



IDRN

Infectious Disease Research Network
A summary of activity and outcomes

www.idrn.org

**Report by Michael Head
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Executive summary

- The Infectious Disease Research Network (IDRN) has been operating since 2002, and is currently funded until end of March 2012. We currently have over 1500 members, and are recruiting 300-400 new members each year (averaging one new member each day).
- All IDRN activity is designed to promote multi-disciplinary collaborations and increase the capacity of infectious disease research in the UK.
- Activity has targeted priority areas of research^{1,2,3}, including tuberculosis, health care associated infection, antimicrobial resistance, hepatitis, and sexually transmitted infections. See appendix 1 for a complete list of research areas targeted by the IDRN.
- Key aspects of our activity have been the establishment of a successful model of innovating research strategy workshops and training events, the provision of our popular and extensive online funding and training bulletins, an input into infectious disease research strategy, and academic and administrative support for grants and fellowships.
- We provide an exemplar of how a modest network infrastructure can add substantial value to a research community.
- The IDRN is online at www.idrn.org . The website typically receives between 4000 – 5000 hits a month.

Background and network infrastructure

The IDRN was initially funded by the National Co-ordinating Centre for Research Capacity Development (NCCRCD), with activity commencing in 2002. The Network was piloted in London, with an initial partnership set-up between University College London (where the co-ordinating centre is based), the London medical schools, the London School of Hygiene and Tropical Medicine, the Health Protection Agency (HPA), and the Medical Research Council Clinical Trials Unit (MRC CTU).

In 2005, at the time of application for continued funding, the IDRN was assessed by an independent review panel, and was awarded a double-A rating for relevance and content (the highest possible award). The IDRN was subsequently awarded funding for a further three years until 2009, but the decision on funding for the expansion of the network to include more academic underpinning was postponed pending the outcome of the Lilleyman review. However, it was agreed that the IDRN should extend from a London base to a national network. The Department of Health have also confirmed that they wish to again extend the funding of the Network until 2012; the Department indicated they will be seeking mechanisms to incorporate sustainable funding of the Network into newly established research and development structures.

The Network resources include funding for a network manager, a half-time network assistant, and a consumables budget (typically spent on the running of research workshops and events, and also to maintain the IDRN website).

There is considerable reliance on the uncosted time given from the IDRN Steering Group, and also the wider research community. For a list of current and previous steering group members, see http://idrn.org/about_us/steering_group/



Activities

We have unparalleled experience in providing networking activity for our members, and the wider research community. We have refined our successful workshop structure over the last six years to ensure best possible engagement of the research community, and the maximising of quality and quantity of subsequent research. The multi-disciplinary backgrounds of the attendees is conducive to such outcomes. Ideas for workshops are proposed by the research community through Network wide calls for proposals, agreed by the IDRN steering group, and led by the members, backed up with IDRN administrative and academic support.

The IDRN also runs training events, in topical areas of particular strategic importance and interest to infectious disease researchers, such as the Human Tissue Act, EU Clinical Trials Directive, and a workshop on grantsmanship, held jointly with the MRC Infections and Immunity Board.

See appendix 2 for a complete list of IDRN workshops and training events.

Resources

In response to demand from our membership and consultation exercises that we have undertaken, the IDRN website has a wealth of high-quality resources available to researchers. These include comprehensive bulletins that are accessed online and sent out to members on a monthly basis. The funding bulletin contains items of funding that are of relevance to infectious disease researchers and have been sourced from several locations and presented in the bulletin under specific keywords. The training bulletin lists relevant conferences, short courses and postgraduate study. Each bulletin is regularly updated. See <http://idrn.org/bulletins/> for more information.

The website also contains a popular jobs page, with current vacancies relating to infectious disease research, our research mapping exercise (see the 'Other' section below), and a resource relating to the Human Tissue Act. Within the members area of the site, there are the presentations and reports from previous IDRN events, and a researchers database.

The innovative IDRN researchers database is a secure area that can be used to search for a specified expertise or skill. For example, the user can log in, enter a specific disease or infection, an infection group or theme (e.g. antimicrobial resistance, zoonoses), or an area of expertise (e.g. statistics, clinical trials). Around 1000 of the IDRN membership have entered in their research profile. See appendix 3 for a list of all the searchable criteria that are in the database.

Web-design services

The IDRN has the facility and expertise to design and host web-pages. There are several study web-pages hosted on the IDRN website, including –

- National Observational Study of the Effectiveness of the CleanYourHands Campaign (NOSEC), <http://idrn.org/nosec.php>
- ORION statement, <http://idrn.org/orion.php>
- Care Pathways for STIs in Primary Care, <http://idrn.org/capsti.php>



- Accelerated Partner Therapy (APT) Research, <http://www.aptresearch.co.uk/>

The IDRN hosted registration forms for events run by other organisations, such as the Association of Clinical Microbiologists, <http://www.idrn.org/acm.php>. We have also designed and hosted online surveys, such as a survey on behalf of the HPA to inform the development of a behavioural sciences research network. See http://idrn.org/behavioural_survey.php. The whole IDRN website typically receives 4000 – 5000 hits a month.

Strategy development

The IDRN has been asked to input into several aspects of research strategy development, including a submission to the UK Clinical Research Collaboration (UK CRC) in relation to the Lilleyman review on 'Developing Microbiology and Infectious Diseases Research in the UK' (the IDRN is also heavily cited in the published report). As part of this review, the IDRN also organised a Challenge workshop that assessed research priorities in the area of healthcare-associated infections and antimicrobial resistance.

The IDRN has collaborated with the UK CRC and partners on the running of a Challenge workshop that was set up to assess research priorities in the area of antimicrobial resistance and healthcare-associated infections. The IDRN also assisted with the co-ordination and launch of the UK CRC Translation Infection Research Initiative.

Other aspects of strategy development have included advising the Royal College of Pathologists Medical Microbiology Research Committee, and the steering group of the Healthcare-Associated Infections Research Network (based at Thames Valley University).

The IDRN has also provided academic support to the UKCRC Translational Infection Research Initiative Strategy Development Groups, specifically those on influenza transmission, chlamydia and antimicrobial resistance.

Academic and administrative support for researchers

Another of our services has been direct support for individual researchers or small research groups. The IDRN has organised many protocol development groups (PDG), which have either followed on from the ideas discussed at research workshops, or occurred as a result of approaches from researchers. See appendix 4 for a complete list of PDGs convened by the IDRN.

As well as organising these small meetings, other forms of assistance has included financial administration for grant applications, academic advice on study design, advice on ethical considerations, rapid literature reviews, power calculations, and sourcing of other collaborators or expertise as required.

