

CURRICULUM VITAE

Personalia:

Name: Arild Folkvord
Phone: + 47 55122477 (private) +47 41300147 (mobile)
Born: February 12 1960 Vevey, Switzerland
Citizenship: Norwegian

Present employer: Department of Biological Sciences (BIO), University of Bergen (UiB)
Present position: Professor
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Education:

University of Bergen, Norway	1994, 2016	University pedagogics
	1989-93	Dr.scient. (PhD) degree
University of California, San Diego, USA	1983-85	Master of science degree
University of Bergen, Norway	1980-82	Bachelor degree
University of Oslo, Norway	1978-80	

Working experience:

Institute of Marine Research (adjunct position 20%)	2012-
Director of Nordic Marine Academy (adjunct position)	2005-2010
Department of Biology/Fisheries and Marine Biology, UiB, professor	2000-
Department of Fisheries and Marine Biology, UiB, associate professor	1998-2000
Department of Fisheries and Marine Biology, UiB, Norway, post-doc.	1994-97
Sea Farm A/S, Norway, production manager of juvenile cod and turbot	1986-89

Working field:

Larval fish ecology, marine juvenile production, growth and condition studies, fish recruitment, fish ageing

Licences:

Drivers licence (automobile), Divers licence CMAS
Licensed researcher in Laboratory Animal Science (Felasa Category C 1998)
Falck Nutec survival suite course (2014)
Cruise leader course (2018)

Language skills:

Norwegian: native level, English: near native level, German, Spanish: working level

Memberships:

Norsk Zoologisk Forening, Forskerforbundet,
Norske Havforskeres Forening,
Early life history section of The American Fisheries Society

Selected research and teaching projects:

Project leader of NFR Infrastructure project EMBRC-Norway (Part of European Research ERIC)
2018-2017, 24 mill NOK)
Participant in "RECNOR" project 2017-2020, (ref. O.S. Kjesbu, IMR Bergen)

Project leader NFR project GENSINC (Genetic adaptations underlying population structure in herring, *Clupea harengus*). 2016-2020, 8.2 mill NOK

Participant "Herring genetics" project 2013-2015 (ref. L. Andersson Uppsala University), 0.7 mill. NOK)

Participant "KILO" project 2012-2013 (ref. S. Sundby, IMR Bergen, 0.4 mill. NOK)

Director of Nordic Marine Academy 2005-2010 (10 mill. NOK).

Participant in EU ITN (Initial Training Network) Calcification by Marine Organisms (CalMarO) 2008-2011 (ref. A. Geffen, UiB)

Participant in NFR project "Progressive, modern production of juvenile Atlantic cod" (PROCOD), 2006-2008 (ref. A.K. Imsland, UiB) (UiB budget 2.2 mill. NOK).

Partner in EU project "Integrated approach to the biological basis of age estimation in commercially important fish species" (IBACS), 2002-2006 (UiB budget 0.147 mill EUR). (ref. Dr. B. Morales-Nin, Mallorca, Spain).

Partner in NFR project "Environmental effects of produce water on egg and larval development and sex differentiation in cod. 2001-2003 (ref. Dr. A. Svardal, IMR Bergen). (UiB budget 1.05 mill. NOK).

Participant and leader of 2 projects of NFR SUP "Environmental influence on fish stocks". 1999-2002. (Budget 7.3 mill NOK).

Programme leader of Norwegian Research Council (NFR) Strategic University Programme (SUP) "Theory and experiment based studies in recruitment in marine fishes". 1995-2001 (Budget 7.0 mill NOK).

Member and participant in EU network, "European Fish Ageing Network", 1997-2000. (ref. E. Moksness, IMR Flødevigen).

Official tasks (selection):

Leader of Fisheries and Marine Biology Science Group at BIO 2017-

Member of Leader Group at BIO 2004-2006, 2017-

Director of the Nordic Marine Academy 2005-2010

Member of the Board at Department of Biology 2009-2012, 2017-

Leader of the Research Education Board, Department of Biology 2014 (member since 2013)

Student supervision:

Master students: 37 completed, 6 ongoing (2019).

Dr. scient./PhD student:

Albert K. Imsland, "Growth mechanisms in turbot (*Scophthalmus maximus*): aspects of environmental and genetical control". 1993-1997 (co-supervisor)

Erling Otterlei, "Temperature- and size-dependent growth of larval and early juvenile Atlantic cod (*Gadus morhua* L.)". 1995-2000

Katrine Skajaa, "Starvation-induced effects on anti-predator behaviour in larval and juvenile marine fish". 1997-2006 (co-supervisor)

Erling Kåre Stenevik, "Comparative studies on recruitment mechanisms of pilchard (*Sardinops sagax*) in the southern and northern Benguela region". 1999-2003 (co-supervisor)

