NIHR Health Protection Research Unit in Gastrointestinal Infections



Newsletter

Summer 2015

Issue 01

NEWS





NIHR HEALTH PROTECTION RESEARCH UNIT IN GASTROINTESTINAL INFECTIONS ANNUAL SCIENTIFIC MEETING AND LAUNCH

On 25 March 2015 the first Annual Scientific Meeting of the NIHR Health Protection Research Unit (HPRU) in Gastrointestinal Infections (GI) was held at the University of Liverpool in London, attracting an audience of researchers, practitioners, policymakers and stakeholders from across the UK. Keynote talks from Professor Bernie Hannigan of Public Health England and Professor Patrick Wall of University College Dublin accompanied presentations from scientists and students representing the six research themes. A selection of photographs of the event are available here, and the meeting presentations will be available shortly on our website.

We would like to thank everyone involved for their efforts in making the event such a success.





The North West Zoonoses Group/National Consortium for Zoonosis Research held its Annual Zoonoses Conference on 9 July 2015 at the University of Liverpool, on the theme of Food Safety. Professor Kenton Morgan chaired the conference. The keynote lecture was given by HPRU GI Theme Leader Professor Martin Maiden on 'Tracking Campylobacter' and PhD students Natalie Adams and Oluwaseun Esan presented research updates. The NIHR HPRU in Gastrointestinal Infections and the NIHR HPRU in Emerging and Zoonotic Infections supported the conference, which attracted 75 attendees.















SUMMER SCHOOL OUTREACH

PhD students Natalie Adams and Tanith Rose helped to run an activity on gastrointestinal infections for Year 10 students as part of a Health and Life Sciences Residential Summer School at the University of Liverpool on 1 July 2015. The 33 students were introduced to the work of the HPRU GI and discussed some of the different pathogens that can cause stomach bugs. The students then took part in an interactive experiment to simulate the spread of an infectious disease and considered how public health experts track down the source of an outbreak, and what measures can be put in place to try and reduce spread. The workshop was led by the Institute of Infection and Global Health and also featured activities on statistical sampling and vector-borne diseases. The event was funded by the University of Liverpool, and aimed to raise awareness and aspirations towards higher education.





A one day induction to Public Health England (PHE) open to all full- and parttime HPRU PhD students was held on 23 July 2015 at Public Health England, Colindale. The event was organised by Jim McLauchlin and Neil Woodford to generate a collegiate environment for PhD students within Health Protection Research Units and provide a broad background on PHE, and included group activities and a tour of the Colindale site.



APPOINTMENT TO ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD

HPRU GI Theme Leader Professor Miren Iturriza-Gómara has been appointed to the Advisory Committee on the Microbiological Safety of Food (ACMSF). Her term is from 1 April 2015 until 31 March 2019. The ACMSF provides the Foods Standards Agency with independent advice on the microbiological safety of food.



NIHR HPRU IN GI WEBSITE & TWITTER

Our website address is www.hprugi.nihr.ac.uk and Twitter name is @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.













The NIHR HPRU in Emerging and Zoonotic Infections has announced the launch of a Cross-NIHR Infrastructure Facility Strategic Research Funding Call as part of its 2015/2016 Strategic Research Funding.

This pump priming initiative seeks to match fund research projects to create a strategic collaboration between HPRU EZI and one or more NIHR Infrastructure facility (HPRUs, BRCs or CLAHRCs for example). The HPRU will provide up to £15,000 per project (Pay and Non-Pay costs) to successful applications on condition that the applicants identify equal amounts of matched funding. The final total of no less than £30,000 will thus provide the Pay and Non-Pay costs of a 6-12 month project.

Guidance and Applications are available via this <u>link</u>, or for more information please contact Adele Maggs, NIHR HPRU Senior Manager at <u>amaggs@liv.ac.uk</u>

Deadline for return of applications now extended until: 4.00 pm on Monday

24 August 2015.



EVENTS

BSP Autumn Symposium 2015 - 'One Health: parasites and beyond...'

