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Publikationer

Identification of a CTX-M-255 β -lactamase containing a G239S substitution selectively conferring resistance to penicillin/ β -lactamase inhibitor combinations

Andreasen, M. R., Rick, T., Alexandersen, N. R., Hansen, K. H., Schou Pedersen, M., Warweitsky, J. K., Botelho, C. M., Häussler, S., Jelsbak, L. & Schønning, K., 1 apr. 2024, I: Journal of Antimicrobial Chemotherapy. 79, 4, s. 810-814 5 s.

The global transcriptomes of *Salmonella enterica* serovars Gallinarum, Dublin and Enteritidis in the avian host

Fei, X., Schroll, C., Huang, K., Christensen, J. P., Christensen, H., Lemire, S., Kilstrup, M., Thomsen, L. E., Jelsbak, L. & Olsen, J. E., sep. 2023, I: Microbial Pathogenesis. 182, 106236.

Global transcriptomic response of the AI-3 isomers 3,5-DPO and 3,6-DPO in *Salmonella* Typhimurium

Lallement, C., Goldring, W. & Jelsbak, L., apr. 2023, I: Archives of microbiology. 205, 4, 7 s., 117.

Complete Genome Sequences of Extraintestinal Pathogenic *Escherichia coli* Clinical Isolates from Danish Ulcerative Colitis Patients

Meski, S., Struve, C., Mirsepasi-Lauridsen, H. C., Petersen, A. M., Jelsbak, L., Skovgaard, O. & Krogfelt, K. A., feb. 2023, I: Microbiology Resource Announcements. 12, 2

Complete Genome Sequence of a Multidrug-Resistant *Klebsiella pneumoniae* Environmental Isolate from Zanzibar, Tanzania, Harboring Novel Insertion Elements and Two *bla*CTX-M-15 Genes

Lallement, C., Krogfelt, K. A., Skovgaard, O. & Jelsbak, L., aug. 2022, I: Microbiology Resource Announcements. 11, 8 August, e00263-22.

Efficacy of piperacillin-tazobactam and cefotaxime against *Escherichia coli* hyperproducing TEM-1 in a mouse peritonitis infection model

Hertz, F. B., Andreasen, M. R., Almind, S. R., Nielsen, K. L., Hansen, K. H., Jelsbak, L., Frimodt-Møller, N. & Schønning, K., apr. 2022, I: International Journal of Antimicrobial Agents. 59, 4, 106543.

Piperacillin-Tazobactam Resistance Mechanisms in *Escherichia coli* and Identification of a CTX-M-255 β -Lactamase Selectively Conferring Resistance to Penicillin/ β -Lactamase Inhibitor Combinations

Andreasen, M. R., Hansen, K. H., Pedersen, M. S., Møllerup, S., Jelsbak, L. & Schønning, K., 2022, bioRxiv.

Isolation and characterization of human pathogenic multidrug resistant bacteria associated with plastic litter collected in Zanzibar

Rasool, F. N., Saavedra, M. A., Pamba, S., Perold, V., Mmochi, A. J., Maalim, M., Simonsen, L., Buur, L., Pedersen, R. H., Syberg, K. & Jelsbak, L., 5 mar. 2021, I: Journal of Hazardous Materials. 405, 405, 124591.

Blærebetændelse: sådan skjuler bakterierne sig i din krop

Enig, S., Pedersen, S. M. S. B., Nielsen, N. E., Sadolin, L. E. R., Nielsen, M. K. M. & Jelsbak, L., 2021, I: Aktuel Naturvidenskab. 2021, 1, 4 s.

Microplastics in the human digestive environment: a focus on the potential and challenges facing in vitro gut model development

Fournier, E., Etienne-Mesmin, L., GROOTAERT, C., Jelsbak, L., Syberg, K., BLANQUET-DIOT, S. & Mercier-Bonin, M., 2021, I: Journal of Hazardous Materials. 415, 415, 125632.

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Guerra, P. R., Liu, G., Lemire, S., Nawrocki, A., Kudirkiene, E., Møller-Jensen, J., Olsen, J. E. & Jelsbak, L., 1 apr. 2020, I: Research in Microbiology. 171, 3-4, s. 143-152 10 s.

Resistance to piperacillin/tazobactam in *Escherichia coli* resulting from extensive IS26-associated gene amplification of blaTEM-1

Hansen, K. H., Andreasen, M. R., Pedersen, M. S., Westh, H., Jelsbak, L. & Schønning, K., 2019, I: Journal of Antimicrobial Chemotherapy. 74, 11, s. 3179-3183 5 s.

The SPI-19 encoded type-six secretion-systems (T6SS) of *Salmonella enterica* serovars Gallinarum and Dublin play different roles during infection

Schroll, C., Huang, K., Ahmed, S., Kristensen, B. M., Pors, S. E., Jelsbak, L., Lemire, S., Thomsen, L. E., Christensen, J. P., Jensen, P. R. & Olsen, J. E., 2019, I: Veterinary Microbiology. 230, s. 23-31 9 s.

