

Newsletter

Spring 2015

Issue 01

NEWS



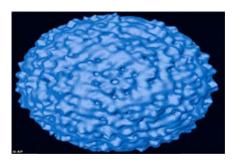
NIHR HEALTH PROTECTION RESEARCH UNIT IN EMERGING AND ZOONOTIC INFECTIONS LAUNCH MEETING

The Launch meeting and inaugural Scientific Advisory Board meeting of the NIHR Health Protection Research Unit (HPRU) in Emerging and Zoonotic Infections (EZI) was held on Tuesday 11 November 2014 at the Victoria Gallery and Museum, University of Liverpool. We would like to thank everyone involved for their efforts in making the events such a success.



VECTOR-BORNE DISEASES IN THE UK: BIENNIAL CONFERENCE 2014 MEETING REPORT

This biennial conference was held at the Foresight Centre, University of Liverpool on Wednesday 12 and Thursday 13 November 2014. The meeting report has been published and will shortly be available on our website.



MEDIA COVERAGE ON PAPER BY NIHR HPRU IN EZI INVESTIGATOR

A research paper by NIHR HPRU in EZI Investigator Dr Jolyon Medlock of Public Health England and colleagues has featured extensively in the press. A species of mosquito capable of transmitting West Nile virus has been found thriving on marshes in the Thames Estuary.

Read more here and here.



NIHR HPRU in EZI WEBSITE

Here is the link to our temporary website http://www.liv.ac.uk/infection-and-global-health/research/zoonotic-infections/hpruzoonotic/

Please don't forget to let us know about any news items, public engagement events, or anything similar, which will be listed on the new NIHR HPRU in EZI website, which is currently being devised.







Public Health England Applied Epidemiology Scientific Meeting

18-19 March 2015, Warwick University

The aim of this meeting is to help strengthen epidemiology and support high quality and innovative science through sharing of good practice. The meeting will focus on the application of epidemiological methods to protect and improve health including the work of the recently established NIHR Health Protection Research Units.

The meeting is particularly aimed at consultants, scientists, analysts and those with an interest in applied epidemiology across Public Health England, devolved administrations, academic departments and partner organisations. Find out more and register here

3rd International Congress on Targeting Infectious Diseases – Targeting Ebola 2015

28-29 May 2015, Institut Pasteur, Paris

Targeting Ebola 2015 will provide a unique and cutting edge conference to discuss the recent advances, strategies and challenges of all Ebola fields. There will be keynote lectures given by leading scientists, as well as oral and poster presentations covering various aspects of Ebola infection.

Topics include: Ebola virus disease: where are we now and where do we go?; The Hemorrhagic Fever Viruses: Recent Advances; Virus-Host Interactions: State-of-the-Art; Epidemiology: The Current Situation; The Diagnostic Tools; Treatment & Vaccines, and Operational Researches: Present & Future.

Deadline for submission of Oral Presentations: Thursday 19 March 2015.

Deadline for submission of Poster Presentations: Thursday 30 April 2015.

Find out more and register here

Video Production and Interview Skills Workshops

March & May 2015

Open to University of Liverpool Postgraduates, Postdoctoral Researchers, and Staff

Following a successful trial video production workshop, the Institute of Integrative Biology is now able to offer postgrads, postdocs and staff the opportunity to learn about video production and interview skills. This should interest colleagues with a particular interest in promoting their own work, and thereby fulfilling our obligation for dissemination to the general public and to the research community.

Two courses have been arranged; one at the end of March (Wednesday 25 March 10.00 am - 12.30 pm, and Friday 27 March 10.00 am - 5.00 pm) and one in May (Wednesday 20 and Friday 22 May, with the same timings as in March). There are still some places left on the upcoming March course. Should you wish to be considered for this early course, and have availability, please write to Professor Andy Cossins ASAP (copied to Louise Crompton), indicating what your particular reason is for attending this course. The May course will be recruited to subsequently.







PUBLICATIONS

Congratulations to the following who have published in recent months.

Liu L, Lear Z, Hughes DJ, Wu W, Zhou EM, Whitehouse A, Chen H, Hiscox JA. Resolution of the cellular proteome of the nucleocapsid protein from a highly pathogenic isolate of porcine reproductive and respiratory syndrome virus identifies PARP-1 as a cellular target whose interaction is critical for virus biology. Veterinary Microbiology. 2014 Dec 30. pii: S0378-1135(14)00547-1. doi: 10.1016/j.vetmic.2014.11.023. [Epub ahead of print]

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Sambo E, Bettridge J, Dessie T, Amare A, Habte T, Wigley P, Christley RM. **Participatory evaluation of chicken health and production constraints in Ethiopia. Preventive Veterinary Medicine.** 2015 Jan 1;118(1):117-27. doi: 10.1016/j.prevetmed.2014.10.014. Epub 2014 Nov 5.

