

## Eighth Annual Symposium

Wednesday 5 June 2019, Royal College of Physicians, Edinburgh

### Programme – part 1

09.00 – 09.30	Coffee and poster set up	
09.30 – 09.40	<b>Ross Fitzgerald</b> (Director Edinburgh Infectious Diseases)	Welcome and introduction
SESSION 1: Chair – Rosalind Allen		
09.40 – 10.00	<b>Lisa Boden</b> , Global Academy of Agriculture and Food Security	EPIC: risk and long-term future resilience to disease outbreaks
10.00 – 10.20	<b>Sarah Walmsley</b> , Centre for Inflammation Research	Regulation of neutrophil apoptosis by hypoxia
10.20 – 10.40	<b>Steven Spoel</b> , School of Biological Sciences	Ubiquitin-mediated gene expression in plant immunity
10.40 – 11.00	<b>David Longbottom</b> , Moredun Research Institute	Towards the commercial development of a new vaccine against ovine enzootic abortion
11.00 – 11.30	Tea and coffee / posters	
SESSION 2: Chair – Alice Street		
11.30 – 11:50	<b>Sarah Chan</b> , Usher Institute	Bioethics of One Health
11.50 – 12.10	<b>Mark Blaxter</b> , School of Biological Sciences	Evolution of the filarial nematode-Wolbachia symbiont system
12.10 – 12.25	<b>Eleanor Gaunt</b> , The Roslin Institute	The role of CpG dinucleotides in regulating virus replication kinetics
12.25 – 12.40	<b>Edward Wallace</b> , School of Biological Sciences	Dynamic mRNA processing in fungi adapting to stress and initiating infection
12.40 – 13.00	<b>Russell Brown</b> , School of Biological Sciences	Engineering bacteriophage to treat diarrheal disease
	<b>Abraham Lee</b> , The Roslin Institute	The SIN3A/HDAC complex protects the human cytomegalovirus genome from DNA damage
	<b>Ritti Soncco</b> , School of Social and Political Science	The Lyme disease epidemic in Scotland
	<b>Bram van Bunnik</b> , Usher Institute	Global surveillance of antimicrobial resistance
	<b>Petra Schneider</b> , School of Biological Sciences	When to make an entrance

## **Eighth Annual Symposium**

Wednesday 5 June 2019, Royal College of Physicians, Edinburgh

### **Programme – part 2**

13:00 – 14.15	Lunch and posters	
	SESSION 3: Chair – David Dockrell	
14.15 – 14.30	<b>Ross Houston</b> , The Roslin Institute	Genomic approaches to understanding and improving disease resistance in aquaculture species
14.30 – 14.45	<b>Jenny Regan</b> , School of Biological Sciences	Sex differences in the innate immune system
14.45 – 15:05	<b>Sander Granneman</b> , School of Biological Sciences	Unravelling post-transcriptional regulatory networks controlling host adaptation in <i>S. aureus</i>
15:05 – 15.25	<b>Claire Mackintosh</b> , Regional Infectious Diseases Unit, WGH	Antibiotic use in secondary care
15.25 – 15.40	<b>KER MEMORIAL PRIZE WINNER</b> <b>William Palmer</b> , University of Pennsylvania	Evolution and genetics of antiviral immunity in <i>Drosophila</i>
15.40 – 16.10	Tea and coffee / posters	
16.10 – 16.15	Presentation of poster prize	
16.15 – 17.15	<b>KER MEMORIAL LECTURER</b> <b>Sharon Peacock</b> , Public Health England	Genomic evidence for transmission of human pathogens: a tale of two halves
17.15 – 18.30	Drinks reception – ALL WELCOME	

Many thanks to our sponsors.