IDRN publications

High-quality peer-reviewed journals have requested that the IDRN highlight its work by contributing articles and editorials for publication.



The IDRN wrote an editorial for Nature Reviews Microbiology, and this was published in the May 2008 issue. The full reference is –
Head MG, Hayward AC, Johnson AM. Networking for infectious disease. Nature Reviews Microbiology 6, 328 (May 2008)

At time of writing, the IDRN is preparing a review article to be published in spring 2009 by the Journal of Antimicrobial Chemotherapy. Another article has also been appeared in The Microbiologist (June 2008), the quarterly publication of the Society for Applied Microbiology.

Other IDRN activity

In order to estimate the extent of infectious disease research in the UK, the IDRN carried out an analysis of the National Research Register. The analysis has focussed on projects initiated in 2003 and the first 6 months of 2004, and the results of this are available at http://idrn.org/research_mapping_exercise/. A revised and extended analysis will be completed and published on the IDRN website in spring 2009.

This mapping exercise has been used strategically to identify important areas of research that have been underfunded, ascertain academic leaders, and expand our membership through direct approaches.

The IDRN has also provided advice to, and shared good practice with other research networks. There were regular communications with the Scottish Infection Research Network before and since their inception, as well as the Healthcare-Associated Infections Research Network and the UK Dermatology Clinical Trials Network.

Research outcomes

Presented here is a list of IDRN research outcomes, funded studies and collaborations. For more detailed information about each of our research outcomes, see appendix 5.

Antimicrobial resistance and healthcare-associated infections

Lead investigators	Institutions	Study title	Funder	Amount requested/awarded	Outcome
Barry Cookson, Sheldon Stone	HPA, Royal Free NHS Trust	I-STRAT trial	Medical Research Council	£500 000	funded
Sheldon Stone, Barry Cookson	Royal Free NHS Trust, HPA, UCL, LSTHM, Mid-Essex Hospitals Trust	NOSEC / FIT studies	National Patients Safety Agency	£580 000	funded
Deborah Biggerstaffe, Dinah Gould	University of Warwick, City University	MRSA bid in relation to hand-hygiene and infection control interventions	National Institute for Health Research	To be confirmed	To be submitted
Elizabeth	Barts and the	Behavioural	NHS	Unknown	Funded

Sheridan, Nick Sevdalis, Tim Stephens	London NHS Trust, Imperial College London	interventions to improve infection control practice	London		(x2 projects ongoing)
Andy Dodgson	Steritrox Ltd, Central Manchester University Hospitals, University of Manchester, HPA	Potential reduction of healthcare-associated settings, via novel decontamination methods	Health Technology Assessment	£600 000	Declined
Sheldon Stone	Royal Free NHS Trust	ORION statement	N/A	N/A	N/A

Tuberculosis

Lead investigators	Institutions	Study title	Funder	Amount requested/awarded	Outcome
Alistair Story	HPA, London TB nurses, UCL	London TB Nurses Patient Profiling Exercise	Thames Region Directors and Public Health / HPA	£30 000	Funded
Alistair Story	HPA, UCL	Evaluation of mobile x-ray unit for tuberculosis screening	Department of Health	£250 000	Funded
John Watson, Alistair Story, Stephen Gillespie, Andrew Hayward	HPA, UCL, TB nursing groups	Improving the management and control of tuberculosis, and other infections, among hard to reach groups	National Institute for Health Research programme grant	£2.5 million	Funded
Delane Shingadia	St Bartholomew's & Royal London Medical Sch, Royal Liverpool Children's Hospital, Llandough Hospital, Newcastle General Hospital,	BPSU Study of Childhood tuberculosis	Department of Health	unknown	Funded
Ibrahim Abubakar, Ajit Lalvani	HPA, Imperial College London	Prognostic value of Interferon Gamma Release Assays in predicting active tuberculosis	Health Technology Assessment	Unknown	Currently shortlisted

		among individuals with, or at risk of, latent tuberculosis infection.			
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Sexually-transmitted infections

Lead investigators	Institutions	Study title	Funder	Amount requested/awarded	Outcome
Cath Mercer, Jackie Cassell	UCL, Brighton and Sussex Medical School	Cost effectiveness of STI services for differing populations in the UK	Medical Research Council	£375 000	Funded
Jonathan Ross, Judith Stephenson	Birmingham Whittall Street Clinic, HPA, Copenhagen Mycoplasma Laboratory, UCLH, St Georges, University of London, UCL,	Natural History of Mycoplasma genitalium	Health Technology Assessment	£1.2 million	Declined, but smaller-scale local work later funded by UCLH Biomedical Research Centre
Pam Sonnenburg, Cath Mercer, Kaye Wellings	UCL, LSHTM, University of Manchester, NATCEN	National Survey of Sexual Attitudes and Lifestyles	Medical Research Council and Wellcome Trust	£7.35 million	Funded
Nicola Low, Jackie Cassell	University of Bern, University of Bristol, UCL	Care Pathways for STIs in Primary Care	Medical Research Council	£300 000	Funded
Claudia Estcourt, Jackie Cassell	Queen Mary University of London, UCL	Accelerated Partner Therapy (APT) Research Study	Medical Research Council	£300 000	Funded

Hepatitis

Lead investigators	Institutions	Study title	Funder	Amount requested/awarded	Outcome
Nikolai Naoumov	Involvement of >20 UK centres	Chronic hepatitis B in the UK - characteristics and prevalence of disease	Nuffield Foundation and Industry	Unknown	Funded

Respiratory

Lead investigators	Institutions	Study title	Funder	Amount requested/awarded	Outcome
Andrew Hayward, John Watson, Andrew McMichael, Maria Zambon	UCL, HPA, University of Oxford, LSHTM	Flu Watch : Community study of behavioral & biological determinants of transmission to inform seasonal & pandemic planning	Medical Research Council	£2.2 million	Funded
Lisa Page, Richard Amlot, Babatune Olowokure	Kings College London, HPA Porton Down, HPA Birmingham	PhD studentships on Psychological impact of Legionnaire's Disease	N/A	N/A	To be submitted

Gastrointestinal infections / food safety

Lead investigators	Institutions	Study title	Funder	Amount requested/awarded	Outcome
Sarah O'Brien	University of Manchester, HPA, LSHTM, Universities of Reading, Cardiff and Glasgow, UCL	2 nd National Intestinal Infectious Disease Study	Food Standards Agency	£3.3 million	Funded
Sarah O'Brien	University of Manchester, Central Manchester University Hospitals, HPA	Carriage and invasion on multiply-resistant ESBL-producing strains of Escherichia coli	Medical Research Council	£1.5 million	Declined

