

Curriculum Vitae

Name: Lars Olof Ebbe Ebbesson
Nationality: Swedish and USA
Born date: January 17, 1966
Private address: Pärongatan 7, 234 37 Lomma, Sweden
Present position: **Director**, Centre for Sustainable Aquaculture Innovations (CSAI), NORCE & UoB
Senior Scientist, Norwegian Research Centre (NORCE), Bergen, Norway
Adjunct Professor (Full), Department of Biology, University of Bergen

Education

2000 Ph.D. in Zoology/Functional Morphology, Lund University, Lund, Sweden "Temporal dynamics of brain and hormone changes during parr-smolt transformation in salmon."
1994 M.Sc. in Neuroscience, University of Alaska Fairbanks, Fairbanks, Alaska, USA
1990 B.Sc. in Chemistry: Biochem./Mol. Biol., University of Alaska Fairbanks, USA

Professional experience

2016-present Director, Centre for Sustainable Aquaculture Innovations, NORCE & UoB
2018-present Senior scientist (Forsker I), Department of Environment, NORCE
2015-2019 Adjunct Professor (Full), Department of Biology, University of Bergen
2015-2018 Head of Department, Fish Production and Welfare, SFI-CtrlAQUA, Uni Research AS
2011-2018 Group Leader, Integrative Fish Biology, Uni Environment, Uni Research AS
2009-2014 Research scientist (permanent), Uni Environment, Uni Research AS
2013-2014 Adjunct Associate Professor, Department of Biology, University of Bergen
2006-2008 Research Scientist, Department of Environmental Research, UNIFOB AS
2003-2006 Research Scientist, Department of Biology, University of Bergen
2002-2003 Associate Professor, Dept. of Fisheries and Marine Biology, University of Bergen, (9 month term position)
2000-2002 Postdoc scientist, Dept. of Fisheries and Marine Biology, University of Bergen
1996-2000 Research Assistant, Dept. of Functional Morphology, Lund University, Sweden
1994-2004 Research Assistant, University of Alaska Fairbanks (UAF), AK Med Res Program,
1994-1995 Graduate Research Assistant, Institute of Arctic Biology UAF
1990-1994 Graduate Research Assistant, Dept. of Chem/Biochem and Molecular Biology, UAF
1989-1991 Teaching Assistant University of Alaska Fairbanks, Dept. of Chemistry, UAF
1988 & 1989 Undergraduate Research Assistant, Dept. of Chem/Biochem and Molecular Biology.

Teaching experience

2015-present Nijmegen University, The Netherlands, Advanced Summer School "Zebrafish:from gene, brain to behaviour"
2014 University of Bergen, Department of Biology, BIO104 Biology.
2013 University of Bergen, Department of Biology, BIO291 Fish Physiology.
Nov 2012 University of Bergen, Department of Biology, Neuroanatomical Techniques, Organised and taught a week PhD course including lectures.
2009-present Uni Research, Fish Neuroscience Network in Bergen, Established and organiser
2008-2011 University of Bergen, Department of Biology, one lecture/year BIO304,
2002-2003 University of Bergen, Dept. of Fisheries and Marine Biology, Associate Professor, (9 month term teaching position;BIO204 Welfare and Ethics)
1999-2000 Lund University, Dept. of Functional Morphology, Responsible for teaching a one-week course (8 hours per day) on histological techniques within the course of Developmental and Evolutionary Vertebrate Biology. Prepared lectures and laboratories.
1989-1991 University of Alaska Fairbanks, Dept. of Chemistry, Teaching Assistant.

Supervision

Present

- Elsa Denker, supervisor, Uni Research, Postdoc 2015-18, Deiodinase and neural plasticity salmon

- Mariann Eilertsen, co-supervisor, UiB, Postdoc 2014-15, Salmon brain activation
- Bernat Morro, co-supervisor, Uni Research, PhD student 2016-18 trout physiology
- Sara Cabrese, , co-supervisor, UiB, PhD student, 2013-present, brain stress physiology
- Igor Gaidukov, co-supervisor, UiB, M.Sc. 2016-present, temperature stress physiology
- Ingrid Gamlem, co-supervisor, UiB, M.Sc. 2016-present, Fish endocrinology of growth
- Øyvind Grøner Moe, co-supervisor, UiB, M.Sc. 2016-present, Exercise on muscle fiber development

Past

- Ragnhild Valen, co-supervisor, UiB, PhD student 2009-16, Fish brain photoreception
- Angelico Madaro, co-supervisor, UiB, PhD student, 2013-15, salmon brain stress
- Cairsty Grassie, co-supervisor, Penn State, (PhD 2013), Brain stress plasticity
- Mariann Eilertsen, co-supervisor, UiB, PhD student 2009-14, Halibut brain opsins
- Mari Sandbacken, co-supervisor, UiB, (PhD 2011), Salmon brain melanopsins
- Tom Ole Nilsen, co-supervisor, UiB (PhD 2007). Molecular and endocrine aspects of hypo-osmoregulatory development in Atlantic salmon (*Salmo salar* L.).
- Lee Hoang Dung, co-supervisor, UiB, M.Sc. 2012-present, appetite regulation in cod brain
- Einar Bye-Ingebrightsen, co-supervisor, UiB, M.Sc. 2011-2013, spectral biological response
- Tom Nilsen, co-supervisor, UiB, M.Sc. 2003, salmon osmoregulation
- Børge Takvam, co-supervisor, UiB, M.Ss. 2004, salmon thyroid hormones and development

Projects

Present

H2020- Intelligent Fish feeding through Integration of ENabling technologies and Circular principle (iFishIENCi). (70 mill NOK, scientific and technical coordinator, 2018-2022)
NFR-SFI, Centre for Research-based Innovations in Controlled-environment Aquaculture” (CtrlAQUA). (195.7 mill NOK, Co-PI, 2015-2022)
NFR-FORNY. Predict-*fit*: intelligent predictive tool for value creation in aquaculture (6.3 mill NOK, partner, 2018-20120)
NFR-Capacity building for sustainable and innovative seafood production (55 mill NOK 2018-2023, partner)
NFR.FRIMEDBIO, Cost of life-history adaptations: Multiple-trait consequences of fisheries-induced evolution (10 mill NOK, partner, 2018-2021)
NFR-HAVBRUK2, The effect of narrow banded LED light on development and growth performance (Partner, 10.6 mill NOK, 2016-2020)