## Poster presentations

1	<p><b>Population analysis of Legionella pneumophila reveals the basis of resistance to complement-mediated killing</b></p> <p>Joana Alves (1; joana.alves@roslin.ed.ac.uk), Bryan Wee (1), Diane Lindsay (2), Andrew Smith (2), J. Ross Fitzgerald (1)</p> <p>(1) The Roslin Institute, University of Edinburgh, (2) Scottish Haemophilus, Legionella, Meningococcus and Pneumococcus Reference Laboratory, NHS Greater Glasgow &amp; Clyde, Glasgow Royal Infirmary</p>	P
2	<p><b>The IUPHAR/MMV Guide to MALARIA PHARMACOLOGY: a new expertly curated resource capturing antimalarial compounds and their Plasmodium targets</b></p> <p>J. F. Armstrong (1; jane.armstrong@ed.ac.uk), S. D. Harding (1), E. Faccenda (1), A. J. Pawson (1), C. Southan (1), J. L. Sharman-Soares (1), B. Campo (2), F. J. Gamo (2,3), S. A. Ward (4), S.P.H. Alexander (5), A.P. Davenport (6), M. Spedding (7), J. A. Davies (1).</p> <p>(1) Centre for Discovery Brain Sciences, Deanery of Biomedical Sciences, University of Edinburgh, UK; (2) Medicines for Malaria Venture, ICC, 20 Route de Pré-Bois, PO Box 1826, 1215, Geneva, Switzerland; (3) Tres Cantos Medicines Development Campus-Diseases</p>	P
3	<p><b>Characterising the early interaction of Mycobacterium avium ssp paratuberculosis and the host using a bovine enteroid system</b></p> <p>Rosemary Blake (s1404179@ed.ac.uk)</p> <p>University of Edinburgh, The Roslin Institute</p>	S
4	<p><b>Characterization of the entry process of Lawsonia intracellularis using in vitro infection of Porcine Kidney cells (PK15)</b></p> <p>M Campillo Poveda, (marta.campillo@ed.ac.uk) T Ail-Tait, T Opriessnig, D Gally.</p> <p>The Roslin Institute</p>	S
5	<p><b>Modulation of lung tissue repair by the helminth-derived HpARI protein in type 2 lung inflammation</b></p> <p>Caroline Chauché (caroline.chauche@ed.ac.uk), Francesco Vacca, Abbie Payne, Josh Richards and Henry McSorley</p> <p>Centre for Inflammation Research, QMRI, University of Edinburgh</p>	P
6	<p><b>Outer membrane vesicles: A mechanism for antibiotic resistance and host evasion?</b></p> <p>Oliver Coombs O'Brien (1; s1798017@ed.ac.uk), Thamarai Schneiders (1), Amy Buck (2)</p> <p>(1) Division of Infection and Pathway Medicine, (2) Institute of Immunology and Infection Research</p>	S
7	<p><b>Mitochondrial double-stranded RNA triggers antiviral signalling in humans</b></p> <p>Dhir A (ashish.dhir@igmm.ed.ac.uk), Dhir S, Borowski LS, Jimenez L, Teitell M, Rötig A, Crow YJ, Rice GI, Duffy D, Tamby C, Nojima T, Munnich A, Schiff M, de Almeida CR, Rehwinkel J, Dziembowski A, Szczesny RJ, Proudfoot NJ.</p> <p>IGMM, University of Edinburgh, Institut Imagine Paris, University of Warsaw, University of Oxford</p>	P
8	<p><b>Investigating how the Knops blood group mutations affect Cerebral malaria risk through Complement Receptor 1 binding</b></p> <p>Sümeyye Erdemci (1), Olivia Swann (1), J. Alexandra Rowe (1) and Christoph Schmidt (2)</p> <p>Institute of Immunology and Infection Research, University of Edinburgh, (2) Ulm University Applied Immunology, Germany</p>	S
9	<p><b>Large chromosomal rearrangements (LCRs) mediate genomic evolution of Enterohaemorrhagic Escherichia coli (EHEC) PT21/28 isolates</b></p> <p>Stephen Fitzgerald (1; stephen.fitzgerald@roslin.ed.ac.uk), Nadejda Lupolova (1), Sharif Shaaban (1), Sean P. McAteer (1), James Bono (3), Tom McNeilly (2), David L. Gally (1)</p>	P

