Intergenic evolution during host adaptation increases expression of the metallophore pseudopaline in *Pseudomonas aeruginosa*. / Hermansen, Grith Miriam Maigaard; Hansen, Morten Lindqvist; Khademi, Seyed Mohammad Hossein; Jelsbak, Lars.
In: Microbiology, Vol. 164, No. 8, 2018, p. 1038-1047.
Publication: Research - peer-review › Journal article – Annual report year: 2018

Transcriptomic profiling of interacting nasal staphylococci species reveals global changes in gene and non-coding RNA expression. / Hermansen, Grith Miriam Maigaard; Sazinas, Pavelas; Kofod, Ditte; Millard, Andrew; Andersen, Paal Skytt; Jelsbak, Lars.
Publication: Research - peer-review › Journal article – Annual report year: 2018

Application of RNA-seq and Bioimaging Methods to Study Microbe-Microbe Interactions and Their Effects on Biofilm Formation and Gene Expression. / Amador Hierro, Cristina Isabel; Sternberg, Claus; Jelsbak, Lars.
Publication: Research - peer-review › Book chapter – Annual report year: 2017

Elucidating the Molecular Factors Implicated in the Persistence and Evolution of Transferable Antibiotic Resistance. / Porse, Andreas; Sommer, Morten Otto Alexander (Main supervisor); Jelsbak, Lars (Supervisor); Munck, Christian (Supervisor).
Publication: Research › Ph.D. thesis – Annual report year: 2018

Genomic epidemiology of a major Mycobacterium tuberculosis outbreak: Retrospective cohort study in a low incidence setting using sparse time-series sampling. / Folkvardsen, Dorte Bek; Norman, Anders; Andersen, Åse Bengård; Rasmussen, Erik Michael; Jelsbak, Lars; Lillebaek, Troels.
Publication: Research - peer-review › Journal article – Annual report year: 2017

SERS detection of the biomarker hydrogen cyanide from *Pseudomonas aeruginosa* cultures isolated from cystic fibrosis patients. / Lauridsen, Rikke Kragh; Madsen Sommer, Lea Mette; Johansen, Helle Krogh; Rindzевичusic, Tomas; Molin, Søren; Jelsbak, Lars; Engelsen, Søren Balling; Boisen, Anja.
Publication: Research - peer-review › Journal article – Annual report year: 2017

A Bacteriophage-Acquired O-Antigen Polymerase (Wzyβ) from *P. aeruginosa* Serotype O16 Performs a Varied Mechanism Compared to Its Cognate Wzyα. / Taylor, Veronique L.; Hoage, Jesse F. J.; Thrane, Sandra Winggaard; Huszczyński, Steven M.; Jelsbak, Lars; Lam, Joseph S.
Publication: Research - peer-review › Journal article – Annual report year: 2016

Antibiotic combination therapy can select for broad-spectrum multidrug resistance in *Pseudomonas aeruginosa*. / Vestergaard, Martin; Paulander, Wilhelm; Marvig, Rasmus L.; Clasen, Julie; Jochumsen, Nicholas; Molin, Søren; Jelsbak, Lars; Ingmer, Hanne; Folkesson, Sven Anders.
Publication: Research - peer-review › Journal article – Annual report year: 2015

Application of WGS data for O-specific antigen analysis and *in silico* serotyping of *Pseudomonas aeruginosa* isolates. / Thrane, Sandra Winggaard; Taylor, Veronique L.; Lund, Ole; Lam, Joseph S.; Jelsbak, Lars.
Publication: Research - peer-review › Journal article – Annual report year: 2016
Biofilm as a production platform for heterologous production of rhamnolipids by the non-pathogenic strain *Pseudomonas putida* KT2440. / Wigneswaran, Vinoth; Nielsen, Kristian Fog; Sternberg, Claus; Jensen, Peter Ruhdal; Folkesson, Anders; Jelsbak, Lars.
Publication: Research - peer-review » Journal article – Annual report year: 2016