Past

NFR-RFFV, Development of a season independent protocol for intensive production of rainbow trout (*O. Mykiss*). (12.5 mill NOK, Co-PI, 2016-2018)
NFR-RFFV, Utvikling av en sesonguavhengig protokoll for intensiv produksjon av regnbueørret (*O. Mykiss*). (12.5 millNOK, Co-PI, 2016-2018)
NFR-FRIMEDBIO, Light & Salt - Thyroid hormone deiodinase paralogues & the evolution of complex life-history strategy in salmonids. (11 mill NOK, Co-PI, 2015-2018)
NFR 233870- SalmoFutura: Welfare of Atlantic salmon postsmolts in closed-containment production systems, using a function-based approach. (9 mill NOK, Co-PI, 2014-2017)
NFR-FORNY2020, SalmonProbe: en ny og innovative metode for å angi smoltstatus (6.8 mill NOK, Co-PI, 2014-2015).
NFR-FRIMEDBIO, The smolt brain model: Unraveling nature’s regulation of neural plasticity. (7.7 mill NOK, Co-PI, 2014-2017).
NFR/NSF GROW- Uncovering the role of the melanocortin system in salmon smoltification. (100 kNOK, Co-PI, 2014)
EU, FP7-KBBE, 265957, ‘COPEWELL-A new integrative framework for the study of fish welfare based on the concepts of allostasis, appraisal and coping styles’, (4.7 mill EUR, Co-PI, 2011-2015)
NFR 217502- Optimalisert Postsmolt: et paradigmeskifte for norsk lakseindustri (OPP), Partner 2012-2016

NFR 190469 'Fish welfare assessment through brain function: Impacts of environmental stress on brain plasticity and behaviour', PI, 2009-2011
 NORDFORSK-BIFINE: Behavioral Fish Neuroscience Network', co-PI, 2010-2012
 NFR 199482 'Cod Development CODE', Partner, 2010-2013
 EU, FP7-KBBE-2007-2A, 222719, 'LIFECYCLE—Building a biological knowledge-base on fish lifecycles for competitive, sustainable European aquaculture' 2009-2013
 NFR 172504 'Nitric oxide regulation of development in fish: emphasis on the light-brain-pituitary axis and gill during salmon smoltification', PI, 2006-2008
 NFR 165331 'Environmental impact and molecular regulation of the osmoregulatory gill during parr-smolt transformation in Atlantic salmon', Partner 2005 – 2007
 NFR 153230/122 'Environmental control of smolt brain development', PI, 2003-2005

Research Collaborators (selected active)

Prof. Vidar Helvik, Ivar Rønnestad, Sigurd Stefansson, Anne Gro Salvenes at **Dept of Biology, UiB**;
 Drs. Geir-Lasse Taranger, Anna Wargelius, Eva Andersson, Tore Kristiansen, **IMR, Bergen**;
 Drs. Åsa Espemark, Jelena Kolarevic, Aleksei Krasnov, **Nofima, Sunndalsøra & Ås**;
 Prof. Clive Bramham, **Dept of Biomedicine Mental Health Research Center, UiB**;
 Prof. David Hazlerigg and Even Jørgensen, **University of Tromsø**
 Prof. Victoria Braithwaite, **Dept of Biology, Penn State University, PA, USA**;
 Prof. Simon Mackenzie, **Stirling University, Scotland**;
 Prof. Gert Flik and Dr. Marnix Gorissen, **Radboud University, Nijmegen The Netherlands**;
Industry Partners: Marine Harvest, Lerøy Seafood Group, Grieg Seafood, Philips Lighting Innovations

Referee assignments

Journal of Comparative Neurology, Journal of Chemical Neuroanatomy,
 General and Comparative Endocrinology, Journal of Experimental Biology,
 Comparative Physiology and Biochemistry, Journal of Fish Biology,
 PLoS ONE, Fish Physiology and Biochemistry, Aquaculture,
 Hormones and Behaviour, Functional Ecology, BBSRC,
 Canadian Journal of Fisheries and Aquatic Sciences,
 Proceedings of the Royal Society B,
 Brain Behavior and Evolution,
 Molecular Ecology

Publications in Peer-Reviewed Journals (Total 70, h-index 30)

1. Damsgård...
2. Denker....
3. McCormick, SD, JM Shrimpton, TO Nilsen, LOE Ebbesson, LO (2018) Advances in our understanding of the parr–smolt transformation of juvenile salmon: a summary of the 10th International Workshop on Salmon Smoltification. *Journal of Fish Biology* **93**: 437-439.
4. Vindas, MA, S Fokos, M Pavlidis, E Höglund, S Dionysopoulou, LOE Ebbesson, N Papandroulakis, CR Dermon, (2018) Early life stress induces long-term changes in limbic areas of a teleost fish: the role of catecholamine systems in stress coping. *Scientific Reports* **8**:5638-
5. Balseiro, P, Ø Moe, I Gamlem, M Shimizu, H Sveier, TO Nilsen, N Kaneko, LOE Ebbesson, C Pedrosa, V Tronci, A Nylund, SO Handeland (2018) Comparison between Atlantic salmon *Salmo salar* post-smolts reared in open sea cages and in the Preline raceway semi-closed containment aquaculture system. *Journal of Fish Biology* **93**:567-579
6. Samaras, A, CE Santo, N Papandroulakis, N Mitrizakis, M Pavlidis, E Höglund, TNM Pelgrim, J Zethof, TFA Spanings, MA Vindas, LOE Ebbesson, G Flik, M Gorissen (2018) Allostatic load and stress physiology in European Seabass (*Dicentrarchus labrax* L.) and Gilthead Seabream (*Sparus aurata* L.). *Frontiers in Endocrinology* **9**:451-
7. Brignon, WR, MM Pike, LOE Ebbesson, HA Schaller, JT Peterson, CB Schreck (2018)

