

Curriculum Vitae - Professor Roberto Marcello La Ragione

Current positions: Professor of veterinary microbiology and pathology, Head of the Department of Pathology and Infectious Diseases, University of Surrey (2014-present). Deputy Head of the School of Veterinary Medicine, University of Surrey (2019-present).

Previous Positions:

Director of the Surrey Veterinary Pathology Centre – (2014-2019).

Professor of veterinary microbiology and pathology, Associate Dean (Veterinary Strategy) University of Surrey (2010-2014).

Head of pathogenesis and control group, APHA, Defra (2005-2015).

Senior lecturer in veterinary microbiology, University of Surrey (April 2009 – 2010).

Senior scientist Department of bacterial diseases, VLA, Weybridge (2001-2005).

Post-doctoral researcher – Royal Holloway, University of London (1999-2001).

Higher Education:

2002-2010 Royal College of pathologists FRCPath (veterinary pathology)

1996-1999 Royal Holloway, University of London (PhD, bacterial pathogenesis)

1995-1996 Royal Veterinary College, University of London (MSc, veterinary microbiology)

1992-1995 University of East London (BSc Hons 2.1, zoology)

Membership of Professional bodies: Fellow of the Royal society of Biology (FRSB CBiol), Fellow of the Institute of Biomedical Science (FIBMS), Chartered Scientist (CSci), Member of the society of General Microbiology, The Society for Applied Microbiology, Member of the British Society of Parasitology, Member of the Universities Federation for animal Welfare, Member of the British society of toxicological pathologists, Fellow of the Royal College of Pathologists (FRCPath), Associate of the European College of Veterinary Microbiology (AECVM). Honorary Associateship of the Royal College of Veterinary Surgeons.

Specialist area: Veterinary microbiology and pathology. High throughput genotyping and phenotyping of zoonotic pathogens to study host-microbe interactions, AMR and interventions. Animal models for studying the pathogenesis and control of zoonotic pathogens. Rapid diagnostics and vaccines. Cellular and comparative pathology, EM, Confocal and whole animal imaging.

Research funding: Principal investigator (PI) - £6.4 million, Co-investigator (CI) - £8.6 million.

Academic activities: Professor of veterinary microbiology and pathology at the University of Surrey, visiting lecturer in microbiology at Royal Holloway and *ad hoc* lecturing at the RVC, LSHTM. BSc veterinary biosciences course director and MSc Vet Micro course director at UoS University of Surrey. External examiner, University of Liverpool Vet Sch. Committee member. (past Chair) of the Royal Society of Biology (BEH branch). Member of the UoS ethics committees in addition to several safety committees. Editor for JMM, RVSC and Vet. Micro. Reviewer for the BBSRC, UKRI, Defra, MRC and EU. I am the past president of the Med-Vet-Net association and Veterinary Research club. I am an experienced PhD, MSc and BSc supervisor. A member of the University Global Partnership Network, (UGPN), the Houghton charitable Trust, Chair of the Humanimal Trust and the Chair of the Vet Path SAC for the RCPPath.

8. Recent relevant publications (Selected from 150):

1. Brown HL, Passey JL, Getino M, Pursley I, Basu P, Horton DL, La Ragione RM. 2020. The One Health European Joint Programme (OHEJP), 2018-2022: an exemplary One Health initiative. J Med Microbiol. doi: 10.1099/jmm.0.001228..J Med Microbiol. PMID: 32633710.

2. Liakopoulos A, La Ragione RM, Nagel C, Schatzschneider U, Rozen DE, Betts JW. 2020. Manganese complex [Mn(CO)₃(tpa-κ₃N)]Br increases antibiotic sensitivity in multidrug resistant *Streptococcus pneumoniae*. J Glob Antimicrob Resist. S2213-7165(20)30124-7.