Curbing the development and spread of 'high risk' bacterial pathogens. / Jelsbak, Lars.
Publication: Research - peer-review » Conference abstract for conference – Annual report year: 2016

Evolution of metabolic divergence in *Pseudomonas aeruginosa* during long-term infection facilitates a proto-cooperative interspecies interaction. / Frydenlund Michelsen, Charlotte; Khademi, Seyed Mohammad Hossein; Johansen, Helle Krogh; Ingmer, Hanne; Dorresteijn, Pieter C.; Jelsbak, Lars.
Publication: Research - peer-review » Journal article – Annual report year: 2015

Evolution of Transcriptional Regulatory Networks in *Pseudomonas aeruginosa* During Long Time Growth in Human Hosts. / Andresen, Eva Kammer, Jelsbak, Lars (Main supervisor); Abou Hachem, Maher (Supervisor).
Department of Systems Biology, Technical University of Denmark, 2016. 125 p.

*Pseudomonas putida* as a microbial cell factory. / Wigneswaran, Vinoth; Jelsbak, Lars (Supervisor); Folkesson, Anders (Supervisor); Jensen, Peter Ruhdal (Supervisor).
Department of Systems Biology, Technical University of Denmark, 2016. 122 p.

Modulation of *S. aureus* Quorum Sensing by *P. aeruginosa*. / Amador Hierro, Cristina Isabel; Jelsbak, Lars.
Publication: Research » Conference abstract in proceedings – Annual report year: 2016

Sharing and community curation of mass spectrometry data with Global Natural Products Social Molecular Networking. / Wang, Mingxun; Carver, Jeremy J.; Pevzner, Pavel; Mohiman, Hosein; Bandeira, Nuno; Phelan, Vanessa V.; Sanchez, Laura M.; Garg, Neha; Watrous, Jeremie; Luzzatto-Knai, Tal; Frydenlund Michelsen, Charlotte; Jelsbak, Lars; Månsson, Maria; Kiltgaard, Andreas; Nielsen, Kristian Fog.
Publication: Research - peer-review » Journal article – Annual report year: 2016

Substantial molecular evolution and mutation rates in prolonged latent *Mycobacterium tuberculosis* infection in humans. / Lillebaek, Troels; Norman, Anders; Rasmussen, Erik Michael; Marvig, Rasmus Lykke; Bek Folkvardsen, Dorte; Bengaard Andersen, Åse; Jelsbak, Lars.
Publication: Research - peer-review » Journal article – Annual report year: 2016

The evolution of antimicrobial peptide resistance in *Pseudomonas aeruginosa* is shaped by strong epistatic interactions. / Jochumsen, Nicholas; Marvig, Rasmus Lykke; Pedersen, Søren Damkjaer; Jensen, Rune Lyngklip; Paulander, Wilhelm; Molin, Søren; Jelsbak, Lars; Folkesson, Anders.
Publication: Research - peer-review » Journal article – Annual report year: 2016
The phenotypic evolution of *Pseudomonas aeruginosa* populations changes in the presence of subinhibitory concentrations of ciprofloxacin. / Wassermann, Tina; Meinike Jørgensen, Karin; Ivanyszyn, Karolina; Bjarnsholt, Thomas; Khademi, Seyed Mohammad Hossein; Jelsbak, Lars; Hæbø, Niels; Ciofu, Oana.

Publication: Research - peer-review › Journal article – Annual report year: 2016

Utilization and control of ecological interactions in polymicrobial infections and community-based microbial cell factories. / Wigneswaran, Vinoth; Amador Hierro, Cristina Isabel; Jelsbak, Lotte; Stemberg, Claus; Jelsbak, Lars.

Publication: Research - peer-review › Journal article – Annual report year: 2016

Bacteriocin-mediated competition in cystic fibrosis lung infections. / Ghoul, Melanie; West, Stuart A.; Johansen, Helle Krogh; Molin, Søren; Harrison, Odile B.; Maiden, Martin C. J.; Jelsbak, Lars; Bruce, John B.; Griffin, Ashleigh S.