# Edinburgh Infectious Diseases

Leading infectious disease research and training

	(1) The Roslin Institute, University of Edinburgh, Scotland, UK (2) Moredun Research Institute, Scotland, UK; (3) USDA, Clay Center, Nebraska 68933-0166	
10	<b>"The Mould that Changed the World": performance of an antimicrobial resistance musical</b> Jennifer Hall (jnh227@gmail.com), Leah Jones, Gail Robertson, Robin Hiley, Meghan Perry University of Edinburgh; British Society of Antimicrobial Chemotherapy	P
11	<b>RNAi-mediated silencing of pyruvate dehydrogenase in Trypanosoma congolense</b> Iremonger, J. (1; s0233327@sms.ed.ac.uk), Stekete, P. (1), Wickstead, B. (2), Schnauffer, A. (3), Morrison, L. (1) (1) The Roslin Institute, University of Edinburgh, (3) Institute of Immunology and Infection Research, University of Edinburgh	S
12	<b>Investigating the differential virulence of Salmonella enterica serovars in livestock animals using quantitative proteomics</b> Imogen Johnston-Menzies (imogen.johnston-menzies@roslin.ed.ac.uk), Prerna Vohra, Jo Stevens Division of Infection and Immunity, The Roslin Institute, University of Edinburgh, Edinburgh, United Kingdom	S
13	<b>Impact of treatment thresholds and cooperation on the evolution of treatment resistance in sea lice</b> D. Lipschutz-Powell, J. Enright University of Edinburgh	P
14	<b>Frequency and risk factors for persisting pain, functional impairment and mortality following native vertebral osteomyelitis: a retrospective review of 90 cases</b> Hugh McCaughan (1,2; hugh.mccaughan@ed.ac.uk), Barrie Lyell (2), Sarah Clifford (1), Rebecca Sutherland (1,2) (1) Regional Infectious Diseases Unit, NHS Lothian, Edinburgh (2) University of Edinburgh	P
15	<b>Identification of non-coding RNA interactions that dictate virulence in Staphylococcus aureus</b> Stuart McKellar (s1025221@staffmail.ed.ac.uk), Sander Granneman University of Edinburgh	S
16	<b>Dissecting and disrupting interactions between host cell receptors and the Porcine Reproductive and Respiratory Syndrome Virus (PRRSV)</b> Elle L. McLuskey (elle.mcluskey@roslin.ed.ac.uk), Paul Digard, Alan L. Archibald & Christine Tait-Burkard The Roslin Institute	S
17	<b>The Outer Membrane Stability in K. pneumoniae is Controlled by the Transcriptional Regulator RamA</b> Charles F Metcalf (s1560114@sms.ed.ac.uk) and Thamarai Schneiders Division of Infection and Pathway Medicine, The University of Edinburgh	S
18	<b>Genome-wide RNAi screening for factors involved in mtDNA maintenance in Trypanosoma brucei</b> Migla Miskinyte (mmiskiny@staffmail.ed.ac.uk), Alasdair Ivens, Martin Waterfall and Achim Schnauffer Institute of Immunology and Infection Research, University of Edinburgh	P
19	<b>Trypanosomes struggling to make ends meet – RNA editing ligase as a drug target</b> Zandile Nare (1), Marios Sardis (1), Rachel Heylen (1), Stephan Zimmermann (1), Michael Speake (2), Stuart McElroy (2), Joanna Koszela (3), Manfred Auer (3) & Achim Schnauffer (1) (1) Institute of Immunology and Infection Research, University of Edinburgh, (2) European Screening Centre Newhouse (3) Institute of Quantitative Biology, Biotechnology and Biochemistry, University of Edinburgh	S
20	<b>Elucidating the function of an Argonaute protein secreted by a parasitic nematode in the mammalian gut</b> Neophytou K (1; Kyriaki.Neophytou@ed.ac.uk), Chow FWN (2) and Buck AH (1) Institute for Immunology and Infection Research, The University of Edinburgh; (2) Department of Microbiology, LKS Faculty of Medicine, The University of Hong Kong, Pokfulam, Hong Kong	S
21	<b>Haptoglobin and <math>\alpha</math>-lactalbumin biomarkers for selective dry cow therapy</b>	P

