

ANNE BERIT SKIFTESVIK

CURRICULUM VITAE

Place of Birth: Bergen, Norway
Citizenship: Norwegian

Home Address

Fiskarhaugane 2
N-5215 Lysekloster
NORWAY
Tel. 47 56 30 92 85

Work Address

Institute of Marine Research
Austevoll Research Station
N-5392 Storebø, Norway
Tel. 47 91187639; Fax. 47 56 18 22 22
Email: anne.berit.skiftesvik@imr.no
Internet: <http://www.fishlarvae.com>

EDUCATION

1996 - Dr. scient. Aquaculture, University of Bergen
1984 - Cand. real. Masters of Science in Ecology, University of Bergen

CURRENT POSITION

Senior Scientist (1110 Forsker), Institute of Marine Research, Austevoll Research Station, Ecosystem Processes Group

CURRENT RESEARCH PROJECTS

- 2011-2014: Fine-scale interactions in the plankton: Empirical observations to parameterize trophodynamic models
- 2010-2014: Effects of climate change on the *Calanus* complex (ECCO)
- 2008-2011: Cascading effects of climate change and UV envirottoxins on the nutritional quality of the food base in marine ecosystems
- 2010 -2013: 36th Annual Larval Fish Conference, Bergen
- 2010-2012: Effect of ocean acidification on *Calanus finmarchicus*, northern krill and fish larvae
- 2009 - 2011: Developing a trap for the control of salmon lice
- 2010 – 2012: Sustainable fishery of goldsinny wrasse at Smøla
- 2010 – 2012: Optimized production, nutrition and use of the cleaner fish Ballan wrasse (*Labrus bergylta*)
- 2011-2013: LeppeProd
- 2011-2013: Stocks and exploitation (wrasse)
- 2011- : Management of wrasse stocks

RESEARCH INTERESTS

- Zooplankton and ichthyoplankton behaviour and ecology
- Cleanerfish culture and sustainability and their use on salmon farms
- Sensory ecology
- Host-finding in fish parasites
- Effects of ocean acidification on the early life stages of marine organisms
- Effects of solar ultraviolet radiation on aquatic organisms and ecosystems

FINANCIAL SUPPORT OF RESEARCH PROJECTS AND SCHOLARLY ACTIVITIES

- 1984-1985: Researcher attached to numerous projects, for example, "Behaviour of turbot larvae" and "Intensive culture of halibut juveniles", Research Council of Norway
- 1985-1989: Project Leader, "Behaviour of marine fish larvae", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 1990-1992: Project Leader, "Optimization of the culture environment for marine fish larvae", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 1991-1993: Researcher, "Ongrowing of Atlantic halibut", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 1993-1994: Project Leader, "Behavioural tools to identify sick fish larvae in intensive culture situations", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 1993-1994: Researcher, "Ecologically based halibut production", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 1993-1994: Researcher "Pilot scale production of Atlantic cod", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 1995: Project Leader, "Optimizing catch efficiency of traps for European eel and wrasse", Institute of Marine Research, Austevoll Aquaculture Research Station, Fishery Directorate
- 1996-1997: Researcher, "Recruitment processes in cod and haddock", Institute of Marine Research, Austevoll Aquaculture Research Station, EU Project
- 1997-1998, Project Leader, "Pilot project for intensive culture of European hake", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 1997-1999: Project Leader, "Wrasse: ecological effect of fishing", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 1997: Project Leader, "Ballan wrasse and "Quality of cod larvae", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway, Internal funding
- 1998-1999: Project Leader, "Intensive culture of ballan wrasse" and "Ballan wrasse 2000", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 1998-1999: Researcher, "Microparticulate feeds for marine fish larvae" and "Key factors in the spread of salmon lice", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 2000: Project Leader, "Eye migration and pigmentation of halibut juveniles related to nutrition", Institute of Marine Research, Austevoll Aquaculture Research Station, Internal funding
- 2000-2002: Project Leader, "Sensory biology and behaviour studies of salmon lice", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 2001-2003: Researcher, "The effect of environmental factors on viability of great scallop larvae: assessment of feeding and behaviour", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 2002-2004: Project Leader, "Domestication of marine species Institute of Marine Research, Austevoll Aquaculture Research Station, Internal funding
- 2002-2003: "Larval Fish Conference", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 2002-2004: Researcher, "The role of olfaction in the foraging and prey search behaviour of marine fish larvae", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 2003-2005, Researcher, "The sensory biology of host detection in the parasitic salmon louse, *Lepeophtheirus salmonis*: electrophysiological and behavioural investigations", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 2002-2006: Project Leader, "Development of vaccines and vaccine strategies for marine fish in aquaculture", Institute of Marine Research, Austevoll Aquaculture Research Station, Intervet Norbio
- 2003-2006: Project Leader, "Intensive culture of ballan wrasse", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 2004-2008: Researcher, "Magnetoreception and magnetic compass orientation in the long distance migration of the European eel", Institute of Marine Research, Austevoll Research Station, Research Council of Norway
- 2006-2007, Researcher, "Developing a trap for the control of salmon lice: A proof of concept project", Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway

- 2007 – 2009: Project Leader, “Development of aquaculture and use of ballan wrasse for the continuous control of sea lice in salmon farms”, Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 2006-2010: Researcher, “Sensory biology and behaviour in the early life stages of marine organisms”, Institute of Marine Research, Austevoll Aquaculture Research Station, Internal funding
- 2004-2010: Researcher, “Magnetoreception and magnetic compass orientation in the long distance migration of the European eel”, Institute of Marine Research, Austevoll Aquaculture Research Station, Research Council of Norway
- 2009-2009: Researcher, Developing a trap for the control of salmon lice”, Institute of Marine Research, Austevoll Research Station, Research Council of Norway
- 2008-2011: Researcher, “Cascading effects of climate change and UV envirottoxins on the nutritional quality of the food base in marine ecosystems”, Institute of Marine Research, Austevoll Research Station, Research Council of Norway
- 2010 – 2012: Project Leader at HI for “Sustainable fishery of goldsinny wrasse at Smøla”, Certifiable sustainability, “Skattefunn” project
- 2010 – 2012: “ Optimized production, nutrition and use of the cleaner fish Ballan Wrasse (*Labrus bergylta*), Research Council of Norway.
- 2011-2013 Project Leader HI part “LeppeProd”, The Fishery and Aquaculture Industry Research Fund
- 2011-2013 Project Leader “Stocks and exploitation”, The Fishery and Aquaculture Industry Research Fund
- 2011 - : Project Leader, “Management of wrasse stocks”, Institute of Marine Research

