

Curriculum Vitae for Helle Krogh Johansen, consultant, DMSc, clinical professor



Born 6 August 1961, married, two children born in 1996 and 1998, maternity leave 2 x 6 months.

Education/academic degrees

- 2000 Specialist in clinical microbiology.
- 1996 Doctor of Medical Science (DMSc), University Copenhagen (KU): Potential of preventing *Pseudomonas aeruginosa* lung infections in cystic fibrosis patients: experimental studies in animals. APMIS Suppl. 63, 1996;104:1-42.
- 1987 Physician, University of Copenhagen.

Current positions

- 2020-25 Adjunct professor, Center for Biosustainability, Technical University of Denmark (DTU).
- 2017- Clinical professor, Dept of Clinical Medicine, Faculty of Health and Medical Sciences, KU.
- 2004- Consultant, Department of Clinical Microbiology, Rigshospitalet.

Previous positions

- 2012-17 5-years clinical research stipend from The Novo Nordisk Foundation.
- 2004-09 Associate Professor, Department of Immunology & Microbiology (ISIM), KU.
- 2000-04 Senior resident doctor, Department of Clinical Microbiology at Rigshospitalet and Herlev.
- 1987-04 Residency positions, research, and specialist education.

Publications

187 original peer-reviewed publications (first author 19, corresponding 27), 26 Cochrane meta-analyses, 19 review articles, co-author of 10 books/book chapters.

H-index calculation

Web of Science January 27, 2021: 9.726 citations, h-index 53. Total publications 237.
Google Scholar December 27, 2021: 16.211 citations, h-index 66, i10-index 182.

Other scientific qualifications

- 1989- Presenter of >240 posters and invited speaker to >90 presentations at conferences, moderator and leader of several symposia and workshops and round table discussions.

Research prize

- 2003 Wyeth research prize for clinical microbiology.

Recent research grants

- 2021 300.000 kr. Cariplo Foundation, Milan, Italy, Co-PI.
- 2020 165.821 kr. CF-Foreningen Denmark, 3-mdr. PhD-introduktions-stipendium - PI.
- 2020 2.350.000 kr. CAG - Greater Copenhagen Health - Science - Partners, 2020, - PI.
- 2020 242.000 kr. Lundbeckfonden visiting professor (Ref. nr. R341-2020-155) - PI.
- 2019 60.000.000 kr. Novo Nordisk Fonden Challenge (Ref. nr.: NNF19OC0056411) - PI.
- 2019 2.054.783 kr. Danish Research Council (DFF-9039-00037A) - PI.
- 2019 922.673 kr. Cystic Fibrosis Trust - UK (SRC 017) - Co-PI.
- 2018 2.500.000 kr. The Novo Nordisk Foundation (NNF18SA0035306) - PI.
- 2018 1.800.000 kr. The Novo Nordisk Foundation (NNF18OC0052776) - PI.
- 2018 100.000 kr. Savværksejer Jeppe Juhl og Hustru Ovita Juhls mindelegat - PI.
- 2018 845.000 kr. North American Cystic Fibrosis Foundation Co-PI.
- 2017 5.400.000 kr. Danish Research Council FTP with PI Prof Hanne Ingmar KU, (FTP-4183-00051) Co-PI.
- 1990-16 More than 40 research grants from Danish foundations as PI.

Management

- 2021- Member, Committee for Infectious Hygiene, RegionH.
- 2020-21 European Research Council panel member of the ERC starting Grant Call 2021 - panel LS6.
- 2019- TWINCORE, scientific advisory board, Hannover Medical School, Hannover, Germany.
- 2017- PERSIMUNE ExComm member (Center of Excellence by Prof Jens Lundgren).

2009-12 Member of the Scientific Committee for the European Cystic Fibrosis Conferences (ECFS).
2008-17 Wrote the first and second eds. of the specialty plan in clin. microbiology (The National Board of Health).
2006-12 Chairman of Danish Society for Clinical Microbiology (DSKM).
2003-06 Chairman of DSKM's Education Committee.
2005 Chairman of DSKM's Structure Plan Committee.
2001-06 Board member DSKM, 3 years as secretary, 3 years as vice-chairman.

Major research focus

Translational biomedical aspects of bacterial infections, e.g., emerging pathogens, bacterial persistence, antibiotic resistance, and tolerance, biofilm, metabolism and modelling, genomics, transcriptomics, and bioinformatics.

Supervision, present project group

Present supervision: 6 PhD students, and 14 postdocs.

Former PhD students, co-supervision

Since 1994 I have supervised 18 PhD students and supervised 12 postdocs.