# Edinburgh Infectious Diseases

Leading infectious disease research and training

	Emily L. O'Reilly, Lorenzo Viora, Nicola Brady, Theo Pepler, Ruth N. Zadoks & P. David Eckersall	
	University of Glasgow	
22	<b>Profiling Epigenetic Landscapes Across Immune Cell Types of European and African Cattle Breeds</b> Jessica Powell (jessica.powell@roslin.ed.ac.uk), Hanneke Hemmink, Edith Paxton, Tim Connelley, James Prendergast and Liam Morrison	S
	The Roslin Institute, The International Livestock Research Institute	
23	<b>A Geography of Tolerance: The Unmaking of the Lyme Disease Epidemic in the Scottish Highlands</b> Ritti Soncco (ritti.soncco@ed.ac.uk)	P
	University of Edinburgh, The Carnegie Trust for the Universities of Scotland	
24	<b>Chloride ion-mediated intrinsic host defence mechanisms against viruses</b> Lizzie Southam (e.a.southam@sms.ed.ac.uk), Nisha Kriplani, Juergen Haas, Sandeep Ramalingam	S
	Division of Infection and Pathway Medicine	
25	<b>Comparative metabolic analysis of the African livestock trypanosomes</b> Pieter C. Steketee (1; pieter.steketee@ed.ac.uk), Emily Dickie (2), Siddharth Jayaraman (1), Kathryn Crouch (2), James Iremonger (1), Federica Giordani (2), Edith Paxton (1), Fiona Achcar (2), Anne-Marie Donachie (2), Mike Witty (3), Rose Peter (3), Harry de Koning (2), Michael P. Barrett (2) & Liam J. Morrison (1)	P
	(1) Roslin Institute, University of Edinburgh, (2) Wellcome Centre for Integrative Parasitology, University of Glasgow, (3) GALVmed, Edinburgh	
26	<b>Identification and characterisation of antigen presenting cells in the chicken spleen</b> Kate Sutton (kate.sutton@roslin.ed.ac.uk), Dominika Borowska, Katrina Morris, helen Sang, Adam Balic, Lonneke Vervelde	P
	The Roslin Institute and Royal (Dick) School of Veterinary Studies, University of Edinburgh, Edinburgh, United Kingdom.	
27	<b>Global surveillance of antimicrobial resistance</b> Rene Hendriksen (1), Patrick Munk (1), Patrick Njage (1), <u>Bram van Bunnik</u> (2; bram.vanbunnik@ed.ac.uk), Luke McNally (2), Oksana Lukjancenko (1), Timo Röder (1), David Nieuwenhuijse (3), Susanne Karlsmose Pedersen (1), Jette Kjeldgaard (1), Rolf S. Kaas (1), Philip Thomas Lanken Conradsen Clausen (1), Josef Korbinian Vogt (1), Pimplapas Leekitcharoenphon (1), Milou G. M. van de Schans (4), Tina Zuidema (4), Ana Maria de Roda Husman (5), Simon Rasmussen (6), Bent Petersen (6), Global sewage consortium, Guy Cochrane (7), Thomas Sicheritz-Ponten (8), Heike Schmitt (5), Jorge Raul Matheu Alvarez (9), Awa Aidara-Kane (9), Sünje J. Pamp (1), Ole Lund (6), Tine Hald (1), Mark Woolhouse (2), Marion Koopmans (3), Håkan Vigre (1), Thomas Nordahl Petersen (1), Frank M. Aarestrup (1)	P
	(1) National Food Institute, Technical University of Denmark, Denmark, (2) Usher Institute, University of Edinburgh, United Kingdom, (3) Viroscience, Erasmus Medical Center, The Netherlands, (4) RIKILT Wageningen University and Research, The Netherlands, (5) National Institute for Public Health and the Environment, The Netherlands, (6) Department of Bio and Health Informatics, Technical University of Denmark, Denmark, (7) European Bioinformatics Institute, UK, (8) Centre of Excellence for Omics-Driven Computational Biodiscovery, AIMST University, Malaysia, (9) World Health Organization, Switzerland	
28	<b>Geographical risk factors for the discovery of human-infective RNA viruses</b> Feifei Zhang (1; Feifei.Zhang@ed.ac.uk), Margo Chase-Topping (2,3), Chuan-Guo Guo (4), Bram A.D. van Bunnik (1,2), Liam Brierley (5), Mark E.J. Woolhouse (1,2)	S
	(1) Usher Institute, University of Edinburgh, (2) Centre for Immunity, Infection and Evolution, University of Edinburgh, (3) Roslin Institute, University of Edinburgh, (4) Department of Medicine, University of Hong Kong, (5) Sigma Unit, Coventry University	
29	<b>Emergence and outcomes of carbapenemase-producing organisms in Scotland, 2003-2016</b>	S

