

## Curriculum vitae with track record (for researchers)

Role in the project    Project manager     Project partner

### Personal information

First name, Surname:	Ole Andreas Økstad		
Date of birth:	19.10.1969	Sex:	Male
Nationality:	Norwegian		
Researcher unique identifier(s):	ORCID ID: 0000-0001-9351-8535 <a href="https://publons.com/researcher/3791148/ole-andreas-okstad/">https://publons.com/researcher/3791148/ole-andreas-okstad/</a> <a href="https://scholar.google.com/citations?user=-61_2tsAAAAJ&amp;hl=en&amp;oi=ao">https://scholar.google.com/citations?user=-61_2tsAAAAJ&amp;hl=en&amp;oi=ao</a>		
URL for personal website:	<a href="https://www.mn.uio.no/farmasi/english/people/aca/aloechen/index.html">https://www.mn.uio.no/farmasi/english/people/aca/aloechen/index.html</a>		

### Education

Year	Faculty/department - University/institution - Country
2000	<b>Ph.D. in Microbiology</b> - Biotechnology Centre of Oslo and School of Pharmacy, Faculty of Mathematics and Natural Sciences, University of Oslo, Norway
1995	<b>Master of Biochemistry</b> – Department of Biochemistry, Faculty of Mathematics and Natural Sciences, University of Oslo, Norway

### Positions - current and previous

Year	Job title – Employer - Country
2015-	<b>Professor</b> of Pharmaceutical Microbiology, School of Pharmacy, University of Oslo, Norway
2006-2015	Associate professor, School of Pharmacy, University of Oslo (UiO), Norway (NOR)
2002-2005	Senior Postdoc (deputy group leader), Biotechnology Centre of Oslo, UiO, Norway - including 7 months at the University of Oxford, UK (David Sherratt lab)
2000-2002	Postdoc (personal grant, Norwegian Research Council), Biotech. Centre of Oslo, UiO, NOR

### Career breaks

Year	Reason
1999-2000	Mandatory military service ( <b>lab scientist</b> , Norwegian Defense Research Establishment)

## Project management experience

Year	Project owner - Project - Role - Funder
2021-2024	<b>NæringsPhD project:</b> “An OMICS approach to study the effects of a novel antiseptic multi-product on microbes with relevance for military operational performance”, funded by the Norwegian Research Council (project nr. 332591). <b>WP leader. Main supervisor.</b>
2021-2024	<b>IPN project:</b> "CRITICAL – preclinical testing of novel antibiotic resistance breaker", funded by the Norwegian Research Council (project nr. 321442). <b>WP leader.</b>
2014-2019	<b>CIME - Centre for Integrative Microbial Evolution</b> - strategic grant covering six PhD students (KD-pool) for six projects. <b>Vice-head. Faculty of Mathematics and Natural Sciences, UiO.</b>
2010-2015	<b>EU 7FP International Research Staff Exchange Scheme</b> project: Functional and structural analysis of bacterial membrane transporters. <b>Co-author. Marie Curie Actions (People), EU.</b>
2007-2011	<b>FUGE II Channel 3 project grant</b> (approx. 8 million NOK). Project 183421. “From comparative genomics to systems biology - unravelling novel principle virulence mechanisms in pathogenic spore-forming bacteria”. <b>Project co-leader. Norwegian Research Council.</b>
2007-2012	<b>LaMDa - Laboratory for Microbial Dynamics</b> - 'Utviklingsmiljø', strategic grant. <b>Project co-leader. Co-supervisor. Faculty of Mathematics and Natural Sciences, UiO</b>
2006-2008	<b>Project grant</b> (3.6 mill Nkr). Development of tools for investigation of metagenomes associated with oil and gas explorations ( <b>contributor to application</b> ). <b>VISTA (Statoil).</b>
2005-2008	<b>White paper</b> , grant for comprehensive whole genome sequencing <i>B. cereus</i> group pathogens. Collaborator with <b>The Institute for Genomic Research (TIGR), USA. Co-author of application. National Institutes of Health, USA.</b>
2002-2007	<b>Strategic University Programme grant</b> (9.8 million NOK). Project 146534. " <i>Bacillus cereus</i> , <i>B. anthracis</i> and <i>B. thuringiensis</i> : comparative genomics and functional analysis". <b>Main author of application. Norwegian Research Council.</b>
2002	<b>Project grant</b> (82 000 USD). <b>Systematic sequencing of large plasmids from the <i>Bacillus cereus</i> group.</b> Collaborator with TIGR, USA. <b>Co-author. National Science Foundation, USA.</b>

