



# Curriculum Vitae – Prof Hannu Saloniemi

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**Date of birth:** October 11th, 1944. **Place of Birth:** Nummi, Finland

**Marital status:** married, three children, three grandchildren

**Contact:** hannu.saloniemi@helsinki.fi

**Degrees and Professional Qualifications:** Licentiate of Veterinary Medicine (DVM degree), College of Veterinary Medicine, Helsinki 1970, PhD, College of Veterinary Medicine, Helsinki (Environmental factors on bovine mastitis) 1980, Docent Competence in Animal Hygiene, College of Veterinary Medicine, Helsinki 1981, Docent Competence in Animal Science, Faculty of Agriculture and Forestry, University of Helsinki 1981, Professor Competence in Farm Animal Medicine 1984, Diplomate of the European College of Veterinary Public Health (Population Medicine) 2002.

**Work experience:** Lecturer in College of Veterinary Medicine, Helsinki 1970-1984, Head of Mastitis Laboratory, National Veterinary Institute 1984-1986, Professor in Animal Hygiene 1987-2008 (Faculty of Veterinary Medicine, University of Helsinki 1995- ), retired 2009.

**Educational experience:** Lectures in animal hygiene (including preventive veterinary medicine, mastitis prevention, and farm animal ethology) and animal nutrition for veterinary students 1970-2008, production environment and hygiene for animal science students 1980-2000. Hundreds of lectures for farmers, secondary school students and public. Presentations and interviews in radio and TV.

**Supervision of scientific studies:** Sixteen PhD thesis work covering farm animal ethology and animal welfare, invasive epidemiology in porcine diseases, vitamin E in ruminant nutrition, hereditary disease control in dogs. Supervised also more than one hundred veterinary licentiate and master thesis.

**Administrative duties:** Department head 1989-1995, Member of the College Council 1989-1995, Vice dean 1995-1997, Dean 1997-2006, Member of the University Board 1997-2006, Chairman of the University Collegium 2003, Academic advisor in the Renovation of Helsinki University Administration 2008-2009, Member of the Reform group of the University of Helsinki 2011-2012, Head of the Graduate School for Farm Animal Welfare 2004-2008.

**Confidential posts in ISAH:** Member of the Extended Board 1973-1988, Executive Board member 1988-2000, President 1994-1997.

**Other confidential posts, national:** Board member and Vice Chairman of the Finnish Veterinary Association 1975-1981, Board member and Chairman in three veterinary research foundations over the years 1984-2014, Head of the Finnish Herd Health Council 1982-1990, Chairman of the Milk

Hygiene Association 1995-2010, Head of the Finnish Farm Animal Welfare Council 2010-2012, Several governmental committee chair and memberships in Ministry of Agriculture, Ministry of Education and Ministry of Trade and Industry 1972-2012.

**Other confidential posts, international:** Nordic organization group for postgraduate studies in Veterinary epidemiology 1982-1986, 1998-2000, International Dairy Federation's Mastitis Expert Group 1987-1998 , European Association for Animal Production, Commission of Animal Management and Health, Secretary and Vice Chairman 1988-1997, Scientific Veterinary Committee of European Union 1994-1997, Nordic Cooperation Network in Veterinary Sciences 1992-2004, Board of Nordic Veterinary and Agricultural Universities' Network 1997-2006.

**Evaluator of studies and organization:** Slovenian Faculty of Veterinary Medicine , Ljubljana 2000, Faculty of Veterinary Medicine, Jelgava, Latvia 2001, 2010, 2015, Norwegian Veterinary College, Oslo 2005, Swedish Veterinary and Animal Science Faculty, Uppsala 2012.

**Evaluator of Professorships:** Animal Hygiene, Norwegian College of Veterinary Medicine 1988, Animal Science, Swedish University of Agricultural Sciences 1993, Agricultural Building Analyses, Swedish University of Agricultural Sciences 1996, Preventive Veterinary Medicine, Norwegian College of Veterinary Medicine 1992 and 2000, Veterinary Genetics, Norwegian College of Veterinary Medicine 1998, Production Diseases in Cattle, Royal Veterinary and Agricultural University, Copenhagen 1996, Veterinary Epidemiology , Royal Veterinary and Agricultural University, Copenhagen 2001, Veterinary Epidemiology, Cornell University, USA, Veterinary Epidemiology University of Prince Edward Island, Canada, Animal Hygiene, Swedish University of Agricultural Sciences 2013.

