

Fagfelleverderte vitenskapelige publikasjoner fra K-res og samarbeidspartnere:

2023:

The population structure of vancomycin-resistant and -susceptible *Enterococcus faecium* in a low-prevalence antimicrobial resistance setting is highly influenced by circulating global hospital-associated clones. Al Rubaye M, Janice J, Bjørnholt JV, Kacelnik O, Haldorsen BC, Nygaard RM, Hegstad J, Sundsfjord A, Hegstad K, The Norwegian Vre Study Group. *Microb Genom.* 2023 Dec;9(12):001160. PMID:[38112685](#)

The first vanE-type vancomycin resistant *Enterococcus faecalis* isolates in Norway - phenotypic and molecular characteristics. Al Rubaye M, Janice J, Bjørnholt JV, Löhr IH, Sundsfjord A, Hegstad K. *J Glob Antimicrob Resist.* 2023 Dec 27;36:193-199. PMID: [38154751](#)

Evolutionary and functional history of the *Escherichia coli* K1 capsule. Arredondo-Alonso S, Blundell-Hunter G, Fu Z, Gladstone RA, Fillol-Salom A, Loraine J, Cloutman-Green E, Johnsen PJ, Samuelsen Ø, Pöntinen AK, Cléon F, Chavez-Bueno S, De la Cruz MA, Ares MA, Vongsouvath M, Chmielarczyk A, Horner C, Klein N, McNally A, Reis JN, Penadés JR, Thomson NR, Corander J, Taylor PW, McCarthy AJ. *Nat Commun.* 2023 Jun 15;14(1):3294. PMID: [37322051](#)

Mge-cluster: a reference-free approach for typing bacterial plasmids. Arredondo-Alonso S, Gladstone RA, Pöntinen AK, Gama JA, Schürch AC, Lanza VF, Johnsen PJ, Samuelsen Ø, Tonkin-Hill G, Corander J. *NAR Genom Bioinform.* 2023 Jul 10;5(3):lqad066. PMID: [37435357](#)

Fra lokalt til nasjonalt utbrudd av *Pseudomonas aeruginosa*. Asfeldt AM, Myrbakk T, Grimnes G, Kildal AB, Pedersen TA, Littauer P, Bogetvedt T, Kroken BA, Nerskogen BJ, Høgli JU, Åsheim S. *Tidsskr Nor Laegeforen.* 2023 May 29;143(8). PMID: [37254978](#)

Population structure and antimicrobial resistance among *Klebsiella* isolates sampled from human, animal, and environmental sources in Ghana: a cross-sectional genomic One Health study. Calland JK, Haukka K, Kporde SW, Brusah A, Corbella M, Merla C, Samuelsen Ø, Feil EJ, Sasser D, Karikari AB, Saba CKS, Thorpe HA, Corander J. *Lancet Microbe.* 2023 Nov;4(11):e943-e952. PMID: [37858320](#)

The population-level impact of *Enterococcus faecalis* genetics on intestinal colonization and extraintestinal infection. Chaguza C, Pöntinen AK, Top J, Arredondo-Alonso S, Freitas AR, Novais C, Torres C, Bentley SD, Peixe L, Coque TM, Willems RJL, Corander J. *Microbiol Spectr.* 2023 Dec 12;11(6):e0020123. doi: 10.1128/spectrum.00201-23. Epub 2023 Oct 9. PMID: 37811975 Free PMC article. PMID: [37811975](#)

The first tigecycline resistant *Enterococcus faecium* in Norway was related to tigecycline exposure. Hegstad K, Pöntinen AK, Bjørnholt JV, Quist-Paulsen E, Sundsfjord A. *J Glob Antimicrob Resist.* 2023 Dec 19;36:112-115. PMID: [38122982](#)

Genomic insights *Enterococcus faecium* isolates from marine bivalves highlight One Health concerns and healthcare linkages. Heim AVBT, Janice J, Bjørnholt JV, Lunestad BT, Hegstad K, Svanevik CS. *Microb Genom.* 2023 Dec;9(12):001154. [PMID: 38085805](#)

Within-patient and global evolutionary dynamics of *Klebsiella pneumoniae* ST17. Hetland MAK, Hawkey J, Bernhoff E, Bakksjø RJ, Kaspersen H, Rettedal SI, Sundsfjord A, Holt KE, Löhr IH. *Microb Genom.* 2023 May;9(5):mgen001005. [PMID: 37200066](#)

Emergence of vancomycin-resistant enterococci from vancomycin-susceptible enterococci in hospitalized patients under antimicrobial therapy. Janice J, Wagner TM, Olsen K, Hegstad J, Hegstad K. *J Glob Antimicrob Resist.* 2023 Dec 19;36:116-122. [PMID: 38128726](#)

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Intraregional hospital outbreak of OXA-244-producing *Escherichia coli* ST38 in Norway, 2020. Lindemann PC, Pedersen T, Oma DH, Janice J, Grøvan F, Chedid GM, Hafne LJ, Josefsen EH, Kacelnik O, Sundsfjord A, Samuelsen Ø. *Euro Surveill.* 2023 Jul;28(27):2200773. [PMID: 37410380](#)

