

Øivind Øines

Alias Oivind Oines
Date of birth: 21 November 1976
Nationality: Norwegian
Occupation: Senior Researcher
Email: oivind.oines@vetinst.no
Telephone: +47 91 67 59 43
Research profiles available @: **Researchgate/Linkedin/Nature-Network/CHRStin**

Work experience

Norwegian Veterinary Institute, Research group on food safety and animal health (V)/Research group on animal health (IV)

Period: Jan 2017 – to current. Position: *Senior Researcher*: Research tasks covering surveillance molecular detection and identification methods, vaccine and parasitology related research, various selected projects; **Hunt en helse** (NVI leader); annual surveillance programme EM; DIFI Medfinansieringsprosjekt **DigMedFisk** 'Prøvereisen fisk' –a project for digitalising (fish) diagnostics LIMS implementation project (2019-2021); Project applicant, initial project-leader; process mapper and development of user requirement documentation. EJP's: **TELEVIR** <https://onehealth.ejrp.eu/jrp-tele-vir/> (NVI leader) **MeME** (Task leader) <https://onehealth.ejrp.eu/jrp-meme/> **TOXOSOURCES**; Red poultry mite (Hønsemidd) Horizon 2020 project **PARAGONE** –vaccines for animal parasites; National Management Committee (MC) member for Norway in EU COST action on Red Poultry Mite FA1404.

Norwegian Veterinary Institute, Section for Virology (III)

Period: April 2014 – Dec 2016 Position: *Head of Molecular biology unit (MBE) /Senior Researcher* Establishment, maintaining and administration of the core molecular diagnostic unit (6 laboratories; 11-14 engineers in rotation). Procurement of instrumentation and equipment. Laboratory workflow management. **Research tasks**: Molecular diagnostics and research; parasitology, vaccines.

Norwegian Veterinary Institute, Section for parasitology (II)

Period June 2006 – March 2014 Position: *Researcher/Senior Researcher* Molecular parasitology; project manager; member board of TEKNA-Veterinærinstituttet; 2011-14

National Veterinary Institute, Section for parasitology (I)

Ullevålsveien 68 0033, Oslo. Period Aug 2002 – May 2006 Position: *Researcher/PhD-student*

Ullevål University Hospital, Department for medical genetics.

Avdeling for medisinsk genetikk, UUS, Kirkeveien 166 0407, Oslo.

Period: May 2001 - July 2002 Position *Ingeniør I*

Norsk Mat og Miljøanalyse AS Oslo, Norway.

Period: January- May, 2001 Position *Tech. staff*

Queensland Health Scientific Services Queensland, Australia.

Period: July-October, 2000 Position *Master student*

Academic background

- **Doctor Scientiarum** (Norway) December 2007 'Host selection and infection strategies in *Caligus elongatus*' Norwegian School of Veterinary Science, Oslo, Norway
- **Master of Science in Clinical Microbiology** (Australia) January 2000- December 2000 Griffith University, Nathan Campus, Brisbane Australia
- **Bachelor of Biomedical Science** (Australia)
- January 1997- December 1999 Griffith University, Nathan Campus, Brisbane Australia

Publications peer-reviewed

Bhowmick B, Zhao J, Øines Ø, et al. **Molecular characterization and genetic diversity of *Ornithonyssus sylviarum* in chickens (*Gallus gallus*) from Hainan Island, China.** Parasit Vectors. 2019;12(1):553. Published 2019 Nov 21. doi:10.1186/s13071-019-3809-9

Woolsey ID, Blomstrand B, Øines Ø, Enemark HL. **Assessment of differences between DNA content of cell-cultured and freely suspended oocysts of *Cryptosporidium parvum* and their suitability as DNA standards in qPCR.** Parasit Vectors. 2019;12(1):596. Published 2019 Dec 19. doi:10.1186/s13071-019-3851-7

Wang C, Ma Y, Huang Y, Su S, Wang L, Sun Y, Wan Q, Li H, Zhang S, Øines Ø, Pan B. **Darkness increases the population growth rate of the poultry red mite *Dermanyssus gallinae*.** Parasit Vectors. 2019 May 7;12(1):213. doi: 10.1186/s13071-019-3456-1.