14-15 September 2015, Royal Veterinary College, London

The British Society of Parasitology (BSP) invites you to a two day symposium focused on One Health with a special emphasis on parasites. One Health promotes collaboration between multiple disciplines including biology, human and veterinary medicine, environmental sciences, economics and social sciences in order to improve human, animal and environmental health. In this symposium experts in different fields will be brought together to explore how an interdisciplinary approach can improve control of parasitic diseases of humans and animals.

BSP would like to invite abstracts for posters, prioritising early career researchers. BSP student members submitting an abstract are entitled to apply for a travel award to attend the meeting (further information here). The abstract deadline for posters is 14 August 2015.

Find out more and register <u>here</u>.

Public Health England Annual Conference 2015

15-16 September 2015, University of Warwick

Public Health England 2015 will bring together over 1,400 participants from a wide range of organisations, to learn, meet each other and share knowledge and experience.

The theme of this year's conference is Evidence into Action, and the conference will promote and showcase applied science and research, translation and implementation for impact. It is anticipated that the conference will be of interest to representatives from across the health and social care system interested in applied prevention research,











programmes and policy.

The outline of the six track programme is now available, covering a wide range of topics from across the breadth of public health. Subject to parliamentary business, the Rt Hon Jeremy Hunt MP, Secretary of State for Health, and Jane Ellison MP, Minister for Public Health, will give keynote addresses. Professor Dame Sally Davies, Chief Medical Officer, will also speak at the conference. Please note that in previous years places have been oversubscribed, and so early booking is advised.

Find out more and register here.

NIHR HPRU in Gastrointestinal Infections Training Workshop:

An Introduction to Systematic Reviews and Meta-Analysis

09.00-16.45, Thursday 24 September 2015, The Foresight Centre, 1 Brownlow Street, Liverpool, L69 3GL

Dr David Taylor-Robinson and Dr Daniel Pope

This one day course is ideal for staff and students wanting to critically appraise systematic reviews and gain experience in the methodology and conduct of systematic reviews and meta-analysis. Delivered by experienced systematic reviewers in the field of global public health the course involves presentations, case-studies and hands-on practical experience. Included outcomes from the course are:

- Ability to develop and refine research questions for a systematic review
- Understanding the processes in the conduct of a systematic review (including quality appraisal of studies)
- Understanding the role of systematic reviews in health practice and policy
- Understanding the processes in the conduct of evidence synthesis using meta-analysis
- Gaining skills in the conduct of meta-analysis using Cochrane RevMan software.

Course fee: £35 (includes lunch)

Please note: You will need to bring your own laptop. Details will be provided on required software download prior to the course.

Places are limited and strictly by registration only. For further details or to register for the course please contact hprugi@liv.ac.uk. Registration closes 14 September 2015.

NIHR HPRU in Gastrointestinal Infections Annual Scientific Meeting 2016

14-15 March 2016, University of Oxford

The 2016 NIHR HPRU in Gastrointestinal Infections Annual Scientific Meeting and External Advisory Panel meeting will be held at the University of Oxford on 14 and 15 March 2016. Please save the date, with further details to follow.











STUDENTSHIPS

PhD Studentship: Risk, vulnerability and consequences of gastrointestinal infections in disadvantaged neighbourhoods in the North West of England

Supervisors: Professor Margaret Whitehead & Professor Jeremy Hawker

Stipend: £14,057 pa

Closing date: 21 August 2015

Hospital admissions for gastrointestinal infections in the UK are nearly twice as high in more disadvantaged neighbourhoods as compared to more affluent areas. There is currently limited evidence indicating how multiple pathways interact within the domestic and public social context to produce these inequalities. The proposed research for this PhD will use mixed methods in selected neighbourhoods in the North West of England to investigate how the characteristics of people, their socioeconomic environment, and local health and care services interact within disadvantaged places, to influence the risk, vulnerability and consequences of infection. Working within a department that brings together anthropologists, sociologists and social epidemiologists the successful applicant will gain expertise in applying multidisciplinary approaches to the study of health inequalities.