# **Edinburgh Infectious Diseases**

Leading infectious disease research and training

Shengyuan Zhao (shengyuan.zhao@ed.ac.uk), Meghan R Perry, Margo Chase-Topping, Bram A.D. van Bunnik, Gail Robertson, Sharon Kennedy, Julie Wilson, Michael Lockhart, Eleanor Anderson, Mark E.J. Woolhouse
--

University of Edinburgh; Western General Hospital; Health Protection Scotland
---

**Late poster additions**

Many thanks to [New England Biolabs](#) for sponsoring the poster prizes.



# Edinburgh Infectious Diseases

Leading infectious disease research and training

## Attendee list

First Name	Surname	Institute or Centre	Organisation
Merab	Acham	Fleming Fund Fellow	Ministry of Agriculture, Animal Industry and Fisheries, Uganda
Oluwafemi	Adu	Roslin Institute	University of Edinburgh
Omar	Alfituri	Roslin Institute	University of Edinburgh
Rosalind	Allen	School of Physics and Astronomy	University of Edinburgh
Joana	Alves	Roslin Institute	University of Edinburgh
Seth	Amanfo	Usher Institute	University of Edinburgh
Jane	Armstrong	Centre for Discovery Brain Sciences	University of Edinburgh
Carlos Enrique	Balcazar Lopez	Centre for Inflammation Research	University of Edinburgh
Peter	Barlow	Edinburgh Napier University	Edinburgh Napier University
Joel	Bazira	Fleming Fund Fellow	Mbarara University of Science and Technology, Uganda
Rosemary	Blake	Roslin Institute	University of Edinburgh
Mark	Blaxter	Institute of Evolutionary Biology	University of Edinburgh
Lisa	Boden	Global Academy of Agriculture and Food Security	University of Edinburgh
Russell	Brown	Synthsys/SBS	University of Edinburgh
Alexander	Brown	Roslin Institute	University of Edinburgh
Amy	Buck	Inst. Immunology and Infection Research	University of Edinburgh
Andrea	Calorini	Moredun Research Institute	
Harry	Campbell	Centre for Global Health Research	University of Edinburgh
Marta	Campillo	Roslin Institute	University of Edinburgh
Maria	Candela	Queen's Medical Research Institute	University of Edinburgh
Inès	Cara	Division of Infection and Pathway Medicine	University of Edinburgh
Molly	Carlier	Inst. Immunology and Infection Research	University of Edinburgh
Mathieu	Cayla	Inst. Immunology and Infection Research	University of Edinburgh
Sarah	Chan	Centre for Biomedicine, Self & Society	University of Edinburgh
Caroline	Chauche	Centre for Inflammation Research	University of Edinburgh
Farisai	Chidzwondo	Inst. Immunology and Infection Research	University of Edinburgh
Liangcui	Chu	Inst. Quantitative Biology, Biotechnology and Biochemistry	University of Edinburgh
Melanie	Clerc	Centre for Inflammation Research	University of Edinburgh
David	Collie	Roslin Institute	University of Edinburgh
Oliver	Coombs OBrien	Division of Infection and Pathway Medicine	University of Edinburgh
Mary-Kate	Corbally	Inst. Immunology and Infection Research	University of Edinburgh
Emma	Cunningham	Institute of Evolutionary Biology	University of Edinburgh
Alison	Daniels	Division of Infection and Pathway Medicine	University of Edinburgh
Federico	De Angelis	LifeArc	