PUBLICATIONS

Publications in peer-reviewed outlets

- Browman, H.I. & **A.B. Skiftesvik** (2011) Welfare in aquatic organisms - is there some faith-based HARKing going on here? *Diseases of Aquatic Organisms* (in press).
- Cloutier, R., J. Lambrey de Souza, H.I. Browman & **A.B. Skiftesvik** (2011) Early ontogeny of the Atlantic halibut (*Hippoglossus hippoglossus*) head. *Journal of Fish Biology* 78: 1035-1053.
- Muncaster, E.Andersson, O. S. Kjesbu', G. L. Taranger, **A.B. Skiftesvik** and B. Norberg (2010) The reproductive cycle of female Ballan wrasse *Labrus bergylta* in high latitude, temperate waters S. *Journal of Fish Biology* 77: 494-511
- Abrahamsen, M.B., H.I. Browman, D.M. Fields & **A.B. Skiftesvik** (2010) The three-dimensional prey field of the northern krill, *Meganyctiphanes norvegica*, and the escape responses of their copepod prey. *Marine Biology*. 157: 1251-1258.
- Arts, M.T., H.I. Browman, E.I. Jokinen & **A.B. Skiftesvik** (2010) Effects of UV radiation and diet on polyunsaturated fatty acids in the skin, ocular tissue and dorsal muscle of Atlantic salmon (*Salmo salar*) held in outdoor rearing tanks. *Photochemistry and Photobiology* 86: 909-919.
- Browman, H.I. & **A.B. Skiftesvik** (Eds.) (2007) Disentangling the moral, ethical, philosophical, social, cultural, political and scientific aspects of “welfare” in aquatic organisms. *Diseases of Aquatic Organisms*, Special Issue 72 (2).
- Bjelland, R.M. & **A.B. Skiftesvik** (2006) Larval development in European hake (*Merluccius merluccius* L.) reared in a semi-intensive culture system. *Aquaculture Research* 37(11):1117-1129.
- Browman, H.I., **A.B. Skiftesvik** & P. Kuhn. (2006) The relationship between ultraviolet and polarized light and growth rate in the early larval stages of turbot (*Scophthalmus maximus*), Atlantic cod (*Gadus morhua*) and Atlantic herring (*Clupea harengus*) reared in intensive culture conditions. *Aquaculture* 256(1-4):296-301.
- Skiftesvik, A.B.** & Bjelland, R.M. (2004). Hake. In: *Culture of Cold-Water Marine Fish* (ed. By Moksness, E., Kjørsvik, E. & Olsen, Y.), Blackwell Publishing, pp.451-454.
- Galbraith, P., H.I. Browman, R.G. Racca, **A.B. Skiftesvik** & J.-F. St-Pierre (2004) The effect of turbulence on the energetics of foraging in Atlantic cod (*Gadus morhua*) larvae *Marine Ecology Progress Series* 281: 241-257.
- Browman, H.I. & **A.B. Skiftesvik** (Editors) (2003) The Big Fish Bang. Proceedings of the 26th Annual Larval Fish Conference.

- Skiftesvik, A.B.**, H.I. Browman & J.-F. St-Pierre (2003) Life in green water: the effect of microalgae on the behaviour of Atlantic cod (*Gadus morhua*) larvae, pp: 97-103, In: H.I. Browman and A.B. Skiftesvik (Eds.). *The Big Fish Bang. Proceedings of the 26th Annual Larval Fish Conference*.
- Browman, H.I., J.-F. St-Pierre, **A.B. Skiftesvik** & R.G. Racca (2003) Behaviour of Atlantic cod (*Gadus morhua*) larvae: an attempt to link maternal condition with larval quality, pp: 71-95, In: H.I. Browman and A.B. Skiftesvik (Eds.). *The Big Fish Bang. Proceedings of the 26th Annual Larval Fish Conference*.
- Karlsen, Ø. **Skiftesvik, A.B.** & J.V. Helvik (1998). The effect of light on activity and growth of halibut (*Hippoglossus hippoglossus*) yolk sac larvae. *Aquaculture Research* 29: 899-911
- Opstad, I., Bergh, Ø. & **A.B. Skiftesvik**. (1998). Large-scale rearing of halibut (*Hippoglossus hippoglossus* L.) yolk sac larvae: Effects of flow rate on growth, survival and accumulation of bacteria. *Aquaculture Research* 29: 893-898
- Bergh, Ø., Hjeltnes, B. & **A.B. Skiftesvik**. (1997). Experimental infection of yolk sac larvae of turbot, *Scophthalmus maximus*, and halibut, *Hippoglossus hippoglossus*, with *Aeromonas salmonicida* subsp. *salmonicida*. *Diseases of Aquatic Organisms*:29:13-20
- Browman, H.I. & **Skiftesvik, A.B.** (1996). The effects of turbulence on the predation cycle of fish larvae: comments on some of the issues. *Mar. Ecol. Prog. Ser.* 139: 309-312
- Skiftesvik, A.B.**, Boxaspen, K. & A. Parsons. (1996). Preliminary breeding trials of wrasse in an intensive system. pp. 136-141 In: 'Wrasse: Biology and Use in Aquaculture' (eds: Sayer, M.D.J., Treasurer, J.W. and M.J. Costello). University Press, Cambridge.
- Skiftesvik, A.B.** (1994). Impact of physical environment on the behaviour of cod larvae. *ICES mar. Sci. Symp.*, 198: 646-653.
- Skiftesvik, A.B.**, Bergh, Ø. & I. Opstad. (1994). Activity and swimming speed at time of first feeding of halibut (*Hippoglossus hippoglossus* L.) larvae. *J. Fish Biol.*, 45: 349-351
- Skiftesvik, A.B.** & Ø. Bergh. (1993). Changes in behaviour of halibut (*Hippoglossus hippoglossus* L.) and turbot (*Scophthalmus maximus* L.) yolk sac larvae induced by bacterial infections. *Can. J. Fish. Aquat. Sci.*, 50: 2552-2557
- Skiftesvik, A.B.** (1992). Changes in behaviour at onset of exogenous feeding in marine fish larvae. *Can. J. Fish. Aquat. Sci.* 49: 1570-1572
- Bergh, Ø., G.H. Hansen, A. Jelmert, **A.B. Skiftesvik** & R.E. Taxt. (1991). Bacterial diseases of eggs and yolk sac larvae of halibut (*Hippoglossus hippoglossus* L.). In: P. Lavens, P. Sorgeloos, E. Jaspers & F. Ollevier (red.) *European Aquaculture Society, Special Publication No. 15: 389-391*, Ghent, Belgium 1991.
- Huse, I. & **Skiftesvik, A.B.** (1990). A PC - aided video based system for behaviour observation of fish larvae and small aquatic invertebrates. *Aquacultural Engineering* 9: 131-142
- Pittman, K., Bergh, Ø., Opstad, I., **Skiftesvik, A.B.**, Skjolddal, L. & Strand, H. (1990). Development of eggs and yolk sac larvae of halibut (*Hippoglossus hippoglossus* L.). *J. Appl. Ichthyol.* 6: 142-160
- Pittman, K., **Skiftesvik, A.B.** & Berg, L. (1990). Morphological and behavioural development of halibut *Hippoglossus hippoglossus* L. larvae. *J. Fish Biol.* Vol. 37, No. 3: 455-474
- Pittman, K., **A.B. Skiftesvik** & T. Harboe. (1989). Effect of temperature on growth rates and organogenesis in the yolk sac larvae of halibut (*Hippoglossus hippoglossus* L.). -Rapp. P.-v. Reun. Cons. int. Explor. Mer, 191: 421-430
- Skiftesvik, A.B.** & I. Huse. (1987). Behaviour studies of cod larvae, *Gadus morhua* L. *Sarsia* 72: 367-368

Submitted for publication

- Durif, C.M.F., J. Phillips, **A.B. Skiftesvik**, L.A. Vøllestad, H.H. Stockhausen & H.I. Browman. Learned magnetic compass orientation in red-listed European eel. *Nature*.
- Browman, H.I., J. Yen, J.-F. St-Pierre, D.M. Fields & **A.B. Skiftesvik**. Fine-scale observations of predation on Atlantic cod (*Gadus morhua*) larvae by the carnivorous copepod *Paraeuchaeta norvegica*. *Marine Biology*.
- Fields, D.M., C.M.F. Durif, R.M. Bjelland, S.D. Shema, **A.B. Skiftesvik** & H.I. Browman. Grazing Rates of *Calanus finmarchicus* on *Thalassiosira weissflogii* Cultured under Different Levels of Ultraviolet Radiation. *PLoS ONE*
- Bjelland, R.M., Opstad, O., **Skiftesvik, A.B.** & H.I. Browman. Comparison of behaviour, growth and gut enzyme activity in the early life stages of cod (*Gadus morhua* L.) and haddock (*Melanogrammus aeglefinus* L.). *PLoS ONE*

In manuscript

- Skiftesvik, A.B.**, Durif, C.M.F., Bjelland R.M. Demographics of wild populations of four species of wrasse in Western Norway.
- Fields, D.M., H.I. Browman, **A.B. Skiftesvik** & S. Shema. Effect of light intensity on the escape response of *Calanus sp.* *Journal of Experimental Marine Biology and Ecology*.