Agusti-Ridaura C., Hamre L., Espedal P., Øines Ø., Horsberg T.E. and Kaur K. **First report on sensitivity of *Caligus elongatus* towards anti-louse chemicals and identification of mitochondrial cytochrome C oxidase I genotypes** Aquaculture (507) May 2019 s190-195.

Price DRG, Küster T, Øines Ø, Margaret Oliver E, Bartley K, Nunn F, Barbero JFL, Pritchard J, Karp-Tatham E, Hauge H, Blake DP, Tomley FM, Nisbet AJ. **Evaluation of vaccine delivery systems for inducing long-lived antibody responses to *Dermanyssus gallinae* antigen in laying hens.** Avian Pathol. 2019 Apr 29:1-44. doi: 10.1080/03079457.2019.1612514.

Burgess STG, Bartley K, Nunn F, Wright HW, Hughes M, Gemmell M, Haldenby S, Paterson S, Rombauts S, Tomley FM, Blake DP, Pritchard J, Schicht S, Strube C, Øines Ø, Van Leeuwen T, Van de Peer Y, Nisbet AJ. **Draft Genome Assembly of the Poultry Red Mite, *Dermanyssus gallinae*.** Microbiol Resour Announc. 2018 Nov 8;7(18). pii: e01221-18. doi: 10.1128/MRA.01221-18. eCollection 2018 Nov.

Kavallari A, Küster T, Papadopoulos E, Hondema LS, Øines Ø, Skov J, Sparagano O, Tiligada E. **Avian mite dermatitis: Diagnostic challenges and unmet needs.** Parasite Immunol. 2018 Aug;40(8):e12539. doi: 10.1111/pim.12539.

Aase A, Hajdusek O, Øines Ø, Quarsten H, Wilhelmsson P, Herstad TK, Kjelland V, Sima RJ, M Lindgren, PE Aaberge I, Sundsvälen. **Validate or falsify: Lessons learned from a microscopy method claimed to be useful for detecting *Borrelia* and *Babesia* organisms in human blood.** Infectious diseases 2016 Volum 48.(6) s. 411-419

Øines Ø, Isaksson M, Hastrøm Å, Tavornpanich S, Davidson RK. 2014. **Laboratory assessment of sensitive molecular tools for detection of low levels of *Echinococcus multilocularis*-eggs in fox (*Vulpes vulpes*) faeces.** Parasites & Vectors 7:246. DOI:10.1186/1756-3305-7-246

Campbell-Palmer R, Girling S, Pizzi R, Hamnes IS, Oines O, Del-Pozo J. 2013 ***Stichorchi subtriquetrus* in a free-living beaver in Scotland.** Vet Rec. Jun 17. PubMed PMID: 23775133.

Davidson R, Øines Ø, Hamnes I. S. Shultze J. 2013. **Illegal wildlife import more than just animals -*Baylisascaris procyonis* in raccoons (*Procyon lotor*) in Norway.** Journal of Wildlife Diseases 49(4):986-990

Davidson RK, Mermer A, Øines Ø. 2012. ***Toxocara cati* larva migrans in domestic pigs detected at slaughterhouse control in Norway.** Acta Vet Scand. 21;54:66. DOI: 10.1186/1751-0147-54-66.

Øines Ø., Jana Radzijeuskaja, Algimantas Paulauskas & Olav Rosef O. 2012. **Prevalence and diversity of *Babesia* spp. in questing *Ixodes ricinus* ticks from Norway.** Parasites & Vectors, 5, 156.

Hasle G., Leinaas H.P., Roed K. H. & Øines Ø. 2011. **Transport of *Babesia venatorum*-infected *Ixodes ricinus* to Norway by northward migrating passerine birds.** Acta Veterinaria Scandinavia. 53(1), 41

Oines O. & Brannstrom S., 2011. **Molecular investigations of cytochrome c oxidase subunit 1 (CO1) and the internal transcribed spacer (ITS) in the poultry red mite, *Dermanyssus gallinae*, in northern Europe and implications for its transmission between laying poultry farms,** Medical and Veterinary Entomology, 25 402-412. DOI: 10.1111/j.1365-2915.2011.00958.x

Øines Ø., Storli K. and Brun-Hansen H., 2010. **First case of babesiosis caused by *Babesia canis canis* in a dog from Norway.** Veterinary Parasitology, 171(3-4), 350-353.