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MacLeod DA, Morse AP. Visualizing the uncertainty in the relationship between seasonal average climate and malaria risk. Scientific Reports. 2014 Dec 2;4:7264. doi: 10.1038/srep07264.

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Munday DC, Wu W, Smith N, Fix J, Noton SL, Galloux M, Touzelet O, Armstrong SD, Dawson JM, Aljabr W, Easton AJ, Rameix-Welti MA, de Oliveira AP, Simabuco FM, Ventura AM, Hughes DJ, Barr JN, Fearns R, Digard P, Eléouët JF, Hiscox JA. Interactome analysis of the human respiratory syncytial virus RNA polymerase complex identifies protein chaperones as important cofactors that promote L-protein stability and RNA synthesis. Journal of Virology. 2015 Jan 15;89(2):917-30. doi: 10.1128/JVI.01783-14. Epub 2014 Oct 29.

Available from: http://jvi.asm.org/content/89/2/917.long

McIntyre KM, Setzkorn C, Hepworth PJ, Morand S, Morse AP, Baylis M. **A quantitative prioritisation of human and domestic animal pathogens in Europe.** PLoS One. 2014 Aug 19;9(8):e103529. doi: 10.1371/journal.pone.0103529. eCollection 2014.

Available from: http://www.ncbi.nlm.nih.gov/pubmed/25136810







Myint KS, Kipar A, Jarman RG, Gibbons RV, Perng GC, Flanagan B, Mongkolsirichaikul D, Van Gessel Y, Solomon T. **Neuropathogenesis of Japanese encephalitis in a primate model.** PLoS Neglected Tropical Diseases. 2014 Aug 7;8(8):e2980. doi: 10.1371/journal.pntd.0002980. eCollection 2014 Aug.

Available from: http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0002980

Bettridge JM, Lynch SE, Brena MC, Melese K, Dessie T, Terfa ZG, Desta TT, Rushton S, Hanotte O, Kaiser P, Wigley P, Christley RM. **Infection-interactions in Ethiopian village chickens.** Preventive Veterinary Medicine. 2014 Nov 15;117(2):358-66. doi: 10.1016/j.prevetmed.2014.07.002. Epub 2014 Jul 12.

Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4235779/

Griffiths MJ, Turtle L, Solomon T. **Japanese encephalitis virus infection**. Handbook of Clinical Neurology. 2014;123:561-76. doi: 10.1016/B978-0-444-53488-0.00026-2.

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Vaux AGC, Gibson G, Hernandez-Triana LM, Cheke RA, McCracken F, Jeffries CL, Horton DL, Springate S, Johnson N, Fooks AR, Leach S, Medlock JM. **Enhanced West Nile virus surveillance in the North Kent marshes**, UK. Parasit Vectors. 2015; 8: 91. Published online 2015 Feb 10. doi: 10.1186/s13071-015-0705-9.

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Available from: http://www.bmj.com/content/349/bmj.g5079







Beeching NJ, Fenech M, Houlihan CF. **Ebola virus disease**. BMJ. 2014 Dec 10;349:g7348. doi: 10.1136/bmj.g7348. Available from: http://bestpractice.bmj.com/best-practice/monograph/1210.html

Fletcher TE, Fowler RA, Beeching NJ. **Understanding organ dysfunction in Ebola virus disease**. Intensive Care Med. 2014 Dec;40(12):1936-9. doi: 10.1007/s00134-014-3515-1. Epub 2014 Nov 1.

Available from: http://link.springer.com/article/10.1007%2Fs00134-014-3515-1

Thwaites CL, Beeching NJ, Newton CR. **Maternal and neonatal tetanus**. Lancet. 2015 Jan 24;385(9965):362-70. doi: 10.1016/S0140-6736(14)60236-1. Epub 2014 Aug 19.

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Schlagenhauf P, Weld L, Goorhuis A, Gautret P, Weber R, von Sonnenburg F, Lopez-Vélez R, Jensenius M, Cramer JP, Field VK, Odolini S, Gkrania-Klotsas E, Chappuis F, Malvy D, van Genderen PJJ, Mockenhaupt F, Jauréguiberry S, Smith C, Beeching NJ, Ursing J, Parola P, Grobusch MP, for EuroTravNet. **Travel-associated infection presenting in Europe (2008-12):** an analysis of EuroTravNet longitudinal, surveillance data, and evaluation of the effect of the **pre-travel consultation.** Lancet Infectious Diseases 2015; 15(1):55-642 Epub 2014 Dec 2.