Please note we are only recruiting UK/EU/home rated students, and only eligible students should apply.

For further information and discussion, please contact Ben Barr at benbarr@liverpool.ac.uk

To apply please visit <u>here</u>.

Please note that the remaining HPRU GI PhD studentships will be advertised shortly, for an expected October 2015 start.

STAFF UPDATES

David James Allen of Public Health England has become a Theme Leader of the Places theme, replacing David

We would like to thank David for all his work to date on the HPRU GI and particularly within the Places theme.

We would like to welcome Erica Kintz who has started with us as a Postdoctoral Research Associate within the Pathways theme, based at the University of East Anglia.

NIHR COMMUNICATIONS

Notification of press releases

The Department of Health (DH) has raised concern about the number of press releases received with extremely short notice. They very much encourage press releases to increase the visibility of NIHR-funded research. However, as per our NIHR HPRU contract, we are required to notify the Communications team at the NIHR Central Commissioning Facility (CCF), of the intention to issue a press release 28 calendar days prior to it being issued. We are also required to send a draft copy of the proposed press release to the Communications team at least 14











calendar days before the date intended for release.

Whilst we are aware that these timescales are not always possible to meet, every effort should be made to give the Communications team as much time as possible so that the release can be flagged to DH and give them time to read and comment on NIHR content before it is issued.

One or two days' notice of intention to issue a press release, and/or sight of a draft, is not sufficient for handling and in such instances the Communications team will require an explanation as to why notification was not given earlier. This also allows the maximum opportunities for DH to consider where appropriate whether a supportive quote from Ministers or the Chief Medical Officer would be helpful.

Please note that this obligation continues after the end of the research period.

Please check that the following are in place when submitting the draft press release (all embargoes are noted as the Communications team is internal to the process, including for any press releases to be issued by the publisher/another funder).

Press release checklist:

- Note that the NIHR Identity Guidelines specify 28 days notification of a press release and sight of a draft copy 14 days before it is due to go out
- Make early mention of the NIHR funding or support e.g. "researchers funded by the National Institute for Health Research (NIHR), the research arm of the NHS, at", or "NIHR-funded", or "NIHR-supported researchers at...."
- If 'NIHR' is used alone early on in a press release, include the name of the relevant NIHR programme or facility later in the release or in the notes to editors
- Attach a copy of the research paper/report if this is the subject of the release (or arranged to be submitted)
- Indicate actual or estimated issue date
- Include the NIHR boilerplate (below)

Notes for editors

The National Institute for Health Research (NIHR) is funded by the Department of Health to improve the health and wealth of the nation through research. Since its establishment in April 2006, the NIHR has transformed research in the NHS. It has increased the volume of applied health research for the benefit of patients and the public, driven faster translation of basic science discoveries into tangible benefits for patients and the economy, and developed and supported the people who conduct and contribute to applied health research. The NIHR plays a key role in the Government's strategy for economic growth, attracting investment by the life-sciences industries through its world-class infrastructure for health research. Together, the NIHR people, programmes, centres of excellence and systems represent the most integrated health research system in the world. For further information, visit the NIHR website (www.nihr.ac.uk)

Please contact the HPRU GI Office at hprugi@liv.ac.uk if you wish to submit a press release to the Communications team at the NIHR Central Commissioning Facility, noting the above timescales.











One NIHR Google Site

The NIHR is delighted to invite you to visit the new **One NIHR Google site** and explore its resources on the Hub.

One NIHR is for the different people funded by, supported by and working for the NIHR. One NIHR is a unifying NIHR identity and provides the tools that different stakeholders across the organisation need to talk about the NIHR in their working lives. For a quick overview, watch Chief Medical Officer Professor Dame Sally Davies introduce One NIHR in this film clip.

