

PUBLICATIONS



Bergljót Magnadóttir

Principal Investigator / Research Professor (Emerita)
The Institute for Experimental Pathology, University of Iceland,
Keldur
Retired in May 2013

Website: <http://www.hi.is/gadus/>

E-mail: bergmagn@hi.is or arnartangi@gmail.com

2020-2021

56. Magnadóttir B., Kraev I., Dodds A.V., Lange S. 2021. The Proteome and Citrullinome of *Hippoglossus hippoglossus* Extracellular Vesicles—Novel Insights into Roles of the Serum Secretome in Immune, Gene Regulatory and Metabolic Pathways. *Int. J. Mol. Sci.* 2021, 22, 875.

55. Magnadóttir, B., Uysal-Onganer, P., Kraev, I., Svansson, V., Lange, L. 2020. Deiminated Proteins and Extracellular Vesicles as Novel Biomarkers in Pinnipeds: Grey seal (*Halichoerus gryptus*) and Harbour seal (*Phoca vitulina*). *Biochimie* (accepted for publication). *Biochimie*, 171 - 172, pp 79-90.

2019

54. Magnadóttir, B., Uysal-Onganer, P., Kraev, I., Svansson, V., Lange, L. 2019 Deiminated Proteins and Extracellular Vesicles - Novel Serum Biomarkers in Whales and Orca. *Comparative Biochem. Physiol. - Part D: Genomics and Proteomics*, 34, p. 100676 100676

53. Magnadóttir, B., Uysal-Onganer, P., Kraev, I., Dodds, A.V., Guðmundsdóttir, S., Lange, S. 2019 Extracellular Vesicles, Deiminated Protein Cargo and microRNAs are Novel Serum Biomarkers for Environmental Rearing Temperature in Atlantic Cod (*Gadus morhua* L.). *Aquaculture Reports*. 16, p 100245 100245.

52 Magnadóttir, B., Bragason, B. Th., Bricknell, I.R., Bowden, T., Nicholas, A.P., Hristova, M., Gudmundsdottir, S., Dodds, A.W. and Lange, S. (2019). Peptidylarginine deiminase and deiminated proteins are detected throughout early halibut ontogeny - Complement components C3 and C4 are post-translationally deiminated in halibut (*Hippoglossus hippoglossus* L.). *Developmental & Comparative Immunology* Vol. 92, 1 – 19.

51 Lange, S., Kraev, I., Magnadóttir B., Dodds, A.W, 2019 Complement component C4-like protein in Atlantic cod (*Gadus morhua* L.). Detection in ontogeny and identification of post-translational deimination in serum and extracellular vesicles. *Developmental & Comparative Immunology*, Vol. 101, 1-6p

50 Magnadóttir B., Kraev, I. Guðmundsdóttir S., Ddds, A.W., Lange, S. 2019 Extracellular vesicles from cod (*Gadus morhua* L.) mucus contains innate immune factors and deiminated protein cargo. *Developmental & Compative Immunology*, vol. 99, 1 – 7.

49 Magnadóttir, B., Gudmundsdottir, S., Lange, S. (2019). A novel ladder-like lectin relates to sites of mucosal immunity in Atlantic halibut (*Hippoglossus hippoglossus*). *Fish and Shellfish Immunology* 87, 9 – 12, short communication.

2018

48. Magnadottir, B., Hayes, P., Gisladottir, B., Bragason, B. Th., Hristova, M., Nicholas, A.P., Gudmundsdottir, S. and Lange, S. (2018). Pentraxins CRP-I and CRP-II are post-translationally deiminated and differ in tissue specificity in cod (*Gadus morhua* L.) ontogeny. *Developmental & Comparative Immunology* Vol. 87, 1 – 11.

47. Magnadóttir, B., Hayes, P. Hristova, M., Bragason, B.Th., Nicolas, A.P., Dodds, A.W., Gudmundsdottir, S. and Lange, S. (2018). Post-translational protein deimination in cod (*Gadus morhua* L.) ontogeny novel roles in tissue remodelling and mucosal immune defences? *Developmental & Comparative Immunology* 87, 157-170.