Davidson, R.K. & Øines Ø., Madslie K. and Mathis A., 2009. ***Echinococcus multilocularis*— adaption of a worm egg isolation procedure coupled with a multiplex PCR assay to carry out large-scale screening of red foxes (*Vulpes vulpes*) in Norway.** Parasitology Research, 104(3), 509-514. DOI: 10.1007/s00436-008-1222-y

Øines, Ø & Scram, T, 2008. **Intra- or inter-specific difference in *Caligus elongatus* Nordmann 1832?** Acta Parasitologica, 53, 93-105

Heuch, P.A. Øines Ø. Knutsen J.A. & Schram T. A., 2007. **Infection of wild fishes from the Norwegian Skagerrak coast with the parasitic copepod *Caligus elongatus*,** Diseases of Aquatic organisms, 77, 149-158

Øines, Ø & Heuch P. A., 2007. **A comparison of *Caligus elongatus* Nordmann genotypes on wild and farmed fish,** Journal of Fish Disease, 30, 81-91

Øines Ø, Simonsen, J. H., Knutsen, J. A. and Heuch, P. A., 2006. **Host preference of adult *Caligus elongatus* in the laboratory and its implications for Atlantic cod aquaculture,** Journal of Fish Diseases, 29, 167-174

Øines, Ø & Heuch, P.A., 2005. **Identification of sea louse species of the genus *Caligus* using mtDNA**, Journal of the Marine Biological Association of United Kingdom (JMBA), 85, 73-79

Other publications

Babesiose hos hund - en ny diagnose i Danmark Anna Hørluck, Øivind Øines, Hanne Friis Lund, Stig M.

Thamsborg, Heidi Enemark, Dansk Veterinærtidsskrift 08, 2019.

The surveillance and control programme for *Echinococcus multilocularis* in red foxes (*Vulpes vulpes*) in

Norway in 2015 Knut Madslie, Charles Jean Albin-Amiot, Malin E Jonsson, Torill Clausen, Kristin Henriksen, Inger Sofie Hamnes, Anne Margrete Urdahl, Berit Tafjord Heier, Øivind Øines, Heidi Enemark, Surveillance and control programmes for terrestrial and aquatic animals in Norway. Annual report 2016

The poultry red mite *Dermanyssus gallinae*: developing novel management solutions for a complicated and neglected pest. George D, Finn R, Graham K, Mul M, Guy J, Strube C, Tomley F, Hernández-Crespo P, Kilpinen O, Eriksson E, Øines Ø, Coles G, Cogan T, Stafford K, Nisbet A, Sparagano O, European Congress of Entomology, 3rd-8th August, University of York, UK. p47. 2014

Dødelig babesiose hos ku, Øines Øivind og Falk Michaela. Norsk Veterinærtidsskrift 2013, 9, 125.

Ghost-hunting - is *Echinococcus multilocularis* really absent from mainland Norway? Davidson, Rebecca K.; Øines, Øivind; Albin-Amiot, C; Hopp, Petter; Madslie, Knut; Hagstrom, A; Isaksson, M. *Tropical medicine & international health* 2013; Volum 18. s. 97-97

The surveillance and control programme for *Echinococcus multilocularis* in red foxes (*Vulpes vulpes*) in Norway. Madslie, Knut; Øines, Øivind; Handeland, Kjell; Urdahl, Anne Margrete; Albin-Amiot, Charles Jean; Hopp, Petter; Davidson, Rebecca K. Hunting season 2011-2012. Norwegian Veterinary Institute/Norwegian Food Safety Authority 2013 8 s. Surveillance and control programmes for terrestrial and aquatic animals in Norway. Annual report 2012

The surveillance and control programme for *Echinococcus multilocularis* in red foxes (*Vulpes vulpes*) in Norway. Knut Madslie, Rebecca Davidson, Kjell Handeland, Øivind Øines, Anne Margrete Urdahl Petter Hopp. Hunting season 2010-2011. Surveillance and control programmes for terrestrial and aquatic animals in Norway. Annual report 2011. Oslo: National Veterinary Institute 2012.