There is a dedicated **One NIHR** page for everyone <u>working or otherwise a part of the NIHR</u> based in the NIHR Infrastructure, Schools, Research Centres and Units, as well as in the NIHR Coordinating Centres, plus a page for Research Nurses.

One NIHR is supported by an 'I am NIHR' pin badge - please contact the HPRU GI Office if you would like a pin badge.

PUBLICATIONS

Congratulations to the following who have published in recent months.

Byrne L, <u>Jenkins C</u>, Launders N, Elson R, <u>Adak GK</u>. **The epidemiology, microbiology and clinical impact of Shiga toxin-producing Escherichia coli in England, 2009-2012**. Epidemiology and Infection. 2015 Apr 29:1-13. [Epub ahead of print]. Available from:

http://journals.cambridge.org/action/displayAbstractfromPage=online&aid=9681009&fileId=S0950268815000746

Loopstra R, Reeves A, Taylor-Robinson D, <u>Barr B</u>, McKee M, Stuckler D. **Austerity, sanctions, and the rise of food banks in the UK**. BMJ. 2015 Apr 8;350:h1775. Available from: http://www.bmj.com/content/350/bmj.h1775.long

<u>Dallman TJ</u>, Byrne L, Launders N, Glen K, <u>Grant KA</u>, <u>Jenkins C</u>. **The utility and public health implications of PCR and whole genome sequencing for the detection and investigation of an outbreak of Shiga toxin-producing Escherichia coli serogroup O26:H11**. Epidemiology and Infection. 2015;143;(8):1672-1680. Available from:

http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9677649&fileId=S0950268814002696

Ashton PM, Perry N, Ellis R, Petrovska L, Wain J, Grant KA, Jenkins C, Dallman TJ. Insight into Shiga toxin genes encoded by Escherichia coli O157 from whole genome sequencing. PeerJ. 2015;(2):e739.

Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4338798/

Tamburro M, Ripabelli G, Vitullo M, <u>Dallman TJ</u>, Pontello M, Amar CFL, Sammarco ML. **Gene expression in Listeria monocytogenes exposed to sublethal concentration of benzalkonium chloride**. Comparative Immunology, Microbiology and Infectious Diseases. 2015;40:31-39.

Available from: http://www.sciencedirect.com/science/article/pii/S0147957115000259











Jenkins C, Dallman TJ, Launders N, Willis C, Byrne L, Jorgensen F, Eppinger M, Adak GK, Aird H, Elviss N, Grant KA, Morgan D, McLauchlin J. Public health investigation of two outbreaks of shiga toxin-producing Escherichia coli O157 associated with consumption of watercress. Applied and Environmental Microbiology. 2015;81:12:3946-3952. Available from: http://aem.asm.org/content/81/12/3946

Cowley LA, Beckett SJ, Chase-Topping M, Perry N, <u>Dallman TJ</u>, Gally DL, <u>Jenkins C</u>. **Analysis of whole genome sequencing for the Escherichia coli O157:H7 typing phages**. BMC Genomics. 2015 Apr 8;16:271.

Available from: http://www.biomedcentral.com/1471-2164/16/271

Colles FM, McCarthy ND, Bliss CM, Layton R, Maiden MCJ. The long-term dynamics of Campylobacter colonizing a free-range broiler breeder flock: An observational study. Environmental Microbiology. 2015;17:4;938-946.

Available from: http://onlinelibrary.wiley.com/doi/10.1111/1462-2920.12415/abstract

Fernandes AM, Balasegaram S, Willis C, Wimalarathna HM, <u>Maiden MC</u>, <u>McCarthy ND</u>. **Partial Failure of Milk Pasteurization as a Risk for the Transmission of Campylobacter From Cattle to Humans**. Clinical Infectious Diseases. 2015 Jun 10. pii: civ431. [Epub ahead of print].