Extensive IS26 mediated gene duplication of blaTEM-1 as a cause of resistance to piperacillin-tazobactam in *Escherichia coli*

Jelsbak, L., Andreasen, M. R., Hansen, K. H., Pedersen, M. S., Schønning, K., Westh, H., Hansen, T. A. & Pedersen, M., 2018.

Health risk associated with plastic debris on the Island of Zanzibar: – Importance of associated pathogenic bacteria and implications for local communities

Syberg, K., Buur, L., Jelsbak, L. & Simonsen, L., 2018.

Isolation and characterization of macrophage adapted *Salmonella* Typhimurium persister clones

Jelsbak, L., Sørensen, M. M., Lind Lauridsen, K., Skovgaard, O. & Nybo Othendal Nielsen, M., 2018.

Isolation and characterization of macrophage adapted *Salmonella* Typhimurium persister clones

Jelsbak, L., Sørensen, M. M. & Lind Lauridsen, K., 2018.

Putrescine biosynthesis and export genes are essential for normal growth of avian pathogenic *Escherichia coli*

Guerra, P. R., Herrero-Fresno, A., Ladero, V., Redruello, B., Pires dos Santos, T., Spiegelhauer, M. R., Jelsbak, L. & Olsen, J. E., 2018, I: BMC Microbiology. 18, 226, 12 s., 226.

Highly expressed amino acid biosynthesis genes revealed by global gene expression analysis of *Salmonella enterica* serovar Enteritidis during growth in whole egg are not essential for this growth.

Jakočiūnė, D., Herrero-Fresno, A., Jelsbak, L. & Olsen, J. E., 2016, I: International Journal of Food Microbiology. 224, s. 40-46 7 s.

Multiple roles of putrescine and spermidine in stress resistance and virulence of *Salmonella enterica* serovar Typhimurium

Espinel, I. C., Guerra, P. R. & Jelsbak, L., 2016, I: Microbial Pathogenesis. 95, s. 117–123 7 s.

***Salmonella* Typhimurium undergoes distinct genetic adaption during chronic infections of mice**

Søndberg, E. & Jelsbak, L., 2016, I: BMC Microbiology. 11 s., 16:30.

Super-Salmonella gør os klogere på tarminfektioner

Jelsbak, L., 2016, I: Aktuell Naturvidenskab. 2016, 5, s. 20-21 2 s.

The in vitro redundant enzymes PurN and PurT are both essential for systemic infection of mice in *Salmonella enterica* serovar Typhimurium

Jelsbak, L., Mortensen, M. I. B., Kilstrup, M. & Olsen, J. E., 2016, I: Infection and Immunity. 84, 7, s. 2076-2085 10 s.

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Wigneswaran, V., Amador Hierro, C. I., Jelsbak, L., Sternberg, C. & Jelsbak, L., 2016, I: F1000Research. 5, s. 1-7 1 s., 421.

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Identification of metabolic pathways essential for fitness of *Salmonella* Typhimurium in vivo.

Jelsbak, L., Hartman, H., Schroll, C., Rosenkrantz, J. T., Lemire, S., Wallrodt, I., Thomsen, L. E., Poolman, M., Kilstrup, M., Jensen, P. R. & Olsen, J. E., 2014, I: P L o S One. 0101869.

Identification of potential drug targets in *Salmonella enterica* sv. Typhimurium using metabolic modelling and experimental validation

Hartman, H., Fell, D. A., Rossell, S., Jensen, P. R., Woodward, M. J., Thorndahl, L., Jelsbak, L., Olsen, J. E., Raghunathan, A., Daefler, S. & Poolman, M. G., 2014, I: Microbiology. 160, 6, s. 1252-1266

Polyamines are essential for virulence in *Salmonella enterica* serovar Gallinarum despite evolutionary decay of polyamine biosynthesis genes.

Schroll, C., Christensen, J. P., Christensen, H., Pors, S. E., Thorndahl, L., Jensen, P. R., Olsen, J. E. & Jelsbak, L., 2014, I: Veterinary Microbiology. 170, 1-2, s. 144-150

Removal of the phage-shock protein PspB causes reduction of virulence in *Salmonella enterica* serovar Typhimurium independently of NRAMP1

Wallrodt, I., Jelsbak, L., Thomsen, L. E., brix, L., Lemire, S., Gautier, L., Nielsen, D. S., Jovanovich, G., Buck, M. & Olsen, J. E., 2014, I: Journal of Medical Microbiology. 63, 6, s. 788-95

The putative thiosulfate sulfurtransferases PspE and GlpE contribute to virulence of *Salmonella* Typhimurium in the mouse model of systemic disease.