Rapid cross-border emergence of NDM-5- producing *Escherichia coli* in the European Union/European Economic Area, 2012 to June 2022. Linkevicius M, Bonnin RA, Alm E, Svartström O, Apfalter P, Hartl R, Hasman H, Roer L, Räisänen K, Dortet L, Pfennigwerth N, Hans JB, Tóth Á, Buzgó L, Cormican M, Delappe N, Monaco M, Giufrè M, Hendrickx AP, Samuelsen Ø, Pöntinen AK, Caniça M, Manageiro V, Oteo-Iglesias J, Pérez-Vázquez M, Westmo K, Mäkitalo B, Palm D, Monnet DL, Kohlenberg A. *Euro Surveill.* 2023 May;28(19):2300209. [PMID: 37166762](#)

Nationwide, population-based observational study of the molecular epidemiology and temporal trend of carbapenemase-producing Enterobacterales in Norway, 2015 to 2021. Ljungquist O, Haldorsen B, Pöntinen AK, Janice J, Josefsen EH, Elstrøm P, Kacelnik O; Norwegian Study Group on CPE; Sundsfjord A, Samuelsen Ø; Members of The Norwegian Study Group on CPE. *Euro Surveill.* 2023 Jul;28(27):2200774. [PMID: 37410381](#)

Pseudomonas aeruginosa antimicrobial susceptibility profiles, resistance mechanisms and international clonal lineages: update from ESGARS-ESCMID/ISARPAE Group. Oliver A, Rojo-Molinero E, Arca-Suarez J, Bešli Y, Bogaerts P, Cantón R, Cimen C, Croughs PD, Denis O, Giske CG, Graells T, Daniel Huang TD, Iorga BI, Karatuna O, Kocsis B, Kronenberg A, López-Causapé C, Malhotra-Kumar S, Martínez LM, Mazzariol A, Meyer S, Naas T, Notermans DW, Oteo-Iglesias J, Pedersen T, Pirš M, Poeta P, Poirel L, Pournaras S, Sundsfjord A, Szabó D, Tambić-Andrašević A, Vatcheva-Dobrevska R, Vitkauskienė A, Jeannot K; ESGARS-ISARPAE members. *Clin Microbiol Infect.* 2023 Dec 30:S1198- 743X(23)00634-1. [PMID: 38160753](#)

Pandemic Sparked Off a Large-Scale Outbreak of Carbapenem Resistant *Acinetobacter baumannii* from the Endemic Strains at an Italian Hospital. Petazzoni G, Bellinzona G, Merla C, Corbella M, Monzillo V, Samuelsen Ø, Corander J, Sasserà D, Gaiarsa S, Cambieri P. *The COVID-19 Microbiol Spectr.* 2023 Mar 23;11(2):e0450522. [PMID: 36951563](#)

Community carriage of ESBL-producing *Escherichia coli* and *Klebsiella pneumoniae*: a cross-sectional study of risk factors and comparative genomics of carriage and clinical isolates. Raffelsberger N, Buczek DJ, Svendsen K, Småbrekke L, Pöntinen AK, Löhr IH, Andreassen LLE, Simonsen GS; Norwegian *E. coli* ESBL Study Group; Sundsfjord A, Gravningen K, Samuelsen Ø. mSphere. 2023 Aug 24;8(4):e0002523. [PMID: 37306968](#)

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Reversible vancomycin susceptibility within emerging ST1421 *Enterococcus faecium* strains is associated with rearranged vanA-gene clusters and increased vanA plasmid copy number. Wagner TM, Janice J, Schulz M, Ballard SA, da Silva AG, Coombs GW, Daley DA, Pang S, Mowlaboccus S, Stinear T, Hegstad K, Howden BP, Sundsfjord A. Int J Antimicrob Agents. 2023 Jul;62(1):106849. [PMID: 37187337](#)

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The clinical impact of errors in semiautomated antimicrobial susceptibility testing of multidrug-resistant Enterobacterales causing bloodstream infections. Sundsfjord A, Giske C. Clin Microbiol Infect 2022 Sep;28(9):1179. Epub 2022 mai 30. [PMID: 35654315](#)

Molecular Epidemiological Characterisation of ESBL- and Plasmid-Mediated AmpC-Producing *Escherichia coli* and *Klebsiella pneumoniae* at Kamuzu Central Hospital, Lilongwe, Malawi. Choonara FE, Haldorsen BC, Janice J, Mbanga J, Ndhlovu I, Saulosi O, Maida T, Lampiao F,

Simonsen GS, Essack SY, Sundsfjord A. Trop Med Infect Dis 2022 Sep 14;7(9). Epub 2022 sep 14. PMID: [36136656](#)

Large increase in bloodstream infections with carbapenem-resistant *Acinetobacter* species during the first 2 years of the COVID-19 pandemic, EU/EEA, 2020 and 2021. Pete Kinross 1 2, Carlo Gagliotti 3 2, Hanna Merk 1, Diamantis Plachouras 1, Dominique L Monnet 1, Liselotte Diaz Högberg 1; EARS-Net Study Group 4; EARS-Net Study Group participants. Euro Surveill 2022 Nov;27(46). PMID: [36398574](#)