Publication: Research - peer-review › Journal article – Annual report year: 2015

Clinical utilization of genomics data produced by the international *Pseudomonas aeruginosa* consortium. / Freschi, Luca; Jeukens, Julie; Kukavica-Ibrulj, Irena; Boyle, Brian; Dupont, Marie-Josée; Laroche, Jérôme; Larose, Stéphane; Maaroufi, Halim; Fothergill, Joanne L.; Moore, Matthew; Jelsbak, Lars; Thrane, Sandra Wingeard.

Publication: Research - peer-review › Journal article – Annual report year: 2015

Epistatic Mutations And Unpredictable Phenotypes In *Pseudomonas Aeruginosa*. / Andresen, Eva Kammer; Abou Hachem, Maher; Jelsbak, Lars.

Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Evolution and adaptation of *Pseudomonas aeruginosa* in cystic fibrosis airways: cystic fibrosis as a model system. / Madsen Sommer, Lea Mette; Molin, Søren (Main supervisor); Johansen, Helle Krogh (Supervisor); Jelsbak, Lars (Supervisor).

Hørsholm: Technical University of Denmark (DTU), 2015. 135 p.
Publication: Research › Ph.D. thesis – Annual report year: 2016

Evolutionary insight from whole-genome sequencing of *Pseudomonas aeruginosa* from cystic fibrosis patients. / Marvig, Rasmus Lykke; Madsen Sommer, Lea Mette; Jelsbak, Lars; Molin, Søren; Johansen, Helle Krogh.

Publication: Research - peer-review › Journal article – Annual report year: 2015

Genomic Evolution Of The Mdr Serotype O12 *Pseudomonas Aeruginosa* Clone. / Thrane, Sandra Wingeard; Taylor, Véronique L.; Freschi, Luca; Kukavica-Ibrulj, Irena; Boyle, Brian; Laroche, Jérôme; Pirmay, Jean-Paul; Lévesque, Roger C.; Lam, Joseph S.; Jelsbak, Lars.

Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

*phuR* intergenic mutation results in pleiotropic effects on global gene expression. / Khademi, Seyed Mohammad Hossein; Wassermann, Tina; Ciofu, Oana; Jelsbak, Lars.

Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Metabolic adaptation of a human pathogen during chronic infections - a systems biology approach. / Thøgersen, Juliane Charlotte; Molin, Søren (Supervisor); Jelsbak, Lars (Supervisor).

Department of Systems Biology, Technical University of Denmark, 2015. 135 p.
Publication: Research › Ph.D. thesis – Annual report year: 2016

Novel Path Towards Colistin Resistance In *Pseudomonas Aeruginosa* During Chronic Infection Involves Polymorphisms In Uncharacterized Glycosyltransferase Gene. / Hermansen, Grith Miriam Maigaard; Jelsbak, Lars.

Rnaseq As A Method To Study Microbial Interactions Arising In The Cystic Fibrosis Airways. / Amador Hierro, Cristina Isabel; Jelsbak, Lars.

Substantial Molecular Evolution In Prolonged Latent Mycobacterium Tuberculosis Infections In Humans. / Lillebaek, Troels; Norman, Anders; Rasmussen, Erik Michael; B. Folkvardsen, Dorte; Marvig, Rasmus; Bengaard Andersen, Åse; Jelsbak, Lars.

The widespread multi-drug-resistant serotype O12 Pseudomonas aeruginosa clone emerged through concomitant horizontal transfer of serotype antigen and antibiotic resistance gene clusters. / Thrane, Sandra Winaard; Taylor, Véronique L.; Freschi, Luca; Kukavic-Ibrulj, Irena; Boyle, Brian; Laroche, Jérôme; Pirmay, Jean-Paul; Lévesque, Roger C.; Lam, Joseph S.; Jelsbak, Lars.
2015.

Working in the biomedical engineering domain: opportunities and challenges. / Jelsbak, Lars.

Diversity Generation in Evolving Microbial Populations. / Markussen, Trine; Jelsbak, Lars (Main supervisor); Molin, Søren (Supervisor).
Technical University of Denmark (DTU), 2014. 126 p.