## Supervision of students

Master's students	Ph.D. students	University/institution - Country
23	9	University of Oslo, Norway (in addition: <b>supervision of two postdocs</b> )

## Other relevant professional experiences

Year	Description - Role
2005-present	<b>Reviewer for:</b> PLoS Pathogens, mBio, Nucleic Acids Research, Journal of Bacteriology, BMC Microbiology, PLoS One, Microbiology-SGM, Research in Microbiology, Journal of Applied Microbiology, Infection Genetics and Evolution, Intl' Jrn of Molecular Sciences
2013-present	BACELL – Organization for <i>Bacillus</i> research in Europe. <b>Member of Steering group.</b>
2022-present	BacillusACT – <b>Member of Steering committee.</b>
2017-present	<b>Member of the Board</b> , Department of Pharmacy, University of Oslo (UiO)

2007-present	Member of <b>working committees</b> for the new <b>UiO Life Sciences building</b>
2018-2020	<b>Member of the iResist network on AMR:</b> iResist: Infection biology and antibiotic resistance in a One-Health perspective: from epidemiology to <b>new antibacterial treatment strategies</b> . Funding body: Norwegian Research Council.
2011 & 2016	<b>Visiting scientist</b> , Macquarie Univ, Sydney, Australia (Prof. Ian Paulsen), <b>sabbatical</b> (3 months 2011, 1 month 2016)
2007-2009	Deputy board member of EMBIO/MLS - <b>Steering board</b> , molecular life sciences, UiO

## Track record

- Number of citations: **6177**; Total number of publications during career: **46**; H-index: **27**, i10-index: **35** (Google Scholar, Sep 1, 2023)
- A list of up to *ten selected* publications in major national or international peer-reviewed journals:

1. Tourasse NJ\*, Jolley KA, Kolstø AB, **Økstad OA\*** (2023). Core genome multilocus sequence typing scheme for *Bacillus cereus* group bacteria. **Res Microbiol.** 174(6):104050. doi: 10.1016/j.resmic.2023.104050. *Contribution: Project co-leader with Tourasse. Data analysis. Co-wrote paper with Tourasse. \*Shared corresponding author.*

2. Lin Y, Alstrup M, Pang JKY, Maróti G, Er-Rafik M, Tourasse N, **Økstad OA**, Kovács ÁT (2021). Adaptation of *Bacillus thuringiensis* to Plant Colonization Affects Differentiation and Toxicity. **mSystems.** 6(5):e0086421. *Contribution: Data analysis. Contributed to paper writing.*

3. Smith V, Josefsen M, Lindbäck T, Hegna IK, Finke S, Tourasse NJ, Christina Nielsen-LeRoux, **Ole Andreas Økstad\***, Annette Fagerlund\* (2020). MogR is a ubiquitous transcriptional repressor affecting motility, biofilm formation and virulence in the *Bacillus cereus* group. **Frontiers Microbiol.** 11: 610650. *Contribution: Project co-leader (with Fagerlund, young investigator). Supervised Smith, Josefsen and Fagerlund. Wrote the paper together with Smith and Fagerlund. \*Shared corresponding author.*

4. Ørjan Samuelsen, Ove Åstrand, Christopher Fröhlich, Adam Heikal, Susann Skagseth, Trine Josefine Carlsen, Hanna-Kirsti S. Leiros, Annette Bayer, Christian Schnaars, Geir Kildahl-Andersen, Silje Lauksund, Sarah Finke, Sandra Huber, Tor Gjøn, Adriana Andresen, **Ole Andreas Økstad**, and Pål Rongved (2020). ZN148 – a modular synthetic metallo-β-lactamase inhibitor reverses carbapenem-resistance in Gram-negative pathogens *in vivo*". **Antimicrobial Agents and Chemotherapy** 64(6):e02415-19. *Contribution: Performed experiment (time-kill). Supervised Heikal & Finke. Wrote paper with Heikal, Samuelsen, Rongved.*

5. Sarah Finke, Annette Fagerlund, Veronika Smith, Veronica Krogstad, Mimmi Jingxi Zhang, Athanasios Saragliadis, Dirk Linke, Christina Nielsen-LeRoux, **Ole Andreas Økstad** (2019). *Bacillus thuringiensis* CbpA is a collagen binding cell surface protein under c-di-GMP control. **The Cell Surface** 5, 100032. *Contribution: Project leader. Supervised Finke. Wrote paper with Finke.*