Antibiotics

Lead investigators	Institutions	Study title	Funder	Amount requested/awarded	Outcome
Jeremy Hawker	HPA, University of Birmingham, UCL	Developing and testing a system for analysing antimicrobial prescribing in primary care	HPA Strategic R & D fund	unknown	Funded
Jeremy Hawker	HPA, University of Birmingham, UCL	Surveillance and Burden of infection using routine health datasets	NIHR	£2 million	To be submitted

Ian Chopra	University of Leeds	Improved understanding of the molecular biology and physiology of <i>Acinetobacter baumannii</i>	MRC, BBSRC and Industry	unknown	Funded
Ian Chopra	Universities of Leeds, Paris, and Ljubljana	Inhibition of LPS biosynthesis at the level of LpxC and the C55 isoprenoid lipid cycle	Wellcome Trust	unknown	To be submitted
Armando Gonzalez	Dartford & Gravesham NHS Trust, Imperial College London	Web based gentamicin monitoring tool	N/A	N/A	N/A

Immunology

Lead investigators	Institutions	Study title	Funder	Amount requested/awarded	Outcome
Francesca Di Rosa, Vitaly Ganusov	University of Rome, National Institute of Health, USA	Modelling T lymphocyte recirculation	Human Frontiers Science Program	\$450 000	To be submitted
Joseph Kovacs, Vitaly Ganusov	University of Utrecht, National Institute of Health, USA	T cell dynamics in humans	N/A	N/A	collaboration
Becca Asquith, Derek Macallan, Jose Borghans, Vitaly Ganusov	University of Utrecht, Imperial College London, St Georges University of London	Labelling techniques in lymphocyte kinetics	N/A	N/A	collaboration
Louise Thaci, Emily Stirk	Maidstone & Tunbridge Wells NHS Trust, University of Leeds	Modelling and statistical components of lymphocyte kinetics	N/A	N/A	collaboration
Becca Asquith, Derek Macallan, Jose Borghans, Vitaly Ganusov	University of Utrecht, Imperial College London, St Georges University of London	Trends in Immunology publication	N/A	N/A	collaboration

Mycoses

Lead investigators	Institutions	Study title	Funder	Amount requested/awarded	Outcome
Robin May, Teun Boekhout	University of Birmingham, CBS Fungal Diversity Centre, Netherlands	Determining the molecular basis of the Cryptococci Vancouver Island Outbreak	Wellcome Trust	£350 000	Decision awaited
Janet Quinn, Lars Erwig	Universities of Newcastle & Aberdeen	Stress responses in <i>C.albicans</i> following phagocytosis	Medical Research Council	£600 000	To be submitted
Donna Macallum, Janet Quinn	Universities of Newcastle & Aberdeen	Virulence defects in strains mutated for specific stress regulators	N/A	N/A	collaboration
Julian Rutherford, Robin May	Universities of Newcastle and Birmingham	Gene knockout techniques	Genetics Society	Small grant	collaboration

Other areas

Lead investigators	Institutions	Study title	Funder	Amount requested/awarded	Outcome
Anne Johnson	UCL, HPA, University of Bristol, Imperial College London	Improving national public health interventions for the control of STIs using the Health Survey for England?	National Institute for Health Research	£2 million	Decision awaited
Melissa Leach, James Fairhead	University of Sussex, Brighton & Sussex Medical School	Is the cultural context of MMR rejection a key to an effective public health discourse?	Economic and Social Research Council	Unknown	Funded

Screenshots

See appendix 6 for screenshots of the IDRN website.

Membership demographics

The two graphs below demonstrate membership growth year on year, and the coverage of membership location across the UK and overseas. Approximately 400 new members sign up each year.

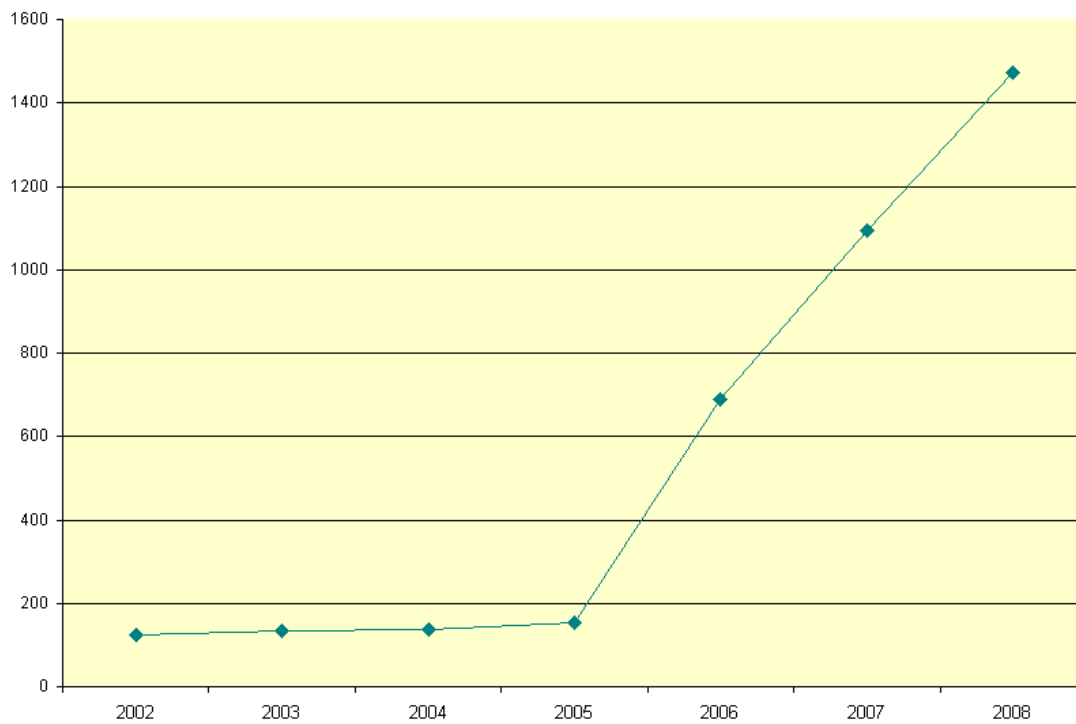


Figure 1. Cumulative growth of IDRN membership, as of December 2008.