Environmental heterogeneity drives within-host diversification and evolution of Pseudomonas aeruginosa. / Markussen, Trine; Marvig, Rasmus Lykke; Gómez Lozano, Maria; Aanæs, Kasper; Burleigh, Alexandra E.; Høiby, Niels; Johansen, Helle Krogh; Molin, Søren; Jelsbak, Lars.

Staphylococcus aureus Alters Growth Activity, Autolysis, and Antibiotic Tolerance in a Human Host-Adapted Pseudomonas aeruginosa Lineage. / Frydenlund Michelsen, Charlotte; Christensen, Anne-Mette; Bojer, Martin Saxtorph; Høiby, Niels; Ingmer, Hanne; Jelsbak, Lars.

Within-host evolution of Pseudomonas aeruginosa reveals adaptation toward iron acquisition from hemoglobin. / Marvig, Rasmus Lykke; Pedersen, Søren Damkjaer; Khademi, Seyed Mohammad Hossein; Markussen, Trine; Molin, Søren; Jelsbak, Lars.

Within-host evolution of Pseudomonas aeruginosa toward iron acquisition from hemoglobin in polymicrobial CF infections. / Khademi, Seyed Mohammad Hossein; Marvig, Rasmus Lykke; Pedersen, Søren Damkjaer; Jelsbak, Lars.
Evolution and diversification of *Pseudomonas aeruginosa* in the paranasal sinuses of cystic fibrosis children have implications for chronic lung infection. / Hansen, Susse Kirkelund; Rau, Martin Holm; Johansen, Helle Krogh; Ciofu, Oana; Jelsbak, Lars; Yang, Lei; Folkesson, Anders; Jarmer, Hanne Østergaard; Aanæs, Kasper; von Buchwald, Christian; Høiby, Niels; Molin, Søren.

Publication: Research - peer-review › Journal article – Annual report year: 2011

Evolutionary dynamics of *pseudomonas aeruginosa* in CF. / Molin, Soren; Jelsbak, Lars; Johansen, Helle; Hoiby, Niels.

Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2012

Multilocus Sequence Typing of Total-Genome-Sequenced Bacteria. / Larsen, Mette Voldby; Cosentino, Salvatore; Rasmussen, Simon; Rundsten, Carsten Friis; Hasman, Henrik; Marvig, Rasmus Lykke; Jelsbak, Lars; Sicheritz-Pontén, Thomas; Ussery, David W.; Aarestrup, Frank M.; Lund, Ole.

Publication: Research - peer-review › Journal article – Annual report year: 2012

Mutations in 23S rRNA Confer Resistance against Azithromycin in *Pseudomonas aeruginosa*. / Marvig, Rasmus Lykke; Søndergaard, Mette S. R.; Pedersen, Søren Damkjaer; Høiby, Niels; Johansen, Helle Krogh; Molin, Søren; Jelsbak, Lars.

Publication: Research - peer-review › Journal article – Annual report year: 2012

Aspergillus triggers phenazine production in *Pseudomonas aeruginosa*. / Jensen, Britt Guillaume; Jelsbak, Lars; Søndergaard, Ib; Pedersen, Mona Haigaaard; Frisvad, Jens Christian; Nielsen, Kristian Fog.
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Bacterial adaptation during chronic infection revealed by independent component analysis of transcriptomic data. / Yang, Lei; Rau, Martin Holm; Yang, Liang; Høiby, Niels; Molin, Søren; Jelsbak, Lars.

Publication: Research - peer-review › Journal article – Annual report year: 2011

Evolutionary dynamics of bacteria in a human host environment. / Yang, Lei; Jelsbak, Lars; Marvig, Rasmus Lykke; Pedersen, Søren Damkjaer; Workman, Christopher; Rau, Martin Holm; Hansen, Susse Kirkelund; Folkesson, Anders; Johansen, Helle Krogh; Ciofu, Oana; Høiby, Niels; Sommer, Morten; Molin, Søren.

