

BIOLOGICAL DEFENCE RESEARCH PUBLICATIONS FOR Dstl PORTON DOWN 2021

1. Barnes KB, Richards MI, Laws TR, Núñez A, Thwaite JE, Bentley C, Harding SV. Finafloxacin Is an Effective Treatment for Inhalational Tularemia and Plague in Mouse Models of Infection. *Antimicrob Agents Chemother*. 2021 May 18;65(6):e02294-20. doi: 10.1128/AAC.02294-20. PMID: 33753342; PMCID: PMC8315961.
2. Back CR, Stennett HL, Williams SE, Wang L, Ojeda Gomez J, Abdulle OM, Duffy T, Neal C, Mantell J, Jepson MA, Hendry KR, Powell D, Stach JEM, Essex-Lopresti AE, Willis CL, Curnow P, Race PR. A New *Micromonospora* Strain with Antibiotic Activity Isolated from the Microbiome of a Mid-Atlantic Deep-Sea Sponge. *Mar Drugs*. 2021 Feb 11;19(2):105. doi: 10.3390/md19020105. PMID: 33670308; PMCID: PMC7918784.
3. Nelson M, Salguero FJ, Hunter L, Atkins TP. A Novel Marmoset (*Callithrix jacchus*) Model of Human Inhalational Q Fever. *Front Cell Infect Microbiol*. 2021 Jan 28;10:621635. doi: 10.3389/fcimb.2020.621635. PMID: 33585288; PMCID: PMC7876459.
4. Barker S, Harding SV, Gray D, Richards MI, Atkins HS, Harmer NJ. Drug screening to identify compounds to act as co-therapies for the treatment of *Burkholderia* species. *PLoS One*. 2021 Mar 25;16(3):e0248119. doi: 10.1371/journal.pone.0248119. PMID: 33764972; PMCID: PMC7993816.
5. Hemsley CM, Essex-Lopresti A, Norville IH, Titball RW. Correlating Genotyping Data of *Coxiella burnetii* with Genomic Groups. *Pathogens*. 2021 May 14;10(5):604. doi: 10.3390/pathogens10050604. PMID: 34069306; PMCID: PMC8156542.
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7. Holley J, Sumner RP, Lant S, Ribeca P, Ulaeto D, Maluquer de Motes C. Engineered Promoter-Switched Viruses Reveal the Role of Poxvirus Maturation Protein A26 as a Negative Regulator of Viral Spread. *J Virol*. 2021 Sep 9;95(19):e0101221. doi: 10.1128/JVI.01012-21. Epub 2021 Sep 9. PMID: 34260287; PMCID: PMC8428399.
8. Goode O, Smith A, Zarkan A, Cama J, Invergo BM, Belgami D, Caño-Muñoz S, Metz J, O'Neill P, Jeffries A, Norville IH, David J, Summers D, Pagliara S. Persister *Escherichia coli* Cells Have a Lower Intracellular pH than Susceptible Cells but Maintain Their pH in Response to Antibiotic Treatment. *mBio*. 2021 Aug 31;12(4):e0090921. doi: 10.1128/mBio.00909-21. Epub 2021 Jul 20. PMID: 34281389; PMCID: PMC8406257.
9. Clay KA, Hartley MG, Armstrong S, Bewley KR, Godwin K, Rayner E, Vipond J, Bailey M, Atkins TP, Norville IH. Evaluation of the Efficacy of Doxycycline, Ciprofloxacin, Levofloxacin, and Cotrimoxazole Using *In Vitro* and *In Vivo* Models of Q Fever. *Antimicrob Agents Chemother*. 2021 Oct 18;65(11):e0067321. doi: 10.1128/AAC.00673-21. Epub 2021 Aug 9. PMID: 34370577; PMCID: PMC8522727.
10. Reddi D, Durant L, Bernardo D, Noble A, English NR, Hendy P, Clark GC, Prior JL, Williamson ED, Knight SC. In Vitro Priming of Human T Cells by Dendritic Cells Provides a Screening Tool for Candidate Vaccines for *Burkholderia pseudomallei*. *Vaccines (Basel)*. 2021 Aug 22;9(8):929. doi: 10.3390/vaccines9080929. PMID: 34452057; PMCID: PMC8402564.
11. Taylor A, Jenner D, Rowland C, Laws T, Norville I, Prior J. Monoclonal Antibodies Opsonize *Burkholderia* spp. and Reduce Intracellular Actin Tail Formation in a Macrophage Infection Assay. *J Bacteriol*. 2021 Oct 12;203(21):e0024421. doi: 10.1128/JB.00244-21. Epub 2021 Aug 30. PMID: 34460311; PMCID: PMC8508110.
12. Wilson J, Carson G, Fitzgerald S, Llewelyn MJ, Jenkins D, Parker S, Boies A, Thomas J, Sutcliffe K, Sowden AJ, O'Mara-Eves A, Stansfield C, Harriss E, Reilly J; members of the Independent High Risk AGP Review Panel. Are medical procedures that induce coughing or involve