Available from: http://cid.oxfordjournals.org/content/early/2015/06/29/cid.civ431.long

Wain J, Hendriksen RS, Mikoleit ML, Keddy KH, Ochiai RL. **Typhoid Fever**. Lancet. 2015 Mar 21;385(9973):1136-45. doi: 10.1016/S0140-6736(13)62708-7. Epub 2014 Oct 21.

Available from: http://www.sciencedirect.com/science/article/pii/S0140673613627087

Acknowledging the NIHR HPRU in Publications

Acknowledging the NIHR HPRU is vital as we need to capture all your relevant work. Please do remember to acknowledge the NIHR HPRU - even if the work is not directly completely funded by the unit, you are supported by the unit in some form or other. This acknowledgement is one of the requirements of being a member of the NIHR HPRU, and is stipulated by the NIHR.

Anything published by any NIHR HPRU in Gastrointestinal Infections Investigators should have one of the following included as an address, in addition to your usual address:

- NIHR Health Protection Research Unit in Gastrointestinal Infections, University of Liverpool, L69 7BE
- NIHR Health Protection Research Unit in Gastrointestinal Infections, University of Oxford, UK
- NIHR Health Protection Research Unit in Gastrointestinal Infections, University of East Anglia, UK
- NIHR Health Protection Research Unit in Gastrointestinal Infections, Institute of Food Research, UK
- NIHR Health Protection Research Unit in Gastrointestinal Infections, Porton Down, UK
- NIHR Health Protection Research Unit in Gastrointestinal Infections, Colindale, UK











Where a publication is a result of work directly funded by the NIHR HPRU, this too needs to be acknowledged with the following statement and disclaimer.

- **Funding:** This work was supported by the National Institute for Health Research Health Protection Research Unit in Gastrointestinal Infections at the University of Liverpool.
- <u>Disclaimer</u>: The research was funded by the National Institute for Health Research Health Protection Research Unit (NIHR HPRU) in Gastrointestinal Infections at the University of Liverpool in partnership with Public Health England (PHE), University of East Anglia, University of Oxford and the Institute of Food Research. 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.

NIHR HPRU RELATED Publication approval

A draft of research articles/papers should be submitted to the NIHR at the same time as submission for publication or at least 28 days before the date intended for publication, whichever is earlier. This should be done via the HPRU GI Office: hprugi@liv.ac.uk

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
Professor Sarah O'Brien (PI) & Professor Nicola Williams (Co-Investigator)	Sources, Seasonality, Transmission and Control: Campylobacter and human behaviour in a changing environment	Medical Research Council	£62,550
Professor Sarah O'Brien (PI)	Fully Integrated, real-time detection, diagnosis and control of community infection outbreaks	Wellcome Trust	£227,921
Dr Mara Violato	The humanistic and economic burden of coeliac disease in the UK: a follow-up survey-based population study	Coeliac UK	£50,960