# **Edinburgh Infectious Diseases**

Leading infectious disease research and training

Femke	de Wit	Biomedical School	University of Edinburgh
Ashish	Dhir	Inst. Genetics and Molecular Medicine	University of Edinburgh
Paul	Digard	Roslin Institute	University of Edinburgh
David	Dockrell	Centre for Inflammation Research	University of Edinburgh
David	Donaldson	Roslin Institute	University of Edinburgh
Katie	Duckett	Division of Infection and Pathway Medicine	University of Edinburgh
Sumeyye	Evin	Inst. Immunology and Infection Research	University of Edinburgh
Cristina	Fernández Rivas	Roslin Institute	University of Edinburgh
Stephen	Fitzgerald	Roslin Institute	University of Edinburgh
Ross	Fitzgerald	Roslin Institute	University of Edinburgh
David	Gally	Roslin Institute	University of Edinburgh
Eleanor	Gaunt	Roslin Institute	University of Edinburgh
Lina	Gonzalez	Roslin Institute	University of Edinburgh
Jamie	Gorzynski	Roslin Institute	University of Edinburgh
Sander	Granneman	SynthSys	University of Edinburgh
Heather	Grant	Institute of Evolutionary Biology	University of Edinburgh
Finn	Grey	Roslin Institute	University of Edinburgh
Aneta	Grochowalska	Inst. Immunology and Infection Research	University of Edinburgh
Juergen	Haas	Division of Infection and Pathway Medicine	University of Edinburgh
Jenny	Hall	NHS Lothian	
Fiona	Hamilton	Royal Infirmary of Edinburgh	NHS Lothian
Josh	Harling-Lee	Roslin Institute	University of Edinburgh
William	Hawkins	Edinburgh Clinical Research Facility	University of Edinburgh
Alejandra	Herbert	Institute of Evolutionary Biology	University of Edinburgh
Katie	Hildersley	Moredun Research Institute	
Holly	Hill	Moredun Research Institute	
Ross	Houston	Roslin Institute	University of Edinburgh
Lenka	Hrabalkova	Inst. Immunology and Infection Research	University of Edinburgh
Ian	Huynh		
Ira	Iosub	Inst. Immunology and Infection Research	University of Edinburgh
James	Iremonger	Roslin Institute	University of Edinburgh
Ivayla	Ivanova	SynthSys	University of Edinburgh
Piotr	Janas	Centre for Inflammation Research	University of Edinburgh
Juan-Carlos	Jiménez-Castellanos	Division of Infection and Pathway Medicine	University of Edinburgh
Imogen	Johnston-Menzies	Roslin Institute	University of Edinburgh
Caitlin	Jones	Inst. Immunology and Infection Research	University of Edinburgh
Anna	Karagianni	Roslin Institute and R(D)SVS	University of Edinburgh
Shazia	Khan	Queen's Medical Research Institute	University of Edinburgh
Elham	Khatamzas	Infectious Diseases	University of Edinburgh



# **Edinburgh Infectious Diseases**

Leading infectious disease research and training

Medhat	Khattar	Biomedical Teaching Organisation	University of Edinburgh
Julius	Kuebel	Inst. Immunology and Infection Research	University of Edinburgh
Joseph	Kungu	Fleming Fund Fellow	College of Veterinary Medicine Animal Resources and Biosecurity, Makerere University
Demi	Lee	Open University	
Abraham	Lee	Roslin Institute	University of Edinburgh
Ola	Lee	Centre for Inflammation Research	University of Edinburgh
Hannah	Lepper	Usher Institute of Population Health Sciences & Informatics	University of Edinburgh
Elin	Lilja	Institute for Condensed Matter and Complex Systems	University of Edinburgh
Oliver	Lin	Roslin Institute	University of Edinburgh
Debby	Lipschutz-Powell	Global Academy of Agriculture and Food Security	University of Edinburgh
David	Longbottom	Moredun Research Institute	
Lu	Lu	Institute of Evolutionary Biology	University of Edinburgh
Nadejda	Lupolova	Roslin Institute	University of Edinburgh
Neil	Mabbott	Roslin Institute	University of Edinburgh
Claire	Mackintosh	NHS Lothian	
Kareen	Macleod	Roslin Institute	University of Edinburgh
Jake	MacLeod	Division of Infection and Pathway Medicine	University of Edinburgh
Concetta	Marino	Moredun Research Institute	
Jacqui	Matthews	Moredun Research Institute	
Keith	Matthews	Inst. Immunology and Infection Research	University of Edinburgh
Stella	Mazeri	Roslin Institute	University of Edinburgh
Hugh	McCaughan	SynthSys	University of Edinburgh
Deirdre	McClean	Institute of Evolutionary Biology	University of Edinburgh
Stuart	McKellar	Wellcome Centre for Cell Biology	University of Edinburgh
Florence	McLean	Inst. Immunology and Infection Research	University of Edinburgh
Elle	McLuskey	The Roslin Institute	University of Edinburgh
Luke	McNally	Institute of Evolutionary Biology	University of Edinburgh
Tom	McNeilly	Moredun Research Institute	
Henry	McSorley	Centre for Inflammation Research	University of Edinburgh
Charles	Metcalf	Division of Infection and Pathway Medicine	University of Edinburgh
Migla	Miskinyte	Inst. Immunology and Infection Research	University of Edinburgh
Liam	Morrison	Roslin Institute	University of Edinburgh
Mary	Morrissey	Usher Institute of Population Health Sciences & Informatics	University of Edinburgh
Ibrahimm	Mugerwa	Fleming Fund Fellow	Uganda National Health Laboratory Services
Dishon	Muloi	Centre for Immunity, Infection & Evolution	University of Edinburgh
Diana	Munoz	Inst. Immunology and Infection Research	University of Edinburgh