- respiratory suctioning associated with increased generation of aerosols and risk of SARS-CoV-2 infection? A rapid systematic review. *J Hosp Infect.* 2021 Oct;116:37-46. doi: 10.1016/j.jhin.2021.06.011. Epub 2021 Jul 8. PMID: 34245806; PMCID: PMC8264274.
13. Peyrusson F, Whelan AO, Hartley MG, Norville IH, Harding SV, Van Bambeke F. Intracellular Activity of Antibiotics against *Coxiella burnetii* in a Model of Activated Human THP-1 Cells. *Antimicrob Agents Chemother.* 2021 Nov 17;65(12):e0106121. doi: 10.1128/AAC.01061-21. Epub 2021 Sep 20. PMID: 34543094; PMCID: PMC8597764.
 14. Henry P, Oswin, Allen E, Haddrell, Mara Otero-Fernandez, Tristan A. Cogan, Jaime F. S. Mann, Catherine H. Morley, Darryl J. Hill, Andrew D. Davidson, Adam Finn, Richard J. Thomas & Jonathan P. Reid (2021) Measuring stability of virus in aerosols under varying environmental conditions, *Aerosol Science and Technology*, 55:12, 1315-1320, DOI: 10.1080/02786826.2021.1976718
 15. Attrill EL, Claydon R, Łapińska U, Recker M, Meaden S, Brown AT, Westra ER, Harding SV, Pagliara S. Individual bacteria in structured environments rely on phenotypic resistance to phage. *PLoS Biol.* 2021 Oct 12;19(10):e3001406. doi: 10.1371/journal.pbio.3001406. PMID: 34637438; PMCID: PMC8509860.
 16. Porges E, Jenner D, Taylor AW, Harrison JSP, De Grazia A, Hailes AR, Wright KM, Whelan AO, Norville IH, Prior JL, Mahajan S, Rowland CA, Newman TA, Evans ND. Antibiotic-Loaded Polymersomes for Clearance of Intracellular *Burkholderia thailandensis*. *ACS Nano.* 2021 Dec 28;15(12):19284-19297. doi: 10.1021/acsnano.1c05309. Epub 2021 Nov 5. PMID: 34739227; PMCID: PMC7612142.
 17. Phelps AL, O'Brien LM, Ulaeto DO, Holtsberg FW, Liao GC, Douglas R, Aman MJ, Glass PJ, Moyer CL, Ennis J, Zeitlin L, Nagata LP, Hu WG. Cross-Strain Neutralizing and Protective Monoclonal Antibodies against EEEV or WEEV. *Viruses.* 2021 Nov 5;13(11):2231. doi: 10.3390/v13112231. PMID: 34835037; PMCID: PMC8621548.
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 21. Hartley MG, Norville IH, Richards MI, Barnes KB, Bewley KR, Vipond J, Rayner E, Vente A, Armstrong SJ, Harding SV. Finafloxacin, a Novel Fluoroquinolone, Reduces the Clinical Signs of Infection and Pathology in a Mouse Model of Q Fever. *Front Microbiol.* 2021 Nov 30;12:760698. doi: 10.3389/fmicb.2021.760698. PMID: 34917048; PMCID: PMC8670379.
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 23. Auty JM, Jenkins CH, Hincks J, Straatman-Iwanowska AA, Allcock N, Turapov O, Galyov EE, Harding SV, Mukamolova GV. Generation of Distinct Differentially Culturable Forms of *Burkholderia* following Starvation at Low Temperature. *Microbiol Spectr.* 2022 Feb 23;10(1):e0211021. doi: 10.1128/spectrum.02110-21. Epub 2022 Jan 5. PMID: 34985335; PMCID: PMC8729786.

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26. Coldrick S, Kelsey A, Ivings MJ, Foat TG, Parker ST, Noakes CJ, Bennett A, Rickard H, Moore G. Modeling and experimental study of dispersion and deposition of respiratory emissions with implications for disease transmission. *Indoor Air*. 2022 Feb;32(2):e13000. doi: 10.1111/ina.13000. PMID: 35225395.
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