- Rearing environment influences boldness and prey acquisition behavior, and brain and lens development of bull trout. *Environmental Biology of Fishes* **101**:383-401
8. Eilertsen, M, R Valen, Ø Drivenes, LOE Ebbesson, JVH Helvik (2018) Transient photoreception in the hindbrain is permissive to the life history transition of hatching in Atlantic halibut. *Developmental Biology* **444**:129-138.
 9. Vindas MA, M Gorissen, E Höglund, G Flik, V Tronci, B Damsgård, P-O Thörnqvist, TO Nilsen, S Winberg, Ø Øverli, LOE Ebbesson (2017) How do individuals cope with stress? Behavioural, physiological and neuronal differences between proactive and reactive coping styles in fish. *J Experimental Biology* doi: 10.1242/jeb.153213
 10. Calabrese S, TO Nilsen, J Kolarevic, LOE Ebbesson, C Pedrosa, S Fivelstad, C Hosfeld, SO Stefansson, BF Terjesen, H Takle, CIM Martins, H Sveier, F Mathisen, AK Imsland and SO Handeland (2017) Stocking density limits for post-smolt Atlantic salmon (*Salmo salar* L.) emphasis on production performance and welfare. *Aquaculture* **468**:363-370.
 11. Le HTMD, AR Angotzi, LOE Ebbesson, Ø Karlsen, I Rønnestad (2016) The ontogeny and brain distribution dynamics of the appetite regulators NPY, CART and pOX in larval Atlantic cod (*Gadus morhua* L.). *PLoS ONE* DOI: 10.1371/journal.pone.0153743
 12. Sveen LR, G Timmerhaus, JS Torgersen, E Ytteborg, SM Jørgensen, SSO Handeland, SO Stefansson, TO Nilsen, S Calabrese, LOE Ebbesson, BF Terjesen, H Takle (2016) Impact of fish density and specific water flow on skin properties in Atlantic salmon (*Salmo salar* L.) post-smolts. *Aquaculture* **464**: 629-637
 13. Macirella R, A Guardia, S Sesti, D Pellegrino, I Bernabò, V Tronci, LOE Ebbesson, S Tripepi, and E Brunelli (2016) Effects of two sublethal concentrations of mercury chloride on the morphology and metallothionein activity in the liver of zebrafish (*Danio rerio*). *Int. J. Mol. Sci.* **2016**, *17*, 361; doi:10.3390/ijms17030361
 14. Moltesen M, MA Vindas, S Winberg, LOE Ebbesson, ML Ruiz-Gomez, PV Skov, T Dabelsteen, Ø Øverli and E Höglund (2016) Cognitive appraisal of aversive stimulus differs between individuals with contrasting stress coping styles; evidences from selected rainbow trout (*Oncorhynchus mykiss*) strains. *Behaviour* DOI:10.1163/1568539X-00003405
 15. Lorgen M, E Casadei, E Król, A Douglas, M Birnie, LOE Ebbesson, TO Nilsen, WC Jordan, E Jørgensen, H Dardente, D Hazlerigg, SAM Martin. (2015) Functional divergence of type 2 deiodinase paralogues in the Atlantic salmon. *Current Biology* **25**(7):936-41
 16. Madaro A, RE Olsen, TS Kristiansen, LOE Ebbesson, G Flik, M Gorissen (2015) A comparative study of the response to repeated chasing stress in Atlantic salmon (*Salmo salar* L.) parr and post-smolts. *Comparative Biochemistry and Physiology. Part A, Molecular & Integrative Physiology* DOI: 10.1016/j.cbpa.2015.11.005
 17. Madaro A, , RE Olsen, TS. Kristiansen, LOE Ebbesson, TO Nilsen, G Flik, M. Gorissen (2015) Stress in Atlantic salmon: response to unpredictable chronic stress. *J Experimental Biology* DOI: 10.1242/jeb.120535
 18. Manuel R, M Gorissen, M Stokkermans, J Zethof, LOE Ebbesson, H Vis, G Flik and R Bos (2015) The Effects of Environmental Enrichment and Age-Related Differences on Inhibitory Avoidance in Zebrafish (*Danio rerio* Hamilton). *Zebrafish*, DOI: 10.1089/zeb.2014.1045
 19. Callol A, D Pajuelo, LOE Ebbesson, M Teles, S MacKenzie, C Amaro (2015) Early steps in the European eel (*Anguilla anguilla*)-*Vibrio vulnificus* interaction in the gills: role of the RtxA13 toxin. *Fish and Shellfish Immunology*, 10.1016/j.fsi.2015.01.009.
 20. Tapia LC, JCL Alvarenga, SOE Ebbesson, LOE Ebbesso, ME Tejero (2015) Apo E isoforms 3/3 and 3/4 differentially interact with circulating stearic, palmitic, and oleic fatty acids and lipid levels in Alaskan Natives. *Nutrition Research* (In press)
 21. Ebbesson SOE, VS Voruganti, PB Higgins, RR Fabsitz, LOE Ebbesson, S Laston, WS Harris, J Kennish, BD Umans, H Wang, RB Devereux, PM Okin, NJ Weissman, JW Maccluer, JG Umans, BV Howard (2015) Fatty acids linked to cardiovascular mortality are associated with risk factors. *International Journal of Circumpolar Health* **74**:28055.
 22. Manuel R, M Gorissen, J Zethof, LOE Ebbesson, H Vis, G Flik and R Bos (2014) Unpredictable chronic stress decreases inhibitory avoidance learning in Tuebingen Long-Fin zebrafish (*Danio rerio* Hamilton): stronger effects in the resting phase than in the active phase. *Journal of Experimental Biology*, DOI: 10.1242/jeb.109736.