Publications in preparation

- Arts, M.T., H.I. Browman, E.I. Jokinen & **A.B. Skiftesvik**. Effects of UV radiation and temperature on polyunsaturated fatty acids in the skin, ocular tissue and dorsal muscle of Atlantic salmon (*Salmo salar*) held in outdoor rearing tanks.
- Bjelland, R.M., **Skiftesvik, A.B.** & H.I. Browman Behavioural responses of larval cod (*Gadus morhua* L.) and haddock (*Melanogrammus aeglefinus* L.) to odours.
- Browman, H.I., R.C. Chambers & **A.B. Skiftesvik**. Search strategy and foraging behaviour in young-of-the-year Atlantic lumpfish (*Cyclopterus lumpus* L.).
- Browman, H.I., D. Lewis, P. Galbraith & **A.B. Skiftesvik**. Revisiting the core assumptions underlying the conclusion that small scale turbulence is beneficial to fish larvae.
- Browman, H.I., **A.B. Skiftesvik** & N.T. Hagen. The BS Factor: a new bibliometric indicator.
- Browman, H.I. & **A.B. Skiftesvik**. Foraging and prey search pattern in Atlantic herring (*Clupea harengus*) larvae: A re-interpretation of the cruise searcher characterization.
- Browman, H.I., Y. Fukunishi, D.M. Fields & **A.B. Skiftesvik**. Invertebrate predation on fish larvae.
- Browman, H.I., D.M. Fields, C.M.F. Durif, M.T. Arts, R. Sommaruga, **A.B. Skiftesvik**, R.M. Bjelland, S. Shema & Q. Browne. Indirect effect of UV radiation – through microalgae - on copepods.
- Browman, H.I., D.M. Fields, C.M.F. Durif, M.T. Arts, R. Sommaruga, **A.B. Skiftesvik**, R.M. Bjelland, S. Shema & Q. Browne. Indirect effect of UV radiation on fish larvae – a trophic cascade from algae through zooplankton.
- Fields, D.M., H.I. Browman & **A.B. Skiftesvik**. Behavioural responses of infective-stage copepodids of the salmon louse (*Lepeoptheirus salmonis*) to host- and non-host-related sensory cues.
- Opstad, I., D.M. Fields, H.I. Browman, **A.B. Skiftesvik**, & S. Shema. Effect of seismic air gun shooting on *Calanus finmarchicus*. *ICES Journal of Marine Science*.
- Skiftesvik, A.B.**, Ø. Bergh & H.I. Browman. The unknown impact of disease on natural mortality in the early life history stages of fishes.

Institutional Reports

- Skiftesvik, A.B.** og C.Durif (2011). Kva vet vi om bestander av leppefisk? , pp. 67-68 in: Agnalt, A.-L., Fossum, P., Hauge, M., Mangor-Jensen, A., Ottersen, G., Røttingen, I., Sundet, J.H. og Sunnset, B.H. (eds) 2011. Haforskningsrapporten 2011. Fisken og havet, særnr. 1-2011
- Espeland, S.H., Nedreaas, K., Mortensen, S., **Skiftesvik, A.B.**, Agnalt, A.-L., Durif, C., Harkestad, L.S., Karlsbakk, E., Knutsen, H., Thangstad, T., Jørstad, K., Bjordal, Å., Gjørseter, J. (2010). Kunnskapsstatus leppefisk – utfordringer i et økende fiskeri. Fisken og havet, særnr. 7-2010
- Skiftesvik, A.B.** (2010) Ål (Europeisk), p.160 in: Gjørseter H.Haug, T., Hauge, M., Karlsen, Ø., Røttingen, I., Skilbrei, O., Sunnset, B.H. (eds) 2011. Haforskningsrapporten 2010. Fisken og havet, særnr. 1-2010
- Skiftesvik, A.B.**, Durif, C. M. F. (2009) Europeisk ål - European Eel, in :. Agnalt, A.-L., Bakketeig, I. E.Haug, T., Knutsen, J. A., Opstad, I. (Eds.) Kyst og havbruk 2009, pp. 97-98
- Gjørseter, J., **Skiftesvik, A.B.** (2009). Leppefisk-Wrasse In Agnalt, A.-L., Bakketeig, I. E.Haug, T., Knutsen, J. A., Opstad, I. (Eds.) Kyst og havbruk 2009, pp. 120-121
- Dalen, J., J.M. Hovem, H.E. Karlsen, P.H. Kvasdheim, S. Løkkeborg, R. Mjelde, A. Pedersen & **A.B. Skiftesvik**. (2008). **Kunnskapsstatus og forskningsbehov med hensyn til skremmeeffekter og skadevirkninger av seismiske lydbølger på fisk og sjøpattedyr**. Rapport til Oljedirektoratet, Fiskeridirektoratet og Statens Forurensningstilsyn fra spesielt nedsatt forskergruppe. 61 p.
- Durif C.M.F., **Skiftesvik A.B.**, (2008). Europeisk ål. In: Boxapen K., Dahl E., Gjørseter J., Sunnset B.H. (Eds.) Kyst og havbruk 2008, Fisken og havet, pp. 86-87.
- Durif C.M.F., **Skiftesvik A.B.**, et al. (2008). Forvaltning av ål i Norge. Rapport med forslag til revidert forvaltning av ål i saltvann fra arbeidsgruppe nedsatt av Fiskeridirektoren.