**Keywords (and activities):** animal hygiene, herd health (organizer of production disease recording system on Finnish dairy farms 1982), mastitis (organizing of mastitis prevention in Finland), production environment, ethology of farm animals, animal welfare (promoting of research of ethology and animal welfare science in Finland), phytoestrogens, veterinary education (developing 1972-2008).

**Decorations:** White Rose of Finland for Class I Knight 1998, Silver honour of the Finnish voluntary auxiliary paramilitary organization for boys during the World War II 2015, Silver plate of the University of Helsinki 2004, Honorary member of ISAH 2005, PhD honoris causa Tartu, Estonia 2007 and Jelgava, Latvia 2013, Honorary member of Finnish Animal Breeding Association 2008, Honorary member of Finnish Association for Food Animal Practitioners 2008, Honorary member of Finnish Veterinary Association 2009, Golden mark of the Finnish Animal Protection Association 1997, Pro Animalia award of the animal protection league 'Animalia' 1997, 2003.

**Military rank:** lieutenant

**Publications listed by PubMed.com:**

- 1. Norring M, Manninen E, de Passillé AM, Rushen J, Saloniemi H. Preferences of dairy cows for three stall surface materials with small amounts of bedding. *J Dairy Sci.* 2010 Jan; 93(1):70-4. Doi: 10.3168/jds.2009-2164. PubMed PMID: 20059906.**
- 2. Mustonen EA, Tuori M, Saastamoinen I, Taponen J, Wähälä K, Saloniemi H, Vanhatalo A. Equol in milk of dairy cows is derived from forage legumes such as red clover. *Br J Nutr.* 2009 Dec; 102(11):1552-6. Doi: 10.1017/S0007114509990857. Epub 2009 Jul 22. PubMed PMID: 19622190.**
- 3. Hepola HP, Hänninen LT, Raussi SM, Pursiainen PA, Aarnikoivu AM, Saloniemi HS. Effects of providing water from a bucket or a nipple on the performance and behavior of calves fed ad libitum volumes of acidified milk replacer. *J Dairy Sci.* 2008 Apr; 91(4):1486-96. Doi: 10.3168/jds.2007-0500. PubMed PMID: 18349242.**
- 4. Norring M, Manninen E, de Passillé AM, Rushen J, Munksgaard L, Saloniemi H. Effects of sand and straw bedding on the lying behavior, cleanliness, and hoof and hock injuries of dairy cows. *J Dairy Sci.* 2008 Feb; 91(2):570-6. Doi: 10.3168/jds.2007-0452. PubMed PMID: 18218743.**
- 5. Taponen S, Koort J, Björkroth J, Saloniemi H, Pyörälä S. Bovine intramammary infections caused by coagulase-negative staphylococci may persist throughout lactation according to amplified fragment length polymorphism-based analysis. *J Dairy Sci.* 2007 Jul; 90(7):3301-7. PubMed PMID: 17582115.**
- 6. Hoikkala A, Mustonen E, Saastamoinen I, Jokela T, Taponen J, Saloniemi H, Wähälä K. High levels of equol in organic skimmed Finnish cow milk. *Mol Nutr Food Res.* 2007 Jul; 51(7):782-6. PubMed PMID: 17576638.**
- 7. Nikunen S, Härtel H, Orro T, Neuvonen E, Tanskanen R, Kivelä SL, Sankari S, Aho P, Pyörälä S, Saloniemi H, Soveri T. Association of bovine respiratory disease with clinical status and acute phase proteins in calves. *Comp Immunol Microbiol Infect Dis.* 2007 May; 30(3):143-51. Epub 2007 Jan 26. PubMed PMID: 17258318.**
- 8. Simonen-Jokinen TL, Eskelinen UM, Härtel HM, Nikunen SK, Saloniemi HS, Maisi PS. Gelatinolytic matrix metalloproteinases-2 and -9 in tracheobronchial lavage fluid obtained from calves with concurrent infections of *Pasteurella multocida* and *Mycoplasma bovirhinis*. *Am J Vet Res.* 2005 Dec; 66(12):2101-6. PubMed PMID: 16379654.**