23. Handeland SO, AK Imsland, TO Nilsen, LOE Ebbesson, CD Hosfeld, C Pedrosa, H Toften and SO Stefansson (2014) Osmoregulation in Atlantic salmon *Salmo salar* smolts transferred to seawater at different temperatures. Journal of Fish Biology DOI: 10.1111/jfb.12481
24. Eilertsen M, Ø Drivenes, RB Edvardsen, CA Bradley, LOE Ebbesson, and JV Helvik (2014) The exorhodopsin and melanopsin systems in the pineal complex and brain at early developmental stages of Atlantic halibut (*Hippoglossus hippoglossus*) Journal of Comparative Neurology DOI:10.1002/cne.23652
25. Lund I, E Höglund, LOE Ebbesson, PV Skov (2014) Dietary LC-PUFA deficiency early in ontogeny induces behavioural changes in pike perch (*Sander lucioperca*) larvae and fry. Aquaculture DOI: 10.1016/j.aquaculture.2014.05.039
26. Braithwaite VA and LOE Ebbesson (2014) Pain and stress responses in farmed fish. In: Animal Welfare: focusing on the future. OIE Scientific and Technical Review, 33: 245-253.
27. Nilsen TO, LOE Ebbesson, SO Handeland, F Kroglund, B Finstad, AR Angotzi, SO Stefansson (2013) Atlantic salmon (*Salmo salar* L.) smolts require more than two weeks to recover from acidic water and aluminium exposure. Aquatic Toxicology 142-143:33-44
28. Salvanes AGV, O Moberg, LOE Ebbesson, TO Nilsen, KH Jensen, VA Braithwaite (2013). Environmental enrichment promotes neural plasticity and cognitive behaviour in fish. Proceedings of the Royal Society B doi:10.1098/rspb.2013.1331
29. Grassie C, VA Braithwaite, J Nilsson, TO Nilsen, H-C Teien, SO Handeland, SO Stefansson, V Tronci, M Gorissen, G Flik, LOE Ebbesson (2013) Aluminum exposure impacts brain plasticity and behavior in Atlantic salmon (*Salmo salar*). Journal of Experimental Biology, doi:10.1242/jeb.083550
30. Handeland S, AK Imsland, LOE Ebbesson, TO Nilsen, CD Hosfeld, HCh Teien, SO Stefansson (2013) Osmoregulation and growth in offspring of wild Atlantic salmon at different temperatures Environmental Biology of Fishes, DOI 10.1007/s10641-013-0151-5
31. Handeland SO, AK Imsland, LOE Ebbesson, TO Nilsen, CD Hosfeld, G Baeverfjord, Å Espmark, T Rosten, OT Skilbrei, T Hansen, GS Gunnarsson, O Breck, SO Stefansson (2013) Low light intensity can reduce Atlantic salmon smolt quality. Aquaculture 384-387:19-24
32. Urke HA, T Kristensen, JV Arnekleiv, TO Haugen, G Kjærstad, SO Stefansson, LOE Ebbesson, TO Nilsen (2013). Seawater tolerance and post-smolt migration of wild Atlantic salmon *Salmo salar* x brown trout *S. trutta* hybrid smolts. Journal of Fish Biology 82: 206-227.
33. Ebbesson LOE and Braithwaite VA (2012). Environmental impacts on fish neural plasticity and cognition. Journal of Fish Biology 81, 2151-2174.
34. Sandbakken M, LOE Ebbesson, SO Stefansson, JV Helvik (2012) Isolation and characterization of melanopsin photoreceptors of Atlantic salmon (*Salmo salar*). J Comparative Neurology. 520:3727-44.
35. Ebbesson SO, JC Lopez-Alvarenga, PM Okin, RB Devereux, ME Tejero, WS Harris, LO Ebbesson, JW MacCluer, C Wenger, S Laston, RR Fabsitz, J Kennish, WJ Howard, BV Howard, J Umans, AG Comuzzie (2012) Heart rate is associated with markers of fatty acid desaturation: the GOCADAN study. Int J Circumpolar Health. doi: 10.3402/ijch.v71i0.17343.
36. Kroglund K, Finstad B, Pettersen K, Teien HC, Salbu B, Rosseland BO, Nilsen TO, Stefansson SO, Ebbesson LOE, Nilsen R, Bjørn PA, Kristensen T (2012) Recovery rates in Atlantic salmon smolts following aluminum exposure defined by changes in blood physiology and salmon lice resistance. Aquaculture. 362-363: 232-240.
37. Finstad B, Kroglund K, Bjørn PA, Pettersen K, Rosseland BO, Teien HC, Nilsen TO, Stefansson SO, Salbu B, Nilsen R, Fiske P, Ebbesson LOE (2012) Salmon lice induced mortality of Atlantic salmon postsmolts experiencing episodic acidification and recovery in freshwater. Aquaculture. 362-363: 193-199.
38. Stefansson SO, Haugland M, Björnsson BTh, McCormick SD, Holm M, Ebbesson LOE, Holst JC, Nilsen TO (2012) Growth, osmoregulation and endocrine changes in wild Atlantic salmon post-smolts during marine migration. Aquaculture, 127-136.
39. Ebbesson LOE, Nilsen TO, Helvik JV, Tronci V and Stefansson SO (2011) Corticotropin-releasing factor neurogenesis during midlife development in salmon: genetic, environment and thyroid hormone regulation. J Neuroendocrinology. 23:733-741.
40. Ebbesson SOE, Devereux RB, Cole S, Ebbesson LOE, Fabsitz RR, Haack K, Harris WS, Howard WJ, Laston S, Lopez-Alvarenga JC, MacCluer JW, Okin PM, Tejero ME, Voruganti VS, Wenger CR,

- Howard BV, Comuzzie AG (2010) Heart rate is associated with red blood cell fatty acid concentration: The Genetics of Coronary Artery Disease in Alaska Natives (GOCADAN) study. American Heart Journal. **159**(6): 1020-5.
41. Ebbesson SOE, Tejero ME, Lopez-Alvarenga JC, Harris WS, Ebbesson LOE, Devereux RB, MacCluer JW, Wenger C, Laston S, Fabsitz RR, Howard BV, Comuzzie AG (2010) Individual saturated fatty acids are associated with different components of insulin resistance and glucose metabolism: the GOCADAN study. Int J Circumpolar Health. **69**(4): 344-51.
 42. Nilsen TO, LOE Ebbesson, OG Kverneland, F Kroglund, B Finstad, SO Stefansson (2010) Effects of acidic water and aluminum exposure on gill Na⁺, K⁺ ATPase – alpha subunit isoforms, enzyme activity, physiology and return rates in Atlantic salmon (*Salmo salar* L.). Aquatic Toxicology **97**: 250-259.
 43. Lopez-Alvarenga JC, Ebbesson SOE, Ebbesson LOE, Tejero ME, Vorugantia VS, Comuzzi AG (2010) Polyunsaturated fatty acids effect on serum triglycerides concentration in the presence of metabolic syndrome components. The Alaska-Siberia Project. Metabolism **59**:86-92
 44. Murashita K, Kurokawa T, Ebbesson LOE, Stefansson SO, Rønnestad I (2009) Characterization, tissue distribution, and regulation of agouti-related protein (AgRP), cocaine- and amphetamine-regulated transcript (CART) and neuropeptide Y (NPY) in Atlantic salmon (*Salmo salar*). Gen. Comp. Endocrinol. **162**:160-71
 45. Ebbesson, LOE, Björnsson, BTh, Ekström, P, Stefansson, SO. (2008) Daily endocrine profiles in parr and smolt Atlantic salmon. Comp. Biochem. Physiol. A, **151**, 698-704.
 46. Ebbesson SOE, Roman MJ, Devereux RB, Kaufman D, Fabsitz RR, Maccluer JW, Dyke B, Laston S, Wenger CR, Comuzzie AG, Romenesko T, Ebbesson LOE, Nobmann ED, Howard BV. (2008) Consumption of omega-3 fatty acids is not associated with a reduction in carotid atherosclerosis: The Genetics of Coronary Artery Disease in Alaska Natives study. Atherosclerosis. **199**(2):346-53
 47. Nilsen TO, Ebbesson LOE, Kiilerich P, Björnsson BTh, Madsen SS, McCormick SD, Stefansson SO. (2008) Endocrine systems in juvenile anadromous and landlocked Atlantic salmon (*Salmo salar*): Seasonal development and seawater acclimation. General Comparative Endocrinology. **155**:762-772
 48. Tipsmark CK, P Kiilerich, TO Nilsen, LOE Ebbesson, SO Stefansson and SS Madsen (2008) Branchial expression patterns of claudin isoforms in Atlantic salmon during seawater acclimation and smoltification. American Journal Physiology **294**: R1563–R1574.
 49. Ebbesson SO, Tejero ME, Nobmann ED, Lopez-Alvarenga JC, Ebbesson LOE, Romenesko T, Carter EA, Resnick HE, Devereux RB, Maccluer JW, Dyke B, Laston SL, Wenger CR, Fabsitz RR, Comuzzie AG, Howard BV. (2007) Fatty Acid Consumption and Metabolic Syndrome Components: The GOCADAN Study. Journal Cardiometabolic Syndrome **2**(4): 244-249.
 50. Ebbesson LOE, Ebbesson SOE, Nilsen TO, Stefansson SO and Holmqvist B 2007. Exposure to continuous light disrupts retinal innervation of the preoptic nucleus during parr-smolt transformation in Atlantic salmon. Aquaculture **273**: 345-349.
 51. Nilsen TO, Ebbesson LOE, Madsen SS, McCormick SD, Andersson E, Björnsson BTh, Prunet P, Stefansson SO.(2007) Differential expression of gill Na⁺,K⁺-ATPase alpha- and beta-subunits, Na⁺,K⁺,2Cl⁻ cotransporter and CFTR anion channel in juvenile anadromous and landlocked Atlantic salmon *Salmo salar*. Journal of Experimental Biology **210**:2885-96.
 52. Stefansson SO, TO Nilsen, LOE Ebbesson, A Wargelius, SS Madsen, BT Björnsson & SD McCormick (2007) Molecular mechanisms of continuous light inhibition of Atlantic salmon parr-smolt transformation. Aquaculture **273**: 235–245
 53. Richardson SJ, Monk JA, Shepherdley CA, Ebbesson LOE, Sin F, Power DM, Frappell PB, Köhrle J and Renfree MB (2005). Developmentally regulated thyroid hormone distributor proteins in marsupials, a reptile and fishes. American Journal of Physiology **288**(5):R1264-72
 54. Ebbesson, LOE, CK Tipsmark, B Holmqvist, T Nilsen, E Andersson, SO Stefansson and SS Madsen (2005a). Nitric oxide synthase in the gill of Atlantic salmon: co-localization with and inhibition of Na⁺,K⁺-ATPase. Journal of Experimental Biology **208**:1011-7
 55. Ebbesson SOE, AI Adler , PM Risica, LOE Ebbesson, J-L Yeh, OT Go, W Doolittle, G Ehlert, M Swenson, DC Robbins (2005b)Cardiovascular disease and risk factors in three Alaskan Eskimo populations: The Alaska-Siberia Project. Int J Circumpolar Health ; **64**(4): 365-386