National and international collaborating partners

Professor Søren Molin, DTU, Lyngby; Professor Sisse Rye Ostrowski, senior scientist Rasmus Marvig, and Professor Kim G. Nielsen, Rigshospitalet; Professor Henrik Westh, Hvidovre Hospital; Professor Jens Ulrik Stæhr Jensen, Gentofte-Herlev Hospital; Professor Thomas Bjarnsholt, University of Copenhagen, Denmark; Professor Susanne Häussler, Hannover, Germany; Professor Andrea Smania, Mendoza, Argentina; group leader Elio Rossi, Milano, and professor Maria Lleò, Verona, Italy; Professor Kors van der Ent, Urtecht, Holland; Professor Bernhard Palsson San Diego, California, Professor Jonathan Monk, San Diego, California, professor Kim Lewis, Boston, Massachusetts, professor Manuel Amieva, Stanford, California, and Professor Marianne Muhlebach, North Carolina, USA; professor Dominique Schneider, Grenoble, France; Professor Ashleigh Griffin, Oxford, Professor Martin Welsh, Oxford, and Professor Ville Friman, York, UK; and Professor Ada Yonath, Rehovot, Israel (Nobel Prize Winner).

Ten recent publications

- 1 La Rosa R, Rossi E, Feist AM, **Johansen HK**, Molin S. Compensatory evolution of *P. aeruginosa*'s slow growth phenotype suggests mechanisms of adaptation in cystic fibrosis. Nat Commun. 2021 May 27;12(1):3186. PMID: 34045458. **(IF 14.92)**.
- 2 Bartell JA, Cameron DR, Mojsoska B, Haagensen JAJ, Pressler T, Sommer LM, Lewis K, Molin S, **Johansen HK**. Bacterial persists in long-term infection: Emergence and fitness in a complex host environment. PLoS Pathog. 2020 Dec 14;16(12):e1009112. 2020 Dec. PMID: 33315938 **(IF 6.82)**.
- 3 Bottery MJ, Matthews J, Wood AJ, **Johansen HK**, Pitchford JW, Friman VP. Inter-species interactions alter antibiotic efficacy in bacterial communities. In press ISMEJ-21-01163AR **(IF 10.30)**.
- 4 Bartell JA, Sommer LM, Marvig RL, Skov M, Pressler T, Molin S, **Johansen HK**. Omics-based tracking of *P. aeruginosa* persistence in 'eradicated' cystic fibrosis patients. Eur Respir J. 2021 Apr 8;57(4):2000512. Print 2021 Apr. PMID: 33093121 **(IF 16.67)**.
- 5 Rossi E, La Rosa R, Bartell JA, Marvig RL, Haagensen JAJ, Sommer LM, Molin S, **Johansen HK**. *P. aeruginosa* adaptation and evolution in patients with cystic fibrosis. Nat Rev Microbiol. 2021 May;19(5):331-342. Epub 2020 Nov 19. PMID: 33214718 **(IF 60.63)**.
- 6 Halfon Y, Jimenez-Fernandez A, La Rosa R, Espinosa R, **Johansen HK**, Matzov D, Eyal Z, Bashan A, Zimmerman E, Belousoff M, Molin S, Yonath A. Structure of *P. aeruginosa* ribosomes from an aminoglycoside resistant clinical isolate. PNAS. 2019 Oct 14. pii: 201909831. [Epub ahead of print] PMID: 31611393 **(IF 12.29)**.
- 7 Bartell JA, Sommer LM, Haagensen JAJ, Loch A, Espinosa R, Molin S, **Johansen HK**. Evolutionary highways to persistent bacterial infection. Nat Commun. 2019 Feb 7;10(1):629. PMID: 30733448 **(IF 14.92)**.
- 8 Imamovic L, Ellabaan MMH, Machado AMD, Citterio L, Wulff T, Molin S, **Johansen HK**, Sommer MOA. Drug Driven Phenotypic Convergence Supports Rational Treatment Strategies of Chronic Infections, Cell 2018, <https://doi.org/10.1016/j.cell.2017.12.012> **(IF 41.58)**.
- 9 Rossi E, Falcone M, Molin S, **Johansen HK**. High-resolution in situ transcriptomics of *Pseudomonas aeruginosa* unveils genotype independent patho-phenotypes in cystic fibrosis lungs. Nat Commun. 2018 Aug 27;9(1):3459. PMID: 30150613 **(IF 14.92)**.
- 10 Marvig RL, Sommer LM, Molin S, **Johansen HK**. Convergent evolution and adaptation of *P. aeruginosa* within patients with cystic fibrosis. Nat Genet. 2015 Jan;47(1):57-64. PMID: 25401299 **(IF 38.33)**.