



## Forschungsoutput 2023 – «One Health» Wirkstoffresistenzen

Biggel M, Boss S, Uea-Anuwong T, Lugsomya K, Magouras I, Stephan R (2023). Complete genome sequence of the extensively drug-resistant ESBL-producing *Proteus mirabilis* isolate HK294 obtained from poultry feces in Hong Kong. *Microbiology Resource Announcements* 12(6):e0022523. doi: 10.1128/mra.00225-23.

Biggel M, Jans Ch., Dassler K, Hoehn S, Frei A, Stephan R (2023). Dissemination and genetic characteristics of ESBL-producing *E. coli* ST131 through wastewater and environmental water in Switzerland. *Environmental Pollution* 15;337:122476. doi: 10.1016/j.envpol.2023.122476.

Biggel M, Johler S, Egli A, Stephan R, Seth-Smith HMB (2023). PorinPredict: in silico identification of OprD loss from WGS data for improved genotype-phenotype predictions of *P. aeruginosa* carbapenem resistance. *Microbiology Spectrum* 11(2):e0358822. doi: 10.1128/spectrum.03588-22d.

Boss S, Stephan R, Horlbog JA, Magouras I, Albane Colon V, Lugsomya K, Stevens MJA, Nüesch-Inderbinen M (2023). Serotypes, antimicrobial resistance profiles and virulence factors of *Salmonella* isolates in Chinese edible frogs (*Hoplobatrachus rugulosus*) collected from wet markets in Hong Kong. *Foods* 12, 2245.  
<https://doi.org/10.3390/foods12112245>.

Degen M, Torgerson P, Nolff MC (2023). Prospektive Analyse von Risikofaktoren für perioperative Infektionen bei sauberen und sauber-kontaminierten Eingriffen bei Hund und Katze unter besonderer Berücksichtigung des perioperativen und postoperativen Antibiotikaeinsatz. *SAT* 165(4), 625-633. <https://doi.org/10.17236/sat00 275>.

Eigner F, Keller S, Schmitt S, Corti S, Nolff MC (2023). Efficiency of octenidine dihydrochloride alcohol combination compared to ethanol based skin antiseptics for preoperative skin preparation in dogs. *PLoS One* 18(11): e0293211. <https://doi.org/10.1371/journal.pone.0293211>.

Kaplan R M, Denwood M J, Nielsen M K, Thamsborg S M, Torgerson P R, Gillear J S, Dobson R J, Vercruyse J, Levecke B (2023). World Association for the Advancement of Veterinary Parasitology (W.A.A.V.P.) guideline for diagnosing anthelmintic resistance using the faecal egg count reduction test in ruminants, horses and swine. *Veterinary Parasitology*, 318:109936.

Kelbert L, Stevens MJA, Horlbog JA, Biggel M, Stephan R (2023). Completely assembled genome sequence of the florfenicol resistant *Enterococcus faecalis* strain 90\_2023 isolated from a raw sausage imported from Italy to Switzerland. *Microbiology Resource Announcements* 12(10):e0061023. doi: 10.1128/MRA.00610-23.

Kunz T, Torgerson P R, Schoster A (2023). Umfrage zum Antibiotikagebrauch bei Schweizer Tierärzten mit Pferdeanteil. *Schweizer Archiv für Tierheilkunde*, 165(2):105-114.

Lagrange J, Amat JP, Ballesteros C, Damborg P, Grönthal T, Haenni M, Jouy E, Kaspar H, Kenny K, Klein B, Lupo A, Madec JY, Salomonsen CM, Müller E, Madero CM, Nilsson O, Norström M, Nykäsenoja S, Overesch G, Pedersen K, Pohjanvirta T, Slowey R, Justo CT, Urdahl AM, Zafeiridis C, Zini E, Cazeau G, Jarrige N, Collineau



L (2023). Pilot testing the EARS-Vet surveillance network for antibiotic resistance in bacterial pathogens from animals in the EU/EEA. *Front Microbiol.* 2023 May 22;14:1188423. doi: 10.3389/fmicb.2023.1188423.

Le Terrier C, Nordmann P, Buchs C, Di DYW, Rossolin, GM, Stephan R, Castanheira M, Poirel L (2023). Wide dissemination of Gram-negative bacteria producing the taniborbactam-resistant NDM-9 variant - a One-Health concern. *Journal of Antimicrobial Chemotherapy*, 78(9):2382-2384. doi: 10.1093/jac/dkad210.

Marti H, Biggel M, Shima K, Onorini D, Rupp J, Charette SJ, Borel N. *Chlamydia suis* displays high transformation capacity with complete cloning vector integration into the chromosomal rrn-nqrF plasticity zone. *Microbiol Spectr.* 2023 Oct 26:e0237823.

Muleme J, Ssempebwa J C, Musoke D, Kankya C, Wafula S T, Okello J, Ninsiima, Lesley R, Wambi R, Baguma J N, Lubega G, Wagaba B, Hartnack S (2023). Antimicrobial resistance among farming communities in Wakiso District, Central Uganda: A knowledge, awareness and practice study. *PLoS ONE*, 18(6):e0284822.

Nüesch-Inderbinen M, Biggel M, Haussmann A, Treier A, Heyvaert L, Cernela N, Stephan R (2023). Oxazolidinone resistance genes in florfenicol resistant enterococci from beef cattle and veal calves at slaughter. *Frontiers in Microbiology* 14:1150070. doi: 10.3389/fmicb.2023.1150070.

Nüesch-Inderbinen M, Heyvaert L, Cernela N, Zurfluh K, Biggel M, Stephan R (2023). Emergence of blaSHV-12 and qnrS1 encoded on IncX3 plasmids: changing epidemiology of extended-spectrum  $\beta$ -lactamases among Enterobacteriales isolated from broilers. *Journal of Global Antimicrobial Resistance* 33, 194-200.  
<https://doi.org/10.1016/j.jgar.2023.03.008>.

Nüesch-Inderbinen M, Heyvaert L, Treier A, Zurfluh K, Cernela N, Biggel M, Stephan R (2023). High occurrence of *Enterococcus faecalis*, *Enterococcus faecium*, and *Vagococcus lutrae* harbouring oxazolidinone resistance genes in raw meat-based diets for companion animals – a public health issue, Switzerland, September, 2018 - May, 2020. *Eurosurveillance* 28(6):pii=2200496. <https://doi.org/10.2807/1560-7917.ES.2023.28.6.2200496>.

Onorini D, Schoborg R, Borel N, Leonard C. Beta lactamase-producing *Neisseria gonorrhoeae* alleviates Amoxicillin-induced chlamydial persistence in a novel in vitro co-infection model. *Curr Res Microb Sci.* 2023 Mar 29;4:100188. doi: 10.1016/j.crmicr.2023.100188.

Vollenweider A, Corti S, Hochreutener M, Biner B, Stephan R, Bleul U (2023). Mastitis pathogens and antibiotic resistance in beef cows in Switzerland. *Schweizer Archiv für Tierheilkunde*, 165, 39-51.  
<https://doi.org/10.17236/sat00381>.