9. Valde JP, Lawson LG, Lindberg A, Agger JF, Saloniemi H, Osterås O. Cumulative risk of bovine mastitis treatments in Denmark, Finland, Norway and Sweden. *Acta Vet Scand.* 2004; 45(3-4):201-10. PubMed PMID: 15663080; PubMed Central PMCID: PMC1820994.
10. Härtel H, Nikunen S, Neuvonen E, Tanskanen R, Kivelä SL, Aho R, Soveri T, Saloniemi H. Viral and bacterial pathogens in bovine respiratory disease in Finland. *Acta Vet Scand.* 2004; 45(3-4):193-200. PubMed PMID: 15663079; PubMed Central PMCID: PMC1820993.
11. Kutila T, Suojala L, Lehtolainen T, Saloniemi H, Kaartinen L, Tähti M, Seppälä K, Pyörälä S. The efficacy of bovine lactoferrin in the treatment of cows with experimentally induced *Escherichia coli* mastitis. *J Vet Pharmacol Ther.* 2004 Aug; 27(4):197-202. PubMed PMID: 15305847.
12. Schnier C, Hielm S, Saloniemi HS. Comparison of the breeding performance of cows in cold and warm loose-housing systems in Finland. *Prev Vet Med.* 2004 Feb 26; 62(2):135-51. PubMed PMID: 15156999.
13. Schnier C, Hielm S, Saloniemi HS. Comparison of the disease incidences of Finnish Ayrshire and Finnish Black and White dairy cows. *Prev Vet Med.* 2004 Apr 16; 62(4):285-98. PubMed PMID: 15068892.
14. Kutila T, Pyörälä S, Saloniemi H, Kaartinen L. Antibacterial effect of bovine lactoferrin against udder pathogens. *Acta Vet Scand.* 2003; 44(1-2):35-42. PubMed PMID: 14650542; PubMed Central PMCID: PMC1831559.
15. Kutila T, Pyörälä S, Kaartinen L, Isomäki R, Vahtola K, Myllykoski L, Saloniemi H. Lactoferrin and citrate concentrations at drying-off and during early mammary involution of dairy cows. *J Vet Med A Physiol Pathol Clin Med.* 2003 Sep; 50(7):350-3. PubMed PMID: 14633227.
16. Schnier C, Hielm S, Saloniemi HS. Comparison of milk production of dairy cows kept in cold and warm loose-housing systems. *Prev Vet Med.* 2003 Dec 12; 61(4):295-307. PubMed PMID: 14623413.
17. Oivanen L, Mikkonen T, Haltia L, Karhula H, Saloniemi H, Sukura A. Persistence of *Trichinella spiralis* in rat carcasses experimentally mixed in different feed. *Acta Vet Scand.* 2002; 43(4):203-10. PubMed PMID: 12831173; PubMed Central PMCID: PMC1764196.
18. Kutila T, Pyörälä S, Kaartinen L, Vahtola K, Myllykoski L, Saloniemi H. Disposition kinetics of lactoferrin in milk after intramammary administration. *J Vet Pharmacol Ther.* 2002 Apr; 25(2):129-33. PubMed PMID: 12000533.