2014

46 Magnadottir, B. (2014) The immune response of Atlantic cod, *Gadus morhua* L. (review). *Icel.Agric.Sci.* 27, 41 – 61

2013

45. Gudmundsdottir, B.K., Gudmundsdottir, S., Gudmundsdottir, S., Magnadottir, B. (2013) Yersiniosis of Atlantic cod, *Gadus morhua* (L.), characterization of the infective strain and host reactions. *Journal of Fish Diseases* DOI: 10.1111/jfd.12139

44.Magnadottir, B., Gudmundsdottir, B.K., Groman, D. (2013). Immuno-histochemical determination of humoral immune markers within bacterial induced granuloma formation in Atlantic cod (*Gadus morhua* L.). *Fish & Shellfish Immunology*, 34, 1372-1375.

43.Arnason, T., Magnadottir, B., Björnsson, B., Steinarsson, A., Björnsson, B.Th. 2013. Effects of salinity and temperature on growth, plasma ions, cortisol and immune parameters of juvenile Atlantic cod (*Gadus morhua*), *Aquaculture* 380-383:70-79.

2012

42. Audunsdottir, S.S., Magnadottir, B., Gisladottir, B., Jonsson, Z.O., Bragason, B.Th., 2012. The acuter phase response of Atlantic cod (*Gadus morhua*): Expression of immune response genes. *Fish & Shellfish Immunology*, 32, 360 – 367.

2011

41. Magnadottir, B., Audunsdottir, S.S., Bragason, B.Th., Gisladottir, B., Jonsson, Z.O., Gudmundsdottir, S. 2011 The acute phase response of Atlantic cod (*Gadus morhua*): Humoral and cellular response. *Fish & Shellfish Immunology*, 30, 1124 – 1130.

2010

40. Lauzon, H. L., Magnadóttir, B., Guðmundsdóttir, G.K., Steinarsson, A., Arnason, I.O., Guðmundsdóttir, S. 2010. Application of prospective probionts at early stages of Atlantic cod (*Gadus morhua* L.) rearing. *Aquaculture Research* 41,576-586.

39. Magnadóttir, B. Gísladóttir, B., Audunsdóttir, S.S., Bragason, B.Th., Guðmundsdóttir S. 2010. Humoral response in early stages of infection of cod (*Gadus morhua* L.) with atypical furunculosis. *Icelandic Agricultural Science*, 23,23-35.

38. Magnadóttir, B. 2010. Review: Immunological control of fish diseases. *Marine Biotechnology*, 12, 361-379.

2009

37. Magnadóttir, B. Guðmundsdóttir, S., Guðmundsdóttir, B.K., Sigurdsson, H. 2009. Natural antibodies of cod (*Gadus morhua* L.): Specificity, activity and affinity. *Comparative Biochemistry and Physiology B* 154, 309-316.

36. Guðmundsdóttir, S., Magnadóttir, B., Björnsdóttir, B., Arnadóttir, H., Guðmundsdóttir, B.K. 2009. Specific and natural antibody response of cod juveniles vaccinated against *Vibrio anguillarum*. *Fish & Shellfish Immunology*, 26, 619-624.

35. Gísladóttir B., Guðmundsdóttir S, Brown L, Jonsson Z O, Magnadóttir B. 2009 Isolation of two C-reactive protein homologues from cod (*Gadus morhua* L.) serum. *Fish & Shellfish Immunology* 26: 210 - 219.

2006

34. Magnadóttir, B. 2006 Innate immunity of fish (overview). *Fish & Shellfish Immunology*. 20: 137-151.

33. Hui K.-M., Magnadóttir B, Schifferli JA, Inal JM. 2006. CRIT peptide interacts with factor B and interferes with alternative pathway activation. *Biochem Biophys Res Commun.*344: 308 – 314.