Hans Høie, "Stable oxygen and carbon isotopes in fish otoliths as environmental recorders". 2000-2003

Claus Stenberg, "Recruitment processes in West Greenland waters, with special focus on Greenland halibut". 2000-2007

Vidar Wennevik, "The application of genetic profiling and statistical assignment methods in the management of fish populations. 2003- 2006 (co-supervisor)

Agurtzane Urtizberra, "Modelling anchovy larvae survival in the Bay of Biscay". 2006-2009 (co-

supervisor)

- Roland Koedijk, “Phenotypic plasticity influenced by diet during early development. A comparative study on Atlantic cod”. 2006-2009 (co-supervisor)
- Knut Wiik Vollset, “Selective processes in the early life history of Atlantic cod”. 2007-2010
- Kyungmi Jung, “Theoretical and experimental studies of Atlantic cod (*Gadus morhua* L.) egg buoyancy within a metapopulation framework”. 2008-2012 (co-supervisor)
- Christian Irgens, “The use of otoliths to elucidate life history events in fish”. 2011-2018
- Eduardo Blanco Rodríguez, “Laboratory studies on growth and survival of bluefin tuna larvae”. 2014-2018 (co-supervisor)

Recent original scientific publications in peer-review journals (selection)

- A110. Slotte A, Husebø Å, Stenevik EK, Vikebø F, **Folkvord** A, Fossum P, Mosegaard H, Nash RDM (2018) Use of otolith microstructure analyses to study the relation between larval hatching time, growth and survival in Norwegian spring spawning herring *Mar Ecol Prog Ser* 00: 000-000. DOI: 10.3354/meps12682
- A109. Berg F, Slotte A, Andersson L, **Folkvord** A (2018) Genetic origin and salinity history influence reproductive success of Atlantic herring. *Mar Ecol Prog Ser* 00: 000-000. DOI: 10.3354/meps12680
- A108. Blanco E, Reglero P, Ortega A, de la Gandara F, **Folkvord** A (2018) Size-selective mortality during the piscivorous stage of laboratory-reared Atlantic bluefin tuna larvae as inferred from otolith microstructure analysis. *J Exp Mar Biol Ecol* 59:36-43. DOI: 10.1016/j.jembe.2018.08.009
- A107. Salvanes AGV, Christiansen H, Seivåg ML, Taha Y, Henseler C, Kjesbu OS, **Folkvord** A, Utne Palm AC, Currie B, Ekau W, Van der Plas A, Gibbons MJ (2018) Variation in growth, morphology and reproduction of the bearded goby (*Sufflogobius bibarbatus*) in hypoxic waters of northern Benguela. *J Mar Syst* 188:81-97. DOI: 10.1016/j.jmarsys.2018.04.003
- A106. Reglero P, Blanco E, Alemany F, Ferrá C, Alvarez-Berastegui D, Ortega A, de la Gándara F, Aparicio A, **Folkvord** A (2018) Vertical distribution of Atlantic bluefin tuna (*Thunnus thynnus*) and bonito (*Sarda sarda*) larvae is related to temperature preference. *Mar Ecol Prog Ser* 594:231-243. DOI: 10.3354/meps12516
- A105. Berg F, Almeland J, Skadal A, Slotte L, Andersson L, **Folkvord** A (2017) Biological and otolith shape data for a parental generation and their subsequent F1-generation of Atlantic/Baltic herring. *PloS one*. e0190995.
- A104. **Folkvord** A, Koedijk R, Grahl-Nielsen O, Meier S, Olsen BR, Blom G, Otterlei E, Imsland A (2017) You are what you eat? Differences in lipid composition of cod larvae reared on natural zooplankton and enriched rotifers. *Aquacult Nutr* 24:224-235. DOI: 10.1111/anu.12550
- A103. Feng C, Petterson M, Lamichhaney S, Rubin CJ, Rafati N, Casini M, **Folkvord** A, Andersson L (2017) Moderate nucleotide diversity in the Atlantic herring is associated with a low mutation rate. *eLife*, DOI: 10.7554/eLife.23907.
- A102. Berg F, Husebø Å, Godiksen JA, Slotte A, **Folkvord** A (2017) Spawning time of Atlantic herring (*Clupea harengus*) populations with a restricted area reflects their otolith growth at the larval stage. *Fish Res* 194: 68-75. DOI: 10.1016/j.fishres.2017.05.009
- A101. Irgens C, Kjesbu OS, **Folkvord** A (2017) Ontogenetic development of otolith shape during settlement of juvenile Barents Sea cod (*Gadus morhua*). *ICES J Mar Sci* 74: 2389–2397. DOI: 10.1093/icesjms/fsx088.
- A100. Blanco E, Reglero P, Ortega A, Gándara F, Fiksen Ø, **Folkvord** A (2017) The effects of light, darkness and intermittent feeding on the growth and survival of reared Atlantic bonito and Atlantic bluefin tuna larvae. *Aquaculture* 479:333-339, DOI: 10.1016/j.aquaculture.2017.05.020