56. Ebbesson SOE, PM Risica, LOE Ebbesson, JM Kennish, ME Tejero (2005c) Omega 3 fatty acids improve glucose tolerance and components of the metabolic syndrome in Alaskan Eskimos: the Alaska Siberia Project. Int J Circumpolar Health 64(4): 396-408
57. Ebbesson SOE, PM Risica, LOE Ebbesson, JM Kennish (2005d) Eskimos have CHD despite high consumption of omega-3 fatty acids: The Alaska Siberia projects. Int J Circumpolar Health 64(4): 387-395
58. Ebbesson SOE, LOE Ebbesson, M Swenson, JM Kennish, DC Robbins (2005e) A successful diabetes prevention study in Eskimos: The Alaska Siberia project. Int J Circumpolar Health 64(4): 409-424
59. Kulczykowska, E., Sokolowska, E., Takvam, B., Stefansson, S.O., Ebbesson, L.O.E. (2004) Influence of exogenous thyroxine on plasma melatonin in juvenile Atlantic salmon (*Salmo salar*). Comparative Biochemistry and Physiology: Part B 137: 43-47
60. Ebbesson, L.O.E., P. Ekström, S.O.E. Ebbesson, S.O. Stefansson, and B. Holmqvist. (2003). Neural circuits and their structural and chemical reorganization in the light-brain-pituitary axis during parr-smolt transformation in salmon. Aquaculture 222: 59-70.
61. Nilsen, T, Ebbesson, L.O.E., Stefansson S.O. (2003) Smolting in anadromous and landlocked strains of Atlantic salmon (*Salmo salar*). Aquaculture 222: 71-82
62. Drivenes, Ø, A. M. Søviknes, L.O.E. Ebbesson, A. Fjose, H-C. Seo and J. V. Helvik. (2003) Isolation and characterisation of two teleost melanopsin genes and their differential expression within the inner retina and brain. Journal of Comparative Neurology 456: 84-93
63. Ebbesson, L.O.E., B.Th. Björnsson, S.O. Stefansson, and P. Ekström (2000). Free-thyroxine during parr-smolt transformation in coho salmon, *Oncorhynchus kisutch*: Comparison with total thyroxine, total triiodothyronine, and growth hormone. Fish Physiol Biochem 22: 45-50
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Book chapters

1. Stefansson SO, Björnsson BTh, Ebbesson LOE, McCormick SD. (2008) Smoltification. In Fish Larval Physiology (Finn & Kapoor, eds.). 639-681. ISBN 978-1-57808-388-6.
2. Holmqvist B, Ebbesson LOE, Alm P (2007). Nitric oxide in developmental neurobiology of zebrafish. Review. In "Nitric oxide", Advances in Experimental Biology series, Tota B and Trimmer B (eds). (Elsevier, Amsterdam), Vol 1. pp 229-274.

Popular science and reports

1. Nilsen TO, J Lukas Juliane, R Valen, JV Helvik, LOE Ebbesson, I Rønnestad, K Hamre, SO Handeland, SO Stefansson (2015) Utvikling av osmoreguleringsystemet hos torskelarver startfåret på rotatorier eller naturlig zooplankton. Norsk Fiskeoppdrett . 36-38
2. Rønnestad, Ivar; Edvardsen, Rolf; Arukwe, Augustine; Hoang Le, M.T.D; Angotzi, Anna Rita; Ebbesson, Lars O.E.; Hamre, Kristin; Karlsen, Ørjan; van der Meeren, Terje; Jordal, Ann-Elise Olderbakk Hvordan kan appetitt og fôrinntak stimuleres hos torskelarver?. Norsk Fiskeoppdrett 2015. s. 28-30
3. Nilsen TO, Ebbesson LOE, Kverneland OG, Kroglund F, Finstad B, Stefansson SO (2010) Ny metode kan påvise skader hos laksesmolt som er utsatt for aluminiumsrikt surt vann. pH-status nr. 4:12-13.
4. Kroglund F, B Finstad, K Pettersen, BO Rosseland, PA Bjørn, HC Teien, B Salbu, TO Nilsen, S Stefansson, L Ebbesson, R Nilsen, T Kristiansen (2010) Forsuringskader og helbredningstid for laksesmolt. pH-status nr.1: 6-7.
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Manuscripts submitted