32. Magnadóttir, B., Guðmundsdóttir, B.K., Lange, S., Bambir, S.H., Steinarsson, A., Oddgeirsson, M., Bowden, T., Bricknell, I., Dalmo, R., Guðmundsdóttir, S. 2006. Immunostimulation of cod (*Gadus morhua* L.) larvae and juveniles. *Journal of Fish Diseases* 26:147-155.

31. Lange, S., Bambir, S. H., Dodds, A. W., Bowden, T., Bricknell, I., Espelid, S., Magnadóttir 2006. Complement component C3 transcription in Atlantic halibut (*Hippoglossus hippoglossus* L.) larvae. *Fish & Shellfish Immunology*. 20:285-294.

2005

30. Hui, K.-M., Orriss, G. L., Schirmer, T., Magnadóttir, B., Schifferli, J. A., Inal, J. M. 2005. Expression of functional recombinant von Willebrand factor-A domain from human complement C2: a potential binding site for C4 and CRIT. *Biochem. J.* 389: 863-868.

29. Lange, S. Dodds, A. W., Gudmundsdóttir, S., Bambir, S. H., Magnadóttir, B. 2005. The ontogenic transcription of complement component C3 and Apolipoprotein A-I tRNA in Atlantic cod (*Gadus morhua* L.) – a role in development and homeostasis? *Developmental and Comparative Immunology*. 29:1065-1077.

28. Magnadóttir, B., Lange, S., Gudmundsdóttir, S., Bøggwald, J., Dalmo R.A. 2005. Ontogeny of humoral immune parameters in fish. *Fish & Shellfish Immunology* (special issue). 19: 429-439.

2004

27. Björnsdóttir, B., Guðmundsdóttir, S. Bambir, S. H., Magnadóttir, B., Guðmundsdóttir, B. K. 2004. Experimental infection of turbot, *Scophthalmus maximus* (L.), by *Moritella viscosa*, vaccination effort and vaccine-induced side-effects. *J. Fish Dis.* 27: 1-11.

26. Magnadóttir B, Lange S, Steinarsson A, Gudmundsdóttir S. 2004 The ontogenic development of innate immune parameters of cod (*Gadus morhua* L.). *Comp Biochem Biophys PartB* 139:217-224.

25. Lange, S., Bambir, S., Dodds, A. W., Magnadóttir, B. 2004. An immunohistochemical study on complement component C3 in juvenile Atlantic halibut (*Hippoglossus hippoglossus* L.). *Developmental and Comparative Immunology* 28:593-601.

24. Magnadóttir, B., Lange, S. 2004. Is apolipoprotein A-I a regulating protein for the complement system of cod (*Gadus morhua* L.)? *Fish & Shellfish Immunology* 16:265-269.

23. Lange, S., Dodds, A. W., Magnadóttir, B. 2004. Isolation and Characterisation of Complement Component C3 from Atlantic Cod (*Gadus morhua* L.) and Atlantic Halibut (*Hippoglossus hippoglossus* L.). *Fish & Shellfish Immunology* 16: 227-239.

22. Lange, S., Bambir, S., Dodds, A. W., Magnadóttir, B. 2004. The ontogeny of complement component C3 in Atlantic cod (*Gadus morhua* L.) – an immunohistochemical study. *Fish & Shellfish Immunology* 16:359-367. 53 citations

2003

21. Lange, S., Magnadóttir, B. 2003. Spontaneous haemolytic activity of Atlantic halibut (*Hippoglossus hippoglossus* L.) and Sea Bass (*Dicentrarchus labrax*) serum. *Comparative Biochemistry and Physiology* 136:99-106.

20. Gudmundsdóttir, S., Lange, S., Magnadóttir, B. and Guðmundsdóttir, B. K. 2003 Protection against atypical furunculosis in Atlantic halibut, *Hippoglossus hippoglossus* (L.); comparison of a commercial furunculosis vaccine and an autogenous vaccine. *J. Fish Diseases*, 26: 331-338.