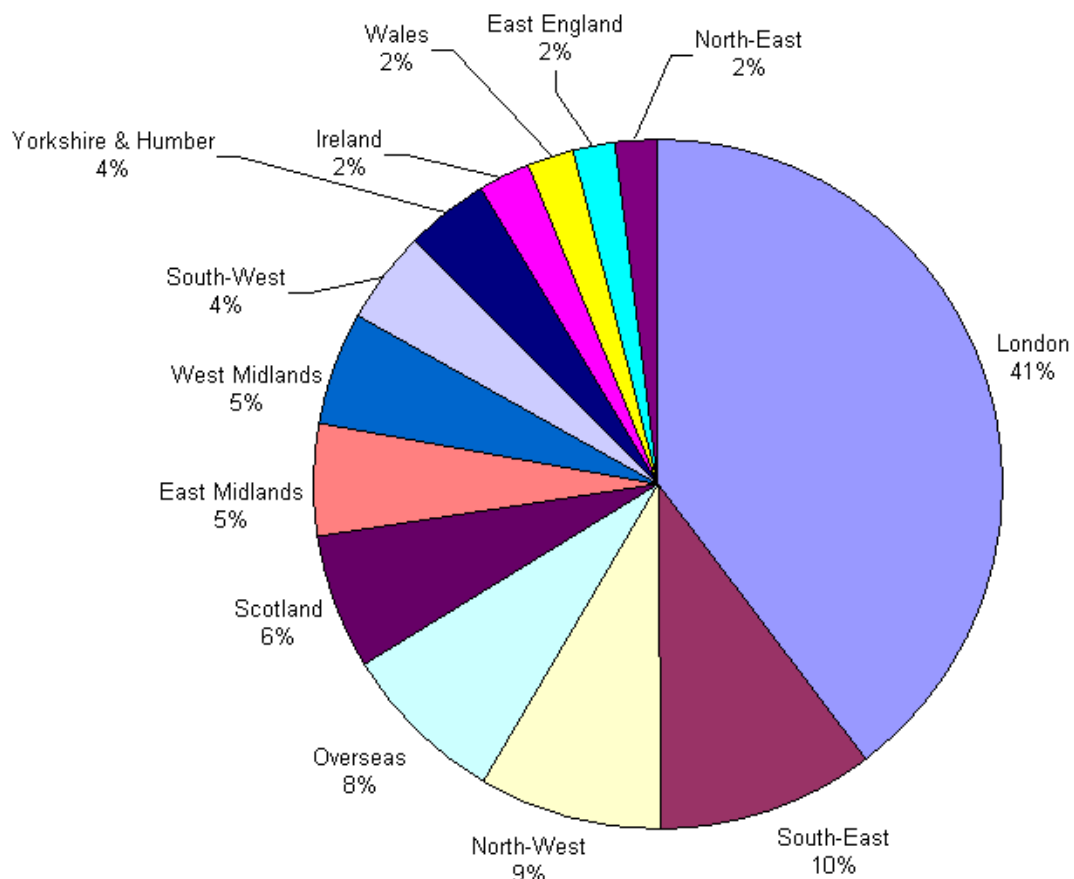


Figure 2. Geographical distribution of IDRN members, as of December 2008.



Activity during 2009

The IDRN programme of activity during 2009 includes the following events –

- Diagnostics research workshop, in collaboration with the Technology Strategy Board (in anticipation of a forthcoming call in this area)
- Mucosal perspectives in pneumococcal vaccine development (research workshop), in collaboration with University of Liverpool
- Developing research in health protection and infectious disease (research workshop), in collaboration with HPA Local and Regional Services
- Introductory day on the use of GIS and other mapping software, in collaboration with the Royal Geographical Society
- Introductory day on the subject of infectious disease and mathematical modelling, in conjunction with Imperial College London.

Summary

Since 2005, we have demonstrably increased our membership, expanded activity, achieved greater engagement with the research community and contributed extensively to the development of awarded studies.

The IDRN provides a model of how a small administrative infrastructure, with academic or specialist input from Network members, can initiate and support a wide range of collaborations, training events and information resources, ultimately leading to better collaborative research.

We thank our funders for their continued support, as well as all those who have contributed to the success of the Infectious Disease Research Network.

References

1. Department of Health, 2002, Getting ahead of the curve: a strategy for combating infectious diseases (including other aspects of health protection).
2. Department of Health, 2008, Department of Health Business Plan 2008 – 09.
3. Department of Health, 2008, CMO Update 47



Infectious Disease Research Network

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Appendices

Appendix 1. Summary list of all research areas / topics covered

- Acinetobacter
- Antibiotic prescribing
- Antimicrobial resistance and healthcare-associated infection
- Antivirals
- Bacteriology
- Behavioural sciences
- Bioterrorism
- Decontamination
- Diagnostics
- Extended-spectrum β -lactamases
- Food safety
- Gastrointestinal infection
- Health Protection
- Health Survey for England
- Hepatitis
- HIV
- Immunology
- Infection control
- Influenza
- Measles, Mumps & Rubella
- Molecular Microbiology
- Mycoses
- Outbreaks
- Prison health
- Probiotics
- Research governance
- Research methodology
- Scabies
- Sexually transmitted infections
- Staphylococcal infection
- Tuberculosis
- Zoonoses

Appendix 2. List of research workshops and training events

- Antibiotic Resistance and Public Health, 20 June 2002
- Epidemiological and programmatic research in tuberculosis, 4 July 2002
- New vaccines & childhood tuberculosis, latent infection diagnosis, rapid diagnostic tests and TB/HIV, 24 September 2002
- HBV, HCV and HCV/HIV co-infection, 14 October 2002
- Antibiotic Resistance: food & resistance and novel interventions to combat resistance, 20 November 2002
- Bioterrorism - Early Detection & Response, 22 September 2003
- The EU Directive on Clinical Trials, 4 May 2004
- Health research needs of prisoners both in and outside prisons, 28 June 2004
- Methods in Molecular Microbiology, 24 - 28 January 2005
- Food Safety Research Strategy Workshop, co-hosted with the Health Protection Agency, 12 July 2005.
- Sexual Health Research Strategy Workshop, 31 October 2005
- Acinetobacter/ESBL-producing organisms research strategy workshop, 2 December 2005
- Methods in Molecular Microbiology, 5 day training event was held between 16 and 26 June 2006
- Grant-writing workshop, jointly organised by the MRC, HPA and the IDRN
- Everything you wanted to know about the human tissue act but were scared to ask, 9 March 2007
- Challenge workshop – research priorities in antimicrobial resistance and healthcare-associated infections, 2 May 2007
- Developing Cluster Randomised Controlled Trials In The Area Of Infectious Disease & Health Protection – A Research Strategy Workshop, 8 October 2007
- Why Don't They Do As We Tell Them? Improving Health Protection Through Behavioural Research In The HPA, 8 February 2008
- Research during outbreaks and incidents – getting through the mud, 14 May 2008 (held in Newcastle)
- Lymphocyte kinetics in health and disease - an international workshop, 19 – 20 May 2008
- Invasive human mycoses, 10 –11 July 2008 (held in Birmingham)
- Evolution and adaptation of foodborne pathogens, 10 November 2008 (held in Birmingham)
- Scabies as a healthcare-associated infection, 21 November 2008 (held in Brighton)

