNICATIONS

### NEW TEMPLATES

Following the rebranding of the Quadram Institute (formally Institute of Food Research) we have updated the NIHR HPRU GI oral and poster presentation templates. The templates now include the new logo for the Quadram Institute. **Please download and use the latest versions for any upcoming presentations:**

<http://www.hprugi.nihr.ac.uk/educating-and-training/nihr-hpru-templates/>

**Please also note that the disclaimer for work both directly and not directly funded by the NIHR (see below) has been amended to include the Quadram Institute.**

### PUBLICATION APPROVAL AND ACKNOWLEDGMENTS

#### **Acknowledging HPRU in Publications**

Acknowledging the NIHR HPRU is vital as we need to capture all your relevant work. If a publication is acknowledged as an HPRU one it can be counted as an output for the Unit.

Anything HPRU related that is published by any HPRU researcher should have the following included as an address, in addition to your usual address:

**- NIHR Health Protection Research Unit in Gastrointestinal Infections, UK.**

Where a publication is a result of work directly funded or indirectly supported by the HPRU this too needs to be acknowledged.

#### **Acknowledgment and disclaimer for work directly funded by the NIHR**

The research was funded by the National Institute for Health Research Health Protection Research Unit (NIHR HPRU) in Gastrointestinal Infections at University of Liverpool in partnership with Public Health England (PHE), in collaboration with University of East Anglia, University of Oxford and the Quadram Institute. [name of researcher] is based at [name of institution]. The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR, the Department of Health or Public Health England.





**Disclaimer for work not directly funded by the NIHR but where they have been acknowledged in the address** [name of researcher] is affiliated to the National Institute for Health Research Health Protection Research Unit (NIHR HPRU) in Gastrointestinal Infections at University of Liverpool in partnership with Public Health England (PHE), in collaboration with University of East Anglia, University of Oxford and the Quadram Institute. [name of researcher] is based at [name of institution]. The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR, the Department of Health or Public Health England.

### Submission

A draft of research articles should be submitted to NIHR at the same time as submission for publication or at least 28 days before the date intended for publication, whichever is earlier.

Please submit your paper directly to [joanna.topping@nihr.ac.uk](mailto:joanna.topping@nihr.ac.uk) and [mike.rogers@nihr.ac.uk](mailto:mike.rogers@nihr.ac.uk) copying in [hprugi@liverpool.ac.uk](mailto:hprugi@liverpool.ac.uk) to the email so that a record of outputs can be maintained. Please include details of the publication/journal the article is to be submitted to.

### Dissemination of results

NIHR would now like sight of any publication or work where the results of HPRU research are being disseminated (book chapters, abstracts from congress participation or poster presentations for example) to ensure the correct acknowledgments are being used, since these too are deemed to be research outputs. Again **please submit these directly to [joanna.topping@nihr.ac.uk](mailto:joanna.topping@nihr.ac.uk) and [mike.rogers@nihr.ac.uk](mailto:mike.rogers@nihr.ac.uk) copying in [hprugi@liverpool.ac.uk](mailto:hprugi@liverpool.ac.uk) to the email.**

## PUBLICATIONS

**Congratulations to the following who have published in recent months.**

Adams NL, Rose TC, Hawker J, Violato M, O'Brien SJ, Whitehead M, Barr B, Taylor-Robinson D. **Socioeconomic status and infectious intestinal disease in the community: longitudinal study of infectious intestinal disease in the UK (IID2 Study).** European Journal of Public Health. 2017; 1-5.

Available from: <https://academic.oup.com/eurpub/article-lookup/doi/10.1093/eurpub/ckx091>

Awofisayo-Okuyelu A, Hall I, Adak G, Hawker J, Abbott S, McCarthy N. **A systematic review and meta-analysis on the incubation period of Campylobacteriosis.** Epidemiology & Infections. Epidemiology and Infection. 2017; 145(11): 2241-2253

Available from: <https://doi.org/10.1017/S0950268817001303>

Cody AJ, Bray JE, Jolley KA, McCarthy ND, Maiden MCJ. **Core genome multilocus sequence typing scheme for stable, comparative analyses of Campylobacter jejuni and C. coli Human Disease isolates.** Journal of Clinical Microbiology. 2017; 55(7): 2086-2097



Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28446571>

Hassard F, Sharp JH, Taft, H, LeVay, L, Harris, JP, McDonald, JE, Tuson, K, Wilson, J, Jones, D.L, Malham, SK. **Critical Review on the Public Health Impact of Norovirus Contamination in Shellfish and the Environment: A UK Perspective**. Food and Environmental Virology; 2017; 9(2): 1-19

Available from: <https://link.springer.com/article/10.1007/s12560-017-9279-3>

Inns T, Harris JP, Vivancos R, Iturriza-Gomara M, O'Brien SJ. **Community-based surveillance of norovirus disease: a systematic review**. BMC Infectious Diseases. 2017; 17:657

Available from: <https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-017-2758-1>

Jones N, Millma C, van der Es M, Hukelova M, Forbes K, Glover C, Haldenby S, Hunter P, Jackson K, O'Brien S, Rigby D, Strachan N, Williams NJ, Lake I. **A novel sampling method for assessing human-pathogen interactions in the natural environment using boot socks and citizen scientists, with an application to the seasonality of Campylobacter**. Applied and Environmental Microbiology. 2017; 83(14) art no. e00162-17

Available from: <http://aem.asm.org/content/83/14/e00162-17>

Millman C, Christley R, Rigby D, Dennis D, O'Brien SJ, Williams N. **"Catch 22": Biosecurity awareness, interpretation and practice amongst poultry catchers**. Preventative Veterinary Medicine. 2017: 141;22-32

Available from: <http://www.sciencedirect.com/science/article/pii/S0167587717302933>

Pascoe B, Meric G, Yahara K, Wimalarathna H, Murray S, Hitchings MD, Sproston EL, Carrillo CD, Taboada EN, Cooper KK, Huynh S, Cody AJ, Jolley KA, Maiden MCJ, Didelot X, Parker CT, Sheppard SK. **Local genes for local bacteria: Evidence of allopatry in the genomes of transatlantic Campylobacter populations**. Molecular Ecology. 2017; 26(17) :4497-4508

Available from:

<http://onlinelibrary.wiley.com/doi/10.1111/mec.14176/abstract;jsessionid=A72869AD1E227E5E0AA71DC875669313.f04t04>

Rose TC, Adams NL, Barr B, Hawker J, O'Brien SJ, Violato M, Whitehead M, Taylor-Robinson DC. **Socioeconomic status is associated with symptom severity and sickness absence in people with infectious intestinal disease in the UK**. BMC Infectious Diseases. 2017; 17: 447.

Available from: <https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-017-2551-1>

**NB If you have published, but it has not been listed here, please let us know about it!**

## GRANT SUCCESS

HPRU members have been successful in obtaining the following research funding.

Name	Details	Funder	Award
Caiomhe McKerr	Bug Terror!: Outbreak in a box (a joint project with HPRU EZI)	WELLCOME TRUST	£1,250
Professor David Taylor-Robinson	Tackling inequalities in child health: Harnessing data to improve lives	MEDICAL RESEARCH COUNCIL	£894,277
Professor Dame Margaret Whitehead, Professors Simon Capewell and David Taylor-Robinson	LiLaC 2 - School for Public Health Research	DEPARTMENT OF HEALTH (UK)	£768,750
Professor Dame Margaret Whitehead, and Professor David Taylor-Robinson	Evaluating the impacts of universal policies on child health inequalities: how best can we exploit the predictive value of the integrated pre-school checks?	DEPARTMENT OF HEALTH (UK)	£175,000

## NEW MEMBERS

**Mr Rory Miles, Research Assistant, Liverpool School of Tropical Medicine**

## SUBMIT YOUR NEWS

If you have any items for inclusion in the next newsletter please send them to [hprugi@liverpool.ac.uk](mailto:hprugi@liverpool.ac.uk)

## NIHR Health Protection Research Unit in Gastrointestinal Infections

Website | <http://www.hprugi.nihr.ac.uk/>

Twitter | [@HPRUGi](https://twitter.com/HPRUGi)