2002

19. Magnadóttir, B., Bambir, SH, Guðmundsdóttir, BK, Pilström, L., Helgason, S. 2002 Atypical *Aeromonas salmonicida* infection in naturally and experimentally infected cod, *Gadus morhua* L. *J. Fish Diseases*, 25: 583-597, 2002.

18. Magnadóttir, B., Crispin, M., Royle, L., Colominas, C., Harvey, D.J., Dwek, R.A., Rudd. P.M. 2002 The carbohydrate moiety of serum IgM from cod (*Gadus morhua* L.). *Fish & Shellfish Immunology* 12: 209 – 227, 2002.

2001

17. Lange, S., Guðmundsdóttir, B. K., Magnadóttir, B. 2001 Humoral immune parameters of cultured Atlantic halibut (*Hippoglossus hippoglossus* L.). *Fish & Shellfish Immunology*, 11 (6): 523 – 534.

16. Magnadóttir, B., Jónsdóttir, H., Helgason, S., Björnsson, B., Solem, S. T., Pilström, L. 2001. Immune parameters of immunized cod (*Gadus morhua* L.). *Fish & Shellfish Immunology*, 11: 75 - 89.

2000

15. Magnadóttir, B. 2000 The spontaneous haemolytic activity of cod serum: Heat insensitivity and other characteristics. *Fish & Shellfish Immunology*, 10: 731 - 735.

1999

14. Magnadóttir, B., Jónsdóttir, H., Helgason, S., Björnsson, B., Jørgensen, T., Pilström, L. 1999. Humoral immune parameters in Atlantic cod (*Gadus morhua* L.) I: The effects of environmental temperature. *Comparative Biochemistry and Physiology*, 122B: 173 - 180.

13. Magnadóttir, B., Jónsdóttir, H., Helgason, S., Björnsson, B., Jørgensen, T., Pilström, L. 1999. Humoral immune parameters in Atlantic cod (*Gadus morhua* L.) II: The effects of size and gender under different environmental conditions. *Comparative Biochemistry and Physiology* 122B: 181 - 188.

12. Widholm, H., Lundback, A. -S., Magnadóttir, B., Warr, G. W., Pilström, L. 1999. The variability of the immunoglobulin light chain in Atlantic cod (*Gadus morhua* L.). *Developmental and Comparative Immunology*, 23: 231 – 240.

1998

11. Magnadóttir, B. 1998. Comparison of immunoglobulin (IgM) in four fish species. *Icel. Agr. Sci.* 12: 47 - 59.

1997

10. Guðmundsdóttir, B. K., Magnadóttir, B. 1997. Protection of Atlantic salmon (*Salmo salar* L.) against an experimental infection of *Aeromonas salmonicida* ssp. *achromogenes*. *Fish & Shellfish Immunol.* 7, 55 - 69.

9. Guðmundsdóttir, B. K., Jónsdóttir, H., Steinþórsdóttir, V., Magnadóttir, B., Guðmundsdóttir, S. 1997. Survival and humoral antibody response of Atlantic salmon (*Salmo salar* L.) vaccinated against *Aeromonas salmonicida* subsp. *achromogenes*. *J. Fish Dis.* 20, 351 - 360.

8. Magnadóttir, B., Guðmundsdóttir, S., Guðmundsdóttir, B.K., 1997. The carbohydrate moiety

of IgM from salmon (*Salmo salar* L.). Comp. Biochem. Physiol. 116B: 423 - 430, 1997

1996

7. Guðmundsdóttir, B., Guðmundsdóttir, Magnadóttir, B., Helgason, S. 1996. Rannsóknir á bakteríusjúkdómum í laxfiskum. Læknablaðið, 82: 72 - 77.

6. Magnadóttir, B., Kristjánisdóttir, H., Guðmundsdóttir, S. 1996. Characterisation of monoclonal antibodies to separate epitopes on salmon IgM heavy chain. Fish & Shellfish Immunol. 6: 185 - 198.