Appendix 3 - List of searchable criteria in the IDRN researchers database

Specific disease/ infection	Infection groups and themes	Skill / Area of expertise
Acinetobacter	Air-borne	Animal models
Adenovirus	Antimicrobial resistance	Behavioural science
Aspergillus	Biofilms	Biochemistry
Botulism	Blood-borne	Bioterrorism
Calciavirus	Chronic disease (related infections)	Clinical trials
Campylobacter	Dental infections	Clinical waste management
Chlamydia	Environmental	Community care
Cholera	Gastrointestinal	Diagnostics
Chronic Obstructive Pulmonary Disease (COPD)	Fungal	Drug abuse
Clostridium	Healthcare-associated infections	Economics
Coxsackie virus	Neonatal pathogens	Epidemiology
Creutzfeldt-Jakob disease (CJD)	Neurological viruses	Ethics
Cryptococcus	Paediatric infections	Ethnic minorities
Cytomegalovirus	Pregnancy (infections in)	Flow cytometry
Cystic fibrosis (related infections)	Respiratory	Geographical information systems
Diphtheria	Tropical infections	Homeless
E. coli	Sepsis	Immunology
Echovirus	Sexually transmitted infections	Infection control
Epstein-Barr virus	Water-borne	IT (Information technology)
Giardia	Zoonoses	Mathematical modelling
Gonococci		Molecular biology
Helicobacter		Microbiology
Hepatitis A		Nursing
Hepatitis B		Nutrition
Hepatitis C		Obstetrics
Herpes viruses		Paediatrics
HIV (AIDS)		Parasitology
Human papilloma virus (HPV)		Pharmacy
Human T-cell lymphotropic viruses (HTLV)		Primary care
Influenza		Prison health

Legionella		Public health
Leishmani		Qualitative methods
Leptospirosis		Refugees / asylum seekers
Listeria		Social deprivation / exclusion
Malaria		Statistics
Measles		Surveillance
Meningococcal disease (inc viral meningitis)		Systematic reviews
MRSA		Travel medicine
Mumps		Typing
Mycoplasma		Vaccination
Norovirus		
Pertussis		
Plague		
Pneumococci		
Polio virus		
Pseudomonas		
Rabies		
Respiratory syncytial virus (RSV)		
Rhinovirus		
Rotavirus		
Rubella		
Salmonella		
Shigella		
Staphylococci (other than MRSA)		
Streptococci		
Syphilis		
Toxoplasmosis		
Tuberculosis		
Varicella		

Appendix 4. List of protocol development groups convened by the IDRN

- Risk factors and outcomes for hospital acquired antibiotic resistant infections, 23 January 2002
- Relationship between prescribing, AMR & outcomes in neonatal intensive care units, 30 August 2002
- Hepatitis C transmission in HIV+ patients, 11 December 2002
- Chronic HCV/HIV observational study, pulling together non-APRICOT treatment outcomes, 12 December 2002
- Evaluation on no cephalosporin policy v alternative policy, 10 February 2003
- Surgical prophylaxis and antimicrobial resistance, 23 June 2003
- Immediate ARV vs deferred ARV in TB-HIV co-infected patient, 23 September 2003
- Molecular tests for diagnosing infection & AMR (meeting convened in response to HTA call for bids), 25 November 2003
- Anti-microbial resistance & complexity approaches, 25 February 2004
- Health Survey for England and infectious diseases research, 22 June 2004
- What is the long term morbidity and mortality associated with IID? 03 February 2006
- What is the natural history of *Mycoplasma genitalium*? 24 March & 26 June 2006
- Carriage and invasion of multiply resistant ESBL-producing strains of *Escherichia coli*, 21 September 2006, 19 February 2007, 19 March 2007 (teleconference), 16 July 2007
- Potential reduction of healthcare acquired infections, via decontamination methods, 16 October & 7 December 2006
- Improving the management and control of tuberculosis, and other infections, among hard to reach groups, 16 May 2007
- IGRA use in tuberculosis disease, 8 January 2008

Appendix 5. List of IDRN research outcomes

STUDIES AND COLLABORATIONS

Antimicrobial resistance and healthcare-associated infections

I-STRAT Trial

Funded by the MRC for 2 years, this study aims to set up a stepped wedge cluster randomised controlled trial of isolation strategies to reduce endemic levels of MRSA and *Clostridium difficile*. The study is using a network of 30 hospitals willing to participate, which were recruited through the Infectious Diseases Research Network. The IDRN also provided some input into the construction of the grant application.

National Observational Study of the CleanYourHands campaign, and a cluster randomised trial of the effectiveness and cost-effectiveness of feedback in intensive care units and acute general medical wards

This 5-year study has been funded by the National Patient Safety Agency. Ethics Committee approval has been granted. Recruitment of centres has started. The study includes researchers from the Health Protection Agency, Royal Free and University College Medical School, University College London, The London School of Hygiene and Tropical Medicine and Infection Control Staff at the Mid-Essex Hospitals Trust. The IDRN support included development of study design, support in preparing funding submissions, and support in MREC applications. The IDRN has also provided web-design expertise in setting up and hosting online resources for this study.

See the IDRN website for the NOSEC webpage, including initial results from the study, publications and a Hand-hygiene Observation Tool. See also the below publications –

- Early communication: Does a national campaign to improve hand hygiene in the NHS work? Initial English and Welsh experience from the NOSEC study (National Observational Study to Evaluate the CleanYourHandsCampaign) *J Hospital Infection* 2007 ;66(3); 288-9
- Development of an observational measure of healthcare worker hand-hygiene behaviour: the hand-hygiene observation tool (HHOT), *Journal of Hospital Infection* (2008) 68, 222-229

ORION statement

The IDRN provided the web-design expertise to set up a webpage for the ORION statement-guidelines for the transparent reporting of Outbreak Reports and Intervention studies Of Nosocomial infection. This is a CONSORT equivalent for infection control studies.