1. Vindas MA, M Gorissen, E Höglund, G Flik, V Tronci, B Damsgård, PO Thörnqvist, TO Nilsen, S Winberg, Ø Øverli, LOE Ebbesson Individual variation in behavior to stress coping and forebrain neural regulation in fish. Scientific Reports (revised)
2. Eilertsen M, R Valen, Ø Drivenes, LOE Ebbesson, and JV Helvik. Transient photoreception in the brain is permissive to life history transitions (In revision JCN)
3. Sveen, L., Timmerhaus, G., Torgersen, J., Ytteborg, E., Handeland, S. O., Stefansson, S. O., Nilsen, T. O., Calabrese, S., Ebbesson, L., Fyhn Terjesen, B. and H. Takle. Fish density and water flow in closed containment systems and their impact on skin properties in Atlantic salmon (*Salmo salar* L.) post-smolt (Aquaculture Submitted).
4. Calabrese, S., Nilsen, T.O., Ebbesson, L., Pedrosa, C., Fivelstad, S., Hosfeld, C, Stefansson, S. O., Terjesen, B., Takle, H., Martins, C., Sveier, H., Mathisen, F., Kolarevic, J., Imsland, A. K. and S.O. Handeland. Stocking density limits for post-smolt Atlantic salmon (*Salmo salar* L.) in semi-closed sea systems (Aquaculture, Submitted).
5. Damsgård B, TH Evensen, Ø Øverli, M Gorissen, LOE Ebbesson, S Rey-Planellas, E Höglund, Behavioural and endocrinological differences in individual coping of hypoxia in Atlantic salmon parr and smolts
6. Nilsen TO, E Andersson, M Melo, GL Taranger, RW Schulz, SD McCormick, LOE Ebbesson, H Sundh, K Sundell, SO Stefansson. Androgens up-regulate freshwater ion transporters in the gill of immature seawater acclimated Atlantic salmon (*Salmo salar*).
7. Macirella R, A Guardia, S Sesti, D Pellegrino, I Bernabò, V Tronci, LOE Ebbesson, S Tripepi and E Brunelli. Effects of two sublethal concentrations of mercury chloride on the morphology and metallothionein activity in the liver of zebrafish (*Danio rerio*)

Manuscripts in Preparation

1. Maguire S, TO Nilsen, H Hoffman, L Ebbesson. Melanocortin receptors in the brain of Atlantic salmon.
2. Eilertsen M, B Clokie, LOE Ebbesson, H Miguad, JV Helvik. LED-light stimulation gives neural activation in photosensitive brain regions of Atlantic salmon
3. Samaras A, C. E Santo, N Papandroulakis, N Mitrizakis, M Pavlidis, E Höglund, TNM Pelgrim, FAT Spanings, M Vindas, LOE Ebbesson, G Flik, M Gorissen Effects of increasing allostatic load on the stress physiology of European sea bass (*Dicentrarchus labrax* L.) and gilthead sea bream (*Sparus aurata* L.)
4. Castanheira MF, MA Vindas, AS Félix, S Rey, S Mackenzie, LOE Ebbesson, R Oliveira. Coping styles and forebrain neural activity in Seabream *Sparus aurata*

5. Moltesen M, S Winberg, L Ebbesson, M Ruiz-Gomez, PV Skov, T Dabelsteen, E Höglund. What underlies animal personalities; differences in cognition and/or energy metabolism? Evidences from selected rainbow trout (*Oncorhynchus mykiss*) lines.
6. Ebbesson LOE, TO Nilsen, E Bye-Ingebrigtsen, SO Handeland, JV Helvik, S Stefansson, G Flik, M Gorissen. Exploring physiological functions of the pleiotropic melanocortin α -MSH in Atlantic salmon
7. Gorissen M, TO Nilsen, C Grassie, V Tronci, SO Handeland, V Helvik ..., LOE Ebbesson Effects of chronic mild stress and an acute challenge on the stress-axis and neuroplasticity in Atlantic salmon (*Salmo salar*, L.)
8. Mackenzie S, TO Nilsen,...LOE Ebbesson. Gene expression in Atlantic salmon blood and the component represented in unperfused gills.
9. Calabrese S, TO Nilsen, SO Handeland, M Gorissen, G Flik, LOE Ebbesson. Proper neural responses to challenges are robust indicators for good welfare
10. Ebbesson L Mental robustness demonstrates good welfare and is reflected in an appropriate neural response to challenges.

Scientific Presentations

Invited and Keynote Presentations (last 2 years)

1. *Institute of Biological and Environmental Sciences, University of Aberdeen, Nov 2013*
2. *Department of Biological and Environmental Sciences, University of Gothenburg, Nov 2013*
3. *Department of Animal Physiology, Radboud University, The Netherlands, Oct 2013*
4. *Marine Biotechnology Institute of Aquaculture, University of Stirling, Scotland June 2013*
5. *Department of Animal Physiology, Radboud University, The Netherlands, May 2013*
6. *International symposium The Physiology of Fish Behaviour, July 2012, Norwich, UK. Keynote.*
7. *7th International Symposium on Fish Endocrinology, Buenos Aires, Argentina, Sept 2012*
8. *Department of Neuroscience, Uppsala University, Sweden, March 2012*

Oral presentations

2013

9. Stefansson, S.O., Sundh, H., Andersen, Ø., Sundell, K., Handeland, S.O., **Ebbesson, L.O.E.**, Andersson, E., Jönsson E., Nilsen, T.O. (2013) Low salinity stress reduces growth and food conversion in Atlantic cod, *Gadus morhua*. *World Aquaculture Nashville, Tennessee, Nashville, February 21-25, 2013*

2012

10. Eilertsen M., **LOE Ebbesson**, JV Helvik (2012) Ontogeny and characterization of non visual photoreception in halibut. *3rd Nordic BiFiNe Meeting: Environmental modifications of the fish brain. Bergen, Norway Nov 12-14.*
11. **Ebbesson LOE** (2012) Chronic mild stress impairs learning and memory in salmon: neural and endocrine correlates. *3rd Nordic BiFiNe Meeting: Environmental modifications of the fish brain. Bergen, Norway Nov 12-14*
12. Salvenes AG, **LOE Ebbesson**, O Molberg, V Braithwaite (2012) Environmental enrichment promotes neural plasticity and spatial learning in fish. *3rd Nordic BiFiNe Meeting: Environmental modifications of the fish brain. Bergen, Norway Nov 12-14*
13. Moltesen M, **LOE Ebbesson**, E Höglund (2012) Brain activation and appraisal of hypoxia in two strains of rainbow trout (*Oncorhynchus mykiss*) displaying divergent stress coping styles. *3rd Nordic BiFiNe Meeting: Environmental modifications of the fish brain. Bergen, Norway Nov 12-14*
14. **Ebbesson LOE**, C. Grassie, V. Braithwaite, J. Nilsson, T.O. Nilsen, H-C. Teien, S.O. Handeland, N. Aubin-Horth, F. Kroglund, H. Hofmann, G.L. Taranger, T. Kristiansen, S.O. Stefansson (2012) Fish welfare assessment through brain function. *Norwegian Research Council Aquaculture program conference, Stavanger, Norway, 16-18, April, 2012.*
15. Stefansson, S.O., Nilsen, T.O., Handeland, S.O., **Ebbesson, L.O.E.**, McCormick, S.D. (2012). The smolt probe – novel tools for assessment of smolt quality and marine performance in Atlantic salmon. *Norwegian Research Council Aquaculture program conference, Stavanger, Norway, 16-18, April, 2012.*