Publication: Research - peer-review › Journal article – Annual report year: 2011

Microbial ecology and adaptation in cystic fibrosis airways. / Yang, Lei; Jelsbak, Lars; Molin, Søren.

Publication: Research - peer-review › Journal article – Annual report year: 2011

Suppression of Aspergillus by *Pseudomonas aeruginosa*. / Jensen, Britt Guillaume; Jelsbak, Lars; Søndergaard, Ib; Frisvad, Jens Christian; Nielsen, Kristian Fog.
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Early adaptive developments of *Pseudomonas aeruginosa* after the transition from life in the environment to persistent colonization in the airways of human cystic fibrosis hosts. / Rau, Martin Holm; Hansen, Susse Kirkelund; Johansen, H. K.; Thomsen, L. E.; Workman, Christopher; Nielsen, Kristian Fog; Jelsbak, Lars; Høiby, N.; Yang, Lei; Molin, Søren.

Publication: Research - peer-review › Journal article – Annual report year: 2010

In situ growth rates and biofilm development of *Pseudomonas aeruginosa* populations in chronic lung infections. / Yang, Lei; Haagensen, Janus Anders Juul; Jelsbak, Lars; Johansen, Helle Krogh; Sternberg, Claus; Høiby, Niels; Molin, Søren.
Complete genome sequence of the myxobacterium Sorangium cellulosum. / Schneiker, S; Perlova, O; Kaiser, O; Gerth, K; Alici, A; Altmeier, MO; Bartels, D; Bekel, T; Beyer, S; Bode, E HB; Bolten, CJ; Choudhuri, JV; Doss, S; Elmakad, YA; Frank, B; Gaigalat, L; Goesmann, A; Groeger, C; Gross, F; Jelsbak, Lars; 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; Muñoz-Dorado, J; Perez, J; Pradella, S; Rachid, S; Raddatz, G; Rosenau, F; Rückert, C; Sasse, F; Scharfe, M; Schuster, SC; Suen, G; Treuner-Lange, A; Velicer, GJ; Vorrößer, FJ; Weissman, KJ; Welch, RD; Wenzel, SC; Whitworth, DE; Wilhelm, S; Wittmann, C; Bloböck, H; Pühler, A; Müller, R.

Molecular epidemiology and dynamics of Pseudomonas aeruginosa populations in lungs of cystic fibrosis patients. / Jelsbak, Lars; Johansen, Helle Krogh; Frost, Anne Louise Viborg; Thøgersen, Regitze; Thomsen, Line E.; Ciofu, Oana; Yang, Lei; Haagensen, Janus Anders Juul; Haiby, Niels; Molin, Søren.

Enhancer-binding proteins with a forkhead-associated domain and the sigma(54) regulon in Myxococcus xanthus fruiting body development. / Jelsbak, Lars; Givskov, Michael Christian; Kaiser, D.

σ54 enhancer binding proteins and Myxococcus xanthus fruiting body development. / Jakobsen, Jimmy S.; Jelsbak, Lars; Jelsbak, Lotte; Welch, Roy D.; Cummings, Craig; Goldman, Barry; Stark, Elizabeth; Slater, Steve; Kaiser, Dale.

Cell behavior and cell-cell communication during fruiting body morphogenesis in Myxococcus xanthus. / Jelsbak, Lars; Søgaard-Andersen, Lotte.

Coupling gene expression and multicellular morphogenesis during fruiting body formation in Myxococcus xanthus. / Søgaard-Andersen, Lotte; Overgaard, Martin; Lobedanz, Sune; Ellehauge, Eva; Jelsbak, Lars; Rasmussen, Anders Aa.

Pattern formation by a cell surface-associated morphogen in Myxococcus xanthus. / Jelsbak, Lars; Søgaard-Andersen, Lotte.

Pattern formation: fruiting body morphogenesis in Myxococcus xanthus. / Jelsbak, Lars; Søgaard-Andersen, L.

The cell-surface associated, intercellular C-signal induces behavioral changes in individual Myxococcus xanthus cells during fruiting body morphogenesis. / Jelsbak, Lars; Søgaard-Andersen, Lotte.