- Durif, C., **Skiftesvik, A.B.** (2007). Europeisk ål. Pp. 88-89 i: Dahl, E., P.K. Hansen, T. Haug & Ø. Karlsen (Eds.) Kyst og Havbruk 2007. Fisken og havet, særnummer 2-2007. Havforskningsinstituttet, Bergen.
- Skiftesvik, A. B.**, Durif, C., Knutsen, J.A. (2006). Kapittel 2. 2.5 Europeisk ål. Pp. 75-76 i: Svåsand, T., Boxaspen, K., Dahl, E., Jørgensen, L.L. (Eds.) Kyst og havbruk 2006. Fisken og havet, særnr. 2-2006.
- Durif, C., **Skiftesvik, A.B.** (2005). Europeisk ål. Pp. 55 i: Boxaspen, K., Agnalt, A.L., Gjøsæter, J., Jørgensen, L.L., Skiftesvik, A.B. (Eds.) Kyst og Havbruk 2005. Fisken og havet, særnummer 2-2005. Havforskningsinstituttet, Bergen..
- Anne Berit Skiftesvik**, Ørjan Karlsen, Ingegjerd Opstad Ole J. Torrissen (2003). Vitenskapelig grunnlag for nye arter i oppdrett. Scientific evaluation of potential new species in Norwegian aquaculture. Fisken og havet: 6-2003, 65 sider
- Skiftesvik, A.B.** og Ø.Karlsen (1997). Effektivisering av rusefiske med bruk av rist i inngangen-oppfølgingsprosjekt. Havforskningsinstituttet. 9 p.
- Korsøen, E., **Skiftesvik, A.B.** og van der Meeren, G.I. (1995). Effektivisering av rusefiske ved bruk av sperrerist i ruseinngangen. Interne notat nr. 11 - 1995, 17 sider.
- Holm, J.C., Hennø, J.S., Karlsen, Ø., **Skiftesvik, A.B.** og I.J. Huse (1993). Matfiskoppdrett av kveite. Faglig sluttrapport til Stolt Sea Farm over delaktiviteter utført i regi av Havforskningsinstituttet Austevoll havbruksstasjon.
- Skiftesvik, A.B.**, Bergh, Ø. og O.M. Rødseth. (1993). Atferdsbasert detektering og utsortering av syke fiskelarver i oppdrett. Fremdriftsrapport for NFFR- prosjekt nr. 1401-701.424
- Opstad, I., Berg, Ø. og **A.B. Skiftesvik**. (1993). Økologisk basert kveiteyngelproduksjon. (NFFR nr. 1501 - 701.378). Framdriftsrapport 30.06.93
- Skiftesvik, A.B.** og J.C. Holm. (1993). Miljøoptimalisering for marine fiskelarver i oppdrett. Sluttrapport for NFFR-prosjekt nr. 1501.701.299. Havforskningsinstituttet, Rapport fra Senter for havbruk 1993, Nr. 14
- Skiftesvik, A.B.** og J.C. Holm. (1992). Miljøoptimalisering for marine fiskelarver i oppdrett. Havforskningsinst. Rapp. Ser. 14/1992/HSH/AH
- Skiftesvik, A.B.** og J.C. Holm. (1991). Miljøoptimalisering for marine fiskelarver i oppdrett. Havforskningsinst. Rapp. Ser. 11/1991/HSH/AH
- Skiftesvik, A.B.** og J.C. Holm. (1991). Miljøoptimalisering for marine fiskelarver i oppdrett. Havforskningsinst. Rapp. Ser. 28/1991/HSH/AH
- Skiftesvik, A.B.** Plommeseklarvens aktivitet og atferd. I rapport/notat nr. Akva 8806: Oppdrett av kveite (*Hippoglossus hippoglossus* L.). (red) Ivar Rønnestad, 1988.
- Skiftesvik, A.B.** (1988). Atferdsstudier på torskelarver i akvarium. Miniseminar om torskeatferd ved Fiskeridirektoratets Havforskningsinstitutt, Bergen, 31 august 1987. Utgitt ved Havforskningsinstituttet, november 1988.

ICES Reports

- Skiftesvik, A.B.** (1993). Impact of the physical environment on the behaviour of cod larvae. ICES 1993 Symposium on Cod and Climate Change, August 1993, Reykjavik, Paper No. 51
- Solemdal, P., Bergh, Ø., Dahle, G., Falk-Petersen, I.B., Fyhn, H.J., Grahl-Nielsen, Haaland, J.M., Kjesbu, O.S., Kjørsvik, E., Løken, S., Opstad, I., Pedersen, T., **Skiftesvik, A.B.** & A. Thorsen. (1993). Size of Spawning Arcto-Norwegian cod (*Gadus morhua* L.) and the effects on their eggs and early larvae. C.M. 1993/G:41
- Solemdal, P., Bergh, Ø., Finn, R.N., Fyhn, H.J., Grahl-Nielsen, O., Homme, O., Kjesbu, O.S., Kjørsvik, E., Opstad, I. & **Skiftesvik, A.B.** (1992). The effects of maternal status of Arcto-Norwegian cod on egg quality and viability of early larvae. II. Preliminary results of the experiment in 1992. ICES C.M. 1992/G:79
- Solemdal, P., Kjesbu, O.S., Opstad, I., **Skiftesvik, A.B.**, Birkeland, R., Bratland, P. & Fonn, M. (1991). A comparison of egg quality and larval viability between cultured coastal cod and wild Arcto-Norwegian cod. ICES. C.M. 1991/F:41
- Skiftesvik, A.B.**, Opstad, I., Bergh, Ø., Pittman, K. & Skjoldal, L.H. (1990). Effect of light on development, activity and mortality of halibut (*Hippoglossus hippoglossus* L.) yolk sac larvae. I.C.E.S. C.M. 1990/F:43
- Bergh, Ø., I. Opstad, K. Pittman, **A.B. Skiftesvik**, L. Skjoldal, H. Strand & V. Vanthuyne. (1989). Preliminary report on the effects of temperature on the development of eggs and larvae of halibut

(*Hippoglossus hippoglossus*) and on the bacterial population in the incubators. ICES C.M. 1989/F:19

Pittman, K., **A.B. Skiftesvik** & T. Harboe. (1988). Effect of temperature on growth rates and organogenesis in the yolksac larvae of halibut (*Hippoglossus hippoglossus* L.). ICES Symposium on the Early Life History of Fish, October 1988, Bergen, Paper 95

Mangor-Jensen, A., A. Jelmert, K.E. Naas, T. Harboe & **A.B. Skiftesvik**. (1987). A biotest system for optimization of environmental parameters for production of halibut fry. ICES C.M. 1987/F:21

Huse, I. & **A.B. Skiftesvik**. (1985). Qualitative and quantitative behaviour studies in starving and feeding turbot (*Scophthalmus maximus* L.) larvae. ICES C.M. 1985/F:38

Theses and dissertations

Skiftesvik, A.B. (1996). The effects of ontogenetic state, light, and bacterial infection on the developmental trajectory of activity and behaviour in three species of marine fish larvae: aquacultural and ecological perspectives. Dr. Scient degree Synopsis, UiB. ISBN 82-7744-024-3

Skiftesvik, A.B. (1984). Rekruttering, mengd, aldersamansetting og vandringsmønster hos ål (*Anguilla anguilla* L.) i Kvernvatn". Hovedfagsoppgave ved Zoologisk Museum, UiB.

POPULARIZING OF RESEARCH AND OUTREACH

Promotional posters (commissioned and/or designed)

[26th Annual Larval Fish Conference](#)

[36th Annual Larval Fish Conference](#)

[The Future is Coming at You](#)

[Gadus morhua Forever](#)

[IMR-Austevoll 25th Anniversary](#)

[Theme image for the Early Life History Section of the American Fisheries Society](#)

Popular articles about our research

Skiftesvik, A.B., Opstad, I., Kvenseth, P.G., Bjelland, R (2011) Oppdrett av berggylte. Norsk Fiskeoppdrett. Mai 2011. Særnr. Om leppefisk

Kvenseth, P.G., **Skiftesvik, A.B.**, Solgård, J. (2005). Rensefisk i oppdrettsnæringen (RIO): Arbeidsmøte leppefisk 2004. Norsk Fiskeoppdrett nr. 1, 2005 p.51

Kvenseth, P.G., **Skiftesvik, A.B.**, Solgård, J. (2004). Rensefisk i oppdrettsnæringen (RIO): Arbeidsmøte leppefisk 2004. Norsk Fiskeoppdrett nr. 11, 2004 pp. 50-51

Skiftesvik, A.B. og Bjelland, R.M.(2003). Oppdrett av berggylte (*Labrus berggylta*). Norsk Fiskeoppdrett nr. 8, mai 2003: s. 36-39

Skiftesvik, A.B., Bjelland, R. og A.G Birkeland Hatlevik. (1999). Oppdrett av berggylte. Norsk Fiskeoppdrett 8

Bergh, Ø., Opstad, I. og **Skiftesvik, A.B.** (1993). Det mikrobielle system i systemer for kveitelarver: Hva kan vi gjøre? I: D.O.Oppen-Berntsen (red.) Ny Fisk 1992-93. Norges forskningsråd. s. 26-28

Bergh, Ø., I. Opstad, **A.B. Skiftesvik**, L. Skjolddal, J.V. Helvik, K. Pittman og H. Strand. (1991). Kveiteoppdrett må utvikles med naturen som lærebok. Fiskets Gang 7/8-1991: 26-29

Skiftesvik, A.B. og J.C. Holm. (1991). Natur og kultur. Ny Fisk 91: 4-6 (ISBN 8290565-15-1).