2011

16. **Ebbesson LOE**, Grassie C, Nilsen TO, Braithwaite VA, Tronci V, Stefansson SO (2011) Environmental impacts on salmon brain plasticity. *Annual Nordforsk Integrative Fish Behavior Neuroscience Network Workshop, Helsinki, Finland*
17. Grassie, C., **Ebbesson, L. O. E.**, Braithwaite VA 2011. The effects of environmental stress on the behavior of Atlantic salmon (*Salmo salar*). *Presented for the American Fisheries Society Pennsylvania Chapter, USA*
18. Salvanes, A. G. V., **Ebbesson, L. O. E.**, Moberg, O., Nilsen, T.O., Jensen, K. H. & Braithwaite, V. A., (2011) "Immunisation impairs cognitive and neural development in fish" *The IVth Conference of The Scandinavian-Baltic Society for Parasitology*
19. Salvanes, A. G. V., **Ebbesson, L. O. E.**, Moberg, O., Nilsen, T.O., Jensen, K. H. & Braithwaite, V. A. (2011) "The trade off between immunity and cognition: immunized individuals learn less!", *EGL seminar, University of Oxford, Invited*
20. Salvanes, A. G. V., **Ebbesson, L. O. E.**, Moberg, O., Nilsen, T.O., Jensen, K. H. & Braithwaite, V. A., (2011) "Environmental enrichment promotes neural plasticity and improve learning ability in fish", *Molecular and behavioural techniques in fish neurobiology 24.- Annual Nordforsk Integrative Fish Behavior Neuroscience Network Workshop, Helsinki, Finland.*

2010

21. **Ebbesson LOE**, Grassie C, Nilsen TO, Braithwaite VA, Tronci V, Stefansson SO (2010) Impacts of chronic stress on learning and brain plasticity in salmon. *Annual Nordforsk Integrative Fish Behavior Neuroscience Network Workshop, Hirtshals, Denmark*

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22. Stefansson, S.O., Haugland, M., Björnsson, B.Th., McCormick, S.D., Holm, M., **Ebbesson, L.O.E.**, Holst, J.C., Nilsen, T.O., (2009). Endocrinology, growth and osmoregulatory systems in wild Atlantic Salmon (*Salmo salar* L.) smolts and post-smolts during migration from the river to the open oceans. *8th International Workshop on Salmonid Smoltification, Corvallis, Oregon, USA, September 24-25.*
23. **Ebbesson, L.O.E.**, Nilsen, T.O., Björnsson, B.Th., Tronci, V., Stefansson, S.O., (2009). Thyroid hormones and smolt development- new models reveal new roles in the brain and gill. *8th International Workshop on Salmonid Smoltification, Corvallis, Oregon, USA, September 24-25.*
24. Kroglund, K., Finstad, B., Pettersen, K., Teien, H.C., Salbu, B., Rosseland, B.O., Nilsen, T.O., Stefansson, S.O., **Ebbesson, L.O.E.**, Nilsen, R., Bjørn, P.A., Kristensen, T., (2009). Recovery rates in Atlantic salmon smolt following aluminum exposure defined by changes in blood physiology and salmon lice resistance. *8th International Workshop on Salmonid Smoltification, Corvallis, Oregon, USA, September 24-25.*

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25. Nilsen, T.O., **Ebbesson, L.O.E.**, Kiilerich, P., Björnsson, B.Th., Madsen, S.S., McCormick, S.D., Stefansson, S.O. Environmental impact and molecular regulation of the osmoregulatory gill during parr-smolt transformation in Atlantic salmon. *Norwegian Research Council Aquaculture program conference, Tromsø, Norway, 7-9, April, 2008.*

2007-2005

26. Nilsen, T.O., **Ebbesson, L.O.E.**, Madsen, S.S., McCormick, S.D., Andersson, E., Björnsson, B.Th., Prunet, P., Stefansson, S.O. (2006). Expression of ion-regulatory proteins in the gill of two strains of Atlantic salmon. *Norwegian Research Council Aquaculture program conference, Stavanger, Bergen, April, 2006.*
27. **Ebbesson, L.O.E.**, Ebbesson, S.O.E., Nilsen, T.O., Stefansson, S.O., Holmqvist, B. (2005). Exposure to constant light disrupts structural reorganization in the light-brain-pituitary axis during parr-smolt transformation in salmon. *7th International Workshop on Salmonid Smoltification, Tono, Iwate, Japan, July 24-29*
28. Stefansson, S.O., Nilsen, T.O., **Ebbesson, L.O.E.**, Wargelius, A., Madsen, S.S., Björnsson, B.Th., McCormick, S.D. (2005). Continuous light inhibits parr-smolt transformation in Atlantic salmon – molecular mechanisms. *7th International Workshop on Salmonid Smoltification, Tono, Iwate, Japan, July 24-29.*
29. Nilsen, T.O., **Ebbesson, L.O.E.**, Madsen, S.S., McCormick, S.D., Björnsson, B.Th., Prunet, P., Andersson, E., Stefansson, S.O. (2005). Expression of gill Na⁺, K⁺-ATPase α 1 and β 1 subunits, and Na⁺, K⁺, 2Cl⁻ cotransporter in anadromous and landlocked strains of Atlantic salmon. *7th*

International Workshop on Salmonid Smoltification, Tono, Iwate, Japan, July 24-29.