1995

5. Magnadóttir, B., Guðmundsdóttir, S., Guðmundsdóttir, B.K., 1995. Study of the humoral response of Atlantic salmon (*Salmo salar* L.), naturally infected with *Aeromonas salmonicida* ssp. *achromogenes*. Vet. Immunol. Immunopathol. 49: 127 - 142.

4. Guðmundsdóttir, S., Magnadóttir, B., Guðmundsdóttir, B., 1995. Effects of antigens from *Aeromonas salmonicida* ssp. *achromogenes* on primed and unprimed leukocytes from Atlantic salmon (*Salmo salar* L.). Fish & Shellfish Immunol. 5: 493 - 504.

1992

3. Magnadóttir, B., Guðmundsdóttir, B.K., 1992. A comparison of total and specific immunoglobulin levels in healthy Atlantic salmon (*Salmo salar* L.) and in salmon naturally infected with *Aeromonas salmonicida* subsp. *achromogenes*. Vet. Immunol. Immunopathol. 32, 179 - 189.

1990

Magnadóttir, B. 1990. Purification of immunoglobulin from the serum of Atlantic salmon (*Salmo salar* L.). Icel. Agr. Sci. 4: 49 - 54.

1987

1. Valgerður Andrésdóttir, Bergljót Magnadóttir, Ólafur S. Andrésón, Guðmundur Pétursson, 1987. Subclasses of IgG from Whales. Dev. Comp. Immunol. 11, 801 - 806.

Special issues

Magnadóttir, B., Jónsdóttir, H., Helgason, S., Jørgensen, T., Pilström, P. 1998
Optimisation of ELISA used to measure total IgM and antibody activity in different groups of cod. "Methodology in Fish Diseases Research", editors: A. C. Barnes, G. A. Davidson, M. P. Hiney, D. McIntosh, p. 105 - 110.

Bergljót Magnadóttir, B. K. Guðmundsdóttir and S. Guðmundsdóttir, The carbohydrate moiety of IgM from Atlantic salmon, *Salmo salar* L. Paper published at the Second Electronic Glycoscience Conference (EGC-2) 9. 9. - 20. 9. 1996, <http://bellatrix.pcl.ox.ac.uk/egc2/> See: 8 above

Theses

Bergljót Magnadóttir, 2000: "Humoral immune parameters of teleost fish" Ph.D. at the

University of Iceland, Jan. 2000, 99 pages, and 9 published papers

Bergljót Magnadóttir, **1981**: "An Experimental Study of Antigens Used in the Serological Diagnoses of Johne's Disease (Paratuberculosis)". M.Sc. "for independent research" at Queen's University, Belfast, 221 pages.

Bergljót Magnadóttir, **1969**: "Heavy metals in electron microscopy". B.Sc. hon. Queen's University, Belfast, 53 pages.

Student's theses

Auðunsdóttir, S. S. **2012**. Studies of the gene expression in acute response of cod (*Gadus morhua* L.) with the help of realtime-PCR. M.Sc. thesis from the Faculty of Medicine, University of Iceland

Gísladóttir, B. **2008**. Acute phase response in cod (*Gadus morhua* L.) with emphasis on C reactive protein (CRP). M.Sc. thesis from the Faculty of Medicine, University of Iceland 2008, 85 p.

Lange, S. **2005**. The complement system of two teleost species with emphasis on ontogeny. Ph.D. thesis from the Faculty of Medicine, University of Iceland 2005, 128 p. and 8 papers.

Lange, S. **2001**. Immunological parameters of Atlantic halibut (*Hippoglossus hippoglossus* L.). M.Sc. thesis from the Faculty of Medicine, University of Iceland 2001, 64 p. and 1 paper.

Jónsdóttir, H. **1990**. Isolation and comparison of immunoglobulin from three fish species Atlantic salmon, *Salmo salar* L., rainbow trout, *Oncorhynchus mykiss* and char, *Salvelinus alpinus* L. (in Icelandic).
B.Sc. thesis from the University of Iceland.