19. Schnier C, Hielm S, Saloniemi HS. Comparison of the disease incidences of dairy cows kept in cold and warm loose-housing systems. *Prev Vet Med.* 2002 Apr 15; 53(4):247-61. PubMed PMID: 11937232.
20. Heinonen M, Hämeenoja P, Saloniemi H, Tuovinen V. Diagnoses and treatments in health-classified fattening herds rearing pigs all in-all out. *Acta Vet Scand.* 2001; 42(3):365-75. PubMed PMID: 11887397; PubMed Central PMCID: PMC2202327.
21. Leppänen M, Saloniemi H. Screening and controlling canine inherited ocular diseases in Finland: epidemiological, economical and health promotional aspect. *Vet Ophthalmol.* 1998; 1(4):203-210. PubMed PMID: 11397232.
22. Heinonen M, Gröhn YT, Saloniemi H, Eskola E, Tuovinen VK. The effects of health classification and housing and management of feeder pigs on performance and meat inspection findings of all-in-all-out swine-finishing herds. *Prev Vet Med.* 2001 Apr 13; 49(1-2):41-54. PubMed PMID: 11267687.
23. Atroshi F, Biese I, Saloniemi H, Ali-Vehmas T, Saari S, Rizzo A, Veijalainen P. Significance of apoptosis and its relationship to antioxidants after ochratoxin A administration in mice. *J Pharm Sci.* 2000 Sep-Dec; 3(3):281-91. PubMed PMID: 11177646.
24. Rautiainen E, Virtala AM, Wallgren P, Saloniemi H. Varying effects of infections with *Mycoplasma hyopneumoniae* on the weight gain recorded in three different multisource fattening pig herds. *J Vet Med B Infect Dis Vet Public Health.* 2000 Aug; 47(6):461-9. PubMed PMID: 11014068.
25. Heinonen M, Bornstein S, Kolhinen R, Saloniemi H, Tuovinen V. Eradication of porcine sarcoptic mange within a health declared production model. *Acta Vet Scand.* 2000; 41(1):41-50. PubMed PMID: 10920475.
26. Leppänen M, Paloheimo A, Saloniemi H. Attitudes of Finnish dog-breeders about programs to control canine genetic diseases. *Prev Vet Med.* 2000 Feb 1; 43(3):159-75. PubMed PMID: 10782595.
27. Leppänen M, Paloheimo A, Saloniemi H. Attitudes of Finnish dog-owners about programs to control canine genetic diseases. *Prev Vet Med.* 2000 Feb 1; 43(3):145-58. PubMed PMID: 10782594.
28. Heinonen M, Fossi M, Jalli JP, Saloniemi H, Tuovinen V. Detectability and prevalence of *Brachyspira* species in herds rearing health class feeder pigs in Finland. *Vet Rec.* 2000 Mar 18; 146(12):343-7. PubMed PMID: 10777042.

29. Leppänen M, Mäki K, Juga J, Saloniemi H. Factors affecting hip dysplasia in German shepherd dogs in Finland: efficacy of the current improvement programme. *J Small Anim Pract.* 2000 Jan; 41(1):19-23. PubMed PMID: 10713978.
30. Atroshi F, Rizzo A, Biese I, Veijalainen P, Saloniemi H, Sankari S, Andersson K. Fumonisin B1-induced DNA damage in rat liver and spleen: effects of pretreatment with coenzyme Q10, L-carnitine, alpha-tocopherol and selenium. *Pharmacol Res.* 1999 Dec; 40(6):459-67. PubMed PMID: 10660942.
31. Heinonen M, Autio T, Saloniemi H, Tuovinen V. Eradication of *Mycoplasma hyopneumoniae* from infected swine herds joining the LSO 2000 health class. *Acta Vet Scand.* 1999; 40(3):241-52. PubMed PMID: 10605141.
32. Leppänen M, Saloniemi H. Controlling canine hip dysplasia in Finland. *Prev Vet Med.* 1999 Oct 31; 42(2):121-31. PubMed PMID: 10551430.
33. Hirvonen J, Eklund K, Teppo AM, Huszenicza G, Kulcsar M, Saloniemi H, Pyörälä S. Acute phase response in dairy cows with experimentally induced *Escherichia coli* mastitis. *Acta Vet Scand.* 1999; 40(1):35-46. PubMed PMID: 10418194.
34. Peltoniemi OA, Love RJ, Heinonen M, Tuovinen V, Saloniemi H. Seasonal and management effects on fertility of the sow: a descriptive study. *Anim Reprod Sci.* 1999 Feb 12; 55(1):47-61. PubMed PMID: 10099678.
35. Leppänen M, Paloheimo A, Saloniemi H. Attitudes of Finnish veterinarians about programs to control canine genetic diseases. *Prev Vet Med.* 1999 Feb 15; 38(4):239-57. PubMed PMID: 10081803.
36. Mylly V, Asplund K, Brofeldt E, Hirvelä-Koski V, Honkanen-Buzalski T, Junntila J, Kulkas L, Myllykangas O, Niskanen M, Saloniemi H, Sandholm M, Saranpää T. Bovine mastitis in Finland in 1988 and 1995--changes in prevalence and antimicrobial resistance. *Acta Vet Scand.* 1998; 39(1):119-26. PubMed PMID: 9592952.
37. Hirvonen J, Hietakorpi S, Saloniemi H. Acute phase response in emergency slaughtered dairy cows. *Meat Sci.* 1997 Jul; 46(3):249-57. PubMed PMID: 22062125.
38. Jukola E, Hakkarainen J, Saloniemi H, Sankari S. Blood selenium, vitamin E, vitamin A, and beta-carotene concentrations and udder health, fertility treatments, and fertility. *J Dairy Sci.* 1996 May; 79(5):838-45. PubMed PMID: 8792283.