- The ORION STATEMENT Guidelines for Transparent Reporting of Outbreak Reports and Intervention studies Of Nosocomial infection *Lancet Infect Dis* 2007; 7: 282–88
- The ORION STATEMENT Guidelines for Transparent Reporting of Outbreak Reports and Intervention studies Of Nosocomial infection. *J Antimicrobial Chemother* 2007; 59(5):833-40

MRSA bid in relation to hand-hygiene and infection control interventions

This grant application is currently being developed, and will be submitted to the National Institute for Health Research in 2009. This collaboration is between University of Birmingham, University of Warwick, and City University. The group met and discussed initial ideas at the IDRN behavioural sciences workshop.

Behavioural interventions to improve infection control practice

Two collaborative research projects have been established, after initial discussions took place at the IDRN behavioural sciences workshop. Initial financial support has been provided by NHS London.

- One is an evaluation of a campaign to improve infection control practices/behaviours. This is led by Barts and the London, and Imperial College are designing the assessment tools and carrying out the analysis.

- A second study is focused on using simulation to improve infection control practices. This is also a collaboration between Barts and the London and Imperial College. Some tools and practices are being shared between the two studies.

Potential reduction of healthcare-associated settings, via novel decontamination methods

This research application arose from an approach from Industry. The IDRN has co-ordinated a grant application to investigate rapid decontamination of hospital areas, particularly communal areas and around bedsides. An outline submission was made to the Health Technology Assessment clinical trials programme. This was not immediately funded, but has resulted in further collaboration to investigate these novel methods.

Tuberculosis

London TB Nurses Patient Profiling Exercise

Detailed baseline data and 1 year follow up data for over 2000 tuberculosis patients in London have been collected. Key stakeholders include all London TB nurses, the Health Protection Agency and UCL. Key findings have been disseminated to and used by: - local tuberculosis services in order to inform commissioning; the NICE TB guideline development group and the Department of Health in order to inform implementation of the National TB Action Plan.

The IDRN provided advice on study design, assistance with MREC applications, data cleaning, data analysis and dissemination of results to TB services and the Department of Health.

- Crack cocaine and infectious tuberculosis. *Emerg Infect Dis.* 2008 Sep;14(9):1466-9
- Tuberculosis in London: the importance of homelessness, problem drug use and prison. *Thorax.* 2007 Aug;62(8):667-71

Evaluation of mobile x-ray unit for tuberculosis screening

Following a successful pilot involving screening in homeless hostels and Pentonville prison, a bid for funding was submitted to the Department of Health led by the HPA. Funding of £250 000 was agreed, and a full evaluation is now complete. The IDRN provided support with protocol development, funding application and the MREC application.

- Tuberculosis and social exclusion. *BMJ.* 2006 Jul 8;333(7558):57-8

Improving the management and control of tuberculosis, and other infections, among hard to reach groups

This application arose from previous IDRN-supported work in tuberculosis (see above). The IDRN also convened protocol development groups for the collaboration to be taken forward. The National Institute for Health Research awarded this programme grant approx £2.5 million.

BPSU Study of Childhood tuberculosis

This is led by Dr Delane Shingadia (St Bartholomew's and the Royal London Medical School), and the results have now been published. The IDRN provided advice on study design.

- Tuberculosis in the United Kingdom and Republic of Ireland. *Archive of Diseases in Childhood.* 2008 Dec 3

Prognostic value of Interferon Gamma Release Assays in predicting active tuberculosis among individuals with, or at risk of, latent tuberculosis infection.

This multi-disciplinary, collaborative application was submitted to the Health Technology Assessment call for bids into projects looking at active TB disease, and has been short listed. The application originated from the IDRN/HPA workshop into interventions trials in the area of health protection, held in London October 07. The IDRN identified this call, and rapidly convened a follow up meeting in response to this call. With the agreement of the project leaders, the IDRN also invited individuals appropriate additional expertise onto the group.

Sexually-transmitted infections

Care Pathways for STIs in Primary Care

This study used an online intervention and resource, see the study webpage. The IDRN provided the web-design expertise and hosting to set up this intervention, and provided

statistics of webpage hits and downloads. The study is now completed, and at the paper-preparation stage (two publications).

Accelerated Partner Therapy (APT) Research Study

This study used an online intervention and resource, see the study webpage. The IDRN provided the web-design expertise to set up this intervention.

NATSAL 2010 - National Survey of Sexual Attitudes and Lifestyles 2010

This large collaborative application was submitted to the MRC and Wellcome in late 2007 and has been awarded £7.35 million. The IDRN provided assistance regarding the composition of the funding elements of this complex grant, as well as further administrative assistance.

Cost effectiveness of STI services for differing populations in the UK

The IDRN disseminated information on the MRC 2006 call for proposals for projects relating to sexual health. As a result of this dissemination, a collaborative bid was submitted. This bid was successful, and the group awarded approx £375000. The aim of the project, which commenced in April 2008, is to build a Decision Analytic Model as a tool for the evidence based planning of the cost-effectiveness of STI services for differing populations in the UK.

Natural History of Mycoplasma genitalium

This research question arose from an IDRN strategy workshop. A multi-disciplinary international collaborative group submitted a grant application to the Health Technology Assessment in late 2006.

Hepatitis

Chronic hepatitis B in the UK - characteristics and prevalence of disease

Joint funding from industry and Nuffield Foundation has recently been negotiated for this study. The study began in Autumn 2006, and has the involvement of 20 UK centres. The IDRN provided advice on study design, assistance with preparation of the protocol, advice on pseudonymisation of data, advice on the MREC application and the PIAG submission.

Respiratory

Flu Watch : Community study of behavioral & biological determinants of transmission to inform seasonal & pandemic planning

The IDRN co-ordinated this successful bid for a large national cohort study of influenza transmission in households. The study is ongoing and has to date successfully recruited around 2000 patients, and requests have been received from other researchers regarding collaborative opportunities. The MRC awarded this project almost £2million.

Psychological impact of Legionnaire's Disease

This PhD studentship is currently under review. It is a project that was initiated at the behavioural sciences workshop, and is a collaboration between the Institute of Psychiatry at Kings College London, HPA West Midlands and HPA Porton Down.

Gastrointestinal infections / food safety

2nd National Intestinal Infectious Disease Study

The Food Standards Agency provided funding of over £3 million for this collaborative, multi-disciplinary study, and is being led by the University of Manchester. The IDRN provided fora for collaborators to meet, and also organised protocol development groups that laid early foundations for this study.