Designing improved feeds for marine fish larvae is an article on our work (by freelance journalist Jens Kyed) appearing in the January/February 2003 issue of the trade magazine Hatchery International.

Micro-diet research held up because of lack of funding *is an article on our work (by freelance journalist Bernadette Tournay) appearing in the 1 December 2006 issue of the trade magazine Fish Farming International.*

Det ål-timate navigasjonssystemet is a popular article about our eel navigation project appearing in March 2010 in [Forskning.no](http://forskning.no) and picked up by numerous national newspapers.

Television, radio and newspaper coverage of our research

2011: Wrasse

2010: 2 intervju i Kysten.no om henholdsvis oppdrett av berggylte og om ville bestander av leppefisk,

2010: Intervju av NRK radio om ville bestander av leppefisk.

2009: Intervju i Aftenposten om ål

2009: TV: about wrasse

2008: Intervju i Adresseavisen om ål,

2004: German science documentary on aquaculture research.

2002: Skrodinger's Kat (Norwegian science show): about hake

1997: NRK radio. Naturens verden

1997. NRK «Leppefisk: Økologiske effekter av fiske og fangst».

1997: Radio Os. Intervju om leppefiskprosjektet. Juni 1997.

1997: Radio Os. Intervju om leppefiskprosjektet. September 1997.

TEACHING

Postdoctoral associates

2010 – Dr. Yuichi Fukunishi

2004 – Dr. Caroline Durif

2002 – 2004 Dr. Syed Yahiya Yacoob (currently Research Associate for a pharmaceutical company in New Zealand)

1997 – 2001 Dr. Iñigo Novales Flamarique (currently Associate Professor, Department of Biology, Simon Fraser University)

Graduate students (supervised or co-supervised)

2010 -- Rommel Maneja (Ph.D. in Biology)

2003 -- Mari Abrahamsen (Ph.D. in Biology – never completed due to long-term illness)

2001 -- Reidun Bjelland (Ph.D. in Biology)

1999 – 2002 Katrine Skajaa (Ph.D. in Fisheries and Marine Biology, currently Research Scientist with County Governor in Aust-Agder, Department of Environment Protection, Arendal, Norway)

ADVISING

- Member of the National Expert Group charged with developing a management plan for the European eel.
- Lead responsibility for generating more information on the basic biology and ecology of the wrasse species complex. That includes organizing and managing a sentinel fishery as well as sample collection by researchers. I am also leading the development of a National management plan for these species of wrasse (which are now being fished for use as cleanerfish to reduce salmon lice infestations on salmon farms).
- Member of the Expert Group to develop directives for the use of wrasses as sealice cleanerfish on salmon farms.
- Contribution to ongoing discussions in the literature on aquatic animal welfare, represented by: Browman, H.I. & A.B. SKIFTESVIK (Eds.). 2007. The welfare of aquatic organisms. Diseases of Aquatic Organisms 75(2) and Browman, H.I. & A.B. SKIFTESVIK. 2011. Welfare in aquatic organisms - is there some faith-based HARKing going on here? Diseases of Aquatic Organisms (in press).

ADMINISTRATIVE, ORGANIZING AND OTHER PROFESSIONAL EXPERIENCE

Ad hoc peer review for scholarly journals: •*Aquaculture* •*Canadian Journal of Fisheries and Aquatic Sciences* •*Diseases of Aquatic Organisms* •*Marine Biology* •*Marine Ecology Progress Series* •*PLoS ONE*

Ad hoc peer review for funding agencies: Research Council of Norway •The Scottish Aquaculture Research Forum (SARF)

07/2012: Co-organizer, 36th Annual Larval Fish Conference. Bergen, Norway. Proceedings published as a book

2008-2009: Ecosystem cruise planning committee, Institute of Marine Research

2007-2008: Negotiation Committee, Scientist Union

2006-2007: Subject Editor (welfare of aquatic organisms), *Diseases of Aquatic Organisms*

2004: External opponent for the Ph.D. defense of Agnes Cristine Gundersen, "Sexual maturity, fecundity and nursery grounds of Nordeast Arctic Greenland halibut (*Reinhardtius hippoglossoides* (W))", University of Bergen

2002: External opponent for the Ph.D. defense of Jon Gulbrandsen, "Larviculture ecology: Interaction between zooplankton and Atlantic halibut larvae in culture (*Hippoglossus hippoglossus* L.)", University of Bergen

07/2002: Co-organizer, 26th Annual Larval Fish Conference. Bergen, Norway.

2000-2007: Animal Use in Research Officer, Austevoll Research Station, Institute of Marine Research

2000-2003: Leader of the "Marine species in aquaculture" Section, Institute of Marine Research, Austevoll Research Station

2000-2003: Leader, Austevoll Research Station, Institute of Marine Research

1997-2002: Panel Member, Marine Resources and Environment Program, Research Council of Norway.

2000: Steering Committee, Akvaplan NIVA project "Evaluating the economic feasibility of the European eel fishery and possibility for aquaculture in southern Norway".

1999-2000: Leader of the "Early life stages of fish and shellfish" Program, Institute of Marine Research, Austevoll Aquaculture Research Station

1998-1999: Local Union Leader, Austevoll Research Station

1998-1999: Negotiation Committee, Scientist Union

1994-1996: Steering Committee, Mowi AS project "Eco-friendly salmon production"

1991-1993: Steering Committee, Sea Farm project "Ongrowth of halibut"

RESEARCH NETWORK (national and international)