39. Jukola E, Hakkarainen J, Saloniemi H, Sankari S. Effect of selenium fertilization on selenium in feedstuffs and selenium, vitamin E, and beta-carotene concentrations in blood of cattle. *J Dairy Sci.* 1996 May; 79(5):831-7. PubMed PMID: 8792282.
40. Koskinen E, Rantala M, Saloniemi H. The effect of sour milk as a postmilking teat dip for mastitis prevention in a dairy herd. *Acta Vet Scand.* 1996; 37(4):427-32. PubMed PMID: 9050275.
41. Atroshi F, Parantainen J, Sankari S, Järvinen M, Lindberg LA, Saloniemi H. Changes in inflammation-related blood constituents of mastitic cows. *Vet Res.* 1996; 27(2):125-32. PubMed PMID: 8721292.
42. Saloniemi H, Wähälä K, Nykänen-Kurki P, Kallela K, Saastamoinen I. Phytoestrogen content and estrogenic effect of legume fodder. *Proc Soc Exp Biol Med.* 1995 Jan; 208(1):13-7. PubMed PMID: 7892287.
43. Saloniemi H. Reproductive disturbances related to feeding. *Acta Vet Scand Suppl.* 1993; 89:71-4. PubMed PMID: 8237669.
44. Saloniemi H. Dairy production and diseases in Finland. *Acta Vet Scand Suppl.* 1993; 89:35-6. PubMed PMID: 8237661.
45. Rizzo AF, Atroshi F, Hirvi T, Saloniemi H. The hemolytic activity of deoxynivalenol and T-2 toxin. *Nat Toxins.* 1992; 1(2):106-10. PubMed PMID: 1344904.
46. Kallela K, Saastamoinen I, Saloniemi H. Effect of germination on vomitoxin level in grain. *Acta Vet Scand.* 1991; 32(4):483-9. PubMed PMID: 1818507.
47. Gröhn YT, Erb HN, McCulloch CE, Saloniemi HS. Epidemiology of metabolic disorders in dairy cattle: association among host characteristics, disease, and production. *J Dairy Sci.* 1989 Jul; 72(7):1876-85. PubMed PMID: 2778171.
48. Kallela K, Saastamoinen I, Saloniemi H, Rizzo A. Vomitoxin and amino acid supplements in rat feed. *Acta Vet Scand.* 1989; 30(2):235-7. PubMed PMID: 2596391.
49. Saloniemi H, Kalima TV, Rahko T. Pancreatic enzyme supplementation in normal and exocrine pancreatic insufficient pigs. *Acta Vet Scand.* 1989; 30(4):367-70. PubMed PMID: 2484259.
50. Gröhn YT, Erb HN, Saloniemi HS. Risk factors for the disorders of the mammary gland in dairy cattle. *Acta Vet Scand Suppl.* 1988; 84:170-2. PubMed PMID: 3232604.