Carriage and invasion on multiply-resistant ESBL-producing strains of Escherichia coli

The IDRN held a research strategy workshop concerning Acinetobacter and infection due to ESBLs on 02 December 2005. Three protocol development groups on the carriage of multiply-resistant ESBL-producing organisms were subsequently held, with a full application submitted to the MRC Infections and Immunity Board in January 2008. This project was not funded.

Antibiotics

Developing and testing a system for analysing antimicrobial prescribing in primary care

This project has been funded by the HPA Strategic R & D fund, is led by the HPA, and is using GPRD data for assessing routine surveillance. The IDRN provided advice on the study design. A further grant application to the National Institute for Health Research is currently being developed.

Surveillance and Burden of infection using routine health datasets

This collaboration has arisen from the above funded project, and is being developed into a programme grant, to be submitted to the National Institute for Health Research in 2009. The collaboration includes the HPA, University of Birmingham and UCL and will total approximately £2 million.

Web based gentamicin monitoring tool

The IDRN received a request from Dr Armando Gonzalez, a microbiologist seeking statistical support for his study, the development of a web based gentamicin monitoring tool to facilitate safe and effective use of gentamicin. A request was sent out through our mailing list, with several responses received. As a result, Dr Gonzalez collaborated with colleagues at Imperial College London.

Fighting Resistance To Antibiotics With New Technologies

This was a workshop organised and hosted in 2006 by the University of Leeds, in collaboration with various European partners and the pharmaceutical industry. The IDRN contributed a small amount of sponsorship to ensure the event took place. The workshop has had the following outputs -

- Improved understanding of the molecular biology and physiology of *Acinetobacter baumannii*, particularly in the biofilm mode of growth. University of Leeds laboratories have since secured additional funding to expand the biofilm work. The funding has come from the MRC, BBSRC and Industry.
- Inhibition of LPS biosynthesis at the level of LpxC and the C55 isoprenoid lipid cycle. A full collaborative application, involving partners from Leeds, Paris and Ljubljana, will be submitted to the Wellcome Trust in January 2009.
- Beta-lactamase inhibitors. A pan-European proposal was submitted to the EU; unfortunately, on this occasion, funding was not obtained.

Immunology

Trends in Immunology publication

The academic leaders on the IDRN lymphocyte kinetics workshop, and the speakers at the event, have collaborated on a publication of the meeting's proceedings. This article will be published in Trends in Immunology in spring 2009.

Labelling techniques in lymphocyte kinetics

A collaboration, set up from the IDRN workshop on lymphocyte kinetics, has discussed reconciling the different results obtained from labelling techniques. A publication is in preparation. This international collaboration involved St Georges, University of London, Imperial College London, and University of Utrecht.

Modelling T lymphocyte recirculation

This international collaboration, set up at the IDRN lymphocyte kinetics workshop, involves the University of Rome and the National Institute of Health, USA. Further meetings on the subject of modelling T lymphocytes have taken place in late 2008, and a grant proposal is currently being constructed.

Modelling and statistical components of lymphocyte kinetics

This collaboration, from the IDRN lymphocyte kinetics workshop, resulted in an exchange of data and techniques between colleagues from Maidstone & Tunbridge Wells NHS Trust and the University of Leeds.

T cell dynamics in humans

Colleagues from University of Utrecht and the National Institute of Health, USA met at the IDRN lymphocyte kinetics workshop. Utrecht colleagues have subsequently gained placements at the NIH to work on T cell dynamics, and this project will be commencing in April 2009.

Mycoses

Determining the molecular basis of the Cryptococci Vancouver Island Outbreak

An international collaboration between the University of Birmingham and the CBS Fungal Diversity Centre, Netherlands was set up from the IDRN mycoses workshop. A joint grant application has been submitted to the Wellcome Trust.

Gene knockout techniques

The University of Birmingham have sent staff to the University of Newcastle for training on the use of gene knockout techniques, as a result of collaborations formed at the mycoses workshop.

Stress responses in C.albicans following phagocytosis

This is a collaboration between the University of Aberdeen and University of Newcastle has been set up, and a joint grant proposal is currently being written. The collaboration was set up at the IDRN mycoses workshop.

Virulence defects in strains mutated for specific stress regulators

This collaboration, set up at the IDRN mycoses workshop, is currently working on a joint publication, and involves the University of Aberdeen and University of Newcastle.

Other areas

Improving national public health interventions for the control of STIs using the Health Survey for England?

Infectious disease epidemiological research using the resource of the Health Survey for England. An outline, collaborative application was submitted to the National Institute for Health Research Programme Grants scheme, and a decision is awaited.

Is the cultural context of MMR rejection a key to an effective public health discourse?

The below paper has now been published in the Journal of the Royal Institute of Public Health. The IDRN supported the quantitative work through providing contacts at the Health Protection Agency and provided forums for early presentation of the work, which informed analysis.

Is the cultural context of MMR rejection a key to an effective public health discourse? Public Health. 2006 Sep;120(9):783-94

Behavioural sciences projects

Further outputs from the behavioural sciences workshop include

- A collaboration between HPA Porton Down and HPA North-East to look at risk communication in chemical incidents. An application has been submitted to the HPA Strategic Fund.
- A collaboration between HPA Porton Down and Kings College London was renewed at the workshop, and they are now looking at an EU project focusing on chemical terrorism.
- A behavioural sciences research network is planned, subject to funding. The IDRN has provided significant advice and assistance with the development work for this.

FELLOWSHIPS

British Infection Society Fellowship –

Dr Sarah Anderson, project on tuberculosis in primary care

MRC Research Fellowships -

Dr Laura Shallcross, Staphylococcal infections in the community, Dr Ben Killingley, Interventions to prevent household transmission of influenza, Dr Charlotte Warren-Gash, Role of influenza as a trigger for acute myocardial infarction

Appendix 6 – Example screenshots of the IDRN website

Home page



The screenshot shows the IDRN home page. At the top right, there is a large circular logo with the text "IDRDN" in green. Below the logo is a search bar with a "GO" button. On the left side, there is a vertical navigation menu with the following items: HOME, ABOUT US, RESEARCH MAPPING EXERCISE, EVENTS, BULLETINS, RESEARCHER RESOURCES, MEMBERS' AREA, VACANCIES, CONTACT US, ADMIN, and MANAGE USERS. The main content area is titled "WELCOME TO THE IDRDN" and contains three paragraphs of text. On the right side, there is a "LOGGED IN AS" section showing "admin [Logout]", an "IDRDN FORUM" link, and a "CONTACT US" section with contact details: T: 020 7830 2239, E: info@idm.org, and F: 020 7794 1224.