3. Mehat JW, La Ragione RM, van Vliet AHM. 2020. *Campylobacter jejuni* and *Campylobacter coli* autotransporter genes exhibit lineage-associated distribution and decay. BMC Genomics. 19;21(1):314. doi: 10.1186/s12864-020-6704-z.
4. Leng J, Walton G, Swann J, Darby A, La Ragione R, Proudman C 2019. "Bowel-on-the-bench:" Proof-of-concept of a three stage, *in vitro*, fermentation model of the equine large intestine. Appl Environ Microbiol. 2019 Nov 1. pii: AEM.02093-19. doi:
5. Güntzel P, Nagel C, Weigelt J, Betts JW, Pattrick CA, Southam HM, La Ragione RM, Poole RK, Schatzschneider U. 2019. Biological activity of manganese(i) tricarbonyl complexes on multidrug-resistant Gram-negative bacteria: From functional studies to *in vivo* activity in *Galleria mellonella*. Metallomics. 11(12):2033-2042. doi: 10.1039/c9mt00224c.
6. Betts JW, Hornsey M, Higgins PG, Lucassen K, Wille J, Salguero FJ, Seifert H, La Ragione RM. 2019. Restoring the activity of the antibiotic aztreonam using the polyphenol epigallocatechin gallate (EGCG) against multidrug-resistant clinical isolates of *P. aeruginosa*. J Med Microbiol.
7. Le Roy CI, Woodward MJ, Ellis RJ, La Ragione RM, Claus SP. 2019. Antibiotic treatment triggers gut dysbiosis and modulates metabolism in a chicken model of gastro-intestinal infection. BMC Vet Res. 2019 Jan 25;15(1):37.
8. Gerson S, Betts JW, Lucaßen K, Nodari CS, Wille J, Josten M, Göttig S, Nowak J, Stefanik D, Roca I, Vila J, Cisneros JM, La Ragione RM, Seifert H, Higgins PG. 2019. Investigation of Novel *pmrB* and *eptA* Mutations in Isogenic *Acinetobacter baumannii* Isolates Associated with Colistin Resistance and Increased Virulence *In Vivo*. Antimicrob Agents Chemother. 26;63(3).
9. Moreno LZ, Gomes VTM, Moreira J, de Oliveira CH, Peres BP, Silva APS, Thakur S, La Ragione RM, Moreno AM. 2019. First report of *mcr-1*-harboring *Salmonella enterica* serovar Schwarzengrund isolated from poultry meat in Brazil. Diagn Microbiol Infect Dis. 93(4):376-379.
10. Hornsey M, Betts JW, Mehat JW, Wareham DW, van Vliet AHM, Woodward MJ, La Ragione RM. 2019. Characterization of a colistin-resistant Avian Pathogenic *Escherichia coli* ST69 isolate recovered from a broiler chicken in Germany. J Med Microbiol.
11. Le Roy CI, Woodward MJ, Ellis RJ, La Ragione RM, Claus SP. 2019. Antibiotic treatment triggers gut dysbiosis and modulates metabolism in a chicken model of gastro-intestinal infection. BMC Vet Res. 25;15(1):37. doi: 10.1186/s12917-018-1761-0.
12. Mehat JW, Park SF, van Vliet AHM, La Ragione RM. 2018. Characterisation of CapC, a novel autotransporter and virulence factor of *C. jejuni*. Appl Environ Micro. AEM. 10.1128/AEM.01032-18.
13. Sakaridis I, Ellis RJ, Cawthraw SA, van Vliet AHM, Stekel DJ, Penell J, Chambers M, La Ragione RM, Cook AJ. 2018. Investigating the Association Between the Caecal Microbiomes of Broilers and *Campylobacter* Burden. Front Microbiol. 22;9:927.
14. Liakopoulos A, Betts J, La Ragione R, van Essen-Zandbergen A, Ceccarelli D, Petinaki E, Koutinas CK, Mevius DJ. 2018. Occurrence and characterization of extended-spectrum cephalosporin-resistant Enterobacteriaceae in healthy household dogs in Greece. J Med Microbiol.
15. Pedersen C, Ijaz UZ, Gallagher E, Horton F, Ellis RJ, Jaiyeola E, Duparc T, Russell-Jones D, Hinton P, Cani PD, La Ragione RM, Robertson MD. 2018. Fecal Enterobacteriales enrichment is associated with increased *in vivo* intestinal permeability in humans. Physiol Rep. 2018 Apr;6(7):e13649. doi: 10.14814/phy2.13649.
16. Giles M, Cawthraw SA, AbuOun M, Thomas CM, Munera D, Waldor MK, La Ragione RM, Ritchie JM. 2018. Host-specific differences in the contribution of an ESBL Inc11 plasmid to intestinal colonization by *Escherichia coli* O104:H4. J Antimicrob Chemother.
17. Newell DG, La Ragione RM. 2018. Enterohaemorrhagic and other Shiga toxin-producing *Escherichia coli* (STEC): Where are we now regarding diagnostics and control strategies? Transbound Emerg Dis. 2018 Jan 25. doi: 10.1111/tbed.12789.
18. King, A., La Ragione, R. Dalton, A. *et al.*, 2017. Pristine carbon nanotube scaffolds for the growth of chondrocytes. J. Materials Chemistry B. Issue 41.
19. Betts J, Nagel C, Schatzschneider U, Poole R, La Ragione RM. 2017. Antimicrobial activity of carbon monoxide-releasing molecule [Mn(CO)₃(tpa-κ³N)]Br versus multidrug-resistant isolates of Avian Pathogenic *Escherichia coli* and its synergy with colistin. PLoS One. 2017 Oct 17;12(10).
20. Betts, J. W., Hornsey, M., Wareham, D., La Ragione, R. 2017. *In vitro* and *in vivo* activity of Theaflavin-Epicatechin combinations versus multidrug-resistant *Acinetobacter baumannii*. Infectious Disease and Therapy. Infect Dis Ther.