# **Edinburgh Infectious Diseases**

Leading infectious disease research and training

Janice	Murray	Inst. Immunology and Infection Research	University of Edinburgh
Zandile	Nare	Inst. Immunology and Infection Research	University of Edinburgh
Kyriaki	Neophytou	Inst. Immunology and Infection Research	University of Edinburgh
Alasdair	Nisbet	Moredun Research Institute	
Emily	O'Reilly	School of Biomedical Sciences	University of Edinburgh
Marie	O'Shea	Roslin Institute	University of Edinburgh
Guy	Oldrieve	Moredun Research Institute	University of Edinburgh
William	Olum	Fleming Fund Fellow	Jinja Regional Referral Hospital
Michael	Omodo	Fleming Fund Fellow	National Animal Disease Diagnostics and Epidemiology Centre, Uganda
Derick	Osakunor	Moredun Research Institute	University of Edinburgh
Billy	Palmer	Perelman School of Medicine	University of Pennsylvania
Holly	Parker	Division of Infection and Pathway Medicine	University of Edinburgh
Gavin	Paterson	Royal (Dick) School of Veterinary Studies	University of Edinburgh
Edith	Paxton	Roslin Institute	University of Edinburgh
Sharon	Peacock	Public Health England	
Chikondi	Peno	Centre for Inflammation Research	University of Edinburgh
Meghan	Perry	Centre for Infection, Immunity & Evolution, NHS Lothian	
Lorraine	Pfavayi		
Hlaing Wai Wai	Phyo	Roslin Institute	University of Edinburgh
Maya	Pidoux	University of Glasgow	
Jessica	Powell	Roslin Institute	University of Edinburgh
Arun	Prakash	Institute of Evolutionary Biology	University of Edinburgh
Elaine	Pritchard	Lloyd's	
Alexandra	Raftery	University of Glasgow	
Pujitha	Raja	Division of Infection and Pathway Medicine	University of Edinburgh
Rachel	Reeves	Centre for Global Health Research	University of Edinburgh
Tim	Regan	Roslin Institute	University of Edinburgh
Jenny	Regan	Inst. Immunology and Infection Research	University of Edinburgh
Amy	Richards	Roslin Institute	University of Edinburgh
Kevin	Robertson	Biomedical Teaching Organisation	University of Edinburgh
Mara	Rocchi	Moredun Research institute	
Enguang	Rong	Roslin Institute	University of Edinburgh
Douglas	Roy	Division of Infection and Pathway Medicine	University of Edinburgh
Appan	Roychoudhury	Division of Infection and Pathway Medicine	University of Edinburgh
Allicia	Ruiz	Centre for Inflammation Research	University of Edinburgh
Simbarashe	Rusakaniko	TIBA Zimbabwe	
Clark	Russell	Centre for Inflammation Research	University of Edinburgh
Neil	Sargison	Royal (Dick) School of Veterinary Studies	University of Edinburgh

