

CV Nina Molin Høyland-Kroghsbo, Ph.D.

Family leaves: April 2012–March 2013, March–April and August 2018

Scientific focus areas: My research explores how bacteria use the cell-cell communication process called quorum sensing (QS) to predict and respond to dangers they encounter in their environment, such as bacteriophage viruses and antibiotics. I transform this knowledge into concrete methods to block bacterial defense mechanisms for novel therapies against multidrug resistant bacteria.

Formal education

2020–2021 University Pedagogy, UCPH.

2018–2019 UCPH Forward, Talent Programme for Excellence in Research, UCPH.

08.12.2014 Ph.D. Biology, Department of Biology, UCPH, Denmark.

20.05.2010 M.Sc. Molecular Biomedicine (Masters of Excellence program), UCPH.

01.11.2007 B.Sc. Molecular Biomedicine, UCPH.

Current and most recent positions

2020–Tenure Track Assistant Professor, PLEN, UCPH.

2018–2020 Assistant Professor, Department of Veterinary and Animal Sciences, UCPH

2015–2018 Postdoctoral Fellow, Bassler laboratory, Princeton University, USA.

2015–2017 International Researcher, Biomolecular Sciences, UCPH.

2014–2015 Family leave cover for Associate Professor Sine L. Sørensen, UCPH.

2014 Visiting student research collaborator, Silhavy laboratory, Princeton University, USA.

2010–2014 Ph.D. student, laboratory of Associate Professor Sine Sørensen, UCPH.

2010 Research Assistant, Biotech Research and Innovation center, UCPH.

Select academic awards, memberships, and independent funding

2022 Elected member, The Young Academy, under the Royal Danish Academy of Sciences and Letters

2021 Sapere Aude Research Leader award, Independent Research Fund Denmark.

2019 Excellence in outreach prize, Department of Veterinary and Animal Sciences, UCPH.

2018 Lundbeck Foundation Postdoctoral Fellowship.

2016+ 2017 Lundbeck Foundation International Postdoctoral Fellowship.

2014 International Postdoctoral Fellowship, Danish Council for Independent Research.

2013 Co-recipient for organizing PhD symposium, Aage V. Jensen Foundation.

2008 Danish Cancer Society scholarship for master students.

2002 Aspiring Researcher Award, the Danish Ministry of Science and Technology.

Select Service and Professional Activities

Reviewer: PNAS, The ISME Journal, Scientific Reports, Nature Microbiology, RNA Biology, Journal of Microbiology, Trends in Microbiology, Cell Host and Microbe.

Grant reviewer: National Science Centre Poland.

2020 Member of committee appointed by UCPH rector Henrik C. Wegener, to formulate initiatives and guidelines for a more inclusive and diverse UCPH.

2018 Member of Pharmadanmark's task force on antibiotic resistance.

2017–2018 Organizer, Postdocs Research Seminars, Princeton University.

2014–Board member, "Study-foundation" Pharmadanmark, awarding travel grants.

2013 Organizer, PhD symposium at the Institute of Biology, UCPH.

Supervision

Co-supervisor: 2 graduate students, 2 rotation graduate students, 1 M.Sc, 1 B.Sc, 7 visiting students/interns.

Main supervisor: 1 M.Sc, 8 B.Sc, 4 PUK.

Teaching

2021–Teaching coordinator, section of Microbial Ecology and Biotechnology, UCPH.

2021–Updated and taught lab exercises, lectures, graded reports, "Microbiology", B.Sc course, UCPH.

2021 Guest lecturer, Lab to Launch, Ph.D course, University of Chicago.

2020–Developed and taught module of "Applied Biotechnology" B.Sc course, UCPH.

2020 Teaching assistant, "Microbial Food safety", M.Sc. course, UCPH.

2019 Developed and taught CRISPR part of "Cutting-edge Gene Editing Techniques in Bacteria; CRISPR and TraDIS", Ph.D. course, UCPH.

2019–Guest lecturer, "Infection Microbiology", Ph.D. course, UCPH.

2018 Developed and taught laboratory exercise and lecture for, "From gene to function in pathogenic bacteria", M.Sc. course, UCPH.

2015 Guest lecturer, Mol. Microbiology and Medical Bacteriology, M.Sc. course, UCPH.

2011, 2013 Teaching assistant, "Elementary Molecular Biology," B.Sc course, UCPH.

2011 Teaching assistant, "Biological Dynamics," B.Sc./ M.Sc course, UCPH.

Select outreach activities

2022Forskningens Døgn, three outreach events.

2021Invited talk, Pharmadanmark network meeting.

2021Invited talk, Danish laboratory technicians' conference.

2021Forskningens døgn. Four online outreach events.

2020Invited virtual presentation and discussion, Hølestebro Gymnasium.

2020 Invited panelist, CRISPR-Cas and AI, Science Faction, Comedy Zoo .

2019Interviewed for three articles on DR Viden on antibiotics resistance transfer, phage therapy, and on our newly discovered phage defense mechanism (Bru et al. 2019).

2019Feature article, Pharmadanmark Magazine #3

2019Invited speaker, CALIS student symposium, UCPH.

2019Radio interview on phage therapy, Danish National Radio P1 Morgen (19.02.19).

2019Translation of children's book, "Paul has Measles". Vaccine awareness initiative.

2018Organizer and speaker, "The Fight Against Superbugs", Pharmadanmark, Denmark.

2018Kulturnatten, Hands-on demonstration, "Why do Bacteria Talk", Denmark.

2017–2018Workshop leader, Lead-Like-A-Girl conference, Stuart Country Day School, USA.