Main Collaborators, Past and Present

Ann-Lisbeth Agnalt, Institute of Marine Research, Norway

Michael Arts, Environment Canada, Burlington, Ontario, Canada

Øivind Bergh, Institute of Marine Research, Norway

Max Bothwell, Pacific Biological Station, Nanaimo, British Columbia, Canada

Karin Boxaspen, Institute of Marine Research, Norway

Howard Browman, Institute of Marine Research, Norway

Christopher Chambers, National Marine Fisheries Service, New Jersey, USA

Richard Cloutier, University of Quebec at Rimouski, Canada

John Dalen, Institute of Marine Research, Norway

Caroline Durif, Institute of Marine Research, Norway

David Fields, Bigelow Laboratory for Ocean Sciences, Boothbay Harbor, Maine, USA

Arild Folkvord, University of Bergen, Norway

Peter Galbraith, Fisheries and Oceans Canada

Espen Grøtan, Marine Harvest Labrus, Norway

Kristin Hamre, NIFES, Norway

Synnøve Helland, NOFIMA, Norway

Bo Holmqvist, University of Lund, Sweden

Ilmari Jokinen, University of Jyväskylä, Finland

Terje Jørgensen, Institute of Marine Research, Norway

Ørjan Karlsen, Institute of Marine Research, Norway

Olav Kjesbu, Institute of Marine Research, Norway
Elin Kjørsvik, NTNU, Norway
Per Gunnar Kvenseth, VILLA Group, Norway
Ingrid Lein, NOFIMA, Norway
Ellis Loew, Cornell University, USA
Brian M. Marcotte, SAI Foundation for Research and Development, Portland, Maine, USA
Webjørn Melle, Institute of Marine Research, Norway
Stein Mortensen, Institute of Marine Research, Norway
Andreas Nordgren, NOFIMA, Norway
Inigo Novales Flamarique, Simon Fraser University, Canada
Ingegjerd Opstad, Institute of Marine Research, Norway
John Phillips, Virginia Tech. University, USA
Karin Pittman, University of Bergen, Norway
Stephane Plourde, Fisheries and Oceans Canada
Roberto Racca, Racca Scientific Consulting, Victoria, British Columbia, Canada
Jeffrey Runge, University of Maine, USA
Harri Salo, Jyväskylä University, Finland
Jean-Francois St-Pierre, Fisheries and Oceans Canada
Konstantinos Stergiou, Aristotle University of Thessaloniki, Greece
Ruben Sommaruga, University of Innsbruck, Austria
Vengatesen Thiyagarajan, University of Hong Kong
Asbjørn Vøllestad, University of Oslo, Norway
Marc Weissburg, Georgia Tech. University, USA
Jeannette Yen, State University of New York, Stony Brook, New York, USA
Gunnvor Øie, SINTEF, Norway

TECHNIQUE, INSTRUMENTATION AND INFRASTRUCTURE DEVELOPMENT

- Computer-automated three-dimensional swimming movement (tracking and path analysis) system, Institute of Marine Research-Austevoll
- Silhouette video imaging system for behavioural observations of small aquatic organisms, Institute of Marine Research-Austevoll
- Use of ultrasound to measure activity in fish larvae
- Use of multi-well dishes to evaluate developmental rate and hatching success in fish embryos

ORAL/POSTER PRESENTATIONS DELIVERED AT CONFERENCES AND MEETINGS

Skiftesvik, A.B. & I.Opstad (2011). Leppefisk hva er status og utfordringer, Ålesund April 2011
Skiftesvik, A.B. (2011). Leppefisk, biologi og bestander. Marine Harvest, Bergen 5.april 2011
Skiftesvik, A.B. (2011). Bestands, beskatning og bruk av leppefisk. Trondheim 9.februar 2011
Skiftesvik, A.B. (2011). Bestands, beskatning og bruk av leppefisk. Bergen 8.februar 2011
Skiftesvik, A.B. (2011). Oppsummering av rapport til FKD om leppefisk. Fdir. Bergen 7.februar 2011
Skiftesvik, A.B. & I. Opstad (2010.) Oppdrett av leppefisk. Fdir, 19.november 2010
Skiftesvik, A.B. & C .Durif (2010.) Bestandssituasjonen for leppefisk, ville bestander. Fdir, 19.november 2010
Browman, H.I, **Skiftesvik, A.B.** et al. (2010). Assessing the effect of ocean acidification on marine organisms. Research Seminar on Ocean Acidification, Opening Conference of the High North Research Centre on Climate and the Environment September 2010
Browman, H.I., **Skiftesvik, A.B.** et al. (2010). Assessing the effect of ocean acidification on marine organisms. Workshop on Polar, Environmental and Climate Change Research, Sino-Norwegian Cooperation to meet global challenges, Shanghai, September 2010
Skiftesvik, A.B. (2010). Culture and use of wrasses as cleanerfish for salmon lice on Atlantic salmon farms Main, USA, August 2010
Browman, H.I. & **A.B. Skiftesvik** (2010). A mechanistic perspective on the fine-scale interactions between ichthyoplankton and zooplankton. ASLO 2010 Summer Conference, Santa Fe, New Mexico, USA, June 2010

- Browman, H.I. & **A.B. Skiftesvik** (2010). Direct and indirect effects of UV radiation on the early life stages of fish and their prey in warming temperate and sub-arctic oceans. Invited talk, 34th Annual Larval Fish Conference, Santa Fe, New Mexico, USA, June 2010
- Skiftesvik, A.B.** (2010). Behavioural responses of fish larvae to pathogen challenges and starvation, "Workshop on understanding and quantifying mortality in pelagic, early life stages of marine organisms: experiments, observations and models (WKMOR), Aberdeen, Scotland, March 2010
- Browman, H.I., J. Yen, D.M. Fields, J.-f St-Pierre & **A.B. Skiftesvik** (2010). Predatory behaviour of the carnivorous copepod *Euchaeta norvegica* and escape responses of their ichthyoplankton prey (Atlantic cod, *Gadus morhua*). Understanding and quantifying mortality in pelagic, early-life stages of marine organisms: experiments, observations and models. Aberdeen, Scotland, March 2010
- Skiftesvik, A.B.** & I. Opstad (2010). Berggyllt en ny oppdrettsart? Gardemoen, 26. januar 2010
- Skiftesvik, A.B.** (2009). European eel. University of Hong Kong, November 2009
- Skiftesvik, A.B.** (2009). Wrasse University of Hong Kong, Desember 2009
- Skiftesvik, A.B.** (2009). Oppdrett av Berggyllt, hvor langt er vi kommet? Tysnes, 19. februar 2009
- Bjelland, R.M., **A.B. Skiftesvik** & H.I. Browman. (2008). Behavioural responses of larval cod (*Gadus morhua*) and haddock (*Melanogrammus aeglefinus*) to odours. 32nd Annual Larval Fish Conference, Kiel, Germany.
- Skiftesvik, A.B.** (2007). Aquaculture in Norway. Chinese Academy of Science, South China Sea Institute of Oceanology, Guangzhou, China, April 2007
- Skiftesvik, A.B.** (2007) Aquaculture in Norway. Hong Kong University of Science and Technology, April 2007
- Simon Muncaster, Eva Andersson, **Anne Berit Skiftesvik**, Ingegjerd Opstad, Geir Lasse Taranger, Birgitta Norberg. (2007). Reproduction of Ballan wrasse "8th International Symposium on Reproductive Physiology of Fish (ISRPF)" Saint-Malo, 3-8 juin 2007
- Browman, H.I. & **A.B. Skiftesvik** (2007). Unresolved issues surrounding the effect of micro-scale turbulence on the behaviour of ichthyoplankton. Euromech Colloquium. The Influence of Fluid Dynamics on the Behaviour and Distribution of Plankton, Liverpool, UK.
- Browman, H.I. & **A.B. Skiftesvik** (2006). Half-truths and myths surrounding feeding and escape behaviour in marine fish larvae. Workshop on advancements in modelling physical-biological interactions in fish early-life history: recommended practices and future directions. Nantes, France.
- Bjelland, R.M., **A.B. Skiftesvik** & H.I. Browman (2005). The effect of odours on the behaviour of cod larvae. 29th Annual Larval Fish Conference, Barcelona, Spain
- Andersen, S., **A.B. Skiftesvik** & H.I. Browman (2005). Swimming behaviour of *Pecten maximus* larvae. 15th International Pectinid Workshop. Queensland, Australia
- Galbraith, P.S., H.I. Browman, P.S. Galbraith, R. Racca, **A.B. Skiftesvik** and J.-F. St-Pierre (2004). Energetics of foraging in Atlantic cod (*Gadus morhua*) larvae: effects of micro-scale turbulence. ICES Annual Science Conference, Vigo, Spain
- Browman, H.I., J.-F. St-Pierre, **A.B. Skiftesvik** and R.G. Racca (2004). Behaviour of Atlantic cod (*Gadus morhua*) larvae: an attempt to link maternal condition with larval quality. ICES Gadoid Mariculture: Development and Future Challenges. Bergen, Norway
- Skiftesvik, A.B.**, S. Anderson and H.I. Browman (2004). The effect of environmental factors on viability of great scallop larvae: assessment of feeding and behaviour. Research Council of Norway, Aquaculture Program Conference, Oslo, Norway
- Boxaspen, K., H.I. Browman and **A.B. Skiftesvik** (2003). Behavioural changes in salmon lice (*Lepeophtheirus salmonis*) larvae in step salinity gradients and implications for infestation dynamics in fjord systems European Association of Fish Pathologists, 11th International Conference on "Diseases of Fish and Shellfish", St. Julians, Malta
- Galbraith, P.S., H.I. Browman, R. Racca; **A.B. Skiftesvik** and J.-F. St-Pierre (2003). The effect of turbulence on the energetics of foraging in fish larvae. 27th Annual Larval Fish Conference, Santa Cruz, California, USA
- Andersen, S., Browman, H., & **Skiftesvik, A.B.** (2003). Comparative studies of feeding and behaviour of great scallop (*Pecten maximus* L.) larvae. 14th International Pectinid Workshop, Florida, USA.
- Andersen, S., Browman, H., & **Skiftesvik, A.B.** (2002). Recent developments in aquaculture production of great scallop spat (*Pecten maximus*) in Norway. Aquaculture Europe, Trieste, Italy.