Intracellular Transposition and Capture of Mobile Genetic Elements following Intercellular Conjugation of Multidrug Resistance Conjugative Plasmids from Clinical Enterobacteriaceae Isolates. Tansirichaiya S, Goodman RN, Guo X, Bulgasim I, Samuelsen Ø, Al-Haroni M, Roberts AP. Microbiol Spectr 2022 Feb 23;10(1):e0214021. Epub 2022 jan 19. PMID: [35044219](#)

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Phenotypic and genotypic characterisation of thymine auxotrophy in *Escherichia coli* isolated from a patient with recurrent bloodstream infection. Jakovljevic A, Afset JE, Haugum K, Steinum HO, Gresdal Rønning T, Samuelsen Ø, Ås CG. PLoS One 2022;17(7):e0270256. Epub 2022 jul 8. PMID: [35802671](#)

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Raffelsberger N, Suzuki Y, Brisse S, Holt K, Samuelsen Ø, Sundsfjord A. Gut Microbes. 2022;14:e2118500. PMID: [36045603](#)

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Alternative vanHAX promoters and increased vanA-plasmid copy number resurrect silenced glycopeptide resistance in *Enterococcus faecium*. Wagner TM, Janice J, Sivertsen A, Sjögren I, Sundsfjord A, Hegstad K. J Antimicrob Chemother 2021 03 12;76(4):876-882. PMID: [33367710](#)

Evaluation of the Amplex eazyplex® SuperBug Acineto test for detection of acquired OXA and NDM carbapenemases in *Acinetobacter* spp. Haldorsen BC, Janice J, Samuelsen Ø. J Glob Antimicrob Resist 2021 03;24():340-341. Epub 2021 feb 8. PMID: [33571709](#)

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Carbapenem Resistance Determinants Acquired through Novel Chromosomal Integrations in Extensively Drug-Resistant *Pseudomonas aeruginosa*. Janice J, Agyepong N, Owusu-Ofori A, Govinden U, Essack SY, Samuelsen Ø, Sundsfjord A, Pedersen T. Antimicrob Agents Chemother 2021 06 17;65(7):e0028921. Epub 2021 jun 17. PMID: [33941520](#)

The global dissemination of hospital clones of *Enterococcus faecium*. van Hal SJ, Willems RJL, Gouliouris T, Ballard SA, Coque TM, Hammerum AM, Hegstad K, Westh HT, Howden BP, Malhotra-Kumar S, Werner G, Yanagihara K, Earl AM, Raven KE, Corander J, Bowden R. Genome Med 2021 03 30;13(1):52. Epub 2021 mar 30. PMID: [33785076](#)

Gastrointestinal carriage of *Klebsiella pneumoniae* in a general adult population: a cross-sectional study of risk factors and bacterial genomic diversity. Raffelsberger N, Hetland MAK, Svendsen K, Småbrekke L, Löhr IH, Andreassen LLE, Brisse S, Holt KE, Sundsfjord A, Samuelsen Ø, Gravningen K. Gut Microbes 2021 Jan-Dec;13(1):1939599. PMID: [34182896](#). Bacterial Membrane-Derived Vesicles Attenuate Vancomycin Activity against Methicillin-Resistant Microorganisms 2021 Sep 29;9(10). Epub 2021 sep 29. Kumaraswamy M, Wiull K, Joshi B, Sakoulas G, Kousha A, Vaaje-Kolstad G, Johannessen M, Hegstad K, Nizet V, Askarian F. PMID: [34683376](#)

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A nationwide genomic study of clinical *Klebsiella pneumoniae* in Norway 2001-15: introduction and spread of ESBLs facilitated by clonal groups CG15 and CG307. Fostervold A, Hetland MAK, Bakksjø R, Bernhoff E, Holt KE, Samuelsen Ø, Simonsen GS, Sundsfjord A, Wyres KL, Löhr IH. J Antimicrob Chemother 2021 Dec 22. Epub 2021 Dec 22. PMID: [34935048](#)

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Epidemiological and molecular characterization of *Streptococcus pneumoniae* carriage strains in pre-schoolchildren in Arkhangelsk, northern European Russia, prior to the introduction of conjugate pneumococcal vaccines. V. Vorobieva S. Jensen, A-S Furberg, H-C Slotved, T. Bazhukova, B. Haldorsen, D. A. Caugant, A. Sundsfjord, P. Valentiner-Branth and G. S. Simonsen. BMC Infectious Diseases (2020) 20:279. [32293324](#)

Antibiotic Sensitivity Screening of *Klebsiella* spp. and *Raoultella* spp. Isolated from Marine Bivalve Molluscs Reveal Presence of CTX-M-Producing *K. pneumoniae*. Fredrik Håkonsholm, Marit A K Hetland, Cecilie S Svanevik, Arnfinn Sundsfjord, Bjørn Tore Lunestad, Nachiket P Marathe. Microorganisms. 2020 Nov 30;8(12):1909. [33266320](#)

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