Wallrodt, I., Jelsbak, L., Thorndahl, L., Thomsen, L. E., Lemire, S. & Olsen, J. E., 2013, I: P L o S One. 8, 8, e70829.

Trapping and proteomic identification of cellular substrates of the ClpP protease in *Staphylococcus aureus*.

Feng, J., Michalik, S., Varming, A. N., Andersen, J. H., Albrecht, D., Jelsbak, L., Krieger, S., Ohlsen, K., Hecker, M., Gerth, U. & Ingmer, H., 2013, I: Journal of Proteome Research. 12, 2

Polyamines Are Required for Virulence in *Salmonella enterica* Serovar Typhimurium

Jelsbak, L., Thomsen, L. E., Wallrodt, I., Jensen, P. R. & Olsen, J. E., 30 apr. 2012, I: P L o S One. 0036149.

Growth phase-dependent regulation of the global virulence regulator Rot in clinical isolates of *Staphylococcus aureus*.

Jelsbak, L., Hemmingsen, L., Donat, S., Ohlsen, K., Westh, H. T., Ingmer, H. & Frees, D., 2010, I: International Journal of Medical Microbiology. 300, 4, s. 229-236

The Chaperone ClpX Stimulates Expression of *Staphylococcus aureus* Protein A by Rot Dependent and Independent Pathways

Jelsbak, L., Ingmer, H., Valihrach, L., Cohn, M. T., Christiansen, M. H. G., Kallipolitis, B. H. & Frees, D., 2010, I: P L o S One. 0012752.

Complete genome sequence of the myxobacterium *Sorangium cellulosum*.

Schneiker, S., Perlova, O., kaiser, O., Gerth, K., Alici, A., Altmeyer, MO., Bartels, D., Bekel, T., Beyer, S., Bode, E., Bode, HB., Bolten, CJ., Choudhuri, JV., Doss, S., Elnakady, YA., Frank, B., Gaigalat, L., Goesmann, A., Groeger, C., Gross, F., & 38 flereJelsbak, L., Jelsbak, L., Kalinowski, J., Kegler, C., Knauber, T., Konietzny, S., Kopp, M., Krause, L., krug, D., Linke, B., Mahmud, T., Martinez-Arias, R., McHardy, AC., Merai, M., Meyer, F., Mormann, S., Munoz-Dorado, J., Perez, J., Pradella, S., Rachid, S., Raddatz, G., Rosenau, F., Ruckert, C., Sasse, F., Scharfe, M., Schuster, SC., Suen, G., Treuner-Lange, A., Velicer, GJ., Vorholter, FJ., Weissman, KJ., Welch, RD., Whitworth, DE., Wilhelm, S., Wittmann, C.,

Blocker, H., Puhler, A. & Muller, R., 2007, I: Nature Biotechnology.

Regulating pilin expression reveals a threshold for S motility in Myxococcus xanthus.
Jelsbak, L. & kaiser, D., 2005, I: Journal of Bacteriology.

Sigma54 enhancer binding proteins and Myxococcus xanthus fruiting body development.
Jelsbak, L., Jakobsen, JS., Jelsbak, L., Welch, RD., Cummings, C., Goldman, B., Stark, E., Slater, S. & kaiser, D., 2004, I: Journal of Bacteriology.

Projekter

Antimicrobial Discovery in Human Commensal Bacteria

Jelsbak, L., Iversen, S. & Andersen, P. S.
01/02/2020 → 31/01/2023

Klarlægning af dynamik og mekanismer for smitte med Salmonella fra kronisk inficerede individer

Jelsbak, L.
Aase og Einar Danielsens Fond
01/11/2015 → 31/10/2016

Mechanisms of chronic infection of food-production animals by Salmonella

Jelsbak, L.
01/02/2013 → 31/03/2017

Molecular mechanisms of a novel intercellular signal controlling virulence and biofilm formation in Salmonella Typhimurium

Jelsbak, L., Goldring, W. & Lallement, C.
01/05/2020 → 30/04/2022

Molecular mechanisms of resistance development and in vivo drug tolerance of E. coli to two antibiotics in clinical use

Jelsbak, L., Andreasen, M. R., Schønning, K. & Hansen, K. H.
04/12/2017 → 30/06/2022

Molekylære mekanismer for kroniske Salmonella infektioner

Jelsbak, L.
Brdr Hartmanns Fond
01/09/2017 → 31/08/2018

Education

2003:Cand. Scient, University of Southern Denmark. 2009:PhD, University of Copenhagen.

Academic employments

2003-2004: Research Assistant, Stanford University, California, USA. 2004-2008:PhD-student, University of Copenhagen. 2009-2013: Post Doc, University of Copenhagen. 2013-2014:Assistant Professor, University of Copenhagen. Dec 2014-: Associate Professor, Roskilde University