30. Nilsen, T., **L. O. E. Ebbesson**, S.O. Stefansson. (2001) Smolting in anadromous and landlocked strains of Atlantic salmon (*Salmo salar*). *6th International Workshop on Salmonid Smoltification. Westport, Ireland. Sept 3-7, 2001.*
31. **Ebbesson, L.O.E.**, P. Ekström, S.O.E. Ebbesson, S.O. Stefansson, and B. Holmqvist. (2001) What's brain got to do with it?- neural circuits and their structural and chemical reorganization in the salmon during parr-smolt transformation. *6th International Workshop on Salmonid Smoltification. Westport, Ireland. Sept 3-7, 2001.*
32. **Ebbesson, L.O.E.** B Th. Björnsson, P Ekström, S. O. Stefansson (2000) Daily variations in plasma FT4, TT4, TT4 and GH in Atlantic salmon parr and smolts: combined control via changes in photoperiod and brain. *4th International Symposium on Fish Endocrinology, Seattle, WA, USA July 31-Aug 3, 2000*

Posters

2013

33. Handeland, S.O., Imsland, A.K., Björnsson, B.Th., Stefansson, S.O., Nilsen, T.O., **Ebbesson, L.O.E.**, Porter M. (2013). Physiology during smoltification in Atlantic salmon: effect of melatonin implants. *World Aquacultur Nashville, Tennessee, Nashville, February 21-25, 2013*

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34. Nilsen, T.O., Sundh, H., Andersen, Ø., Sundell, K., Handeland, S.O., **Ebbesson, L.O. E.**, Jönsson, E., Stefansson, S.O. (2012). The repertoire of the Na, K,-ATPase system in Atlantic cod (*Gadus morhua* L.): tissue distribution and differential expression in response to altered salinity. *10th International Congress on the Biology of Fish, Madison, Wisconsin, July 15-19, 2012.*
35. Nilsen, T.O., Sundh, H., Andersson, E., Sundell, K., Taranger, G.L., Schulz R.W., **Ebbesson, L.O.E.**, Handeland, S.O., Prunet, P., Stefansson, S.O. (2012) Homeostasis in Atlantic salmon: adaptations to fresh- and seawater environments during important life stages (2012). *1st Integrative Salmonid Biology conference, Oslo, Norway, June 17th – 20th, 2012.*
36. **Ebbesson, L.O.E.**, Nilsen, T.O., Handeland, S.O., Stefansson, S.O. (2012). Environmental and Genetic Impacts on Brain Development During Parr-Smolt Transformation – Consequences for Neuroendocrine and Physiological Change. *1st Integrative Salmonid Biology conference, Oslo, Norway, June 17th – 20th, 2012.*

2011

37. Grassie, C., Braithwaite, V. A., Nilsson, J. and **Ebbesson, L. O. E.** (2011) Learning the hard way: Effects of environmental stress on fish behavior. *Poster presented at the Pennsylvania State University Annual Graduate Exhibition.*

2010

38. Grassie, C., Braithwaite, V. A., Nilsson, J. and **Ebbesson, L. O. E.** (2010) Quantifying the impact of environmental stress on learning and memory in Atlantic salmon (*Salmo salar*). *Poster presented at The 9th International Congress for the Biology of Fish, Barcelona, Spain.*

2008

39. Nilsen, T.O., **Ebbesson, L.O.E.**, Björnsson, B.Th., Holm, M., Haugland, M., Stefansson S.O. (2008). Endocrine and osmoregulatory system profiles in wild Atlantic salmon smolts and post-smolts during migration from the river, through the estuary, fjord, costal areas and in open ocean. *6th International Symposium on Fish Endocrinology, Calgary, Canada June 22-27.*
40. **Ebbesson, L.O.E.**, Nilsen, T.O., Stefansson, S.O. (2008). Neuroendocrine development during parr-smolt transformation – consequences for endocrine and physiological change. *6th International Symposium on Fish Endocrinology, Calgary, Canada June 22-27.*

2007-2002

41. Pittman K, Sæle Ø & **Ebbesson L.O.E.** (2004) Control of metamorphosis is control of juvenile quality? Invited Keynote Lecture, European Aquaculture Society conference. *International Conference Aquaculture Europe 2004. Barcelona, Spain, October 20-23, 2004. EAS Special Publications No. 34, p60-64 (880 pp)*
42. **Ebbesson, L.O.E.**, S.O. Stefansson, and B. Holmqvist. (2004) Distribution of nitric oxide synthase in the salmon pituitary. *5th International Symposium on Fish Endocrinology, Castillon, Spain Sept 5-9, 2004.*

43. Nilsen, T., **Ebbesson, L.O.E.**, Björnsson, B. Th., Stefansson, S. (2004) Endocrine changes in Atlantic salmon (*Salmo salar*) during parr-smolt transformation: a comparative study between anadromous and landlocked strains. *5th International Symposium on Fish Endocrinology, Castillion, Spain Sept 5-9, 2004.*
44. Kulczykowska, E., Sokolowska, E., Gozdowska, M., Kalamarz, H., Takvam, B., Stefansson, S., **Ebbesson, L.O.E.** (2004) Thyroxine and Ca²⁺: endo- and exogenous factors influencing the capacity of melatonin production in fish. *22nd Conference of European Comparative Endocrinologists, Uppsala, Sweden, August 24-48, 2004.*
45. Helvik, J., **Ebbesson, L.O.E.**, Eilertsen, M., Seo, H., Fjose, A., Drivenes, Ø. (2004) Early expression of VA opsin in Atlantic halibut. *34th Annual Meeting of the Society for Neuroscience, San Diego, CA, USA, November 4-9, 2004.*
46. **Ebbesson, L. O.E.**, Bo Holmqvist, Glen Sweeney, Børge Takvam, Tom Nilsen, Björn Th. Björnsson, Steffen Madsen, Sigurd Stefansson. (2002) The endocrine control of Na⁺,K⁺-ATPase α -subunit expression and enzyme activity in the gill of Atlantic salmon: a comparison of a natural hypothyroid model with thyroid hormone treatment. *The Fifth International Congress on the Biology of Fish, Vancouver, BC, Canada, July 21-26, 2002.*
47. **Ebbesson, L.O.E.**, S.O. Stefansson, and B. Holmqvist. (2002). The salmon brain during parr-smolt transformation: a model of neural plasticity. *26th Annual Larval Fish Conference, Bergen, Norway, 22-26 July 2002.*
48. Drivenes, Ø, A. M. Søviknes, **L. O. E. Ebbesson**, A. Fjose, H-C. Seo and J. V. Helvik. (2002). A dual non-visual photoreception system consisting of two melanopsins found in teleosts. *26th Annual Larval Fish Conference, Bergen, Norway, 22-26 July 2002.*
49. Takvam, B., **L. O.E. Ebbesson**, and S. O. Stefansson. (2002) Osmoregulatory mechanisms in the gill during parr-smolt transformation in Atlantic salmon (*Salmo salar*): the role of thyroxine. *World Aquaculture, Beijing, China, April 23-27, 2002.*
50. Browman, H. I., J. Forsell, B. Holmqvist, **L. O. E. Ebbesson**, Per Alm (2002) Life-stage dependent changes and thyroid hormone-mediated plasticity in the retinal ultraviolet photoreceptor cell complement of Atlantic salmon (*Salmo salar*). *Annual Meeting of the Society for Integrative and Comparative Biology, Anaheim, California, 2-6 January 2002,*