Har revens dvergbandelmark, *Echinococcus multilocularis*, kommet til Norge? Davidson, Rebecca K. Hamnes, Inger Sofie; Øines, Øivind; Urdahl, Anne Margrete; Madslie, Knut; Handeland, Kjell. *Norsk Veterinærtidsskrift* (2) s. 82-86, 2012

Prosjekt Hømvak -nye metoder for identifisering av vaksine kandidater mot rød hønsemidd *Dermanyssus gallinae* og sekvensundersøkelser av midd hos norske fjørfe produsenter. I: Øines, Oivind. Universitetet for miljø- og biovitenskap 2011 ISBN 978-82-7479-024-7. *Husdyrforsøksmøtet 2011*

Undersøkelser av rød hønsemidd og en alternativ tilnærming til vaksineutvikling. Øivind Øines. Fjørfe Norsk fjørfe felag; 11; 128; 28-33. 2011

Middens hemmeligheter ligger i arvestoffet. Hansen Magne and Øines Øivind. Fjørfe, Norsk fjørfe felag; 4; 127;36-37. 2010

The surveillance and control programme for *Echinococcus multilocularis* in red foxes (*Vulpes vulpes*) in Norway. Davidson R, Øines Ø, Norström M. Annual report 2009. In: Karlsson AC, Jordsmyr HM, Hellberg H, Sviland S (editors). Surveillance and control programmes for terrestrial and aquatic animals in Norway. Oslo: National Veterinary Institute; 2010.

***Strongyloides stercoralis* identified in dogs in Norway for the first time.** Hamnes I, Davidson R, Øines Ø. Norsk Veterinærtidsskrift. 121, 9, 752. 2009

The surveillance and control programme for *Echinococcus multilocularis* in red foxes (*Vulpes vulpes*) in Norway. Kjell Handeland, Rebecca Davidson, Øivind Øines, Knut Madslie, Anne Margrete Urdahl. In: Ståle Sviland and Hellberg H (editors). Surveillance and control programmes for terrestrial and aquatic animals in Norway. Annual report. Oslo: National Veterinary Institute; 109-113. 2007

Host selection and infection strategies in *Caligus elongatus* Øines, Ø, Norwegian School of Veterinary Science. ISBN 978.82.90550.58.0 *Dr. Scient-thesis* Dissertation 2007

Selected presentations

State of the art molecular epidemiology on PRM Roy L. & Øines Ø.; **New molecular tools and techniques** Øines Ø, COREMI workshop, Slovenia 2018.

Nisbet A, Bartley K, Nunn F, Kuster T., Price D., Burgess S., Oines O., Blake D., Tomley, F. **The potential for vaccination to control Poultry red mite (CO307)**, XI European Congress of Entomology, Napoli 2018.

Roy, L, Marangi M., Radeski M., Øines Ø. **Molecular markers and the neutral genetic structure of *Dermanyssus gallinae* (De Geer, 1778)** (CO308), XI European Congress of Entomology, Napoli 2018

Genetic structure of Poultry red mite and dispersal patterns Øines Ø & Hansen M. Cost COREMI conference FA1404, Foggia, Italy, 2015

Investigations of the poultry red mite from layer farms in Norway Øines Ø, Jore S & Hansen M. European Poultry Conference (EPC) Stavanger, 2014

Prosjekt Hømvak-Nye metoder for identifisering av vaksinekandidater mot rød hønsemidd *Dermanyssus gallinae* og sekvensundersøkelser av midd hos norske fjørfeprodusenter Øines Ø Husdyrforsøksmøtet, Lillestrøm, 2011

Novel approach to identify vaccine candidates in the poultry red mite *Dermanyssus gallinae* and molecular investigations of mite from Norwegian layer farms Øines Ø Nordic Poultry Conference, Tromsø, 2010

Phylogeny of selected copepods of the family Caligidae, with the emphasis on molecular evidence for a sibling species complex in *Caligus elongatus* Øines Ø & Schram T. 9th international conference on Copepoda, Tunisia, 2005

Investigations of population differences in the parasitic copepod *Caligus elongatus* using mitochondrial DNA. Øines Ø, Heuch P.A.: Sixth International Symposium on Fish Parasites, University of Bloemfontein, South Africa. 2003

Using mitochondrial DNA to discern population differences in the sea louse *Caligus elongatus* Øines Ø, Sea Lice, St. Andrews, Canada. 2002

Other presentations, reports and posters

HUNT One Health Enabling human-animal health investigations by population-wide studies of metagenomic data, Øivind Øines, Kristin S Pettersen, Ann-Katrin Llarena, Thomas Haverkamp, Kristin Herstad, Lisbeth Rannem, Arne Holst-Jensen, Kristian Hveem, Eystein Skjerve, SLAS San Diego USA 2020