- A99. Martinez Barrio, A., Lamichhaney, S., Fan, G., Rafati, N., Pettersson, M., Zhang, H., Dainat, J., Ekman, D., Höppner, M., Jern, P., Martin, M., Nystedt, B., Liu, X., Chen, W., Liang, X., Shi, C., Fu, Y., Ma, K., Zhan, X., Feng, C., Gustafson, U., Rubin, C.-J., Sällman Almén, M., Blass, M., Casini, M., **Folkvord**, A., Laikre, L., Ryman, N., Ming-Yuen Lee, S., Xu, X. & Andersson, L. (2016) The genetic basis for ecological adaptation of the Atlantic herring revealed by genome sequencing. *eLife*, **5**, e12081.
- A98. **Folkvord** A, KW Vollset, IA Catalán, (2016). Differences in growth and survival between cod and herring early stages co-reared at variable prey concentrations. *Journal of Fish Biology*. 87: 1176-1190. DOI: 10.1111/jfb.12783
- A97. **Folkvord** A, G Gundersen, J Albretsen, L Asplin, S Kaartvedt, J Giske, (2016). Impact of hatch-date on early life growth and survival of Mueller's pearlside (*Maurollicus muelleri*) larvae, and life history consequences. *Canadian Journal of Fisheries and Aquatic Sciences*. 73: 163-176. DOI: 10.1139/cjfas-2015-0040
- A94. Jung K-M, A **Folkvord**, OS Kjesbu, S Sundby, 2014. Experimental parameterisation of principal physics in buoyancy variations of marine teleost eggs. *PloS one*. 9, e104089.
- A91. **Folkvord**, A., Jørgensen, C., Korsbrekke, K., Nash, R. D. M., Nilsen, T. and Skjæraasen, J. E. (2014) Trade-offs between growth and reproduction in wild Atlantic cod. *Canadian Journal of Fisheries and Aquatic Sciences* 71: 1106-1112.. DOI: 10.1139/cjfas-2013-0600
- A89. Vollset, K. W., Catalán, I. A., Fiksen, Ø. and **Folkvord**, A. (2013) Effect of food deprivation on distribution of larval and early juvenile cod in experimental vertical temperature and light gradients. *Marine Ecology Progress Series* 475: 191-201. DOI: 10.3354/meps10129
- A83. Jung K.M., A. **Folkvord**, O.S. Kjesbu, A.L. Agnalt, A.Thorsen & S. Sundby (2012) Egg buoyancy variability in local populations of Atlantic cod (*Gadus morhua*). *Marine Biology* 159: 1969-1980.
- A82. Ferreira, S., E.K. Stenevik, K.W. Vollset, R. Korneliussen & A. **Folkvord** (2012). Vertical migration of Norwegian spring-spawning herring larvae in relation to predator and prey distribution. *Marine Biology* 8:605-614.
- A80. Frommel, A.Y., R.H. Maneja, D.M. Lowe, A. Malzahn, A. Geffen, A. **Folkvord**, U. Piatkowski, T. Reusch & C. Clemmesen. (2012). Ocean acidification effects on larvae of a commercially important fish species, Atlantic cod (*Gadus morhua*). *Nature Climate Change*. 2: 42-46.
- A79. Koedijk R., Imsland A.K., **Folkvord** A., Stefansson S.O., Jonassen T.M. & A. Foss (2012) Larval rearing environment influences the physiological adaptation in juvenile Atlantic cod, *Gadus morhua*. *Aquaculture International* 20: 467–479.
- A78. Catalan, I. A., K.W. Vollset, B. Morales-Nin & A. **Folkvord**. (2011). The effect of temperature gradients and stomach fullness on the vertical distribution of larval herring in experimental columns. *Journal of Experimental Marine Biology and Ecology* 404: 26-32.
- A76. Vollset K.W., A. **Folkvord** & H.I. Browman (2011). Foraging behaviour of larval cod (*Gadus morhua*) at low light intensities *Marine Biology* 158: 1125-1133
- A74. Meier S, H.C. Morton, G. Nyhammer, B.E. Grøsvik, V. Makhotin, A. Geffen, S. Boitsov, K.A. Kvestad, A. Bohne-Kjersem, A. Goksøyr, A. **Folkvord**, J. Klungøy & A. Svardal (2010) Development of Atlantic cod (*Gadus morhua*) exposed to produced water during early life stages. Effects on embryos, larvae, and juvenile fish. *Marine Environmental Research* 70: 383-394
- A73. **Folkvord** A, Koedijk R, Lokøy V & Imsland AK (2010) Timing and selectivity of mortality in reared Atlantic cod revealed by otolith analysis. *Environmental Biology of Fishes* 89: 513-519.