# **Edinburgh Infectious Diseases**

Leading infectious disease research and training

Fiona	Sargison	Roslin Institute	University of Edinburgh
Achim	Schnauffer	Inst. Immunology and Infection Research	University of Edinburgh
Petra	Schneider	Institute of Evolutionary Biology	University of Edinburgh
Thamarai	Schneiders	Division of Infection and Pathway Medicine	University of Edinburgh
Holger	Schulze	Division of Infection and Pathway Medicine	University of Edinburgh
Colin	Sharp	Roslin Institute	University of Edinburgh
Eleanor	Silvester	Inst. Immunology and Infection Research	University of Edinburgh
Richard	Sloan	Division of Infection and Pathway Medicine	University of Edinburgh
Jacqueline	Smith	Roslin Institute	University of Edinburgh
Richard	Smith	Centre for Reproductive Health	University of Edinburgh
Natasha	Smith	Inst. Immunology and Infection Research	University of Edinburgh
Hilary	Snaith	Edinburgh Infectious Diseases	University of Edinburgh
Maria	Solsona	Division of Infection and Pathway Medicine	University of Edinburgh
Ritti	Soncco	School of Social and Political Science	University of Edinburgh
Lizzie	Southam	Division of Infection and Pathway Medicine	University of Edinburgh
Steven	Spoel	Institute of Molecular Plant Sciences	University of Edinburgh
Helen	Stagg	Usher Institute of Population Health Sciences & Informatics	University of Edinburgh
Tom	Stanton	Division of Infection and Pathway Medicine	University of Edinburgh
Hanne	Stawarz	Roslin Institute	University of Edinburgh
Pieter	Steketee	Roslin Institute	University of Edinburgh
Mark	Stevens	Roslin Institute	University of Edinburgh
Jo	Stevens	Roslin Institute	University of Edinburgh
Alice	Street	School of Social and Political Science	University of Edinburgh
Rebecca	Sutherland	Western General Hospital	NHS Lothian
Kate	Sutton	Roslin Institute	University of Edinburgh
Olivia	Swann	Centre for Infection, Immunity and Evolution	University of Edinburgh
Balazs	Szoor	Inst. Immunology and Infection Research	University of Edinburgh
Christine	Tait-Burkard	Roslin Institute	University of Edinburgh
Mehroosh	Tak	GAAFS	
Matthew	Taylor	Inst. Immunology and Infection Research	University of Edinburgh
Michelle	Taylor	School of Social and Political Science	University of Edinburgh
Kate	Templeton	Royal Infirmary of Edinburgh	NHS Lothian
Ioanna	Thoma	Institute of Genetics and Molecular Medicine	University of Edinburgh
Kim	Thompson	Moredun Research Institute	
Alison	Tidswell	Roslin Institute	University of Edinburgh
Magdalena	Unterer		

# **Edinburgh Infectious Diseases**

Leading infectious disease research and training

Pedro	Vale	Institute of Evolutionary Biology	University of Edinburgh
Bram	van Bunnik	Usher Institute of Population Health Sciences & Informatics	University of Edinburgh
Fernanda	Velasco Rendon		
Frank	Venter	Inst. Immunology and Infection Research	University of Edinburgh
Lonneke	Vervelde	Roslin Institute	University of Edinburgh
Manouk	Vrieling	Roslin Institute	University of Edinburgh
Bartlomiej	Waclaw	School of Physics and Astronomy	University of Edinburgh
Edward	Wallace	Institute of Cell Biology	University of Edinburgh
Sarah	Walmsley	Centre for Inflammation Research	University of Edinburgh
Ross	Watson		University of Edinburgh
Rebecca	Watson	Centre for Inflammation Research	University of Edinburgh
Sean	Wattegedera	Moredun Research Institute	
Agata	Wawarczyk	Roslin Institute	University of Edinburgh
Catriona	Wedderburn	Global Academy for Agriculture and Food Security	University of Edinburgh
Nick	Wheelhouse	Edinburgh Napier University	
Christianus Arie Wisnu	Wijaya	Roslin Institute	University of Edinburgh
Wren	Wilson	School of Social and Political Science	University of Edinburgh
Jeroen	Witteveldt	Inst. Immunology and Infection Research	University of Edinburgh
Mark	Woolhouse	Usher Institute of Population Health Sciences & Informatics	University of Edinburgh
Yanping	Xie		
Gonzalo	Yebra	Roslin Institute	University of Edinburgh
Amal	Zaidan	University of Edinburgh	University of Edinburgh
Grace	Zdesenko	School of Biological Sciences	University of Edinburgh
Feifei	Zhang		
Shengyuan	Zhao	Usher Institute of Population Health Sciences & Informatics	University of Edinburgh