- Browman, Howard, **Anne Berit Skiftesvik**, Marise Bélanger & Reidun Bjelland (2002). Does ultraviolet-A and polarized light in the rearing environment affect the growth rate of marine fish larvae? Research Council of Norway Program Meeting on Marine Ecosystems, Bergen, Norway
- Browman, Howard, **Anne Berit Skiftesvik**, Bo Holmqvist, Syed Yahiya Yacoob & Reidun Bjelland. (2002). Sensory biology and behaviour in the service of aquaculture. Research Council of Norway Program Meeting on Aquaculture and Wild Salmon, Tromsø, Norway
- Browman, Howard, Karin Boxaspen, **Anne Berit Skiftesvik** & Penny Kuhn (2002). Sensory biology and behaviour studies of salmon lice nauplii and copepodids. Research Council of Norway Program Meeting on Aquaculture and Wild Salmon, Tromsø, Norway
- Browman, H.I., J.-F. St-Pierre and **A.B. Skiftesvik** (2002). Activity and prey search behaviour in Atlantic cod (*Gadus morhua*) larvae: an attempt to link indices of larval "performance" with indices of maternal condition. 26th Annual Larval Fish Conference, Bergen, Norway
- Skiftesvik, A.B.**, H.I. Browman & J.-F. St-Pierre (2002). Life in green water: the effect of algae on the foraging and prey search behaviour of Atlantic cod larvae. 26th Annual Larval Fish Conference, Bergen, Norway
- Skiftesvik, A.B.**, I. Novales Flamarique, H.I. Browman, M. Bélanger & K. Boxaspen (2002). Ontogenetic changes in visual responses of the parasitic salmon Louse, *Lepeophtheirus salmonis*, to ultraviolet and polarized light. Annual Meeting of the Society for Integrative and Comparative Biology, Anaheim, California
- Browman, H.I., I. Novales Flamarique, M. Bélanger, and **A.B. Skiftesvik** (2001). Does ultraviolet-A and polarized light in the rearing environment affect the growth rate of marine fish larvae? 25th Annual Larval Fish Conference, Sandy Hook, New Jersey, USA
- Browman, H.I., I. Novales Flamarique, M. Bélanger, K. Boxaspen & **A.B. Skiftesvik** (2001). Ontogenetic changes in visual responses of the parasitic salmon louse, *Lepeophtheirus salmonis*, The Cultivation of Salmon II, Bergen, Norway
- Skiftesvik, A.B.** (2001). Austevoll, mye mer enn kveite. Talk for The Ministry of Fisheries, April 2001
- Browman, H.I., I. Novales Flamarique, M. Bélanger, K. Boxaspen & **A.B. Skiftesvik** (2001). Ontogenetic changes in visual responses of the parasitic salmon louse, *Lepeophtheirus salmonis*, Annual Symposium of The Research Council of Norway, Trondheim, Norway
- Andersen, S., H.I. Browman & **A.B. Skiftesvik** (2001). Studies on the rearing environment for giant scallop (*Pecten maximus*). Annual Symposium of The Research Council of Norway, Trondheim, Norway
- Skiftesvik, A.B.** (2000). Kveiteyngelproduksjon. Forskningsrådets konferanse om verdiskapning basert på biologiske ressurser. Oslo 1. nov. 2000
- Bjelland, R.M. & **A.B. Skiftesvik** (2000). Lysing (*Merluccius merluccius*) – en ny art i akvakultur. Avslutningskonferanse for programmer i Norges Forskningsråd, Bergen 14.-16. februar.
- Skiftesvik, A.B.**, I. Novales Flamarique, H.I. Browman, M. Bélanger & K. Boxaspen (2000). Ontogenetic changes in visual responses of the parasitic salmon Louse, *Lepeophtheirus salmonis*, to ultraviolet and polarized light. Second Workshop on the Biology of Ultraviolet and Polarization Vision. Victoria, B.C., Canada.
- Skiftesvik, A.B.**, R.M. Bjelland & H.I. Browman (2000). Larval development and start feeding of the Ballan wrasse (*Labrus bergylta*). 24rd Larval Fish Conference. 5-10. November, Gulf Shores, Alabama,
- Bjelland, R.M. & **A.B. Skiftesvik** (2000). Developing the European hake (*Merluccius merluccius*) as a new species for aquacultural production. 24rd Larval Fish Conference. 5-10. November, Gulf Shores, Alabama.
- Skiftesvik, A.B.**, R.M. Bjelland & H.I. Browman (2000). Larval development and start feeding of the Ballan wrasse (*Labrus bergylta*). Avslutningskonferanse for programmer i Norges Forskningsråd, Bergen 14.-16. februar.
- Skiftesvik, A.B.** & H.I. Browman (1999). Prey search pattern and foraging behaviour of Atlantic herring (*Clupea harengus*) larvae: a reassessment of the cruise searcher characterization. Journal of Fish Biology 55(Supplement A): 249-250. Environment, Development and Growth of Fishes, Annual International Symposium of the Fisheries Society of the British Isles, St. Andrews, Scotland.
- Bjelland, R.M. & **A.B. Skiftesvik** (1999). Larval development and start feeding of the European hake (*Merluccius merluccius* L.). Fisheries Society of the British Isles, St. Andrews, Scotland.
- Skiftesvik, A.B.**, R.M. Bjelland & H.I. Browman (1999). Larval development and start feeding of the Ballan wrasse (*Labrus bergylta*). Journal of Fish Biology 55(Supplement A): 249. Environment,