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Available from: http://www.sciencedirect.com/science/article/pii/S0020751914002896

Acknowledging the NIHR HPRU in Publications

Acknowledging the NIHR HPRU is vital as we need to capture all your relevant work. If it says NIHR HPRU in the address it counts, and if it doesn't say it, it doesn't count: simple! 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 Emerging and Zoonotic Infections Investigators should have one of the following included as an address, in addition to your usual address:

- NIHR Health Protection Research Unit in Emerging and Zoonotic Infections, Liverpool, L69 7BE
- NIHR Health Protection Research Unit in Emerging and Zoonotic Infections, Porton Down, UK
- NIHR Health Protection Research Unit in Emerging and Zoonotic 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.

- <u>Funding</u>: This work was supported by the National Institute for Health Research Health Protection Research Unit in Emerging and Zoonotic 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 Emerging and Zoonotic Infections at the University of Liverpool in partnership with Public Health England (PHE) and Liverpool School of Tropical Medicine (LSTM). 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

Submission: 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 NIHR HPRU admin team: hpruei@liv.ac.uk

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

GRANT SUCCESS

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

Name	Details	Funder	Award
Professor Matthew Baylis (Co-Investigator)	Improving the control of liver fluke infection in cattle in the UK	EBLEX, DairyCo, Quality Meat Scotland, AgriSearch, Hybu Cig Cymru - Meat Promotion Wales	£25,000.25
Professor Matthew Baylis & Professor Tom Solomon	Mosquitoes and the spread of arboviruses: What is the threat to UK horses?	The Horse Trust	£91,908
Professor Nigel Cunliffe & Professor Neil French	Epidemiology, Prevention, and Treatment of Influenza and Other Respiratory Infections in a Malaria- Endemic Area of Malawi with High HIV Prevalence	Centers for Disease Control and Prevention (CDC)	£689,362.78
Professor Nigel Cunliffe & Professor Neil French	Impact of national rotavirus vaccination on diarrhoea deaths among infants in rural Malawi	GlaxoSmithKline Biologicals S.A.	£304,144.28
Professor Nigel Cunliffe & Professor Neil French	Assessment of the effect of rotavirus vaccination on a health system in Merseyside, UK	GlaxoSmithKline Plc	£151,563







Professor Julian Hiscox	EVIDENT - High throughput analysis of samples from the West African ebola outbreak	European Commission	£117,658.86
Professor Julian Hiscox	Identification of new cellular or host pathway targets in ebola infection and comparison to other viruses	Ministry of Defence	£74,116
Dr Alan Radford	National surveillance of antimicrobial consumption and resistance in companion pet animals	Department for Environment, Food and Rural Affairs	£58,922
Dr Jonathan Read	USA school mixing patterns	Centers for Disease Control and Prevention (CDC)	£25,421
Dr Calum Semple	Ebola CP Study in Sierra Leone	Wellcome Trus t	£370,000
Dr Calum Semple	The Wellcome Trust Ebola Clinical Trials Platform (RAPIDE Rapid Assessment of Potential Interventions and Drugs for Ebola)	Wellcome Trust	£3.2 million
Professor Tom Solomon	Improving the diagnosis of patients with central nervous system infections in partnership with Fast Track Diagnostics	Fast-Track Diagnostics	£183,532.30
Professor Tom Solomon	DEX ENCEPH - Dexamethasone in Herpes Simplex Virus Encephalitis randomised controlled trial	Department of Health	£40,399.71
Professor Tom Solomon (Co- Investigator)	Bridging and accelerating the translation of novel scientific findings for health and wealth gain	Medical Research Council	£39,277.35
Professor Tom Solomon (Co- Investigator)	The British Antibiotic and Silver Impregnated Catheters for ventriculoperitoneal Shunts multicentre randomised controlled trial (The BASICS trial)	Department of Health	£35,943.61
Professor Tom Solomon	The Kirkby Foundation-Encephalitis Society PhD Studentship	The Kirkby Foundation	£30,000
Professor Tom Solomon	Understanding and Improving the outcome of Viral Encephalitis (ENCEPH UK Neuropsychology Sub Study)	The Encephalitis Society	£21,490.55
Professor Tom Solomon	Understanding and improving the outcome of viral encephalitis	Department of Health	£19,064