NEW MEMBERS

- Dr Gary Barker, Research Leader, Institute of Food Research
- Mr Ben Barr, NIHR Research Fellow, Institute of Psychology Health and Society, University of Liverpool
- Dr Nick Beeching, Senior Lecturer (Clinical) in Infectious Diseases, Clinical Group, Liverpool School of Tropical Medicine
- Professor David Brown, Public Health England
- Professor Rachel Chalmers, Head, Cryptosporidium Reference Unit, Public Health Wales Microbiology
- Dr Paul Cleary, Consultant Epidemiologist, Public Health England
- Dr Ann Marie Connolly, Deputy Director, Health Equity and Place, Health and Wellbeing, Public Health England
- Dr Tim Dallman, Bioinformatician, Public Health England
- Dr Alistair Darby, Lecturer, Department of Functional and Comparative Genomics, Institute of Integrative Biology, University of Liverpool
- Professor Peter Diggle, Professor of Epidemiology and Statistics / Distinguished University Professor in CHICAS,
 University of Liverpool / Lancaster University
- **Dr Nicola Elviss**, Unit Head, Food, Water & Environmental Microbiology Laboratory, London, Public Health England
- Dr Tom Fanshawe, Senior Statistician, University of Oxford
- Professor Alastair Gray, Director, Health Economics Research Centre and Professor of Health Economics, University of Oxford
- Professor Jonathan Green, Head of Bioinformatics and Laboratory Informatics Unit, Public Health England
- Professor Neil Hall, Director, Centre for Genomic Research and Head of Department, Functional and Comparative Genomics, Institute of Integrative Biology, University of Liverpool
- Dr John Harris, Epidemiologist, Public Health England
- **Dr Christiane Hertz-Fowler**, Centre Manager, Centre for Genomic Research, Department of Functional and Comparative Genomics, Institute of Integrative Biology, University of Liverpool
- Professor Rick Holliman, Lead Public Health Microbiologist for London, Public Health England
- Dr Lee Hooper, Reader in Research Synthesis and Nutrition, Norwich Medical School, University of East Anglia
- Dr Claire Jenkins, Gastrointestinal Bacteria Reference Unit, Public Health England
- Dr lain Lake, Senior Lecturer, School of Environmental Sciences, University of East Anglia











- Dr Gwen Le Gall, Senior Research Scientist, Institute of Food Research
- Dr Fabio Miyajima, MRC Programme Investigator/Lead Scientist, The Wolfson Centre for Personalised Medicine,
 University of Liverpool
- Miss Carina Nakamura, PhD student, The Wolfson Centre for Personalised Medicine, University of Liverpool
- Professor Keith Neal, Locum Consultant Epidemiologist, Field Epidemiology Services
- Professor Rafael Perera, Professor of Medical Statistics, University of Oxford
- Dr Tansy Peters, Clinical Scientist, Public Health England
- Professor Jennie Popay, Professor of Sociology and Public Health, Institute for Health Research, Lancaster University
- Professor Chris Probert, Professor of Gastroenterology, Institute of Translational Medicine, University of Liverpool
- Dr Jonathan Read, Lecturer in Epidemiology, Department of Epidemiology and Population Health, University of Liverpool
- Yasmin Rehman, Field Epidemiology Service (Birmingham), Public Health England
- Dr Mara Violato, Senior Researcher in Health Economics, University of Oxford
- Professor John Wain, Professor in Medical Microbiology, Norwich Medical School, University of East Anglia
- Dr Alison Waldram, Field Epidemiology Training Programme Fellow, Field Epidemiology Services Liverpool,
 Public Health England
- Professor Jonathan Wastling, Pro Vice-Chancellor & Executive Dean of Natural Sciences, Keele University
- Professor Nicola Williams, Professor of Zoonotic Bacterial Disease, University of Liverpool

New Institutional/Group Membership

- **CHICAS** is a group of staff, research associates, and postgraduate students in the Lancaster Medical School, part of the Faculty of Health and Medicine at Lancaster University http://chicas.lancaster-university.uk/
- University of Leeds Healthcare Associated Infection (HCAI) Research Group Professor Mark Wilcox's research
 group is focused on healthcare associated infections, is closely aligned to the clinical infection service within
 Leeds Teaching Hospitals and to Public Health England, and as such has multiple ongoing applied infection
 research projects. Website
- University of Warwick http://www2.warwick.ac.uk/











External Advisory Panel

Two new Lay Members have joined our External Advisory Panel, Roger Gibb and Charles Henderson. Roger and Charles join Vivianne Buller as panel Lay Members and all have been invited to attend quarterly Steering Committee meetings and the Annual Scientific Meeting. Both Roger and Charles are also members of Public Health England's People's Panel.

SUBMIT YOUR NEWS

If you have any items for inclusion in the next newsletter please send them to hprugi@liv.ac.uk

NIHR Health Protection Research Unit in Gastrointestinal Infections

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

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