- Development and Growth of Fishes, Annual International Symposium of the Fisheries Society of the British Isles, St. Andrews, Scotland.
- Skiftesvik, A.B.** & Browman, H.I. (1999). Foraging behaviour and prey search pattern of Atlantic herring (*Clupea harengus*) larvae: A reassessment of the cruise searcher characterization. 23rd Larval Fish Conference. 6-11 April 1999. Beaufort, North Carolina.
- Boxaspen, K., **A.B. Skiftesvik** & H.I. Browman (1999). Behavioural studies of nauplii and copepodites of salmon lice (*Lepeophtheirus salmonis* Krøyer). Possible effects of physical parameters on position of larvae. Fourth International Conference on Sea Lice. Trinity College, Dublin, Ireland
- Skiftesvik, A.B.** & H.I. Browman (1999). Foraging behaviour and prey search pattern of Atlantic herring (*Clupea harengus*) larvae: a reassessment of the cruise searcher characterization. 23rd Annual Larval Fish Conference, Beaufort, North Carolina, USA
- Skiftesvik A.B.** (1997). « Egg and larval viability in cod». Programsamling Solstrand 28.-29. Oktober.
- Skiftesvik A.B.** (1997). «Naturlige bestander av leppefisk». Leppefisk arbeidsmøte 1997, Bjørnefjorden Gjestetun, 25.-26. November.
- Skiftesvik A.B.** (1997). «Yngelproduksjon hos leppefisk - status og muligheter». Leppefisk arbeidsmøte 1997, Bjørnefjorden Gjestetun, 25.-26. November.
- Skiftesvik, A.B.** & Browman, H.I. (1996). Foraging behaviour and prey search pattern in American plaice larvae: what exactly is "cruise" search. American society of ichthyologists and herpetologists. June 13-19, 1996. New Orleans, LA.
- Browman, H.I., **A.B. Skiftesvik** & R. Racca (1996). Turbulence and ichthyoplankton-zooplankton interactions: a sensitivity analysis and critique of the assumptions underlying the behavioural components of analytical models. Annual Larval Fish Conference, New Orleans.
- Skiftesvik, A.B.** & H.I. Browman (1996). Foraging behaviour and prey search pattern in American plaice larvae (*Hippoglossoides platessoides*): debunking the cruise search myth. Annual Larval Fish Conference, New Orleans.
- Bergh, Ø., **Skiftesvik, A.B.** & Rødseth, O.M. (1995). Experimental challenge of yolk sac larvae of marine fish with different *Vibrio* spp. European Association of Fish Pathologists, Seventh international conference "Diseases of fish and shellfish". Palma de Mallorca Spania 10-15.9.1995
- Hellvik, J.V., Karlsen, Ø. & **Skiftesvik, A.B.** (1994). Light effects on activity and yolksac utilisation of halibut (*Hippoglossus hippoglossus*) larvae. 18th annual larval fish conference and meeting of the early life history. St. Andrews, New Brunswick, Canada, June 26-28, 1994
- Bergh, Ø, Hjeltnes, B., **Skiftesvik, A.B.** og Holm, J.C. (1994). Infeksjoner med *Aeromonas salmonicida* subsp. *salmonicida* i marin fisk. "Miljøvirkninger av havbruk" årsmøteseminar, Storefjell 17-19.januar 1994.
- Bergh, Ø., **Skiftesvik, A.B.**, Hjeltnes, B. and Rødseth, O.M. (1994). Pathogen-host relations between bacteria and marine fish eggs and larvae. IMBC'94 (International Marine Biotechnology Conference) Tromsø 7-12. august 1994.
- Bergh, Ø., **Skiftesvik, A.B.**, Hjeltnes, B. and Rødseth, O.M. (1994). Host specificity of *Vibrio* infections in marine fish larvae. International Symposium on Aquatic Animal Health. Seattle, WA, USA 4-8. september 1994.
- Bergh, Ø., **Skiftesvik, A.B.**, Rødseth, O.M., Hjeltnes, B. og Glette, J. (1994). Patogene og patogen-inhiberende bakterier knyttet til tidlige livsstadier av kveite. "Frisk Fisk" årsmøteseminar. Storefjell 17-19. januar 1994.
- Rødseth, O.M., Uglens, I., **Skiftesvik, A.B.** og Bergh, Ø. (1994). Histogenese av lymfoide organer hos kveite. "Frisk Fisk" årsmøteseminar. Storefjell 17-19. januar 1994.
- Skiftesvik, A.B.**, Bergh, Ø., Rødseth, O.M. og Hjeltnes, B. (1994). Aktivitet, flyteevne og mortalitet hos infiserte kveite- og piggvarlarver. "Frisk Fisk" årsmøteseminar. Storefjell 17-19. januar 1994.
- Skiftesvik, A.B.**, Boxaspen, K. and Parsons, A. (1994). Experience from preliminary breeding trials of wrasse in an intensive system. Wrasse symposium. Oban, Scotland, 6-7. oktober 1994
- Bergh, Ø., **Skiftesvik, A.B.**, Rødseth, O.M., Hjeltnes, B. og Glette, J. (1994). Patogene og patogen-inhiberende bakterier knyttet til tidlige livsstadier av kveite. "Frisk Fisk" årsmøteseminar. Storefjell 17-19. januar 1994.
- Opstad, I. Bergh, Ø. & **A.B. Skiftesvik** (1993). Effects of light and flow in large scale rearing of halibut (*Hippoglossus hippoglossus*) yolk sac larvae. ICES Symposium on Mass Rearing and Juvenile Fish, Bergen 21-23. juni 1993
- Skiftesvik, A.B.** & Ø. Bergh (1993). Do bacterial infections affect the behaviour of yolk sac larvae of the halibut *Hippoglossus hippoglossus* L. ICES Symposium on Mass Rearing and Juvenile Fish, Bergen 21-23. juni 1993.

- Bergh, Ø. og **A.B. Skiftesvik** (1992). Kan atferdsendringer brukes til å skille ut infiserte kveitelarver? (Foredrag presentert av Ø. Bergh). Årsmøteseminar Frisk Fisk 1992.
- Pittman, K., **Skiftesvik, A.B.**, Bergh, Ø. & Opstad, I. (1991). Embryological neurological and ethological periods (with emphasis on halibut). Larvi 91. August 27-30, 1991. Ghent, Belgia.
- Skiftesvik, A.B.** (1991). Betydning av fysiske faktorer - spesielt lys for startfôring av torskelarver. Minisymposium om produksjonsmetoder for torskeyngel i regi av TORSK I FJORD, Bergen, januar 1991
- Bergh, Ø., Helvik, J.V., Opstad, I., Pittman, K., **Skiftesvik, A.B.**, Skjolddal, L. og Strand, H. (1990). The early life history of the halibut (*Hippoglossus hippoglossus* L.). "Development and aquaculture of marine larvae". Universitetet i Bergen 12-15. august 1990.
- Skiftesvik, A.B.** (1988). Atferdsstudier på torskelarver i akvarium. Miniseminar om torskeatferd ved Fiskeridirektoratets Havforskningsinstitutt, Bergen, 31 august 1987. Foredragene utgitt ved Havforskningsinstituttet, November 1988.

INVITED LECTURES/DEPARTMENTAL SEMINARS

- 2010 Bigelow Laboratory for Ocean Sciences
McGill University
Woods Hole Oceanographic Institution
- 2009 Laval University, Quebec City, Quebec, Canada
University of Quebec at Montreal, Montreal, Quebec, Canada
Institute of Marine Research, Bergen, Norway
Texas A&M University, Corpus Christi, Texas, USA
University of Hong Kong
- 2008 Marine Science Centre, University of Quebec at Rimouski, Canada
Shirahama Research Station, Kyoto University, Japan
- 2007 Hong Kong University of Science and Technology
Chinese Academy of Science, South China Sea Institute of Oceanology, Guangzhou, China

PROFESSIONAL REFERENCES

Names and contact details will be provided upon request.