NEW MEMBERS

- Professor Rob Beynon, Chair of Proteomics / Royal Society Industrial Fellow, University of Liverpool
- Dr Marcus Blagrove, Postdoctoral Research Associate, University of Liverpool
- Dr Ales Chrdle, České Budějovice Hospital, Czech Republic







- Professor Susan Dawson, Head of School, Veterinary Sciences, University of Liverpool
- Professor Peter Diggle, Professor of Epidemiology and Statistics / Distinguished University Professor in CHICAS, University of Liverpool / Lancaster University
- Professor Francesco Falciani, Chair of Functional and Comparative Genomics, University of Liverpool
- **Professor Tony Fooks,** Head of Wildlife Zoonoses and Vector-Borne Diseases Research Group and Statutory and Exotic Viruses Sub-Programme Manager, Animal and Plant Health Agency (APHA)
- Professor Neil French, Chair of Infectious Diseases, University of Liverpool
- Professor Anna Maria Geretti, Professor of Virology & Infectious Diseases, University of Liverpool
- **Professor Saheer Gharbia,** Head of Genomics, Proteomics and Bioinformatics, Public Health England (Colindale)
- Dr Johan van Griensven, Postdoctoral Researcher (NTD and HIV), Institute of Tropical Medicine (ITM), Antwerp, Belgium
- Dr Jonathan Green, Head of Infectious Disease Informatics, Public Health England
- Dr Michael Griffiths, Senior Clinical Lecturer, University of Liverpool
- Dr Samreen Ijaz, Clinical Scientist, Virus Reference Department, Public Health England (Colindale)
- **Professor Andy Jones**, Professor of Bioinformatics, University of Liverpool
- Sister Claire Matata, Specialist Research Nurse, Royal Liverpool and Broadgreen University Hospitals NHS Trust
- Dr Philip McCall, Everett-Dutton Reader in Medical Entomology, Liverpool School of Tropical Medicine
- Dr Alastair Miller, Honorary Senior Lecturer, Institute of Infection and Global Health, University of Liverpool
- **Professor Andy Morse,** Professor of Climate Impacts, University of Liverpool
- Professor Lisa Ng, Professor of Viral Immunology / Principal Investigator, University of Liverpool / Singapore Immunology Network, A*STAR
- **Professor Bill Paxton,** Professor of Virology, University of Liverpool
- **Dr Georgios Pollakis,** Senior Research Fellow, University of Liverpool
- Dr Alan Radford, Reader in Infection Biology, University of Liverpool
- **Dr Jonathan Read,** Lecturer in Infectious Disease Epidemiology, University of Liverpool
- **Dr Bengu Said,** Epidemiologist, Public Health England (Colindale)
- **Dr Calum Semple,** Senior Lecturer, University of Liverpool







- **Professor John Stephenson,** Honorary Professor, University of Liverpool
- **Professor Richard Tedder,** Virologist, Public Health England (Colindale)
- Professor Steve Torr, Professor of Neglected Tropical Diseases (joint appointment LSTM and University
 of Warwick), Liverpool School of Tropical Medicine
- Dr Lance Turtle, NIHR Clinical Lecturer in Infectious Diseases, University of Liverpool
- Professor Nicola Williams, Professor of Zoonotic Bacterial Disease, University of Liverpool

NIHR HPRU in EZI Scientific Advisory Board

Two new members have joined our Scientific Advisory Board, Gideon Ben-Tovim OBE and Lynnette Crossley.

Gideon is Chair of the North West Coast Academic Health Science Network, having previously served as Chair of the Liverpool NHS Primary Care Trust (PCT) and Chair of NHS Merseyside. He is also Chair of Nature Connected, the Liverpool City Region Local Nature Partnership. Gideon has had a long-standing academic career at the University of Liverpool, where in partnership with Liverpool PCT he helped establish the Liverpool Health Inequalities Research Institute. He is currently Honorary Senior Fellow at the University of Liverpool, having previously been Reader in Sociology.

Lynnette is a Senior Port Health Officer with the Manchester Port Health Authority, based in Runcorn. She is Committee Secretary Environmental Health and Hygiene/Airports at The Association of Port Health Authorities (APHA), and was jointly responsible for organising the 2014 APHA Conference.

SUBMIT YOUR NEWS

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

NIHR Health Protection Research Unit in Emerging and Zoonotic Infections

Website | http://www.liv.ac.uk/infection-and-global-health/research/zoonotic-infections/hpruzoonotic/
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