51. Rahko T, Saloniemi H, Kalima TV. Pancreatic duct obstruction in the pig: electron microscopy of chronic pancreatitis. *Acta Vet Scand.* 1988; 29(2):255-8. PubMed PMID: 3223475.
52. Rahko T, Kalima TV, Saloniemi H. Pancreatic duct obstruction in the pig: light microscopy of chronic pancreatitis. *Acta Vet Scand.* 1987; 28(3-4):285-9. PubMed PMID: 3454539.
53. Atroshi F, Parantainen J, Sankari S, Kangasniemi R, Saloniemi H. Possible role of sialic acid in bovine mastitis with particular reference to milk electrical conductivity. *Zentralbl Veterinarmed B.* 1986 Oct; 33(8):620-7. PubMed PMID: 3799100.
54. Syväjärvi J, Saloniemi H, Gröhn Y. An epidemiological and genetic study on registered diseases in Finnish Ayrshire cattle. IV. Clinical mastitis. *Acta Vet Scand.* 1986; 27(2):223-34. PubMed PMID: 3799399.
55. Gröhn Y, Saloniemi H, Syväjärvi J. An epidemiological and genetic study on registered diseases in Finnish Ayrshire cattle. III. Metabolic diseases. *Acta Vet Scand.* 1986; 27(2):209-22. PubMed PMID: 3799398.
56. Saloniemi H, Gröhn Y, Syväjärvi J. An epidemiological and genetic study on registered diseases in Finnish Ayrshire cattle. II. Reproductive disorders. *Acta Vet Scand.* 1986; 27(2):196-208. PubMed PMID: 3799397.
57. Gröhn Y, Saloniemi H, Syväjärvi J. An epidemiological and genetic study on registered diseases in Finnish Ayrshire cattle. I. The data, disease occurrence and culling. *Acta Vet Scand.* 1986; 27(2):182-95. PubMed PMID: 3799396.
58. Kallela K, Heinonen K, Saloniemi H. Plant oestrogens; the cause of decreased fertility in cows. A case report. *Nord Vet Med.* 1984 Mar-Apr; 36(3-4):124-9. PubMed PMID: 6739284.
59. Saloniemi H, Roine K. Field observations on the incidence of bovine clinical mastitis and teat diseases. *Nord Vet Med.* 1981 Jun-Aug; 33(6-8):297-305. PubMed PMID: 7322870.
60. Saloniemi H, Roine K. Incidence of some metabolic diseases in dairy cows. *Nord Vet Med.* 1981 Jun-Aug; 33(6-8):289-96. PubMed PMID: 7322869.
61. Näsi M, Saloniemi H. Effect of environmental change on injuries of udder and legs in dairy cows. *Nord Vet Med.* 1981 Apr-May; 33(4-5):185-93. PubMed PMID: 7322858.
62. Saloniemi H, Näsi M. Effects of environmental change on udder health of dairy cows. *Nord Vet Med.* 1981 Apr-May; 33(4-5):178-84. PubMed PMID: 7322857.



63. Roine K, Saloniemi H. Incidence of some diseases in connection with parturition in dairy cows. *Acta Vet Scand.* 1978; 19(3):341-53. PubMed PMID: 727085.
64. Näsi M, Saloniemi H, Kallela K. Hematological and blood chemical data of pigs fed various amounts of mink manure. *Acta Vet Scand.* 1978; 19(1):84-92. PubMed PMID: 655031.
65. Näsi M, Saloniemi H, Kallela K. Dehydrated mink manure as a protein source for growing pigs. *Acta Vet Scand.* 1978; 19(1):73-83. PubMed PMID: 655030.
66. Roine K, Saloniemi H. Incidence of infertility in dairy cows. *Acta Vet Scand.* 1978; 19(3):354-67. PubMed PMID: 569430.
67. Kalima TV, Saloniemi H, Rahko T. Experimental regional enteritis in pigs. *Scand J Gastroenterol.* 1976; 11(4):353-62. PubMed PMID: 935796.
68. Rahko T, Saloniemi H. A histochemical study of epithelial mucosubstances in the ileum of the pig. II. Carbohydrate-rich compounds in regional ileitis. *Nord Vet Med.* 1973 Apr; 24(4):208-12. PubMed PMID: 4125671.
69. Rahko T, Saloniemi H. A histochemical study of epithelial mucosubstances in the ileum of the pig. I. Carbohydrate-rich compounds in normal mucosa. *Nord Vet Med.* 1973 Apr; 24(4):196-200. PubMed PMID: 4125670.
70. Saloniemi H, Rahko T. On the enzyme histochemistry in the ileum of the pig. *Nord Vet Med.* 1972 Mar; 24(3):151-5. PubMed PMID: 4666553.
71. Rahko T, Saloniemi H. On the pathology of regional iteitis in the pig. *Nord Vet Med.* 1972 Mar; 24(3):132-8. PubMed PMID: 4666552.
72. Rahko T, Saloniemi H. [Pathology of the natural *Yersinia pseudotuberculosis* infection in cats]. *Dtsch Tierarztl Wochenschr.* 1969 Nov 15; 76(22):611-3. German. PubMed PMID: 5408015.