6. Ikram S, Heikal A, Finke S, Hofgaard A, Rehman Y, Sabri AN, **Økstad OA** (2019). *Bacillus cereus* biofilm formation on central venous catheters of hospitalised cardiac patients. **Biofouling** 35(2):204-216. *Contribution: Project leader. Supervised Ikram, Finke and Heikal. Wrote paper with Ikram, Heikal and Finke.*

7. Heikal A, Samuelsen Ø, Kristensen T, **Økstad OA** (2017). Complete genome sequence of a multidrug-resistant, *bla**NDM-1*-expressing *Klebsiella pneumoniae* K66-45 clinical isolate from Norway. **Genome Announcements** 5(27):e00601-17. *Contribution: Project leader. Supervised Heikal. Wrote paper with Heikal and Samuelsen.*

8. Fagerlund A, Smith V, Røhr ÅK, Lindbäck T, Parmer MP, Krogstad V, Andersson KK, Reubsaet L, **Økstad OA (2016)**. Cyclic-di-GMP regulates biofilm formation in *Bacillus thuringiensis*. **Molecular Microbiology** 101, 471-494. *Contribution: Project leader. Supervised Fagerlund, Smith and Krogstad. Wrote paper with Smith and Fagerlund.*
9. Kristoffersen SM, Haase C, Weil MR, Passalacqua KD, Niazi F, Hutchison SK, Desany B, Kolstø AB, Tourasse NJ, Read TD, **Økstad OA (2012)**. Global mRNA decay analysis at single nucleotide resolution reveals segmental and positional degradation patterns in a Gram-positive bacterium. **Genome Biology** 2012 Apr 26;13(4):R30. *Contribution: Project leader. Supervised Kristoffersen. Wrote paper with Kristoffersen and Read.*
10. Kristoffersen SM, Tourasse NJ, Kolstø AB, **Økstad OA (2011)**. Interspersed DNA repeats *bcr1-bcr18* of *Bacillus cereus* group bacteria form three distinct groups with different evolutionary and functional patterns. **Molecular Biology and Evolution** 28(2):963-83. *Contribution: Project leader. Supervised Kristoffersen. Wrote paper with Kristoffersen and Tourasse.*

In addition co-wrote one high profile review paper in the time period, but have given priority to original research papers.

- **Book chapters:**
  - **Økstad OA, Kolstø AB (2012)**. Evolution of the *Bacillus cereus* group. In: "Bacillus thuringiensis biotechnology". Sansinenea (Ed.). Springer. pp. 117-127.
  - **Økstad OA, Kolstø AB (2011)**. Genomics of *Bacillus* spp. related to food-borne disease. In: Genomics of Foodborne Bacterial Pathogens. Wiedmann, Zhang (Eds.). Springer. pp. 29-53.
- **Industrial or public innovation or design** and/or highlights from research or innovation with societal impact:
  - **2018-present:** Participant in research project **developing the zinc chelator ZN148 as an adjuvant compound in treatment of infections** with carbapenem resistant Gram-negative bacteria
- **Granted patent (2018)**, phenazine derivatives as novel antimicrobial agents (co-author, Rongved).
- Invited presentations to internationally established conferences and/or international advanced schools:
  - **2018: Invited Lecturer**, International Symposium on Biophysics of Microbial Adhesion, Toulouse, France (10-11 Sep). <https://biophysadh.sciencesconf.org/>
  - **2013 and 2015: Invited Lecturer**, MBI 8001 (Molecular and clinical aspects of infection, inflammation and immunity), Advanced course, National PhD School in Pharmacy, Tromsø
- Prizes, awards, academy memberships:
  - **2018: Lecturer of the year**, Department of Pharmacy, University of Oslo
- **Organisation of international conferences:**
  - **2017:** 19th International Conference on Bacilli, June 11-15, Berlin, Germany (300 participants) - member of scientific committee
  - **2011:** ETOX15 - European Workshop on Microbial Protein Toxins, Oslo, Norway – member of organizing committee
  - **2008:** BACELL2008 - International conference on European *Bacillus* research (approx.. 100 participants) - **Vice-head** of organizing committee
  - **2007:** Bacillus ACT 2007 – International Conference on *Bacillus anthracis*, *B. cereus* and *B. thuringiensis*. Oslo (326 participants, 30 countries) - **Vice-head** of organizing committee
- Major contributions to the early careers of excellent researchers:
  - **Centre for Integrative Microbial Evolution** – a cross-departmental initiative at the Faculty of Math. and Nat. Sci., Univ. of Oslo, offering cross-disciplinary PhD supervision. **Vice-head**.