Mye skottelus på rognkjeks er ikke uventet Øivind Øines and Haakon Hansen, Ilaks 2017

Enhanced delivery of a prototype poultry red mite vaccine Tatiana Küster, Dan Price, Alasdair Nisbet, Oivind Oines, Damer Blake, Fiona Tomley, Oeiras Portugal 2017

Understanding population genetic and antigenic diversity of the poultry red mite to improve prospects for successful vaccine development
Eleanor Karp-Tatham, Tatiana Küster, Alasdair Nisbet, Øivind Øines, Fiona Tomley, Damer Blake, Oeiras Portugal 2017

The poultry red mite *Dermanyssus gallinae*: developing novel management solutions for a complicated and neglected pest., GEORGE D, FINN R, GRAHAM K, MUL M, GUY J, STRUBE C, TOMLEY F, HERNÁNDEZ-CRESPO P, KILPINEN O, ERIKSSON E, ØINES Ø, COLES G, COGAN T, STAFFORD K, NISBET A, SPARAGANO O. 3rd-8th August, p47. European Xth Congress of Entomology, University of York, UK. 2014

The hidden cost of import - an emerging parasitic disease in dogs in Norway. Hamnes I S; Davidson, RK. and Øines, Øivind. 4th Conference of the Scandinavian Baltic Society for Parasitology. 2011

***Echinococcus* surveillance in Norway.** Davidson R K & Øines Ø. The 4th International Workshop on Arctic Parasitology. 2010

***Caligus elongatus* on fishes in Norway.** Øines Ø., Heuch P. A., Knutsen J. A., Simonsen, J. H. & Schram, T. A. International Symposium on Fish Parasites, Viterbo IT 2007

Host selection and infection strategies in *Caligus elongatus*, poster. Øines Ø, Heuch, P.A., Knutsen, K.A. & Schram, T.A. Havbruk og Villaks, Tromsø 2002.

Relevant qualifications/certifications

Laboratory Animal Science for Researchers 2017020, NMBU 2020

PRIMUS research-leadership training for the primary institutes, dec 2018

Green Belt Lean Six Sigma-Lean project continuous improvement, Aksena Drammen 2015

EU reference laboratory Proficiency tests; Detection of *Echinococcus multilocularis* in faeces of the definitive host European Union Reference Laboratory for Parasites, 2015

EU reference laboratory Proficiency tests; To identify *Trichinella larvae* at the species level by molecular method, European Union Reference Laboratory for Parasites, 2012, 2017-2018

Authorisation as Bioengineer'/Bioingeniør. HPR-number: 8640165 Oslo, 15 January, 2002. Statens Autorisasjonskontor for helsepersonell.

Additional courses and training

Why it Matters; Value propositions in Scientific Innovation, SLAS San Diego USA, 2020

Minlon Advanced user training, Oxford Nanopore Technologies, Oslo 2017.

Bioinformatics training, (internal training) NVI 2018.

One Health training school on the poultry red mite, COST 2017 Hellas.

Course in tick identification, Norwegian Institute of Public Health, 2016 Oslo

An introduction to lab automation, SLAS 2016 USA

Next Generation sequencing technology fundamentals and applications, SLAS 2016 USA

Hvordan lede uten å være sjef, TEKNA 2014, Oslo

Instrument super-user/user courses: EP Motion 5075 liquid handler (Eppendorf 2016), Tecan Evo100

Evoware/touchtools liquid handler (2014 Bergman Diagnostika), **Digital PCR** droplet PCR dd200 (2016, Biorad), **AATI fragment analyser** (Chem En Tech, 2014), **Qiasymphony/Qiacube** automated nucleic acid extractors (Qiagen 2012-14), **ABI PRISM® 7700** Sequence Detection System Stockholm 29-30 januar, (2002, Applied Biosystem). Vitek 32 (2001, BioMerieux)

Research skills keywords

Molecular biology, parasitology, microbiology; phylogeny population, genetics, PCR, real-time PCR, digital PCR, , cloning, DNA sequencing, next generation sequencing (NGS), MinION, nanoporesequencing, HTS, metagenomics, targeted DNA isolation, , behavioural experiments, DNA vaccination, pyro sequencing, referee work, instrument procurement, project acquisition and management, LEAN, improvements, parasitology, photography.