WELCOME TO THE IDRDN

The Infectious Disease Research Network (IDRN) is proud to launch its new website! For a summary of the new features, [click here](#) to download a short powerpoint presentation.

Please do explore the new site. Many of the links elsewhere on the site have changed, so you should check (and correct if necessary) any bookmarks / favourites pages. All existing IDRDN resources have been transferred across, such as the jobs page, funding and training bulletins and the Human Tissue Act pages. The search field in the top left corner can also be used to look for pages and resources.

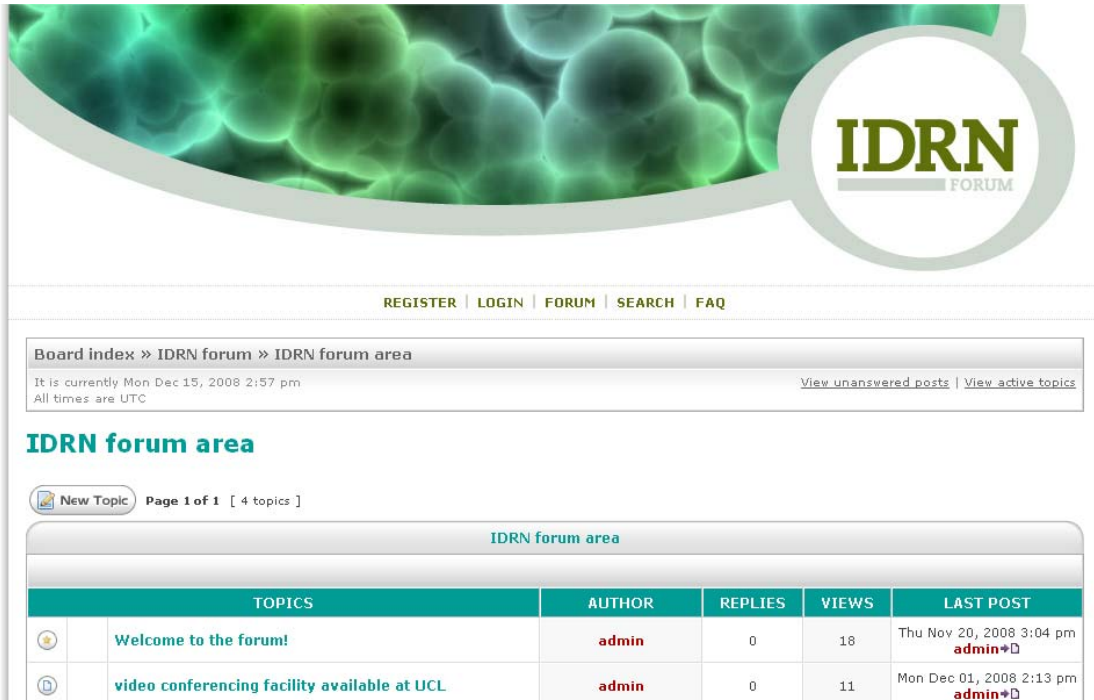
We would particularly draw your attention to the new online IDRDN forum. This has been requested by several IDRDN members, and can be used to ask and answer questions, engage in debate, and share ideas. This can be viewed openly, but you must be logged in to reply to existing threads, or start a new discussion.

Our focus is on UK-based research, although we welcome international members and collaborators. For more information on the IDRDN, see the 'about us' pages.

FORUM

To access the forum, click the link on the right hand side of the page.

IDRDN online forum



The screenshot shows the IDRDN online forum page. At the top right, there is a large circular logo with the text "IDRDN FORUM" in green. Below the logo is a navigation bar with the following items: REGISTER | LOGIN | FORUM | SEARCH | FAQ. The main content area is titled "IDRDN forum area" and contains a table of forum topics. The table has five columns: TOPICS, AUTHOR, REPLIES, VIEWS, and LAST POST. There are two topics listed: "Welcome to the forum!" and "video conferencing facility available at UCL".

IDRDN forum area

Board index » IDRDN forum » IDRDN forum area

It is currently Mon Dec 15, 2008 2:57 pm
All times are UTC

[View unanswered posts](#) | [View active topics](#)

IDRDN forum area

[New Topic](#) Page 1 of 1 [4 topics]

	TOPICS	AUTHOR	REPLIES	VIEWS	LAST POST
	Welcome to the forum!	admin	0	18	Thu Nov 20, 2008 3:04 pm admin+D
	video conferencing facility available at UCL	admin	0	11	Mon Dec 01, 2008 2:13 pm admin+D

Funding bulletin

PSEUDOMONAS

International

Keyword: pseudomonas

Source: [Vaincre la Mucoviscidose \(To Overcome Cystic Fibrosis\)](#)

Grant Name: [Project Grant](#)

Funding: Amount of funding available is unspecified

Amount: Unspecified

Closing Date: March-09

Duration: 6 mths - 1 year

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SALMONELLA

UK

Keyword: salmonella

Source: [Food Standards Agency](#)

Grant Name: [Postgraduate Scholarship Scheme](#)

Funding: Applications for research scholarships starting in October 2008 were invited in the following areas of the microbiological safety of food: * food hygiene * meat hygiene. In the first area (ref. Food Hygiene), they particularly welcome proposals to (i) investigate the impact of milder food processing conditions on the microbiological safety of food, or (ii) assess, using novel molecular techniques, the risk posed by Norovirus in shellfish in the UK. In the second area (ref. Meat Hygiene), they welcome proposals in meat production that address methodology to reduce Salmonella in pigs, in particular pre-, pro- and syn-biotic dietary interventions and pre- and post-harvest bacteriophage control.

Amount: Unspecified

Closing Date: Feb-09

Duration:

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SEPSIS

Training bulletin, conferences section

MAY 2009

Medicolegal aspects of hospital acquired infection

Date: 5 May 2009

Location: Royal Society of Medicine, London

Website/further information:

<http://www.rsm.ac.uk/academ/pog105.php>

12th Annual Spring Meeting of the British Infection Society

Date: 14-15 May 2009

Location: School of Oriental & African Studies, central London

Website/further information:

[Click here](#) for the BIS website.

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JUNE 2009

18th ISSTD International Society for STD Research in conjunction with British Association for Sexual Health & HIV - Scanning the horizons

Date: 28 June - 1 July 2009

Location: London

Website/further information:

<http://www.isstdlondon2009.com/>

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